

**RESHAPING SPATIAL PLANNING PARADIGM IN AN ATTEMPT TO
ACHIEVE ENVIRONMENTAL JUSTICE IN SOUTH AFRICA**

By

BONGANE CORNELIUS NTIWANE

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Supervisor: Dr. P.J. van V. COETZEE

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DECLARATION OF ORIGINALITY

Full names of student: Bongane Cornelius Ntiwane

Student number: 29500053

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SUMMARY

South Africa, as a country and especially within the context of its geographies, remains scarred by the past apartheid regime. As a result, the country is still struggling with the problems of spatial transformation and inequalities. Recent indications suggest that the country is the leading unequal nation when compared with other states characterised by prevailing inequalities (World Bank, 2018). This study aims to answer the question of how spatial planning could be restructured in order to address environmental justice (EJ) to improve the performance of spatial planning. Planning theories provide procedures for undertaking planning and substance matters, but without proper guidance on the achievement of EJ. In addressing the main research question, the study debates EJ within the context of planning, the extent to which the South African spatial planning responds to EJ, and the factors perceived to enhance or impede the implementation of spatial planning towards EJ. These debates are reflective of the six dimensions of EJ that this study discusses which comprise distributive, recognition, procedural, and substantive justices, the capability approach, as well as just policy.

The research study is cross-sectional in design and adopts a mixed-research approach so as to address the three research sub-questions. The sample of the study comprises seventy-one municipalities selected from six provinces of South Africa. These municipalities include seven metropolitan, twelve district, and fifty-two local municipalities. The data collection methods include the administration of questionnaires in 71 municipalities, interviews of nine planning experts, and a corpus review (including literature, reports and legislation). The analysis of data includes both qualitative and quantitative data analysis methods, drawing its foundation from the philosophies of interpretivism and positivism.

This study reveals that the concept of EJ is unpopular among municipal planners. Furthermore, it alludes to the fact that the first generation (rational, incremental, and mixed-scanning) and second generation (advocacy, transactive and communicative planning) planning approaches lack the adequate incorporation of EJ dimensions. In addition, this study found that there exists weak recognition of EJ in municipal planning practices, notwithstanding that some South African planning Acts make provision for EJ in planning, at least to some extent. The results of the study reveal that municipalities in South Africa focus more on compliance than on being outcome-oriented in the implementation of spatial planning. The findings furthermore indicate that the lack of spatial planning prioritization, political pressure, inadequate tools of trade, and exclusion of context are the highest-ranking factors across four categories (structural, administrative, political, and contextual) perceived

to impede spatial planning towards achieving EJ. The study further suggests that the adoption of spatial planning implementation (SPI) strategies, capacity building for political leaders on spatial planning, competent and skilful personnel, and public awareness and education are the highest-ranked factors that planners perceive as having the potential to enhance spatial planning in the achievement of EJ. The research introduces the third-generation planning approach, based on EJ, with principles and propositions. The study also proposes a conceptualization of the SPI strategy to support spatial planning. Lastly, the study recommends guidelines for the implementation of EJ in spatial planning. The researcher concludes that the practice of EJ in planning requires extensive capacity building among planners, communities, sectors, and leaders.

TABLE OF CONTENTS

Content	Page
DECLARATION OF ORIGINALITY	ii
SUMMARY	iii
TABLE OF CONTENTS	v
APPENDICES	xii
LIST OF TABLES	xiii
LIST OF FIGURES	xvi
 PART 1: THE BACKGROUND AND THEORETICAL JOURNEY OF THE STUDY AND ITS APPROACH	
 CHAPTER 1: THE INTRODUCTION AND RESEARCH PROBLEM..... 1	
1.1 Introduction	1
1.2 Provenance of the problem	2
1.2.1 International context	2
1.2.2 South African context	7
1.3 The problem.....	10
1.4 The problem contextualized	14
1.4.1 European context	14
1.4.2 North American context	16
1.4.3 South African context	19
1.5 The problem statement	24
1.6 Research objectives and questions.....	27
1.6.1 Research objectives	27
1.6.2 Research questions.....	28
1.7 Significance of the research	28
1.8 Definitions of study terminology	31
1.9 Structure of the research.....	34
1.10 Conclusion	37
 CHAPTER 2: FROM ENVIRONMENTALISM TO ENVIRONMENTAL JUSTICE ... 39	
2.1 Introduction	39
2.2 ENVIRONMENT OF ENVIRONMENTAL JUSTICE	39

TABLE OF CONTENTS CONTINUED...

Content	Page
2.3	From environmentalism to environmental justice 43
2.4	The Birth of Environmentalism 45
2.5	Environmental Justice (EJ) 49
2.6	Dimensions of Environmental Justice 55
2.6.1	Distribution or distributive justice 56
2.6.2	Procedural Justice..... 61
2.6.3	Substantive justice 70
2.6.4	Recognition Justice 72
2.6.5	Capability approach (CA) 74
2.6.6	Just policy 79
2.7	Conclusion..... 81
CHAPTER 3: PLANNING THEORIES AND ENVIRONMENTAL JUSTICE.....	85
3.1	Introduction 85
3.2	Rational-comprehensive planning theory 87
3.3	Incremental planning theory..... 90
3.4	Advocacy planning theory 93
3.5	Transactive planning theory 97
3.6	Communicative or collaborative planning theory 100
3.7	Environmental justice in planning..... 106
3.7.1	Principles of environmental justice planning 108
3.7.2	Spatial planning as a just distributive action 111
3.7.3	Spatial planning as a multi-stakeholder democratic planning..... 114
3.7.4	Spatial planning as a contextual experience and learning 116
3.7.5	Spatial planning as a vehicle for governance..... 118
3.7.6	Spatial planning as an action for capability assessment 120
3.7.7	Spatial planning as an environmental restorative approach..... 121
3.8	Conclusion..... 123
CHAPTER 4: SPATIAL PLANNING IMPLEMENTATION.....	125
4.1	Introduction 125
4.2	Spatial planning 126
4.3	Approaches to spatial planning implementation 128

TABLE OF CONTENTS CONTINUED...

Content	Page
4.4	Types of spatial planning implementation 130
4.4.1	Intra-organizational implementation..... 131
4.4.2	Inter-organizational implementation..... 132
4.4.3	Administrative implementation..... 135
4.4.4	Political implementation..... 136
4.4.5	Experimental implementation 137
4.4.6	Symbolic implementation..... 138
4.4.7	Collaborative implementation 139
4.5	Spatial planning implementation barriers and enablers 141
4.6	Barriers to spatial planning implementation..... 143
4.6.1	Structural or institutional barriers..... 143
4.6.2	Political barriers..... 145
4.6.3	Administrative barriers..... 147
4.6.4	Contextual barriers 149
4.7	Enablers to spatial planning implementation 150
4.7.1	Structural or institutional enablers 150
4.7.2	Political enablers 153
4.7.3	Administrative enablers 154
4.7.4	Contextual enablers 156
4.8	Conclusion..... 157
CHAPTER 5: RESEARCH METHODOLOGY	158
5.1	Introduction..... 158
5.2	Broad research setting..... 159
5.2.1	Demographic characteristics 162
5.2.2	Socio-economic background 163
5.3	Research time horizon 166
5.4	Methodological choice 166
5.5	Research strategy..... 168
5.5.1	Study sample 168
5.5.2	Comparative strategy 171
5.6	Research data collection..... 172
5.6.1	Survey..... 172

TABLE OF CONTENTS CONTINUED...

Content	Page
5.6.2 Interviews	176
5.6.3 Administration of questionnaires.....	178
5.6.4 Literature review.....	183
5.6.5 Document review.....	184
5.7 Data analysis	185
5.7.1 Qualitative analysis	185
5.7.2 Quantitative analysis	185
5.8 Research reliability and validity	187
5.9 Study limitations.....	188
5.10 Study ethical consideration	189
5.11 Conclusion.....	190

PART 2: THE PRACTICAL TEST OF ENVIRONMENTAL JUSTICE IN SPATIAL PLANNING

6. CHAPTER 6: THE ENVIRONMENTAL JUSTICE TURN IN PLANNING..... 192

6.1 Introduction	192
6.2 Spatial planning theories and environmental justice.....	192
6.3 Familiarity of municipal planning with environmental justice.....	196
6.4 Planners' understanding of environmental justice	198
6.4.1 The view of planners on the concept of environment.....	198
6.4.2 The view of planners on the concept of environmental justice	199
6.5 Support of environmental justice principles in planning	205
6.6 Spatial planning in the notion of environmental justice	212
6.6.1 Planners' agreement with these propositions	213
6.7 The place of the third generation planning approach.....	216
6.8 Conclusion.....	218

CHAPTER 7: FACTORS IMPEDING AND ENHANCING SPATIAL PLANNING IMPLEMENTATION TOWARDS ENVIRONMENTAL JUSTICE IN MUNICIPALITIES

7.1 Introduction	219
7.2 Municipal approaches to spatial planning implementation.....	219

TABLE OF CONTENTS CONTINUED...

Content	Page
7.3 Municipal spatial planning implementation style or type	221
7.3.1 Administrative, symbolic and political	221
7.3.2 Inter-organizational and intra-organizational.....	223
7.3.3 Collaborative and experimental	226
7.3.4 Ranking of implementation styles used by municipalities.....	228
7.3.5 Likelihood of each implementation type supporting environmental justice	231
7.4 Factors perceived to enhance and impede spatial planning implementation	235
7.4.1 Structural factors that impede spatial planning implementation.....	239
7.4.2 Structural factors that enhance spatial planning implementation.....	242
7.4.3 Political factors that impede spatial planning implementation	244
7.4.4 Political factors that enhance spatial planning implementation.....	247
7.4.5 Administrative factors that impede spatial planning implementation	249
7.4.6 Administrative factors that enhance spatial planning implementation	252
7.4.7 Contextual factors that impede spatial planning implementation.....	257
7.4.8 Contextual factors that enhance spatial planning implementation.....	258
7.5 Conclusion.....	260

CHAPTER 8: THE TEST OF DISTRIBUTION, RECOGNITION, CAPABILITY APPROACH AND JUST POLICY DIMENSIONS OF ENVIRONMENTAL JUSTICE IN SPATIAL PLANNING

8.1 Introduction.....	262
8.2 Distributive justice in spatial planning.....	262
8.2.1 Distributive justice in spatial planning policies	263
8.2.2 Municipal consideration of distributive justice during planning	264
8.2.3 Municipal evaluation and monitoring of distributive effects in planning	267
8.3 Recognition justice in spatial planning.....	268
8.3.1 Recognition justice in spatial planning policies	269
8.3.2 Municipal consideration of recognitive justice during planning.....	270
8.3.3 Municipal monitoring and evaluation of contextual recognition in planning	272
8.4 Municipal consideration of capabilities in planning	274
8.4.1 Capability to improve quality of life and spatial transformation.....	274
8.4.2 Sustainability factors in planning	276
8.4.3 Municipal monitoring and evaluation of capability to implement.....	278

TABLE OF CONTENTS CONTINUED...

Content	Page
----------------	-------------

8.5	Conclusion.....	280
-----	-----------------	-----

CHAPTER 9: PROCEDURAL AND SUBSTANTIVE JUSTICE IN SPATIAL PLANNING

9.1	Introduction.....	282
9.2	Representation and influence on decision-making.....	282
9.2.1	Method of public participation (PP).....	282
9.2.2	Type of public participation.....	284
9.2.3	Stage of public participation in planning.....	285
9.2.4	Level of public involvement.....	286
9.2.5	Representation in planning decisions.....	289
9.2.6	Influence of representation on planning decisions.....	291
9.2.7	Monitoring and evaluation of public participation fairness in planning.....	293
9.2.8	Tools for empowering the public about spatial planning.....	294
9.2.9	Implementation of spatial planning awareness programmes.....	297
9.3	Consistency.....	298
9.4	Impartiality.....	299
9.5	Objectivity.....	301
9.6	Correctability.....	303
9.7	Ethicality.....	307
9.8	Importance of the procedural justice criteria.....	308
9.9	Conclusion.....	310

CHAPTER 10: SUMMARY AND RECOMMENDATIONS: THE CONSOLIDATION OF NEW KNOWLEDGE

10.1	Research sub-question (a): new knowledge.....	312
10.1.1	Adequacy of planning theory concerning EJ.....	313
10.1.2	New approach to spatial planning.....	313
10.2	Research sub-question (b): new knowledge.....	315
10.2.1	Municipal spatial planning practice concerning EJ.....	316
10.3	Research sub-question (c): new knowledge.....	318
10.3.1	Spatial planning implementation forms in municipalities.....	319
10.3.2	Factors that enhance or impede spatial planning towards EJ.....	319

TABLE OF CONTENTS CONTINUED...

Content	Page
10.3.3 Conceptualization of SPI strategy.....	321
10.4 Recommendations for practice.....	322
10.4.1 EJ planning implementation guidelines.....	322
10.4.2 Implementation of EJ guidelines in spatial planning.....	335
10.5 Recommendation for future research.....	341
10.6 Conclusion.....	342
REFERENCES	343

APPENDICES

APPENDIX 1: QUESTIONNAIRE.....	386
APPENDIX 2: INTERVIEW SCHEDULE.....	397
APPENDIX 3: INTERVIEW SEMI-STRUCTURED QUESTIONS	398
APPENDIX 4: ANALYSIS TABLES.....	399
APPENDIX 5: ETHICAL APPROVAL.....	421

LIST OF TABLES

Content	Page
Table 1-1: Development of terminology in the report chapters	32
Table 2-1: Environmental justice definitions	50
Table 2-2: Types of public participation	67
Table 2-3: Summary of EJ dimensions.....	82
Table 3-1: Principles of environmental justice planning	109
Table 4-2: Framework for spatial planning implementation strategy	152
Table 5-1: South African population and geographic area.....	159
Table 5-2: Erstwhile homeland areas	160
Table 5-3: Categories of municipalities	168
Table 5-4: Distribution of studied municipalities within provinces	170
Table 5-5: Planning theory evaluation criteria	171
Table 5-6: Registration of respondents with council for planners.....	173
Table 5-7: Planning experience of respondents	174
Table 5-8: Qualifications of study respondents.....	175
Table 5-9: Distribution of questionnaires by municipal category	182
Table 5-10: Distribution of municipalities within provinces.....	183
Table 5-11: Method for the ranking of variable	186
Table 6-1: EJ evaluation results in spatial planning theories	192
Table 6-2: The views of planners on the concept of environmental justice	201
Table 6-3: Responses on the support of EJ principles in planning.....	207
Table 6-4: Correlation between planners' backgrounds and support of principles	211
Table 6-5: Planners' agreement with propositions of spatial planning in the notion of EJ ..	214
Table 7-1: Frequency ranking on the use of implementation style.....	228
Table 7-2: Mean variance on the frequency of using each implementation style	229
Table 7-3: Frequency of application for implementation types (n=71).....	230
Table 7-4: Regression analysis on the use of each implementation type with other variables (n=71)	230
Table 7-5: The ranking on the likelihood of implementation style towards EJ	232
Table 7-6: Mean variance on the likelihood of using each implementation style.....	232
Table 7-7: Descriptive statistics on the likelihood of application for implementation types (n=71)	234
Table 7-8: Regression analysis on the likelihood of each implementation type with other variables (n=71).....	234

LIST OF TABLES

Content	Page
Table 7-9: Perceived barriers to spatial planning implementation towards EJ	235
Table 7-10: Overall mean difference among barriers (n=71)	236
Table 7-11: Perceived enablers of spatial planning implementation towards EJ.....	237
Table 7-12: Overall mean difference between enablers (N=71).....	238
Table 7-13: Ranking of structural barriers	241
Table 7-14: Ranking of structural enablers.....	243
Table 7-15: Responses on political barriers (n=71)	245
Table 7-16: Ranking of political barriers	246
Table 7-17: Ranking of political enablers.....	248
Table 7-18: Ranking of administrative barriers	251
Table 7-19: Ranking of administrative enablers.....	254
Table 7-20: Ranking of contextual enablers	259
Table 8-1: Satisfaction with distributive justice in SPP.....	263
Table 8-2: Municipal consideration of distributive justice during planning	264
Table 8-3: Correlation of a municipal category, EJ familiarity, and distribution variables ...	266
Table 8-4: Satisfaction with recognitive justice in SPP	269
Table 8-5: Municipal consideration of recognitive justice during planning.....	270
Table 8-6: Correlation of a municipal category, EJ familiarity, and recognitive variables ...	271
Table 8-7: Municipal monitoring and evaluation of contextual recognition in planning	273
Table 8-8: Capability to improve quality of life and spatial transformation.....	275
Table 8-9: Sustainability factors in planning	276
Table 8-10: Correlation of a municipal category, EJ familiarity, and capability variables....	277
Table 8-11: Municipal monitoring and evaluation of capability to implement.....	278
Table 8-12: Municipal personnel to evaluate and monitor the performance.....	279
Table 9-1: Methods of public participation	283
Table 9-2: Type of public participation in spatial planning policies.....	284
Table 9-3: Stages of public participation in planning	285
Table 9-4: Level of public involvement in spatial planning policy making.....	287
Table 9-5: Representation of parties in planning decision-making.....	289
Table 9-6: Monitoring and evaluation of public participation fairness in planning.....	293
Table 9-7: Tools for awareness on spatial planning policies.....	294
Table 9-8: Access to information.....	295
Table 9-9: Municipal consistency in planning decisions.....	298

LIST OF TABLES

Content	Page
Table 9-10: Perceptions of interviewees about municipal consistency in planning decisios	299
Table 9-11: Municipal impartiality in decision-making.....	300
Table 9-12: Perception of respondents on municipal objectivity	302
Table 9-13: Ethicality in planning decision-making (N=71)	307
Table 9-14: Importance of the procedural justice criteria (N=71)	309
Table 10-1: Classification of factors perceived to impede or enhance spatial planning towards EJ	320
Table 10-2: Guidelines for distributive justice in spatial planning	328
Table 10-3: Guidelines for substantive justice in spatial planning	329
Table 10-4: Guidelines for procedural justice in spatial planning	331
Table 10-5: Guidelines for recognitive justice in spatial planning.....	332
Table 10-6: Guidelines for capability approach in spatial planning	333
Table: 10-7: Guidelines for just policy in spatial planning	334
Table 10-8: Plan or policy evaluation criteria	337

LIST OF FIGURES

Content	Page
Figure 1-1: Conceptual framework	30
Figure 1-2: Structure of the research.....	37
Figure 2-1: Relationship of the environmental justice dimensions	55
Figure 4-1: Spatial planning implementation framework	125
Figure 5-1: Research methodology	158
Figure 5-2: South African Map	161
Figure 5-3: Map showing former homelands with demarcations of traditional councils	165
Figure 5-4: Number of municipalities with opportunity to participate	170
Figure 5-5: Planning experience of respondents	174
Figure 5-6: Qualifications of study respondents.....	175
Figure 6-1: Respondents' familiarity with environmental justice.....	196
Figure 6-2: Principles of environmental justice in planning	206
Figure 6-3: Planners' agreement with propositions of spatial planning in the notion of EJ	214
Figure 7-1: Spatial planning implementation approaches in local municipalities (N=71)	220
Figure 7-2: Frequency of using a type of spatial planning implementation (n=71)	221
Figure 7-3: Responses on structural barriers to implementation (n=71)	240
Figure 7-4: Responses on structural enablers to implementation (n=71).....	242
Figure 7-5: Responses on political enablers (n=71)	247
Figure 7-6: Responses on the administrative barriers (n=71)	250
Figure 7-7: Responses on administrative enablers (n=71)	253
Figure 7-8: Responses on the contextual barriers (n=71).....	257
Figure 7-9: Respondents on contextual enablers	258
Figure 8-1: Municipal consideration of distributive justice during planning.....	265
Figure 8-2: Municipal evaluation and monitoring of distributive effects in planning (n=71)	267
Figure 8-3: Municipal consideration of recognitive justice during planning.....	271
Figure 8-4: Municipal monitoring and evaluation of contextual recognition in planning	273
Figure 8-5: Sustainability factors in planning	276
Figure 9-1: Satisfaction with PP process in spatial planning policy making	288
Figure 9-2: Influence of representation on decision-making	292
Figure 9-3: Implementation of awareness programmes.....	297
Figure 9-4: Existence of municipal appeal procedures (N=71)	306
Figure 10-1: Third generation planning approach.....	314

LIST OF ABBREVIATIONS

CA:	Capability Approach
CBD:	Central Business District
CPD:	Continuous Personal Development
CSIR:	Council for Scientific and Industrial Research
DEA:	Department of Environmental Affairs
DEAT:	Department of Environmental Affairs and Tourism
DEAET:	Department of Economic Affairs, Environment and Tourism
DJ:	Distributive Justice
EJ:	Environmental Justice
EU:	European Union
HIA:	Heritage Impact Assessment
HIP:	Health in Planning
IDP:	Integrated Development Planning
I&APs:	Interested and Affected Parties
IOC:	Inter-organizational Cooperation
IOI:	Inter-organizational Implementation
ISO:	International Organization for Standardization
IUCN:	International Union for the Conservation of Nature
JP:	Just Policy
KZNM1:	Generated Code of a Participating Municipality in KwaZulu-Natal
LDF:	Local Development Framework
LTD:	Limited
M&E:	Monitoring and Evaluation
MPT:	Municipal Planning Tribunal
MSA:	Local Government: Municipal Systems Act
MST:	Mixed Scanning Theory
MWPF:	Municipalities with Planning Function
NDQ:	Number of Distributed Questionnaires
NDP:	National Development Plan
NEMA:	National Environmental Management Act
NRQ:	Number of Returned Questionnaires
OECD:	Organisation for Economic Co-operation and Development
PJ:	Procedural Justice
PP:	Public Participation
PPP:	Public-Private Partnership

PTY:	Proprietary
RJ:	Recognitive Justice
SA:	South Africa
SACPLAN:	South African Council for Planners
SALGA:	South African Local Government Association
SANBI:	South African Natural Biodiversity Institute
SDF:	Spatial Development Framework
SEMA:	Sectoral Environmental Management Acts
SJ:	Substantive Justice
STATSSA:	Statistics South Africa
SPI:	Spatial Planning Implementation
SPLUMA:	Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013)
SPP:	Spatial Planning Policies
SPPP:	Spatial Planning Policies and Plans
SUDPF:	Strategic Urban Development Planning Framework
RSA:	Republic of South Africa
UK:	United Kingdom
US:	United States
USA:	United State of America
WA:	Western Australia

1. CHAPTER 1: THE INTRODUCTION AND RESEARCH PROBLEM

1.1 INTRODUCTION

In the existing literature, environmental justice (EJ) is defined as a political remedial action that reinforces public and private commitment, in bringing about change beyond racism, in order to guarantee the protection and fulfilment of environmental rights for all (Cutter, 1995) through the fair and meaningful formulation, adoption, implementation, and enforcement of environmental prescripts (Pedersen, 2011; Millner, 2011). The attempt to achieve EJ requires a clear understanding of the problems within the context of implementing EJ initiatives. EJ appears as a force that “originally ascended from grass-root level” (Martinez-Alier *et al.*, 2011:32; Conrad, 2011:349; Pedersen; 2011:281; Agyeman, 2007:172) to a “political and administrative level” (Pedersen; 2011:281). The main cause for the rise of the grass-roots organizations focused on EJ as emanating from deep-rooted racial segregation policies (Pedersen; 2011:280), but EJ is also associated with quality of life achievable through spatial planning and is “beyond racism” (Cutter, 1995:113). Therefore, EJ is an inherent and inseparable element of spatial planning.

The orthodoxy of EJ appears in the literature with three main components or dimensions, which can be summarized as the equal distribution (distributive justice) of environmental ills, risks, planning, and responsibility including benefits; the recognition (recognition justice) of the right to live and work in an environment that is clean, safe and healthy; and the procedures, including participation (procedural justice), in planning decisions and access to information (Figuroa, 1999; Millner, 2011; Walker, 2009a; Agyeman, 2007; Pedersen; 2011; Pearsall & Pierce, 2010). Recent developments in literature indicate that EJ is not restricted to these three dimensions but includes many other dimensions. Hence, the debate in this work widens EJ to include some of the dimensions (substantive, capability approach, and a just policy) that are subtly prompted in the literature. In the practice of South Africa, planning barely achieves the equal distribution of environmental harms and benefits in most instances, while planning for an environment that is clean, safe, and healthy, where people can work, play and enjoy remains important. On the other hand, meaningful participation as an element of procedural justice in spatial planning, and as a vehicle for the recognition of context,

remains questionable. In practice, most countries, and South Africa in particular, have introduced reforms in their spatial planning systems with the intention to redress injustices; however, the challenges of injustices remain salient and reflects similar scars of the past social and spatial geographies. Undeniably, the question of the scourges of spatial planning problems still remains unaddressed and attenuated. More importantly, spatial planning studies concentrate on practical spatial planning challenges (du Plessis, 2014b), urban forms (du Plessis, 2014a; du Plessis and Boonzaaier, 2014) and the spatial planning system (Berrisford, 2011), among others, but only superficially contemplate the implementation strategies of spatial planning. In most of the available literature, spatial planning appears to have less success in redressing injustices. For instance, in South Africa, most towns remain a symbol of apartheid because the means of segregation, such as buffer zones, are still prevalent. The first part of this chapter starts with an introduction to the research by discussing the research problem. In brief, the problem entails the inability of spatial planning to address environmental injustice. Secondly, it explains this problem from a practical and contextual point of view. Thirdly, the chapter discusses the statement of the problem, which leads to the presentation of the research objectives before leading to the definitions of the primary terms used in the study. Lastly, a description of the research report structure concludes the chapter.

1.2 PROVENANCE OF THE PROBLEM

This section discusses the provenance of the problem, especially regarding the international and local contexts, in order to provide a clear account of how it came about.

1.2.1 INTERNATIONAL CONTEXT

The concepts of urbanization and industrialization contribute significantly to the scourge of environmental injustice, especially within the global context. Fredericks (2011:63) defines environmental injustice as “the disproportionate distribution of environmental benefits and harms among racial and socio-economic groups (distributional injustice), the limited ability of these groups to participate in decision making about such issues (participatory injustice), and the restoration and enrichment of relations between those involved in and affected by environmental injustice (restorative justice).” Therefore, environmental justice seeks to address the injustices inherited from industrialization and

urbanization. The existing literature presents industrialization as the indubitable and most significant contributor to economic growth and employment (Orchard, 1960; West, 1978), albeit at the cost of natural capital (Kavzoğlu, 2008), the existing social structure or system and corresponding societies (Elgie, 1980). Gentrification is evident in modern industrialization, especially as a result of a lack of balance in planning due to the exclusion of recognition, distribution and procedural dimensions of justice. The cross-sectional/longitudinal study of Elgie (1980) evidently reveals that the industrialization period in South America between 1950 and 1970 strengthened racial and class disparities. It is apparent that during this period, marginalized people experienced both spatial and social exclusion. These exclusions strategically persist in the planning tools of most countries, including South Africa. According to West (1978) industrialization in many counties of the United States in the 1960s resulted in significant inconsistencies in income distribution. The equal planning of cities, without regard to class or race, can potentially promote the balance in income distribution. In Asian countries (India, Japan and mainland China), industrialization was a response to the substantial increase in “underemployment and unemployment” (Orchard, 1960:197) in the agricultural sector, which has become palpable since the last leg of the World War II. Moreover, the disregard and isolation of certain sectors is evidenced in a clear lack of distributive justice in planning. The planning of one sector of the economy must invariably support other sectors and amenities in space, without detrimental socio-economic effects. Post-industrialization cities display a number of a number of challenges confronting societies such as environmental degradation. Vosloo (2018) suggests the reclaiming of quarries within post-industrial urban areas to create passive or active recreational spaces. Post-industrialization provides an opportunity to redefine space to the benefit of communities as cities continue to grow.

Other than contributing to economic growth and job creation, industrialization assisted the significant population growth witnessed in urban areas through urbanization, which is most pronounced in developing countries (Kavzoğlu, 2008). Urbanization represents the process of migrating from rural to urban areas. Many factors that influence urbanization include social conflict or civil wars, poverty, job opportunities, industrialization and the desire for new lifestyles. Hence, Rogerson, Kotze and Rogerson (2014) state that the current period of urbanization constitutes a second urbanization that focuses primarily on socio-economic sustainability, whereas the first period of urbanization emphasized the

search for formal opportunities of employment. The sustainability focus of the second urbanization implies the need for EJ to address urbanization pressures. According to Kavzoğlu (2008:430), the “economic opportunity, economic problems, and insecurity in the countryside, and the perceived excitement of city life” are the reasons for urbanization in Turkey. Furthermore, and most notably, urban areas constitute the home or nodes for administrative, industrial, and commercial hubs in various regions within a specific country (Mojares, 2013). In South Africa, the Gauteng Province (urban), which accommodates the capital city (Pretoria) of the country and the ‘City of Gold’ (Johannesburg), is the destination for most South Africans and African immigrants who seek better opportunities. Todes *et al.* (2010a) state that economic growth in South African cities since the dawn of democracy contributes to the movement of people to these urban centres. According to McKinsey Global Institute (2011, cited in Balbo, 2014:269), approximately 200 of the largest cities in developing countries contribute an estimated “10% of the worldwide gross domestic product.” This contention illustrates the fact that urbanization is not exclusive to the developed world but also pertinent in the developing world. Rogerson *et al.* (2014) emphasize that the second urbanization transition has seen a global increase in the urban population as having emerged from developing countries.

The world’s population statistics suggest that, in 2008, half of the population lived in urbanized areas, concomitantly reducing the proportion of people working and staying in rural areas (Watson, 2009; Wurwarg, 2014). Accordingly, “half of the world’s population of 6.6 billion live in urban areas” (Omolabi and Adebayo, 2015:90), while a projected 60% of the world’s population in rural areas will migrate to urban areas by 2030 (Kavzoğlu, 2008; Chakwizira, Bikam and Adeboyejo, 2014) and by the year 2050, cities will be home for 70% of the global population (Watson, 2009a). In South Africa, projections indicate that more than 70% of the population will live in urban areas by 2030 (Chakwizira, Bikam and Adeboyejo, 2014). Undoubtedly, there exists a gap in planning for the improvement of rural areas so as to balance the development between rural and urban areas. The projection of the 70% global population in cities by 2050 and the 70% estimates of the SA population in urban areas by 2030 present the country as experiencing rapid urbanization. In illustrating this rapid urbanization, Chakwizira, Bikam and Adeboyejo (2018) indicate that the Gauteng province as the country’s economic centre experienced 30,7% population growth rate between the year 2001 and 2011 as a

result of in-migration. This population growth in urban areas requires proactive interventions to ensure the sustainable provision of services. In reality, urban areas that experience rapid growth require comprehensive plans from various sectors of government to accommodate projected future population growth in either new or existing towns (Ebrahimpour, Majedi and Zabihi, 2017).

Urbanization, as a consequence of social conflict and prolonged civil wars, is also evident in Colombia, where many displaced persons have migrated to the city of Bogotá, thereby increasing the demand for services such as work, land, shelter, and food (Wurwarg, 2014). However, twenty percent of the 7.4 million of Bogotá's population lives in poverty (Wurwarg, 2014). The challenge of poverty in Bogotá is a social inequity produced by the increase of urban dwellers in the city. On the other hand, in Addis Ababa, the city's annual population growth rate of 8% is suggested to be significantly above the country's annual population growth rate of 2.4%. Furthermore, the population of Addis Ababa (4 million) is characterized by many people (50%) living below the poverty line, and a potentially significant proportion (80%) of persons living in slums (Wurwarg, 2014). These effects of urbanization increase poverty levels, as seen in Addis Ababa and Bogotá, and in particular where planning practices are weak. Watson (2009a) argues that rapid urbanization happens in areas where governments provide inadequate planning and service delivery leading to high rate of unemployment and poverty. Planning in this regard becomes relevant as it informs city improvement and intervention in order to address inequity challenges.

Rontos, Zitti and Salvati (2017), in studying Anthen's urban structure, show that urbanization contributes to social and economic development, including modernization, albeit with urban problems (i.e., illegal occupations of land) that become especially pertinent where land use management is absent. These urban problems include substandard housing, uninhabitable environments, homelessness, mushrooming of informal settlements, aging or derelict infrastructure for engineering services, inadequate health facilities, insecurity of tenure and lack of essential services, especially for members of the low-income group or poor urban dwellers (Mojares, 2013; Strauss, 2017). By implication, urbanization contributes to disproportionate provision of services between the formally established areas and those that are informal. Formally established areas are those areas where planning, with all required technical studies, approval

processes and installation of engineering services (roads, storm water, sewer, water, and electricity), has taken place; whereas informally established areas refer to those without planning approval and installation of engineering services. The inadequate planning for future growth of urban areas can be associated with the mushrooming of informally established settlements. In most instances where urban areas are improved, inequalities between the rich and poor, class and race as well as rural and urban areas are evident. This inequality is especially evident in the Philippines where the poor remain poor, the rich become more affluent, all the while rural regions remain rural and urban areas become unequally urbanized amongst various groups (Mojares, 2013).

Conversely, EJ dictates the need for equity in the quality of lives for all, including both the countryside and urban areas. Equity refers to the equal proportion of input and outcome ratios (Cook, and Hegtvedt, 1983). This definition implies a two-way approach of distribution toward equity, whereby Eckhoff (1974) distinguishes between one-way and two-way approaches of resource allocation. A one-way approach explains the equity required to improve quality of life, which refers to the proportionate allocation of resources based on the needs and characteristics of an area, i.e. developed and underdeveloped areas. The two-way approach implies that the cost an area suffers is equivalent to the benefits received. Cook and Hegtvelt (1983:218) indicate that when the input and outcome ratios “are not equal, inequity is said to exist.” In this context, inequity will exist if, and only, the benefits that an area receives are inequivalent to the cost it suffers.

The case of Zhongdian, in the northwest Yunnan Province of China, provides an interesting case study for illustrating equity between urban and countryside areas, as it promotes rural urbanization. This urban centre experienced rapid rural urbanization as a consequence of proper forward planning and infrastructure investment (Hillman, 2013). This rural urbanization resulted in the prioritization of transforming more farm land so as to allow for more business activities, improvement of the education system, increased residential development, and improved tourism among others (p.29). The transformation of Zhongdian profoundly presents the power of planning in addressing urbanization challenges. In fact, other than planning, the power of effective implementation also accounts for the success in Zhongdian. Yingjie, de Roo and Bin (2013) highlight the fact that the socio-economic ills (vitiating quality of life, traffic congestion, etc.) that confront

cities in China contribute to suburbanization, rural urbanization and a decline in inner-city growth. The case of Zhongdian is a clear indication that urbanization taking place in urban areas can also take place in rural areas in order to promote equity.

1.2.2 SOUTH AFRICAN CONTEXT

The struggles of EJ in contemporary South Africa (SA) arose from the legacy of apartheid politics as well as spatial planning discourse and practice. Apartheid took hold after the National Party's election victory in 1948 (Siedman, 1999; McCusker and Ramudzuli, 2007) and reached its peak between 1970 and 1980 (Meadows and Hoffman, 2003). The literature on apartheid argues that "inequality was built in the apartheid system" (Siedman, 1999:442; Munslow and Fitzgerald, 1994:227). The apartheid system favoured the white community (the minority) as opposed to the black majority who suffered the socio-economic ills of the apartheid system.

Berrisford (2011:249) notes that the apartheid planning laws applied in "white-reserved areas" promoted sustainability by ensuring consistent provision of services and development, while those applied in "black reserves areas" strengthened development inequity. Such prescripts accelerated the creation of isolated black townships across South Africa, from large cities to small villages. The enactment of the Group Areas Act, 1950 (Act No. 41 of 1950) systematically promoted segregation, inequities, and unjust spatial practices based on race. According to Baptista, Sachs and Rot (2019), Baltimore in America was the first city to adopt an ordinance that promotes the segregation of residential areas in the year 1910. The Group Areas Act was, therefore, not the first law in the world to institutionalize segregation. Segregation and discrimination in South Africa began in the 1870's when the adoption of laws for the management of mining activities took place. These laws only permitted Europeans to settle and mine within and around the gold fields of the Witwatersrand (Van Wyk and Oranje, 2014). Apartheid spatial planning provided the white minority with the most fertile portions of the land, all the while accommodating them near Central Business Districts (CBDs). The white people stayed in suburban areas with adequate services and amenities (Hansmann, Lincoln and Musvoto, 2018) and their areas received more attention from government (Todes and Mngadi, 2007). During apartheid, the black people of the country suffered restrictions in respect of movement from one area to another (Todes *et al*, 2010a). The

implementation of apartheid policies championing segregation from the 1870's to the early 1990's indicates that it will take time to redress the spatial effects of these policies. Harrison, Todes and Watson (2007) indicates that apartheid suffered contraction even though it promoted the removal of black Africans from areas predominately for white people because of the fact that it forced the black people in the proximity of "whites only" areas for labour related services. Oranje and van Huyssteen (2007) argues that a fragmentation planning approach applies in areas of black communities compared to the North American and British planning approach used in areas reserved for white people. Although SA applied laws that promoted segregation and fragmentation, Sihlongonyane (2018) states that, in general, the foundation of the South African planning approach derives from Britain's early planning system. Therefore, if apartheid laws did not exist, SA could have been a better country from a planning perspective.

The spatial geographies of South Africa remain scarred by apartheid policies. In a study on segregation in residential areas, Parry and van Eeden (2015) concludes that most of the residential areas that white people dominate in Cape Town are more segregated from other racial groups than those of Johannesburg. This study illustrates the persistent structure of apartheid, which remain embedded in the spatial patterns of the country. In contrast to this, Laldaparsad, Geyer and du Plessis (2013: 43) state that the City of Cape Town's "highest investment per km² occurred in marginalised areas". The problem of segregation based on race is not unique to South Africa, as is evident in Fong and Shibuya (2000) who found that black communities experienced significantly higher rates of poverty than other groups in Canadian cities. Furthermore, apartheid policies directed 'second-grade citizens' (coloured and Asian people) and 'third-grade citizens' (the majority black natives) further away from the CBDs and closer to areas with fewer business and social amenities. The segregation evident in Cape Town shows the need to transform this urban area. This notion is supported by Du Plessis (2014b) who views urban areas as having a significant influence on economic and population growth, albeit with a full range of social and ecological injustices.

Rural areas in the country are also not immune to the consequences of apartheid, such as population growth in urban areas. The policies of the apartheid system successfully widened and strengthened the economic and social challenges existing in the rural and black community areas of South Africa. These problems continue to persevere in most

urban areas to date, especially as a consequence of population growth (urbanization) that the democratic, inclusive government of post-1994 promoted. In this light, Newton and Schuermans (2013) contend that, in 1994, the democratic government aimed to address the challenge of the considerable housing backlogs presented by the mushrooming of informal settlements in urban areas. The challenge of informal settlements and housing backlogs consequently cut across municipalities throughout the country. According to the RSA (2019a), between the years 1996 and 2017, informal settlements reduced from 16% to 13,6%. These percentages indicate that it took the country 21 years to address 2,4% of informal settlements. By implication, the country would require at least 100 years to reach an approximate 90% reduction of the 13,6% of informal settlements, if it continues at this pace of addressing the problem of informal settlements. Furthermore, the same period experienced an increase in the construction of formal dwellings "from 64% in 1994 to 80% in 2017" (RSA, 2019a:141). Lategan and Cilliers (2016) state that informal settlements comes with various problems, which include inhabitable locations, inadequate basic services, lack of enforcement, insecurity of tenure, substandard housing structures and health issues. In Gauteng, backyard dwellings have become an alternative option in an attempt to bridge the gap of housing backlogs in most townships (Shapurjee, le Roux and Coetzee, 2014). Although backyard dwellings are instrumental in providing accommodation to families or tenants, Lategan and Cilliers (2016a:12) argue that informal backyard dwelling rentals have an impact on the reduction of green space, therefore, they advocate for the effective utilization of "public green space".

Rogerson (2001) and Todes *et al.* (2009) argue that post-apartheid planning introduced various interventions to address the problems that apartheid had left in the socio-economic geographies of the country. The scars left by apartheid comprise spatial fragmentation and segregation, inequalities, poor quality of life and public related debts as the major inheritances of the apartheid government (Oranje and Merrifield, 2010; Oranje, 2010; Schoeman, 2015). The democratic government inherited these scars in addition to inheriting a country with dual identities, consisting of those who are better off and those who are not (RSA, 2019a). According to Busari and Jackson (2006), the huge backlog in the provision of basic services (water, sanitation, refuse removal and electricity) also flows from the apartheid-era. For instance, Willemse (2015:16) states that Mitchells Plain, which is an area that accommodates coloured people in Cape Town,

exists as one of the apartheid suburbs that was developed in the 1970's with inadequate "higher order facilities" such as parks, clinics, schools, libraries and community centres. Therefore, it can be said that the democratic government is inherently dealing with systematically built-in socio-economic problems. Coetzee, *et al.* (2014) highlight that South Africa has been making great efforts to overcome spatial fragmentation and segregation, which are the main causes of socio-economic inequality, since the inception of democracy. However, the effect of these interventions and efforts, are yet to become visible owing to the implementation of EJ in planning. It is important to note that these interventions promote a certain degree of procedural justice, especially with regards to participatory planning, which is inevitably imbued with equity (Cash and Swatuk, 2011). One of the legal requirements of planning, in terms of the Municipal Systems Act, 2002 (Act No. 32 of 2002) and the Spatial Planning and Land Use Management, 2013 (Act No. 16 of 2013), includes the participation of stakeholders (i.e. communities, political parties, non-profit organizations and various sectors and departments). The participation element of the system, although with flaws, is reflective of an attempt towards achieving EJ, which will be demonstrated later in this chapter and other chapters (see Chapters 2 and 8). In the final analysis, it is important to note that over and above any global or continental scars of apartheid, South Africa remains an "exemplar to be emulated" (Berrisford, 2011:248; Seidman, 1999:429) because it provides insight on how to deal with difference, especially with regards to politics and policy, without bloodshed. South Africa, in defeating apartheid, applied a reconciliation approach and adopted a constitution that promotes equality in administration, planning and all aspects of life. However, there exists a need for more efforts to be made in order to improve the lives of South African communities through planning.

1.3 THE PROBLEM

Planning practices, on an international and local scale, are emerging beyond the conception of short-sighted master planning, which is an element of the past planning paradigm (Todes *et al.*, 2010). This type of planning is inappropriate for the 21st century planning that deals with rapid urban growth demanding plans that are flexible given the ruling governing planning systems (Watson, 2009). The attributes of master planning include the blueprint conception, which neglects participation, recognition and the resilient elements of planning. This approach exclusively involves experts and

technocrats, without allowing for democratic planning processes that promote the fair distribution of resources, activities and services; recognition of context, as well as participation by the general public. Activities comprise land uses; resources includes air, soil, water, plants, animals and man-made goods and objects i.e., infrastructure, furniture; and services includes refuse removal; the supply of water, electricity and sanitation; education, health care, maintenance of infrastructure, enforcement. Over the years, the pre-democratic planning regulatory regime of South Africa, which was based on physical or master planning, has shifted to the democratic planning regulatory era of strategic spatial planning (Todes *et al.*, 2010; du Plessis, 2014b). However, the current paradigm of democratic planning only partially addresses EJ, as it is moulded primarily around sustainable development. In South Africa, under the Spatial Planning and Land Use Management Act (SPLUMA), 2013 (Act No 16 of 2013), the spatial planning system incorporates forward planning (spatial development framework), guiding principles, land use management, and governance (procedures and processes). Schoeman (2015) cites SPLUMA as a tool to redress apartheid spatial disparities through spatial transformation

This spatial planning system aligns with the notion of Todes *et al.* (2009), who posits that planning is an undertaking concerned with land development, relating to both proactive forward planning, as well as the management of day-to-day land use changes. Although the improvements in spatial planning are evident, the challenges designed by the architectures of apartheid planning remain present (Visser, 2001; Berrisford, 2011; du Plessis, 2014b). In support of this argument, McCusker and Ramudzuli (2007) underscore the idea that land use geographies in the country are derived from the planning policies of past dispensation and post-apartheid regulation. Harrison and Todes (2001) argue that the reform of, and the interest in, spatial planning has evolved to the point of redressing the past spatial geographies and injustices. The post-apartheid spatial planning system in cities such as Durban, Cape Town, and Johannesburg promotes segregated and exclusionary developments through the maximum support of gated communities (Lemanski, 2006), most notably in areas called 'city improvements districts' (CID) (Miraftab, 2007) in particular those for residential development. According to Heimann and Oranje (2008), in SA, the CIDs have become prominent features in cities or urban areas. The presence of community enclaves; therefore, perpetuates the divide between the rich and poor. Hence, the promotion of spatial integration is, by implication, the core element of spatial planning which central in government priorities.

The National Planning Commission (2012) in the National Development Plan (NDP) indicates that the spatial injustices emanating from the practice of the country's apartheid regime remain unresolved and problematic. Fourie (2015:8) viewed the NDP as "an overarching social and economic plan" that is aimed at addressing the triple challenges of poverty, inequality, and unemployment. The NDP confirms the failure of spatial planning in reversing the past spatial disparities. Therefore, it can be said that the presence of informal settlements (slums) in cities, rural and urban areas, without access to infrastructure and social facilities as well as fragmented spatial patterns is the veridical patent failure of spatial planning. According to Drewes (2015), the ultimate aim of the NDP is to improve the living standard of the South African people with opportunities for the future generation. The NDP provides direction to address spatial challenges which requires commitment and dedication on implementation. Further, the NDP underscores the need for collective efforts toward growth and development in a participatory manner (Subban and Theron, 2016). The only way to address spatial challenges, growth and development is through spatial plans that are responsive.

In a study on spatial planning of eight South African cities, based on densities and urban form, du Plessis and Boonzaaier (2014) found significant changes in the urban density, but with insignificant change in the urban form. This revelation confirms the partial perpetuation of the ideals of the past policies through the current planning framework. Conclusively, the environmental injustice in the context of distribution through planning continues to exist. For example, in Cape Town, the apartheid planning for the poor on the periphery, signified by the dispersed or fragmented spatial pattern, continues to exist (Crane and Swelling, 2008). The case of Cape Town represents an environmental injustice because the poor communities on the periphery have more difficulty accessing services than community members in the urban areas who are within close proximity of the central business districts. The recent study on capital investment revealed that the City of Cape Town invest more in marginalised areas (Laldaparsad, Geyer and du Plessis, 2014) which includes poor communities. Despite the capital investment, the effectiveness of spatial planning implementation (SPI) leaves much to be desired. SPI refers to the execution of plans and policies derived from spatial planning processes. In Gauteng, a study on the Ekurhuleni spatial development framework (SDF) aptly indicates the injustice presented by spatial planning. In their study, Todes *et al.* (2010) reveals that the focus of local SDFs in the Ekurhuleni Metropolitan Municipality relies

more on land use than on integrating developmental issues such as poverty, health, and equity. Subban and Theron (2016) view SDFs as tools to integrate and address development issues that create spatial inequalities between the rich and poor including those for developed and undeveloped areas. Ntiwane (2012), in an evaluation of spatial planning instruments (SDFs and land use management schemes) of the Ehlanzeni District Municipality, revealed the limited extent to which these tools incorporate environmental issues. Furthermore, this problem is also evident in the findings of du Plessis (2014b), who identifies the failure of the SDFs of fifteen (15) municipalities in South Africa that have not achieved meaningful integration of their physical and socio-economic conditions, including informal developments, settlements and second-economy activities. Görgens and Denoon-Stevens (2013) quite notably point out that SDF's failure to incorporate urban land markets can ultimately contribute to pro-poor approaches. The shortcomings of SDFs as the tools for spatial planning in South African succinctly explain the perpetual spatial injustices. Recently, Hansmann, Lincoln and Musvoto (2018) revealed that spatial planning instruments applied in regulating and managing land uses in the Berea neighbourhood of Durban have failed to promote sustainability. In practice, SDFs inform the regulation and management of land uses as a strategic policy. The SDF as a mechanism to redress apartheid spatial patterns (Laldaparsad, Geyer, and du Plessis, 2014) appears from the challenges as either inadequately prepared or implemented.

Nonetheless, the spatial planning system in the country of South Africa strategically and subtly highlights EJ considerations (distributive, procedural, recognition, substantive, just policy, and capability approach). The spatial planning system is indubitably bound to address the plurality of EJ. However, it is apparent in the practical problems that the various implementations of the spatial planning systems, and in particular the tools of these systems, have become a challenge. Furthermore, du Plessis's study (2014a) of eight South African cities, stipulates that the priority areas for mixed land uses identified in SDFs present an insignificant correlation with the areas of mixed-use increases. These findings support the argument that an implementation problem exists in the spatial planning system of the country. The failure of spatial planning in addressing injustices is persuasive enough to necessitate spatial planning reforms that actively address EJ.

1.4 THE PROBLEM CONTEXTUALIZED

The following contextualization of the problem highlights the experiences of the international community such as Europe and North America as well as the local community, especially with regards to South Africa, spatial planning and EJ. This section furthermore details the mosaic of practical planning injustices evident in many countries, within the context of North America and Europe.

1.4.1 EUROPEAN CONTEXT

The spatial planning system in Europe primarily includes land use planning, comprehensive integrated planning, regional economic planning, and urbanism planning (Trkulja, *et al.*, 2012). The European spatial planning system presents with elements that are similar to that of the South African planning system. In comparison to elsewhere in the world, the SPI challenge exists on the European continent. This challenge involves the failure of the implemented plan in achieving the intended outcomes of integration, densification and improved services to name a few. Kunzmann (2007) argues that injustices, and in particular spatial injustices, remain evident in the city regions, and that the continent is far from achieving justice. This challenge exists throughout the continent. In addition to this, the lack of effective spatial planning in Serbia is associated with discrepancies, and the exclusion of other areas, in planning territories within the country (Trkulja, *et al.*, 2012). This contention is indirectly supported by Koomen *et al.* (2005), who argue that the loss of most agricultural land in the Netherlands resulted from the partial management of agricultural land through spatial policies. The partial planning and management of agricultural land is; therefore, a problem of distributive justice in spatial planning policy implementation. On the other hand, Ioffe and Nefedova (2001) point out that recreational and residential land uses supplant commercial agriculture in Moscow. The injustices created in the SPI resulted in this ineffectiveness in the distribution of planning. Furthermore, the problem of injustice in planning is also salient in most Norwegian municipalities, where public health is absent, with the exception of the municipalities that participate in the Health in Planning (HIP) Project (Hofstad, 2011). According to Bikam (2016), the integration of health care in planning is achievable through environmental justice.

The problem of exclusionary planning in relation to socio-economic factors is similar to the challenge in the implementation of spatial planning tools of South Africa. This challenge defeats the endeavours of achieving distributive justice and recognition justice in planning. Local municipalities in the Netherlands applied spatial planning to facilitate the development of sustainable industrial estates, commonly referred to as “careful industrial sites” (Pellenbarg, 2004:504) through park management programmes (Louw and Bontekoning, 2007). Nonetheless, the planning presented injustices, because it created obsolete estates as the new estates were developed. By implication, the spatial planning neglected the prevailing developed areas by prioritizing new developments. The intention of spatial planning, among other things, must be the promotion of land use harmony in order to ensure compatibility of all land uses. The failure of planning to recognize existing estates in the case of the Netherlands, presents an example of the failure of planning to recognize context.

The benefits of proper implementation of planning are also evident in the reform of land use regulations (zoning) in the City of Novgorod in Russia, which have resulted in enhanced benefits to the public and local government (Trutnev, *et al.*, 2004). Although planning regulations improved land patterns and spatial organization, Faludi (2000) supported by Steele and Ruming (2012), argue that unmalleable planning policies, by and large, result in unsustainable land uses. Moreover, as a result of inflexibility, spatial planning and land use management, mostly in developing countries, have proved to be too fragile and too patchy to achieve EJ (Milder, 2007). The challenge of recognition justice is at the centre of inflexibility in planning policies as a policy that is open to changes has the potential to recognize other elements that influence its implementation upon discovery. Scott and Kühn (2012) present the view that in West Europe, urban decline and shrinking cities have led to severe declines of economic and population growth. To overcome these challenges, spatial planning should direct economic investment and growth direction. Similarly, the need to upgrade infrastructure, revitalize, and regenerate residential and urban neighbourhoods became a necessity in recent years after decades of negligence in many cities of Central East Europe (Scott and Kühn, 2012). Yet, without the reform of SPI, the existing challenge of injustice (Kunzmann, 2007) will persist.

The question of recognition justice and procedural justice, in the context of planning, is a substantial challenge facing the European continent. However, in Europe, planning espouses public participation in its legal framework. For instance, on 25 June 1998, the Member States of the European Union (EU) and other States (19 in total) signed the Aarhus Convention that underscores procedural equity (Mason, 2010; Poncelet, 2012). In actuating the provisions of this Convention, the EU adopted an array of directives to respond to the three pillars of the Convention, namely access to information, participation of the public in decision-making, and access to procedural justice. Although the legal obligation of participation in planning exists, challenges of implementation are evident. For example, in Serbia, the challenge in spatial planning is the inability to implement spatial development programmes owing to poor governance that include deficiencies in openness, responsibility and participation (Trkulja, *et al.*, 2012). The inability to effectively engage stakeholders is the most pertinent contributor to the injustices prevailing in planning. Moreover, a study of golf-centred developments in the coastal areas of Mediterranean Europe demonstrated that decision-making that excludes the majority with local interests exposes the challenge of recognition justice in planning (Briassoulis, 2007). Recognition justice is inseparable from distributive justice. Although there is interdependency between these forms of justices, Figueroa (1999) argues that there is a problem that exists between recognition and distribution. This problem is mainly the bridge that connects the two dimensions which is participation. In essence, planning ought to equally recognize the interests of all parties through a participative process. Lastly, in Norway, although the planning law espouses public participation requirements, the degree of implementation is questionable (Mäntysalo, *et al.*, 2011)¹. The dubious participation often found in planning in Norway is comparable to that of other countries discussed in this chapter. The European planning system allows for the consideration of justice principles; however, their implementation presents only a snapshot of justice.

1.4.2 NORTH AMERICAN CONTEXT

Two items of legislation regulated American planning in the 1920s, the “Standard State Zoning Enabling Act of 1922 (about zoning ordinances) and the Standard City Planning

¹ Mäntysalo, *et al.*, 2011 provide a detailed discussion of public participation in Norway, see pages 2115-2117.

Enabling Act of 1928 (about comprehensive land use plans)” (Nolon, 1993:357-359), with more focus being placed on urban areas (Akimoto, 2009). The provenance of spatial planning, and in particular the element of land use planning, in America can be traced back to the 1930s rural county planning; hence, today it has become an element of American city planning (Akimoto, 2009). In the 20th century, the challenge of incorporating justice indicators confronted the American city planning. The City of New York (between 1961 and 1998), for instance, in recognition of the injustices, rezoned some so-called ‘M zones’ (heavy/noxious industries) to other uses, such as “lighter (less polluting) industrial uses” (Maantay, 2002:574). This rezoning happened to reduce the environmental and health adverse impacts on the population that had emanated from the M zones. The implementation of the justice approach through planning became central to the promotion of equity in quality of life, especially for the minority group.

Wilson *et al.*, (2008) contribute to this debate by referring to an example where municipalities in the USA, specifically in fragmented urban regions, have changed zonings to exclusionary zoning. Exclusionary zoning includes the regulation of land use through minimum size of dwelling houses, minimum stand size, and other requirements (exclusion of multi-residential dwelling units and mobile homes, etc.) that make it difficult, if not impossible, for minority groups and poor people to access certain areas (King, 1978; Wilson *et al.*, 2008). These typical zones of exclusion and the principle of exclusionary zoning in planning, which were also eminent in USA, are somewhat reminiscent of the typical community enclaves and ‘privatopias’ that started to form in South African cities over the last two decades. Although exclusionary zoning that promotes discrimination and segregation is still a challenge, Harris (1996) cited in Randall and Baetz (2001:2) highlights the fact that the segregation of land use is not new in some parts of North America because sprawl has become evident on the edges of various “cities during the years 1910 and 1920.” The exclusion referred to above is not only associated with class and race, but also with the restriction of good quality of life through the avoidance of justice in planning control. The exclusion of fairness and justice in planning appears to harbour some traits of discrimination.

In the recent years, Godschalk (2004) stated that planning should be inclusive of the liveability principle. This principle is closely associated with sustainability and spatial justice, as well as the principle of recognition justice. If planning serves to support these

principles, it should focus on building sustainable and liveable communities and settlements – where people can live, work, play and learn. Although the urban revitalization programmes of metropolitan regions in the world have begun to adopt the smart growth concept toward building sustainable and liveable areas, the principles of equity and justice are still neglected in most parts (Wilson *et al.*, 2008). Consequently, the strategy of SPI in North American planning, similar to that of the European and South African contexts, presents the need for reform.

In a study on the USA's land use regulation, as an element of spatial planning, Wu and Cho (2007) reveal the lack of some state and local government efforts to implement spatial planning policies. This kind of attitude toward implementation questions the ability of some states and local government to implement any planning reform. Most notably, the USA land use regulation study indicates that land use regulation has the potential to significantly influence the development and use of land. On the contrary, Kline and Alig (1999) draw on the failure of spatial planning and regulation in reducing the loss of resourced land (agricultural) in the western Oregon and western Washington regions. This failure is can however be precisely attributed to the injustices displayed by the exclusive application of spatial planning in the urban areas, and to the exclusion of the rural areas. In support of this contention, Sudonienè and Matonienè (2009) state that spatial planning policies in the USA, to a more considerable extent, concentrate on urban planning. In Mexico, urban management and economic development, with associated problems, are also focused in the urban settlements (Medina-Ross *et al.*, 2005) and display a unidimensional planning approach. The unfair distribution of planning between rural and urban areas is a challenge experienced worldwide. Further, the environmental injustice of planning is also evident in a study of Humboldt County, California, which reveals that the conversion of agricultural land is unacceptably high because of the demand for urban land uses (Smith and Giraud, 2006). By implication, the contemplation of a single land use in planning with a higher value than other land uses compound the ecological footprint and other socio-economic related challenges, thereby compromising justice.

In the Canada First Native reserve lands, spatial planning policies, and especially land use regulations, are generally unsuccessful because they ignore traditional knowledge and strategies (Millette, 2011). The ignorance of traditional knowledge and strategies

reflects the absence of recognition justice. In spite of the challenge of recognition, the spatial planning system of North America still presents an element of recognition justice to a certain degree. However, the implementation approach is questionable regarding the quality (meaningful) and quantity (inclusive) of participation. Practically, Bezdek (2013) points out that people of lower class and education in the USA remain marginalized because they are only partially engaged in decision-making, even though public participation on the whole seems to be improving. The above contention of Bezdek (2013) points to the existence of participation and democracy in the planning process, but is reflective of the challenges of implementation. A study of participation in the Brownfields Redevelopment Projects of Houston and Boston in the United State of America (USA) is also indicative of the problem of meaningful public participation. In the study of Houston and Boston, Solitare (2005) revealed that there was greater public involvement in Boston than in Houston, because the process in Boston included mechanisms to involve the public. By implication, the weak relationship between the local authority and the public is the reason for poor participation in Houston. Solitare (2005) highlights that planning authorities viewed Brownfields as an environmental risk for the affected parties, yet the affected parties accepted the status quo and were more concerned about the effects of redevelopment such as traffic impacts, the design of structures, accessibility, social disorganization, etc. It is therefore evident that the implementation of participation in planning requires not only consultation but also a proper public participation strategy and that such a strategy remains a critical implementation factor.

1.4.3 SOUTH AFRICAN CONTEXT

The reform of the spatial planning system in South Africa after the year 1994 led to expectations among many of the marginalized communities. However, as presented above, the achievement of EJ requires major improvement in the implementation of spatial planning. The country's landscape reflects an ecocentric approach, which is adopted by policies that govern environmental management. The ecocentric approach entails an ideal that prioritises nature, and its intrinsic value, as opposed to fulfilling the socio-economic needs of human beings (De Steiguer, 1997). Hence, the principles of development enshrined in the Spatial Planning and Land Use Management Act (SPLUMA), 2013, requires the promotion of justice, sustainability, efficiency, resilience

and good governance in spatial planning. However, Van Wyk and Oranje (2014) argue that, in the absence of a legislative mechanism to enforce these SPLUMA principles, they remain toothless. In support of this, the DEA (2012) states that approximately 80.14% of land in South Africa remains 'untransformed' or natural, leaving 19,86% as degraded and transformed land. Cilliers and Cilliers (2015) also argue that the country's system of protected areas is extensive; however, the land for residential development in the country remains scarce (especially for the poor) and residentially developed land only accounts for 1.06% of the total area of 121 907 789.0 hectares of land. Moreover, commercial and industrial and transport developed land take up a 0.8% share (99 128.3 ha) of land (DEA, 2012).

The statistical distribution on the use of the land illustrates that there exists a problem of equity in the distribution of land-based socio-economic challenges in South Africa. One of the socio-economic challenges is the unavailability of land for development in urban areas, which can address the presence of informal settlements caused mostly by land protection. As a result, the spatial planning approach in the post-apartheid era appears to consider nature as having more value than socio-economic/equity issues, which is supported by the fact that regulations which protect the natural environment restrict development in certain areas. This attitude towards spatial planning continues to view environmental protection from the traditional perspective of nature. According to Cadman *et al.* (2010), in respect of biological diversity, SA is third amongst the top three countries globally. The country's continuous improvement of the environmental management framework, with regards to environmental protection, is commendable, but spatial planning remains problematic in addressing important socio-economic issues.

It is evident that spatial planning is not focusing effectively on the implementation of plans. Coetzee (2012) indicates that the country's municipal planning (i.e., spatial planning) structure finds it cumbersome to assume and implement the new era's mandate of planning even 18 years after the dawn of democracy. In the present, twenty-five years into democracy, the same problems regarding the implementation of the planning mandate remains. Lategan and Cilliers (2016) highlight that literature regarding post-apartheid SA reflects the failures of the democratic government in delivering its programme of integrated human settlement. The Census results of 2011 lucidly show that the country succeeded by only 2% between 1996 and 2011 in the fight against

informal settlements (STATSSA, 2011). These informal settlements are centres of unemployment, poor infrastructure and poverty. In support of this argument, Van Huyssteen *et al.* (2009) revealed that service delivery, unemployment, inequity, and poverty are challenges that still exist in most settlements and areas of city regions, as indicated by the findings of a study on the city regions of Gauteng, Nelson Mandela Bay, eThekweni, and Cape Town. These results suggest a widened gulf in the implementation of spatial planning. It is also apparent that this gap is attributable to the ineffective consideration of distributive justice in planning. In addition to challenges regarding distributive justice, there is also an array of procedural challenges existing in the implementation of planning such as public participation.

The existing planning prescripts of South Africa identify participation and democracy as being the core elements of spatial planning. In essence, the effectiveness of distributive justice in planning requires the full participation of the general public, without the exclusion of recognition. Nonetheless, the lack of a definition for public participation in the planning prescripts creates discrepancy in the understanding of public participation in the country. However, the meaning of public participation is incorporated in the environmental management legislation. The National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998) defines the public participation process as “a process by which potential interested and affected parties are given the opportunity to comment on, or raise issues relevant to the application.” The definition is restrictive as it relates only to a process of environmental assessment. DEAT (2005) views public participation as a deliberative and transparent process for interested and affected parties (I&APs) wherein planning processes and decision making consider and incorporate all issues of I&APs. The latter definition provides the basis for an understanding of participation that can promote justice. Van Wyk and Oranje (2014) consider public participation with diversity in both its interpretation and meaning. These scholars state that public participation “can be interpreted to mean any of the following: information-gathering, consultation, collaboration, engagement and meaningful engagement” (2013:11). In general, public participation will not happen if information about stakeholders, their interests and locations is unknown. Further, meaningful engagement will not prevail if consultation and collaboration are absent, especially during the development and implementation of spatial planning tools.

It is of interest to note that spatial planning tools in South Africa, and in particular the spatial development framework (SDF), contains an element of the integrated development plan (IDP) of any given municipality. Although SPLUMA has elevated the legal status of the SDF, the SDF remains a component of the IDP, as SPLUMA did not repeal any section of the Municipal Systems Act, 2000 that regulates IDPs. By implication, the IDP process prevails as a primary tool for ascertaining and interpreting public opinions for incorporation in planning and decision-making through a participatory process (Cash and Swatuk, 2011). According to Schoeman (2015), there exists no contradiction between the provisions of SPLUMA and the Municipal Systems Act, 2000. However, spatial planning is inherently broad and must therefore inform the entire IDP process. According to Cash and Swatuk (2011), the Stellenbosch Municipality has expressed public participation in the IDP process as not pertaining to meaningful participation, but rather as merely informing the public. Similarly, Todes (2004) reveals that public participation in the IDP of the Ugu District Municipality is evident, but insufficient in meeting the targets of the Local Government Agenda 21. In addition, Cele and Chipunga (2016) also discuss the difficulty surrounding public participation and revealed that community engagement was a notable challenge in the development of the Florida Road precinct. These results represent a miscarriage of justice in planning implementation. In practice, there exists a inability of municipalities to undertake separate processes for the approval of spatial planning tools. In accordance to this, the level of participation, especially concerning quality and quantity, remains a challenge. For instance, Connelly (2010) points to the 2007 review of the City of Johannesburg SDF, and related regional SDFs, that afforded public participation by means of a single platform (meeting) for the deliberation of the SDFs. A single platform for deliberating a strategic spatial planning of a municipality constitutes inadequate public participation. Similarly, inadequate public participation is amongst the most pressing problems affecting the implementation of e-tolling system in the Gauteng Province (Chakwizira, Bikam and Adeboyejo, 2018) where a majority of commuters are not paying for using road networks with e-tolling systems. In general, some municipalities often notify the public about the approval of planning policies without engagement. The 'plan, adopt, and implement approach' should not find refuge in planning as it excludes the public from a deliberative-orientated process of policy planning and decision-making. On the 05 December 2018, the Constitutional Court of SA (in *South African Veterinary Association v Speak of the National Assembly and others*) stated that "a complete failure to take any

steps to involve the public in material amendment to a Bill cannot be reasonable by any measure.” By implication, the exclusion of the public on planning policies, which affect the space they use for residential, recreational, economic and other purposes is an unreasonable act.

In addition to this, the lack of meaningful inclusion of poor societies in planning, mostly in rural villages and urban areas, results in service delivery protests. According to Kienast (2010), community service delivery protests contributed greatly to the introduction of a turnaround strategy in local government. Protest actions have become a norm in South Africa, with the purpose of influencing service delivery. During the apartheid regime, service delivery protests became a strategy for the deprived poor, and in particular, Black Africans, to express their concerns and dissatisfaction with the system (Reddy, 2016). This argument confirms that protest actions are a societal norm to resist socio-economic challenges. De Beer and Oranje (2019) indirectly consider protest actions as a form of resistance, which arise from unaccountability, maladministration, lack of public involvement, poor service delivery and corruption among others. Conversely, Todes (2010) highlights that public participation is central to the local SDF preparation in the Ekurhuleni Metropolitan Municipality, albeit with challenges regarding the active involvement of informally organized groups. It can be said that the failure of spatial planning programmes directly correlates with a lack of participation. The lack of public participation means the absence of adequate recognition of contextual issues. Thwala (2009) draws attention to the failure of community participation in the Urban Renewal Project of Alexandra in Johannesburg. The author underscores the fact that the lack of precise objectives for the project resulted in inadequate commitment from the community to participate in the planning process of the project. This finding supports Solitare’s argument (2005) that there exists a compelling need to expressively inform the public about the objectives, benefits and opportunities of participation, including assurance of integrity and recognition of their interests. In procedural justice, integrity that encompasses honesty, truthfulness, transparency, openness, and fairness improves trust among stakeholders in a planning process. In return, public commitment is guaranteed to drive a meaningful participation process. Although Görgens and Denoon-Stevens (2013:86) argue that forward-planning (SDF) aims to achieve the “strategic visions of future land uses” through the participation of I&AP, the existing evidence presents a mere snapshot of participation in planning. The existing procedural justice

gap in planning shows the absence of the principles of just policy, advocating for the monitoring and evaluation of fairness in distribution, recognition of context, and capabilities. Fairness involves the equal treatment of every person (Dator, 2006); however, the equal treatment of everyone requires the application of equity in order to prevent inequity. The research in Chapter 9 argues that the achievement of fairness occurs not only by governance, but also by representation, consistency, impartiality, objectivity, and ethicality in decision-making². Governance, in the context of Rawls (1971), refers to a well-ordered society that has a basic structure (constitution and political, economic, and social systems), whereby justice is central in its arrangement. Rawls (2001) argues that where there is fairness, there is justice³ and the effective implementation of spatial planning should therefore account for the visible success concerning EJ. EJ, if adequately implemented through spatial planning, may be able to redress spatial injustices by promoting the existence of urban and rural areas that are equally planned by means of an inclusive process that promotes liveability.

1.5 THE PROBLEM STATEMENT

The challenges of justice occur in an environment that requires effective planning to achieve EJ. In recent years, the perception of EJ is that it goes beyond racism and class (distribution), and it now incorporates the aspects of quality of life and procedural fairness, among others. Jie *et al.* (2010) cite the fact that spatial planning affects regional eco-environmental value, ecosystem functions, and contributes to the improvement of regional socio-economic and environmental systems by transforming land-use geographies. The effects of spatial planning on a global scale, and in particular in South Africa, are far from convincing in terms of the shaping of the urban form and redressing injustices. Studies related to spatial planning represent the failure of planning in addressing justice-related matters (Kline & Alig, 1999; Koomen *et al.*, 2005; Smith and Giraud, 2006; Milder, 2007; Crane and Swelling, 2008; Sudonienè and Matonienè, 2009; Todes *et al.*, 2010; Millette, 2011; Trkulja, *et al.*, 2012; Ntiwane, 2012; Görgens and Denoon-Stevens, 2013; du Plessis, 2014b; Hansmann, Lincoln and Musvoto, 2018).

² Chapter 9 of this report provides a detailed discussion of representation, consistency, impartiality, objectivity and ethicality in decision.

³ John Rawls in his book published in 2001 titled *Justice as fairness* discusses the notion of justice and fairness. Section 6.4.2 in Chapter 6 of this report provides the analysis of justice as fairness in the context of planning.

Furthermore, these studies fail to highlight the spatial planning system as being problematic. The challenge of planning effectiveness relates to the gap that exists in knowledge and theory as to how to achieve effective spatial planning and implementation. Effective planning is the success that planning ought to reflect through the achievement of EJ.

More importantly, there exists a paucity of literature concerning spatial planning and EJ. Hence, the gap resides in the implementation of spatial planning in an attempt to achieve EJ. The existing studies focus primarily on zoning law and EJ in relation to race and class (Maantay, 2002; Wilson *et al.*, 2008), with few studies viewing the problem in light of EJ. In contributing to the SA debate of spatial planning and EJ, Van Wyk and Oranje (2014) provide an overview of spatial planning and its role in the implementation of the Bill of Rights. Willemse (2018) studied EJ on the distribution of neighbourhood parks which revealed the existence of injustices. The extant literature on spatial planning considers sustainability (Campbell, 1996; Hansmann, Lincoln and Musvoto, 2018), environmental consideration (Todes *et al.*, 2009; Millette, 2011; Ntiwane, 2012; Cilliers and Cilliers, 2015; Rohr, Cilliers and Fourie, 2017) and socio-economic aspects (Heimann and Oranje, 2008; Görgens and Denoon-Stevens, 2013; Bikam, 2016; Lategan and Cilliers, 2016; 2016a; Chakwizira, Bikam and Adeboyejo, 2014; 2018). This study therefore intends to present an in-depth understanding, as well as practical strategies, for spatial planning implementation aimed at achieving EJ. There also exists a greater extent of literature focusing on the integration of environmental and spatial issues, but with limited presentation of how planning could influence EJ. For instance, Soja (2010:53) indirectly presents spatial planning as being central to EJ by positing “environmental justice as a subfield of spatial justice.” In this context, there is a possible association between spatial planning and EJ. Soja (2009:2) states that spatial justice “involves the fair and equitable distribution in the space of socially values resources and the opportunities to use them.” Adegeye and Coetzee (2018: 12) most recently defined spatial justice “as a spatial distribution of socially valued resources such as education, employment, transport, health and housing in any society in such a way that everyone would have adequate access to them, with the disadvantaged of the society being the first beneficiaries rather than last.” These two definitions centralise distribution in space as the core element of spatial justice. The concept of spatial justice as the end product of spatial planning has gained recognition in recent years, although it is reluctantly used

by many in the field of land development and planning (Soja, 2009). In spite of this, the study at hand only addresses the concept of EJ and spatial planning. Chapter 3 of this research study briefly debates Soja's contention in this regard.

The researcher indubitably believes that the spatial planning system in South Africa, and within the global context, is well developed, but maintains that the focus on justice in planning implementation enjoys less attention in the existing studies. According to Van Wyk and Oranje (2014) the implementation of the Bill of Rights enshrined in the Constitution of SA requires spatial planning as an instrument for redressing imbalances. At the centre of this Bill of Rights is justice aimed promoting equality that apartheid policies rejected. Most notably, du Plessis (2014a) and du Plessis and Boonzaaier (2014) studies spatial planning success in urban form concerning mix uses and densities, although without relating the failures to implementation. In addition to this, du Plessis (2014b) explored the spatial development frameworks of 15 municipalities in South Africa, highlighting the failures and successes in achieving solutions to spatial planning challenges; however, the study's findings lacked insight into the correlation between spatial planning challenges and the strategies applied in the SPI. All of these studies overlooked the role of effectiveness of the SPI in an attempt to improve spatial transformation, let alone the mention of justice. Baker and Hincks (2009) also expound the view that planning has received condemnation for its failure to implement policies and plans effectively.

The lack of knowledge in SPI for EJ explains the current challenges of justice. This gap represents the need for further research in an attempt to expand the boundaries of theory in spatial planning, and EJ, so as to inform practical experiences thereof. For instance, Holifield (2009) and Pedersen (2011) contend that certain geographers and scholars have viewed research in EJ as narrow, empirical and limited. This study intends to further contribute to the growing theoretical developments of EJ from the early US conception of EJ based on race (Reed & George, 2011; Cutter, 1995; Pedersen, 2011; Walker, 2009a) to an EJ that drives "socio-environmental change" (Holifield, *et al.*, 2009:593) and a "spatio-cultural and organisational context" (Walker, 2009a:614) through spatial planning. Although the shift from the first-generation research theory to recent literature on EJ (Walker, 2009a) is evident, there exists limited evidence of studies that articulate spatial planning in the context of EJ.

Salkin's (2006) publication titled "Intersection between environmental justice and land use planning"; Arnold's (2007) publication titled "Planning for environmental justice" and Khosravaninezhad and Akbari's (2014) publication titled "Application of environmental justice concept in urban planning, the peri-urban environment of Tehran as the case study" provide the basis for the argument that effective spatial planning could achieve EJ. These publications accept that planning, and in particular land use policies, continues to create socio-economic and spatial injustices. Arnold (2007) specifically recommends certain actions that planning must take in order to achieve EJ. Although Arnold (2007) makes some recommendations, the "how" part is missing. The work of Khosravaninezhad and Akbari's (2014) introduces the process for realizing an in-depth analysis of EJ in planning, yet without all dimensions of EJ. This study, therefore, contributes to planning literature by improving on the work of Salkin (2006), Arnold (2007), and Khosravaninezhad and Akbari's (2014) with an exposition of spatial planning implementation perspectives in the pursuit of EJ. The study at hand will, over and above the existing theory, significantly contribute to new notions of spatial planning for EJ. Notwithstanding the above, there is overt reference in the literature that most contributions in the research and theory of EJ are from geographers (Reed and George, 2011; Syme and Nancarrow 2001); hence, this study provides the planning point of view for achieving EJ, or the view from the planner. Furthermore, this thesis addresses the improvement of the spatial planning system to bridge the gap between plan and implementation and between spatial planning and EJ.

1.6 RESEARCH OBJECTIVES AND QUESTIONS

The backdrop to the practical and theoretical statement of the problem provides the basis for the research objectives. This study broadly **aims** to answer the main research question of how spatial planning could be restructured to address EJ so as to improve the performance of spatial planning. In responding to the central research question, the study addresses the following research objectives and sub-questions:

1.6.1 RESEARCH OBJECTIVES

- a) To critically discuss environmental justice in the planning context.

- b) To investigate and critically discuss the extent to which spatial planning in South Africa responds to environmental justice.
- c) To identify and critically discuss factors perceived to enhance or impede the realization of the implementation of spatial planning towards achieving environmental justice.
- d) To create and introduce guidelines for incorporating environmental justice as part of broader spatial planning approaches.

1.6.2 RESEARCH QUESTIONS

- a) What is environmental justice in the planning context?
- b) To what extent does spatial planning in South Africa respond to environmental justice?
- c) Which factors are (or perceived to be) enhancing or impeding the realization of the implementation of spatial planning towards achieving environmental justice?

1.7 SIGNIFICANCE OF THE RESEARCH

The achievement of environmental justice remains a cumbersome challenge that many countries are struggling to address. However, there is no evidence of spatial planning prioritization as constituting the mechanism to achieve EJ. Yet, the Planning Commission (2012) in South Africa blamed spatial planning for failing to address injustices. In light of this view, there exists an opportunity to use spatial planning as the palatable means with which to attain justice. In revealing the intervention requirement of spatial planning, Chopra (2012) argues that the inappropriate use of land parcels is a consequence of social injustice (i.e. urban disinvestment, poverty, health crises, crime, and the degradation of the natural capital) that spatial planning must forestall. The appearance of social injustice could easily qualify as a profound consequence of the failure to deliver environmental justice. Environmental justice aims, among others, to address social injustices, whereby its failure would allude to the perpetuation of injustices.

The ineffectiveness of spatial planning is reflective of the mismatch of land use that adds to the challenge of socio-economic inequity and fairness. The mushrooming of informal settlements on unplanned and undevelopable land contributes to the difficulty in the provision of services and addressing day to day needs of a society, which is reflective of ineffective spatial planning. The current spatial planning system hinders the achievement of environmental justice, as it has no direct link to environmental justice. The drawback (such as the failure to redress the imbalances of spatial fragmentation, i.e., segregation), of spatial planning that apartheid created, especially within the South African context, demands that the state and local government implement spatial planning approaches that would enable spatial transformation.

Figure 1-1 illustrates the framework of the study indicating the known, missing and added knowledge. The known knowledge refers to the knowledge about spatial planning and EJ that exists in literature. The missing knowledge is the knowledge about spatial planning and EJ that is absent or only subtly presented in theory and practice. Lastly, the added knowledge is the contribution that the study makes in theory and practice regarding spatial planning and EJ. The figure demonstrates these types of knowledge in three categories. These categories include the theory underpinning the study, the practice and the research method. Figure 1-1 is important as it graphically represents the entire study from a theoretical and practical perspective.

In any research, it is crucial to review and expose the theoretical foundation from existing literature regarding the study in question. Subsequently, the literature and theory provide the basis for indicating what is known in relation to the study.

Figure 1-1: Conceptual framework

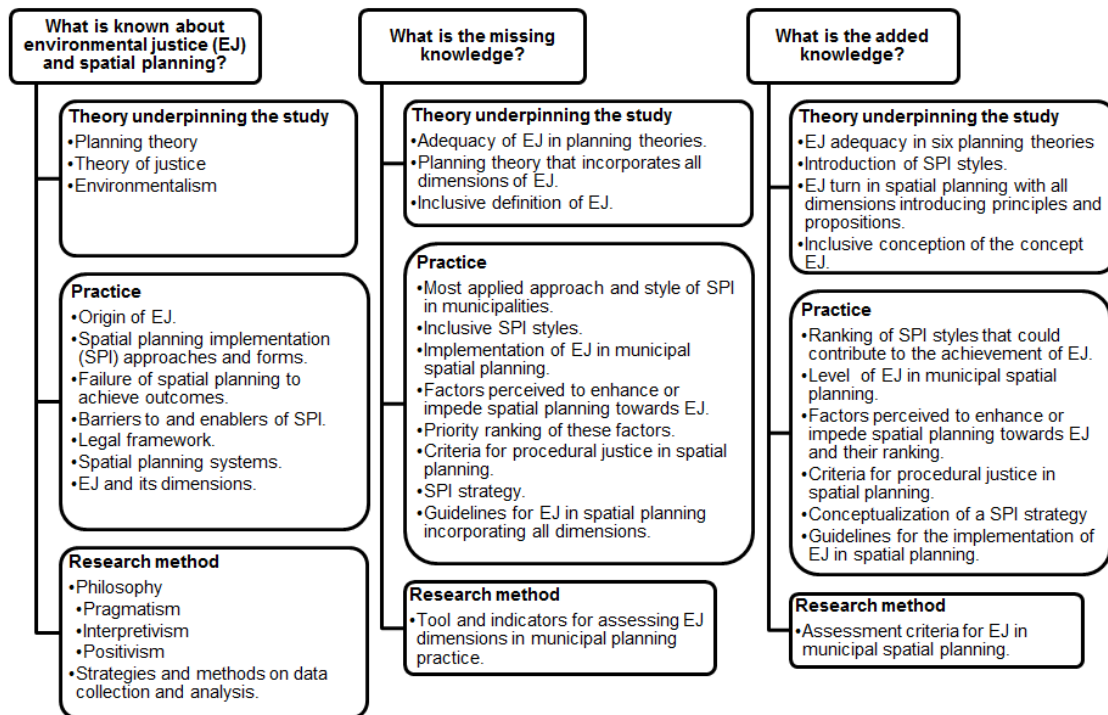


Figure 1-1 demonstrates that planning theories, the theory of justice and the philosophy of environmentalism provide the basis for the study. The study can be useful in indicating the relationship between these theories and environmentalism, where spatial planning and EJ refer to areas of development. Moreover, it is apparent from the figure that existing literature provides debates about the origin of EJ and its dimensions; approaches to spatial planning implementation; ineffectiveness of spatial planning (its failure to achieve outcomes, barriers and enablers to implementation); including spatial planning systems as well as its legal framework. This knowledge provides the basis to gauge gaps or loopholes that require interventions.

Figure 1-1 further indicates that the study reveals the missing knowledge regarding spatial planning and EJ. From a theoretical point of view, it is apparent from the figure that no literature exists that stipulates the adequacy of EJ in some planning theories, in particular the traditional planning theories. The study also unearths the gap on the implementation of spatial planning in municipalities, particularly in pursuit of EJ. The literature on practice highlights the absence of a framework for an SPI strategy. Spatial planning that has no strategy has the potential of affecting implementation, because

when there exists no strategy on how to prioritize planning interventions; implementation may not stand a chance to succeed. The failure of spatial planning to address imbalances implies the absence of monitoring and evaluation of implemented plans. Under normal circumstances, monitoring and evaluation provides an opportunity to measure effectiveness enabling the review of ineffective strategies. Figure 1-1 suggests that, in terms of methods, there appears to be no tool for assessing the implementation of EJ in municipal spatial planning. The assessment tool for planning implementation is pivotal in serving as an instrument for monitoring and evaluation.

Lastly, this study introduces the new theoretical lens of spatial planning from the context of EJ. This new lens, therefore, becomes added knowledge for planning practice and theory. The study further contributes to planning theory through its exposition of the extent to which existing theories (first- and second-generation planning approaches) support EJ. Moreover, it introduces principles and propositions for the new EJ approach in planning. The research further expands the knowledge on the typologies of spatial planning implementation (SPI), often only subtly presented in spatial planning studies. The study not only reveals the inhibiting and enhancing factors of SPI towards EJ but also the ranking regarding their impact. The study contributes to the practical forms of implementing spatial planning and its tools, such as the spatial development frameworks in South Africa and spatial plans elsewhere in the world. The study provides a framework for spatial planning implementation, which, if implemented appropriately, can cultivate an EJ type of spatial planning. The study offers findings on the practice of planning authorities in South Africa concerning EJ. The conceptual framework itemizes the practice factors that the study explores and debates. Over and above the discussed contribution, the study provides guidelines for the implementation of EJ in spatial planning with respect to its dimension.

1.8 DEFINITIONS OF STUDY TERMINOLOGY

This section of the introduction defines the main terminology that will be repeatedly and extensively used throughout the research study. The definitions of the terms provided herein are to be considered within the context of the study. The following chapters in the report provide further detailed expositions of each term within the conceptual framework

of the research. Table 1-1 provides the list of chapters and sections that provide details on the extended explanation of the defined terms discussed in this section.

Table 1-1: Development of terminology in the report chapters

Terminology	Chapter	Section
Environment	2	2.2
Environmentalism	2	2.3, 2.4
Environmental justice	2	2.5
Environmental justice planning	3	3.7
First generation planning approach and second-generation planning approach	3	3.7
Implementation	4	4.3, 4.4
Just policy, procedural justice, and recognition justice, substantive justice	2	2.6

Environment represents a system that includes components and functions of natural capital (e.g., water, wetlands, soil, air, land), along with its wildlife, that shares a strong connection with the socio-economic and cultural conditions of humans.

Environmentalism: According to Lewthwaite (1966), environmentalism is concerned with two notions; one is that nature has power over people, and the other is that people share a close relationship with nature. The study supports the later notion of the environmentalism which presents human beings' ethical obligation to protect nature. Environmentalism is an idea that has evolved and is used to protect nature and promote environmentally friendly technologies and actions in order to maintain the functions of nature.

Environmental justice is the fair and equitable distribution of environmental resources, services and activities to everyone, regardless of social structure, through a recognition and capability approach that provides equitable access to participate in appropriate procedures, with substantive means, towards restorative processes and benefits.

Environmental justice planning is the third-generation approach in planning, which is concerned with the explicit incorporation of justice dimensions in spatial planning and implementation.

First generation planning approach involves theories of planning that are procedural and include the rational-comprehensive, incremental and mixed-scanning planning theories.

Implementation is about a collaborative process that involves various actors engaged in a give-and-take approach to achieve plan objectives (Healey, 2003), rather than being only about actuating a plan to achieve its objective.

Just policy refers to the fair consideration of policy effects during the phases of plan preparation, implementation, and enforcement.

Planning “is a reformist and change-oriented practice” (March, 2010:109), being an action implemented to identify problems, and to introduce strategies and plans to address them.

Procedural justice: According to Millner (2011), procedural justice refers to the existence of prescripts (laws, policies, and regulations) that provide strategies for the participation of the public in decision-making on implementation and enforcement of environmental programmes.

Recognition justice refers to the contemplation of context through expert and experiential knowledge of the general public in planning.

Second generation planning approach involves theories in planning that are substantive, such as advocacy, transactive, communicative, collaborative and bargaining planning theories.

Spatial planning is an inter-organizational action that coordinates policies and different interest of societies and different groups to transform and shape the environment

through just procedures for now and the future. This action results in spatial planning policies and plans, including land use schemes for the management of land use.

Spatial planning implementation refers to the execution of plans and policies derived from spatial planning processes.

Substantive justice refers to fair provision of governance tools required and made available to capacitate the general public to participate in decision-making (Millner, 2011).

1.9 STRUCTURE OF THE RESEARCH

This research entails ten (10) chapters, each starting with an explanation of the problem and concluding with the recommendations made by the study. Figure 1-1 illustrates the structure of the research.

PART 1: THE BACKGROUND AND THEORETICAL JOURNEY OF THE STUDY AND ITS APPROACH

Chapter 1, **The Introduction and Research Problem**: The chapter introduces the study and provides a detailed discussion of the research problem. Further, the chapter presents the main research aim, research sub-questions and the significance of the research that announces its contribution to theory and practice. Lastly, it provides a definition of terminology used in the research and the structure of the research.

Chapter 2, **From Environmentalism to Environmental Justice**: The chapter provides an exposition of how environmental justice came about. It highlights the ontology of environmentalism in great detail, which gave birth to environmental justice. The chapter simplifies the understanding of the main research question by illustrating that the human beings' ethical obligations that started with the protection of the natural environment before moving toward debates and responses on justice related matters.

Chapter 3, **Planning Theories and Environmental Justice**: The chapter provides a critical review of the rational-comprehensive, incremental, advocacy, transactive, and communicative or collaborative planning theories within the context of environmental justice. It further debates the new turn in spatial planning, specifically the environmental justice turn in planning. This chapter, - responds to the research sub-question (a) that reads: *“what is environmental justice in the planning context?”*

Chapter 4, **Spatial Planning Implementation**: The chapter provides a critical review of literature in spatial planning implementation. It highlights the approaches to implementation, typologies of implementation, and the barriers and enablers to spatial planning implementation. The chapter responds to the research sub-question (c) that reads: *“what factors are (perceived to be) enhancing or impeding the achievement of environmental justice in the implementation of spatial planning?”* The chapter reveals a number of these factors and ranks them according to their priority analysed from the empirical investigation. Lastly, the chapter introduces the framework for spatial implementation strategy.

Chapter 5, **Research methodology**: The chapter explains the research methods applied in undertaking the study. The research setting, philosophy, sampling, design (research time horizon, methodological choice, and strategy), data collection techniques and analysis form part of the discussion in the chapter. Overall, the chapter illustrates the approach of the research in responding to the main research question and its sub-questions.

PART 2: THE PRACTICAL TEST OF ENVIRONMENTAL JUSTICE IN SPATIAL PLANNING

Chapter 6, **The environmental justice turn in planning**: This chapter responds to research sub-question (a) as it provides findings on the level of support for the proposed principles and propositions of the environmental justice turn in planning. Further, it highlights the familiarity of municipal planners with the concept of environmental justice.

Chapter 7, **Factors impeding and enhancing spatial planning implementation towards environmental justice in municipalities**: The chapter discusses the perception of planners on the factors perceived to impede and enhance spatial planning implementation towards achieving environmental justice. The discussion in this chapter extends to include the ranking of these factors in support of planning implementation. Further, the chapter reveals the practice of municipalities on the implementation of spatial planning. In addition to this, the chapter responds to research sub-question (c).

Chapter 8, **The test of distributive, recognition, just policy, and capability approach dimensions of environmental justice in spatial planning**: This chapter responds to research sub-question (b), providing the extent to which South African spatial planning incorporates environmental justice. The chapter exposes the municipal planning practice in four dimensions of environmental justice (distributive, recognition, just policy, and capability approaches). The findings in the chapter present the performance of spatial planning in the four dimensions.

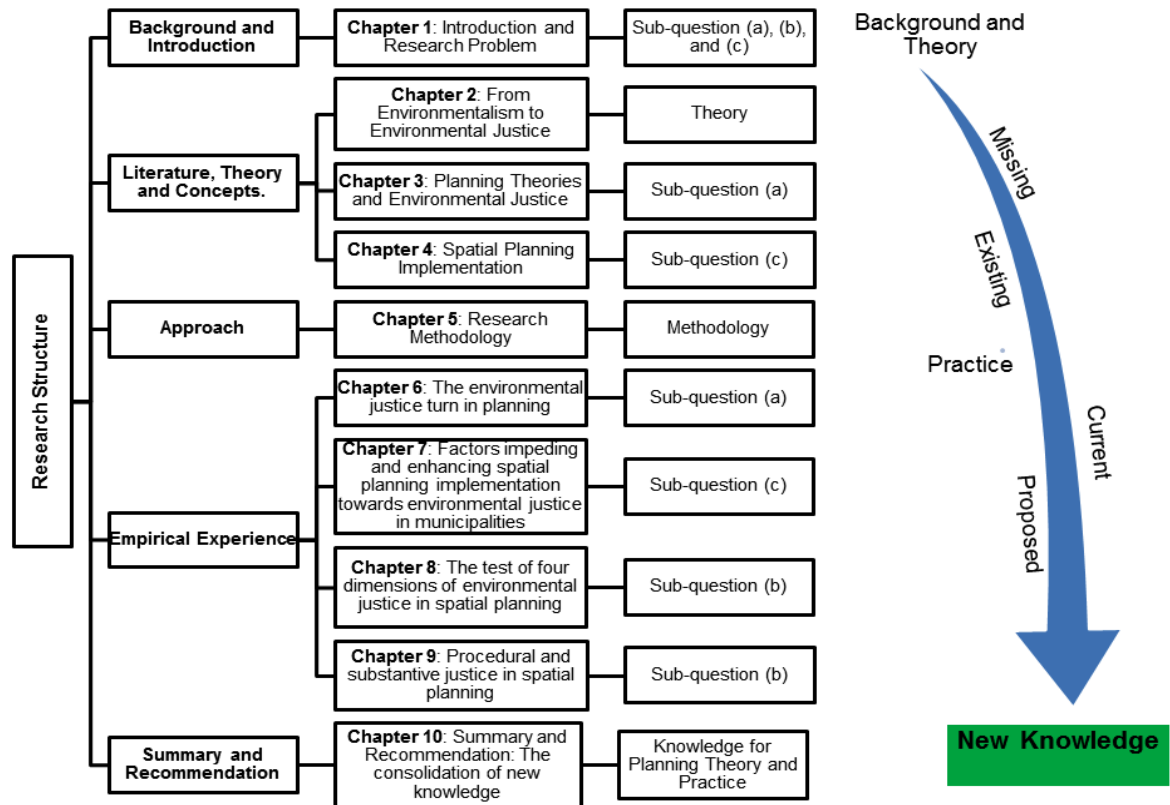
Chapter 9, **Procedural and substantive justice in spatial planning**: Likewise, this chapter responds to research sub-question (b). Further, the chapter addresses procedural and substantive justice in spatial planning as the dimensions of environmental justice. The chapter reveals the practice of municipalities concerning spatial planning in respect of these two dimensions.

Chapter 10, **Summary, recommendations – The consolidation of knowledge**: The chapter summarizes the research against each sub-question and further provides additional practical and theoretical knowledge. Lastly, it provides recommendations for further research regarding spatial planning and EJ.

Figure 1-2 below presents the structure of the research by clearly highlighting the focus area of each chapter and linking research sub-questions. The figure below indicates that the development of new knowledge begins from the understanding of existing theory and

background about the focus area, missing knowledge in theory and practice and current and proposed practice, before leading to the development of new knowledge.

Figure 1-2: Structure of the research



Source: Own construction, 2018

1.10 CONCLUSION

In summary, this chapter highlights that the implementation of spatial planning is ineffectual in responding to injustices prevailing in communities. Therefore, the discussion elevates the importance of achieving EJ through spatial planning. It is apparent from the above debate that the practical problem of injustices is not peculiar to South Africa, but that it is a global challenge. Furthermore, the chapter reveals that the study intends to address how spatial planning could be restructured to address EJ to

improve the performance of spatial planning. The research, in responding to the central research question, has identified four objectives and three sub-questions. Further, the above debate shows that the study discusses existing, current, missing, and proposed knowledge, with regards to spatial planning and environmental justice. In light of this debate, the above discussion briefly described the ten chapters that comprise this research study. In conclusion, this chapter is a prelude to the entire study, defining the fundamental concepts that are repeatedly and extensively applied throughout the report.

2. CHAPTER 2: FROM ENVIRONMENTALISM TO ENVIRONMENTAL JUSTICE

2.1 INTRODUCTION

This chapter discusses the dimensions of environmental justice. In building a clear understanding of environmental justice (EJ), as well as its dimensions and context in planning, it is necessary to explore the founding philosophy of environmental justice and related dimensions. First, the discussion provides an account of the meaning of the term 'environment' within the context of the study as well as a discussion on the birth of environmentalism. This account forms the foundation for understanding the evolution of environmental justice. Lastly, the chapter focuses on the dimensions of environmental justice, which will receive attention in greater detail.

2.2 ENVIRONMENT OF ENVIRONMENTAL JUSTICE

There is more to the environment than the wilderness and natural resources. An exposition of the term 'environment' is crucial in gaining an understanding of environmental justice. According to Van der Merwe (2009), most people define the term 'environment' within the context of wilderness and nature and as missing the opportunity for equity in social matters. In support of the argument, Moore and Wilson (2009) argue that there is a general ignorance of social equity in planning practice. In contrast to this, a court case between the Fuel Retailers Association of SA (Pty) Ltd vs Director-General Environmental Management Mpumalanga and others (case number CCT67/06), regarding a filling station establishment for which the government had issued an environmental authorization, reflect the court's emphasis on the importance of socio-economic preconditions in its final ruling (Kotze, 2008). The above case law demonstrates that the original planning of the filling station excluded socio-economic preconditions and that it took a court of law to enforce such an obligation.

In recent years, the development in theory and practice influenced the conception of the term environment to assume attributes that are beyond nature or wilderness. Agyeman (2007:172) states that the foci of the term now incorporate "urban disinvestment, racism,

homes, jobs, neighbourhood and communities.” On the other hand, Novotny (2000) presents the term environment as simply ‘the space’ where we live, play and work. Gottlieb (1993:1-2) states that Dana Alston, in 1991 during the opening of the first “National People of Colour Environmental Leadership Summit”, referenced the environment as “where we live, we work, and where we plan.” The arguments of Agyeman (2007) and Novotny (2000) support a weak anthropocentric view that underscores human beings as being cooperative with nature through respect and wise use while realizing the socio-economic benefits of such practices. Norton (1984:144) highlights that the weak anthropocentric view is imbued with the principle of “fair treatment” of all members of a biotic community and the principle of “general obligation” for all current members of a community with regards to respecting nature for its sustainability. Brownlie *et al.* (2006:1) view the environment as including “all living organisms (plants, animals, and other life), the biophysical environment (land, water, and air), including social, economic and cultural conditions.” This view incorporates wildlife, human beings, natural resources and socio-economic attributes. All these definitions support Aldo Leopold’s land ethic that sees a biotic community as including human beings, water, animals, plants, and soil. Leopold (1949:239) asserts that “the land ethic simply enlarges the boundaries of the community to include soil, waters, plants and animals or collectively: the land.” In practice, for example, Amado *et al.* (2010) applied the environmental perspective to the conceptual urban model, as stipulated by the *Congres International d’Architecture Moderne* (CIAM), which demarcates functional zones for living (residential development), working (economic hubs), recreation (large green spaces), and circulation. This foundation of this urban model by no doubt aligns with Dana Alston’s conceptualization of the term ‘environment’ as detailed above.

In essence, the term ‘environment’ assumes a perspective that merges socio-economic conditions and functions (represented by the colour brown) with those of nature (represented by the colour green and wildlife). In light of the above discussion, the author conceptualizes **the term ‘environment’ to mean a system that includes components and functions of natural capital (e.g. water, wetlands, soil, air, and land) with its wildlife, including the socio-economic and cultural conditions of human beings.** This definition is consistent with the description of the term enshrined in the National Environmental Management (NEMA) Act, 1998 (Act No 107 of 1998). The

NEMA describes the term 'environment' as "the surroundings within which humans exist and that are made up of-

(i) the land, water and atmosphere of the earth;

(ii) micro-organisms, plant and animal life;

(iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and

(iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being" (RSA, 1998b). The similarity between the author's definition of the term environment and NEMA's definition relies on the inclusiveness of socio-economic issues as well as the inclusion of water, soil, animals, and plants. The only difference is that the NEMA's definition explicitly articulates an interrelationship that various species have. This difference of relationship among species is not necessarily unavailable in the author's definition because by referring to the environment as a system, the author accepts that there is an interrelationship of components within the system.

In general, there are several ecological and socio-economic problems in an environment. Environmental inequalities can generally be regarded as the cause of these problems. According to Walker (2009b), environmental inequalities become more evident with attempts to gain access to environmental functions and resources, such as those enjoyed for socio-economic purposes (e.g. food, homes, community amenities and facilities, basic services, and business opportunities). This furthermore includes those environmental functions and resources enjoyed for cultural purposes (heritage or archaeological sites for spiritual connection, such as mountains, fountains, battlegrounds, towers and bridges), and natural purposes (water, topography, wetlands, wildlife, countryside benefits, ponds and other sensitive resources). A number of scholars also revealed inequities in the natural environment's distribution of services (Willemse, 2015; Dawson, *et al.*, 2017; Villamagna, Mogollón, and Angermeier, 2017; Mullin, *et al.*, 2018; de Sousa Silva, *et al.*, 2018). In practice, attempts to address the inequalities that are at the core of environmental problems started gaining increasing support, because environmental issues have become a threat to human nature and wellbeing (Dunlap & Scarce, 1991).

These attempts have in many cases failed to fully address environmental challenges, in particular through failed sustainability strategies and frameworks. Patel (2000) cited in Van der Merwe (2009:26) criticizes sustainable development for being difficult to achieve and as being unrealistic. In this regard, Kurwakumire, Mapurisa and Kuzhazha (2018) also argue that there is a need for flexible, adaptive and adequate self-reliant systems in order to achieve sustainability. These authors further cite that sustainability is unachievable if it can't withstand external conditions or forces (p.68). The Brundland Report defines sustainability as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations General Assembly, 1987, p. 43). Sustainability, as a concept, is about the improvement of quality of life for the current and future generations so as to achieve equity through just means, while ensuring the resilience of the ecosystem (Agyeman and Evans, 2003). This definition is consistent with the argument of the International Union for the Conservation of Nature (2006), which states that the sustainability concept was coined to eloquently show the possibility of achieving economic growth without compromising nature. The Agyeman and Evans definition of sustainability highlights the importance of the current and future generation the same way the Brundland Report does. Therefore, the sustainability contention underscores the anthropocentric conception of the environment as brown and green, and as propounded in this discussion. Agyeman and Evans (2004) argue that their definition explicitly incorporates justice and equity, unlike the traditional definition of sustainability adopted in the Brundtland Report of 1987, and the 1991 International Union for the Conservation of Nature (IUCN). Although the definition as described above incorporates justice, Patel (2006) cited in Walker, (2009b:367) criticizes sustainable development in South Africa for its failure to address environmental justice or social equity issues. Haberl (2004) further suggests that sustainability involves the maintenance of the dominant exchange processes between a human being and nature, while enhancing economic opportunities and social justice. Kurwakumire, Mapurisa and Kuzhazha (2018) support Haberl's argument on maintenance by recommending an approach that is resilient towards sustainability. The maintenance element pertains to keeping the "stability, integrity and beauty" of the environment as proposed by Leopold (1949: 262). The critique on South African sustainability implies that South Africa based its sustainable development conception on the focus of the Brundtland Report, 1987, and the 1991 International Union for the Conservation of Nature (IUCN).

According to Seke *et al.* (2013), the realization of sustainable development is unlikely in an environment dominated by socio-economic inequity and large-scale environmental deterioration, including the corresponding presence of increasing health-related illnesses. Although there are many adaptive approaches in the literature, the dominance of socio-economic inequity in any given place will necessarily affect the consideration of the environment as a whole. For instance, an area that has no accessibility and many inadequate planned settlements will rather prioritise socio-economic balance than the protection of natural resources.

The broadening of the scope on the concept of sustainability is ineffective regarding its outcomes, especially because the issue of environmental inequalities is beyond sustainability and is instead about justice. Van Der Merwe (2009) suggests the need to pursue other concepts for achieving sustainability. In addition to this, in bridging the gap of sustainability, Rosan (2012:962) and Agyeman (2007:180) propound the concept of “just sustainability” whilst Kurwakumire, Mapurisa and Kuzhazha (2018:67) propound a “resilience approach”, which consists of a management framework that addresses sustainability and resilience. This framework calls for the consideration of political, socio-economic, environmental and technological issues through a multi-stakeholder approach. Rosan (2012) argues that the just sustainability concept connects sustainability and environmental justice by increasing opportunities for communities, whereas Agyeman (2007) underscores the concept of sustainability as being complementary to environmental justice. Therefore, the recommended tool for achieving just sustainability, independently or collectively within the framework of environmental justice, is yet to be developed. In keeping with this, the following discussion addresses the concept of environmental justice.

2.3 FROM ENVIRONMENTALISM TO ENVIRONMENTAL JUSTICE

Environmentalism focuses on the present and future welfare of the environment and human beings, as well as the interaction between the environment and people. Central to environmentalism is environmental ethics. Environmental ethics introduced the moral obligation that people have to the natural environment (Callicott, 1984; Kortenkamp and Moore, 2001). The continuity or sustainability of the environment depends on how human beings relate to it. In reality, ethics involves moral actions and the responsibilities

of human beings. Aldo Leopold (1949:114), in reflecting on interdependency and sustainability in the essay titled "Odyssey", states that "the prairie lived by the diversity of its plants and animals, all of which were useful because the sum total of their co-operation and competitions achieved continuity". By implication, the survival of human beings depends on the natural environment and the continued functioning of the natural environment for its own sake, and for other purposes such as supporting human beings, depends on how human beings relate to it. Environmentalism takes the future generations in consideration with regards to resources and socio-economic decision-making (Paehlke, 1989). An absence of cooperation between human beings and nature will result in ecological dilemmas (polluting land, overgrazing, deforestation) as well as social dilemmas. According to Dawes (1980:169) two principles define social dilemmas, namely "a) that each individual receives a higher payoff for a socially defecting choice (e.g., having additional children, using all the energy available, polluting his or her neighbours) than for a socially cooperative choice, no matter what the other individuals in the society do, but b) that all individuals are better off if all cooperate, than if all defect." Therefore, environmentalism seeks to advance a cooperative position so as to guarantee sustainability through ethics.

According to Paehlke (1989) environmentalism was detached from politics during its earlier days of development. On the contrary, Taylor (1991:581) argues that the environmental crises that environmentalism seeks to address "are political, not individual in character." By implication, environmentalism is a response to politically oriented environmental crises that include pollution, degradation, global warming and social equity among others. It adopts political influence, because resource and socio-economic issues are never apolitical. According to O'Riordan (1981) and Paehlke (1989), environmentalism originated from the conservation movement founded on the edifice of ecocentric (nature-centred) and anthropocentric (human-centred) perspectives. From an international perspective, industrialization, urbanization and apartheid policies (in South Africa) undermined the importance of environmental health and concerns. These environmental concerns propelled the formation of environmental movements, which advocate in favour of increased environmental protection. As a result, the demand for environmental protection resulted in the birth of environmentalism.

2.4 THE BIRTH OF ENVIRONMENTALISM

According to Hetch (2012) and Vail (2015), the work of Rachel Carson on pesticides ignited public awareness on the need to protect the natural environment and led to the advent of environmentalism. However, environmentalism started years before it gained prominence as result of the publication of Carson's "Silent Spring" in 1962, which revealed the effects of pesticides. In the 1920s, Bob Marshall advocated for the protection of forest land against development and promoted increased access to it by the poor, as opposed to limiting the access to those that have power and money (Gottlieb, 1993). Further, earlier than the work of Bob Marshall in the 1900s, Alice Hamilton exposed the health hazard consequences of sewer spillages or outflows and later expanded her work to reveal the occupational health and environmental problems of industrial toxic and poisonous substances (p.7-10)⁴. The work of Bob Marshall and Alice Hamilton reveals not only the protection of natural resources but also the social element ingrained in environmentalism. In addition, to these contributors, Falkner (2012:511) indicates that "the root of environmentalism" is "in the late eighteenth century" where "environmental sensibility" dominated debates. The emergence of environmentalism illuminated the requirement of ethical and moral responsibility, not just for individuals in a community, but for the environment as a whole. Davies (2009) argues that environmentalism evolved to address the conflicting demands between industrial and commercial developments and natural resources. Davies' argument illustrates the existence of a relationship between human beings and nature and this relationship furthermore implies that the survival of a human being depends on nature. In addition to this, Platt (1948:351) defines environmentalism as the "approach which gives primary consideration to the natural environment as a causal factor, advocates its importance, and looks particularly for evidence of its influence, creating indeed a prejudice in its favour." Therefore, environmentalism considers the functions and services that the natural environment provides, with the intention of ensuring its protection.

In the existing literature, Lewthwaite (1966) elucidates that environmentalism has two dimensions. The first one is that of the environmental determinism view, where natural

⁴ Robert Gottlieb in his article titled "Reconstructing Environmentalism: Complex Movement, Diverse Roots" provides a detailed account on the work of Bob Marshall, Alice Hamilton and Rachel Carson.

resources appear as holding innate control over the actions of human beings; and alludes to the strong relationship between natural resources and human beings (p.22). The second view implies the obligation of stewardship, respect, and wise use of nature for its own existence, all the while fulfilling human requirements. In practice, economic development depends on relevant natural resources (i.e. in mining, fishing, agriculture, etc.), the character of strong anthropocentrism and the laws that regulate the utilization and protection of these resources. A strong anthropocentric perspective defines value from “felt preferences” whereas a weak anthropocentric perspective defines value from “considered preference”:

A felt preference is any desire or need of a human individual that can at least temporarily be sated by some specifiable experience of that individual. A considered preference is any desire or need that a human individual would express after careful deliberation, including a judgment that the desire or need is consistent with a rationally adopted world view which includes fully supported scientific theories and a metaphysical framework interpreting those theories, as well as a set of rationally supported aesthetic and moral ideals” (Norton, 1984:134).

By implication, the view that supports human beings as having values that are more important than nature assumes the position of a strong anthropocentric perspective. This view also states that human beings who subscribe to the value of destruction will understand nature as an object for exploitation and damage without any consideration of sustainability. In contrast to the strong anthropocentric, the weak anthropocentric notion calls for human beings to seek a balance with nature. Norton (1984:136) views this value theory as advocating for human beings to live in “harmony with nature.” During the 1960s and 1970s, some movements advocated for environmental protection, which subsequently resulted in the implementation of environmental regulation. According to Milton (1993), environmentalism incorporates and demands the control of activities in the natural environment through culturally framed roles and responsibilities so as to secure a sustainable future. Likewise, Tsao (2013: 449-453) discusses the contentions of environmentalism, from the perspectives of various scholars, as being primarily about the impact of human activities on the biophysical environment. Most countries, such as South Africa, North America, and those in Europe, have adopted spatial planning systems in pursuit of the ideals of environmentalism. Hence, Davies (2009) states that

environmentalism centralizes environmental protection in an attempt to forestall increasing environmental challenges.

In addition to this, a number of scholars introduced various types of environmentalism. These kinds of environmentalism include the radical (Besthorn, 2002), the “cult of wilderness [or] a gospel of eco-efficiency” (Anguelovski and Martinez-Alier, 2014:167), “environmentalism of the poor” (Anguelovski and Martinez-Alier, 2014:167; Guha and Martinez-Alier, 1997:34), and global environmentalism (Falkner, 2012). According to Besthorn (2002), radical environmentalism advocates for equality in the value of all resources, without human interference. Although this type of environmentalism addresses justice or fairness, it also supports the ecocentric perspective. The cult of wilderness view promotes preservation and has attributes of ecocentrism, while the gospel of eco-efficiency advocates for sustainability through green approaches and other means of sustainability, such as smart growth (Anguelovski and Martinez-Alier; 2014). The eco-efficiency environmentalism view promotes the efficient use of the natural capital and supports weak anthropocentrism. Environmentalism of the poor evolved to address the depletion and distress of natural resources, which constitute the sources of livelihood for the poor (p.169). The marginalization of the poor is caused by the failure to consider the intrinsic and instrumental values that nature provides to them. Over and above the description of environmentalism of the poor, Guha and Martinez-Alier (1997) posit that this typology of environmentalism extends to include materialists and non-materialists within the context of the poor and rich. Materialist environmentalism in rich countries is concerned with fighting against the environmental impact of the rich, whereas in developing countries the emphasis is on fighting against the degradation of the resources that provide for survival and livelihood (p.34). On the other hand, the non-materialist view focuses on the protection of nature, as it either guarantees a good quality of life or resonates with the cultures, beliefs, and values of various social groups (p.34). The non-materialist notion of environmentalism illuminates the natural environment as being the prerequisite to life nourishment. Interestingly, Guha and Martinez-Alier (1997) enunciate that there is a strong relationship between environmentalism and prosperity. In the last 20 years, especially with the rise of EJ studies, the association between environmentalism and prosperity has been seriously questioned. Scholars argue that the old vision of environmentalism, which was often rich and white and considered in an American context, is associated with visions of pure

wilderness, rather than more complex views of people in nature, which recognize people's dependence on nature. The latter notion was born out of urban environmental movements and movements in developing countries worldwide. The materialist and the non-materialist aspects underpin the axiology of anthropocentrism within the context of the strong and weak perspectives. Lastly, global environmentalism advocates for the adoption of international laws, agreements, conventions or treaties and practices, which are assumed via diplomatic means, in an attempt to protect nature and address social equity challenges (Falkner, 2012).

Indeed, environmentalism sets the scene for the introduction of laws that govern natural resources in the national and transnational geographies. In South Africa, environmental protection is a government policy, and various Acts refer to environmental conservation and management. Internationally, Schofer and Granados (2006) underscores the fact that the introduction of international treaties, conventions and standards (i.e., ISO1400), agreements and frameworks have institutionalized environmentalism globally, all the while reflecting significant correlation to increased investment and economic growth, particularly in the pro-environmental protection countries⁵. Norton (1999; 2005) highlights an adaptive management approach that emphasises learning from experience so as to improve our relation to the environment. This approach is rooted in the experience of Aldo Leopold, who went from disregarding the wilderness to avidly protecting it as is detailed in his 1949 book, titled "A Sand County Almanac". In this regard, adaptive management is defined as "a search for a locally anchored conception of sustainability and sustainable management," resulting from scientific knowledge and "social learning" as the means "to achieve cooperation in the pursuit of management goals" (Norton, 2005:362). The adoption of conventions, standards, and laws emanates from experience that many countries have while relating to the environment.

Although environmentalism has increased the consciousness of environmental concerns, it has failed to adequately expose and subdue issues of inequalities. This failure is especially evident in Europe, the United States, and South Africa. In South

⁵ In South Wales, Australia in a case between *Gloucester Resources Limited v Minister for Planning* [NSWLEC 7] regarding a coal mine, on the 08 February 2019 Judge Preston CJ dismissed an appeal application citing among others climate change impacts and the country's obligation under the United Nations Framework Convention on Climate Change, 1992 and Paris Agreement, 2015.

Africa, although the policies and laws for the protection of the natural environment did exist during apartheid, Siedman (1999) and Munslow and Fitzgerald (1994) state that the policies of the apartheid regime conspired to centralize inequalities. Pohoryles (2010) has critiqued the findings of Warleign-Lack, which state that environmentalism is not central in the European Union policies on the basis that the findings have focused more on the ecological perspective. The ecological notion often ignores the vital adjunct of nature towards human actions. Nonetheless, the EU states are among the countries that invariably improve systems for planning and environmental protection. Evidence in the existing literature implies that the United States policies have institutionalized the minority and led them to experience the brunt of environmental pollution. This practice resulted in the drive for change and advocating for environmental justice (Cutter; 1995; Bullard, 2001; Rhodes, 2003; Urkidi and Walter, 2011; Reed & George, 2011; Walker, 2009a, 2009b; Boone, 2008) without neglecting environmentalism.

2.5 ENVIRONMENTAL JUSTICE (EJ)

The conception of EJ, since its origin, has focused on distribution and particularly on toxic waste (Bullard, 2001; Hamlin, 2008; Urkidi & Walter, 2011; Pedersen, 2011)⁶. The distribution of injustices has recently been extended to include “urban heat as an environmental justice issue” because only those that can afford in life are able to adapt to it (Voelkel, *et al.*, 2018:2). The distribution of services that the natural environment provide is now the new topic of injustice (Willemse, 2015; Dawson, *et al.*, 2017; Villamagna, Mogollón, and Angermeier, 2017; Mullin, *et al.*, 2018; de Sousa Silva, *et al.*, 2018) and “odour pollution exposure” of disadvantaged communities in Melbourne, Australia (Gunn, *et al.*, 2017:127). In recent years, the construct of environmental justice has expanded its boundaries. In support of the former argument, Schlosberg (2004) notes that the focus of environmental justice theory has been on distribution, all the while underplaying recognition and participation. Recognition and public participation, as it is defined today, have become an extension of the concept of environmental justice. Figueroa (1999) argues that participation became prevalent in environmental justice in order to bridge the gap between distribution and recognition forms of justice. This

⁶ Robert D. Bullard (1991) indicates that the summit of the National People of Colour Environmental Leadership convened for the first time in 1991 extended the mandate of the EJ movement to include other issues (transportation, land use, health, safety and empowerment) than toxic waste alone.

expansion of the concept reflects the flexibility of the concept known as “environmental justice”. According to Walker (2009b), environmental justice is malleable as it allows for reconstruction. Environmental justice has become visible in many countries in recent years, especially regarding practice and theory. Reed and George (2011) revealed that the United States dominates academic publications on EJ, although other countries like South Africa, New Zealand and Australia have also started to participate in these debates, albeit with low levels of publications. The spatial attraction of environmental justice beyond the US can account for the concept’s rapid development. Walker (2009b) extensively discusses the globalization of EJ as incorporating two dimensions of which the first dimension is horizontal, and refers to EJ issues in new areas/countries beyond the USA, and the second dimension is vertical as it relates to addressing EJ issues through international laws, agreements, conventions, and protocols. The latter form is consistent with global environmentalism as it places an obligation on signatory countries through international laws, agreements, conventions, and protocols. There exists many forms of justice over and above EJ, whether horizontal or vertical, namely spatial justice (Soja, 2009; 2010), social justice (Barry, 1989; Visser, 2001), climate justice (Chatterton, Featherstone & Routledge, 2013), forest justice (Sikor, 2010), food justice (Agyeman & McEntee, 2014), organizational justice (George & Wallio, 2017), and many other omitted forms of justice, as well as those that are yet to evolve. Hence, this study is about EJ, with specific reference to spatial planning. The diversity in the definitions of EJ presented in Table 2-1 also confirms the flexible nature of this concept; however, it is important to note that the definitions presented in the table are not exhaustive of all EJ definitions in the literature of EJ.

Table 2-1: Environmental justice definitions

Authors	Definitions
Figueroa (1999:6,55)	<ul style="list-style-type: none"> • “Environmental justice refers to social justice in terms of the ways that human activities affect human and natural environments, especially the impact of activities upon human health and human values as they relate to immediate living and working conditions, natural resources that humans depend upon, cultural values intimately tied with the natural environment, and the way that the institution of environmentalism affects human

Authors	Definitions
	relations. EJ is a problem of distribution and recognition.”
Laurent (2011:1847)	<ul style="list-style-type: none"> • The US Environmental Protection Agency defines it as “the fair treatment and meaningful involvement of all people regardless of race, colour, national, origin or income concerning the development, implementation, and enforcement of environmental laws, regulations, and policies.”
Laurent (2011)	<ul style="list-style-type: none"> • The UK Environment Agency (European) defines EJ in three different dimensions: <ul style="list-style-type: none"> • Distributive justice: the distribution of benefits and harms in an environment considering the existing social structure through equity. • Procedural justice: access to processes of environmental decisions in a fair manner and access to environmental liberties or rights and recourse in environmental guiding prescripts such as legislation, by laws, executive orders, etc. • Policy justice: the decisions on environmental policy fundamental principles, norms, and outcomes including the relationship with their effects on the social structure (various groups) of the community.
Cock (2004) and van der Merwe (2009)	<ul style="list-style-type: none"> • The Charter of the SA Environmental Justice Network Forum refers to environmental justice as concerned with social change, restructuring and transformation aimed at ameliorating quality of life (protected environment, civil rights, security and democracy etc.) and improving access to the basic needs of humans (shelter, economic quality, food, health care, sanitation, education etc.). • Further, abovementioned charter denotes EJ as being about the socio-economic transformation towards a good quality of life (McDonald, 2002).
Fredericks (2011)	<ul style="list-style-type: none"> • Defines environmental justice as the distribution, of

Authors	Definitions
	environmental ills, burdens and benefit, participation of various groups in decision making, and restoration of relations between those perpetuating injustices and that injustices affect. .
Millner (2011)	<ul style="list-style-type: none"> • It is about recognition, participation, substantive, precaution, fair distribution, redress, and compensation.
Whyte (2011)	<ul style="list-style-type: none"> • Environmental justice is about the fulfilment of the standard of distribution, procedure, correction, and recognition.
Schlosberg (2013)	<ul style="list-style-type: none"> • Environmental justice is not just about individuals and communities addressed through distribution, recognition, and participation, but rather a wide range of issues that impact on the functionality of an individual and community exposed through the capability approach.
Khosravaninezhad and Akbari (2014:58)	<ul style="list-style-type: none"> • “Fair treatment of all people in terms of the distribution of benefits and costs arising from planning, programs and policies.”

Source: Own construction, 2018

According to Laurent (2011), the US definition of environmental justice encompasses the procedural and distribution dimensions of justice. On the other hand, the United Kingdom's (UK) definition of EJ extended its scope to incorporate equity and policy justice (p.1848). However, it is interesting to note that these two definitions enjoy legal status, as they appear in legal prescripts and official policy documents of the US Environmental Protection Agency and the UK Environment Agency. According to Fredericks (2011) and Walker (2009a; 2009b), the US engrained EJ in the Executive Order 12898, which also led to the publication of the 2014 Environmental Justice Plan of the US (Pedersen, 2014). In the midst of policy reform to address EJ in the USA, Baptista, Sachs, and Rot (2019) state that even 30 years after the publication of the Commission for Racial Justice of the United Church of Christ report, which illustrated the environmental injustices experienced by people of colour, traces of injustices remain evident. The story of Flint in Michigan where the contamination of water between the year 2014 and 2015 affected mostly the disadvantaged African-American people

(Campbell, *et al.*, 2016) is a good illustration of the pervading injustices in the USA. It is, therefore, apparent that despite the legal recognition of EJ in the USA, there is a need for more action to promote environmental justice.

The policy justice supported in the UK definition also addresses the outcomes and impacts of policy implementation. However, Fredericks (2011) postulates that EJ policies lack strategies for monitoring progress in reaching EJ. This observation implies that monitoring must accompany policy implementation in order to achieve policy justice. In South Africa, EJ is directly or indirectly addressed in the Constitution, and particularly in the Bill of Rights, (see RSA, 1996). In this regard, Debbané and Keil (2004) consider the South African Constitution as having a high degree of liberty. Van Wyk and Oranje (2014) state that the Constitution provides rights (equality, culture, dignity, religion, housing, property, administrative action and information) that play a critical role in the implementation of spatial planning. However, the Bill of Rights in the Constitution addresses the question of equity with limited direction. For instance, South Africa's environmental rights in the Constitution provide an acceptable framework for EJ (Cock, 2004), yet there exist mounting criticisms for its lack of a distributive and procedural justice frame with regards to environmental planning and management (Walker, 2009b). The SA Environmental Justice Network Forum contextualizes EJ on the basis of sustainability (improved services, quality of life, and protected environment), but there remains a patent inability to highlight distribution, procedural and recognition traits of justice. Figueroa (1999) articulates that social justice is central to EJ, with precise reference to distribution and recognition justices. The definition of Figueroa (1999) is also comparative with that of the SA Environmental Justice Network Forum with respect to the notion of improved quality of life. The other definitions of EJ share similarities regarding distribution, procedural and recognition, yet they also introduce other components of justice, such as restoration (Fredericks, 2011; Conrad, 2011; Khosravaninezhad and Akbari, 2014), substantive, precaution, fair redress and compensation (Millner, 2011), corrective ideals (Whyte, 2011) and the capability approach (Schlosberg, 2013).

In considering the various thoughts of the abovementioned scholars, the author has extracted the following definition:

EJ refers to the fair and equitable distribution of environmental resources, services and activities to everyone, regardless of social structure, through recognition and the capability approach providing equitable access to participate in appropriate procedures with substantive means towards achieving restorative processes and benefits.

Norton and Toman (1997) refer to resources and services as anything that is valuable to people, whether it is human-made or directly from nature, including food, water, meat, furniture and other equipment. Activities refer to various uses located in any given place. These activities include various uses such as business, industrial, conservation, residential and transportation related uses, and are normally regulated through town planning or land use schemes. A town planning scheme or land use scheme is a tool or policy used to demarcate and regulate activities of any place through zoning policies. In practice, a town planning scheme or land use scheme is a tool for land use management. Land use management entails managing the use of land through granting or allocating land use rights (de Visser and Poswa, 2018). In the context of South Africa, SPLUMA assigns the powers to approve a land use scheme for the entire jurisdiction of a municipality to a municipal council. However, according to SPLUMA, the power to approve a land use rights or an amendment to a land use scheme application is either with an authorised official or a municipal planning tribunal, as per the categories of applications.

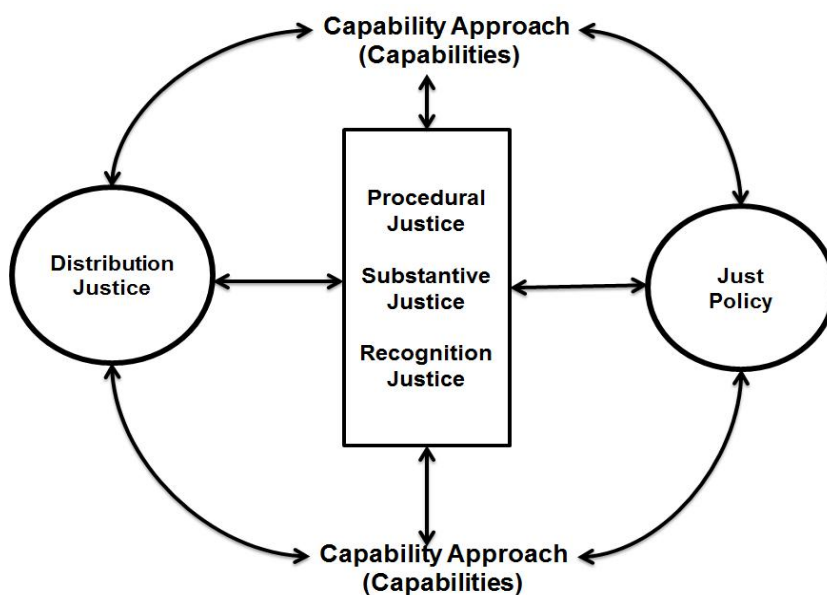
The above definition of EJ highlights distribution by means of certain criteria (recognition and the capability approach), all the while ensuring that there is fairness in gaining access to decision-making procedures and restoration processes. Willemse (2015) cites that EJ advocates for the protection of all people from environmental impacts regardless of their social, economic and demographic attributes. Drawing from Willemse (2015), this further underscores the point that environmental justice promotes fairness towards all people, which implies that the social structure of human beings does not define whether a person receives justice or not. The definition excludes the direct articulation of environmental harms or ills and underscores the environmental resources, services and activities. Rhodes (2005) also states that various economic, health, social and technological factors influenced the emergence of the EJ movement in the 1980s. In keeping with this, the definition in the preceding paragraph incorporates the natural

environment, including the socio-economic and cultural conditions of human beings through the capability approach. The diversity of conditions that the definition incorporates also support the argument of Banzhaf, Ma, and Timmins (2019) who state that EJ is a field that involves multiple disciplines. In light of this definition, environmental justice consists of six (6) dimensions that comprise distribution, procedural, substantive, recognition, capability approach, and just policy. These dimensions contextualize environmental justice beyond the contentions of Fraser (2000) and Schlosberg (2003 and 2004), who focused primarily on the three traditional dimensions of EJ namely distribution, recognition, and procedure.

2.6 DIMENSIONS OF ENVIRONMENTAL JUSTICE

The dimensions of EJ represent a precise relationship, for none of the dimensions is 'just' when applied in isolation. The discussion that follows offers the exposition of each dimension and their corresponding relationships, including a critique of the insulation in their application. Figure 2-1 shows that these dimensions are interconnected, yet independent. Further, the figure illustrates that EJ is incomplete without a combination of these dimensions. The preceding section also underscores the diversity of the dimensions of EJ in the literature.

Figure 2-1: Relationship of the environmental justice dimensions



Source: Own construction, 2018

Figure 2-1 demonstrates procedural, substantive, and recognition justice as being at the same level of relation, whereas distributive justice as well as just policy is depicted on the outer side of the figure. Therefore, distributive justice and just policy depend on the central forms (procedural, substantive, and recognition) of justice to succeed. Just policy can be regarded as an enabler of distributive justice whereas capabilities are applicable to all forms of justice. The definition of EJ presented in the above discussion highlights the intention of EJ as distribution through recognition, procedures, and capabilities with substantive means to achieve restorative processes and benefits.

2.6.1 DISTRIBUTION OR DISTRIBUTIVE JUSTICE

Distributive justice refers to the fair distribution of resources, activities, and services in space. This kind of justice denotes the exposure of the poor and disadvantaged people to environmental harms, ills and hazards (Master-Smith *et al.*, 2016). The definition of these authors provides meaning from a distributive injustice perspective. Usmani and Jamali (2013) refer to distributive justice as fairness in the allocation of resources and outcome of decisions. This notion of justice promotes Rawls's nature of contract that stands in contrast to the social contract based on the state of nature. The state of nature suggests that a society is free and equal for its own self-preservation without control and regulation from a government which led John Locke to highlight the aspect of moral obligation⁷. By implication, the agreement of members of a society on how to live and sustain life has no governing rules. This means that the distribution of resources, activities, and services needs no rules, with the exception of moral obligation, if observed to promote fairness. In contrast, in Rawls' contract, the justice principles (freedom and equality) govern the agreement of society based on the original position (Rawls, 1971), which refers to "the situation of men as they would be found at any time in history if, abstracted from their own positions in society and the concrete events of their times, they were required to choose the ideally just social institutions for themselves and their descendants" (McBride, 1972:983). This situation indicates that when a member of a society enters into an agreement, no status or class exists. Rawls

⁷ Thomas Hobbes. 1660. *The Leviathan* accessible from https://www.ttu.ee/public/m/mart-murdvee/EconPsy/6/Hobbes_Thomas_1660_The_Leviathan.pdf and John Locke. 1689. *Second Treatise of Government*, accessible from <https://www.earlymoderntexts.com/assets/pdfs/locke1689a.pdf> provide a detailed discussion on the state of nature contract.

highlights that, in the original position, the society chooses the justice principles under the veil of ignorance. Rawls (1971:137; 1999:11) demonstrates the veil of ignorance to mean the following:

First of all, no one knows his place in society, his class position or social status; nor does he know his fortune in the distribution of natural assets and abilities, his intelligence and strength, and the like. Nor, again, does anyone know his conception of the good, the particulars of his rational plan of life, or even the special features of his psychology such as his aversion to risk or liability to optimism or pessimism. More than this, I assume that the parties do not know the particular circumstances of their own society. That is, they do not know its economic or political situation, or the level of civilization and culture it has been able to achieve. The persons in the original position have no information as to which generation they belong.

Moral and ethical obligation informs fair distribution under the veil of ignorance given the nature in which members of the society participate. However, the original position becomes problematic, as argued later in this chapter, in addressing other areas of justice such as procedure and capability. Rawls's justice principles, decided upon under the veil of ignorance, include:

“First Principle

Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all.

Second Principle

Social and economic inequalities are to be arranged so that they are both:

- (a) to the greatest benefit of the least advantaged, consistent with the just savings principle and;
- (b) attached to offices and positions open to all under conditions of fair equality of opportunity” (Rawls, 1971:302).

In fulfilling or satisfying these principles Rawls proposed a basic structure that include a constitution (political) as well as social and economic arrangements (Rawls, 1971; 1999; 2001). The basic structure introduces government, rules and laws in the contract in contrast to the social contract based on the state of nature.

Distributive injustices in South Africa continued even after Rawls introduced the justice principles of freedom and equality. During apartheid in South Africa, spatial planning promoted a land use mismatch that distributed industries next to residential areas (Leonard and Pelling, 2010). This land use mismatch benefitted the advantaged at the cost of the least advantaged. The example shows economic self-interest in gaining industrial returns and the weaknesses of distributive justice on socio-economic effects. Young (1990) cited in Schlosberg (2004:518) further highlights the inadequacy of distributive justice, in responding to social justice, because of the fact that inequity in distribution is not the sole source of injustices. Urkidi and Walter (2011) are in accord with this argument and affirm that distributive justice ignores the importance of socio-cultural and geographical conditions in distribution. However, in distribution, Rawls' second principle of justice highlights that plans to address socio-economic inequalities should benefit the disadvantaged group taking into account the efficiency, just saving and the difference principles (Kukathas & Pettit, 1990). The 'just saving' principle also implies sustainable development for the future generation. On the other hand, the 'difference principle' promotes a distribution of inequalities, but only those inequities that positively influence the impoverished group (Lebacqz, 1986; Kukathas & Pettit, 1990). The second principle prioritises the least advantaged in a society. Brock (1973:491), in addressing the inequalities that the application of the second principles could create, suggests a "mixed principle" so as to promote a minimum level of survival. By implication, the mixed principle aims at preventing injustices for the most advantaged members of society while addressing injustices existing in the least advantaged societies. In Sweden, the study regarding the distribution of decisions on windmill initiatives revealed that there is a high probability of proposal rejection in areas with highly skilled and educated people and dominated by people working for the private sector; as opposed to areas dominated by unemployed people (Litjenfeldt and Pettersson, 2017). The mixed principle, if applied in the case of Sweden, would have reduced the probability of proposal rejection in the mentioned areas. The rationale of the justice principles is evident in the work of Debbané and Keil (2004), who found that the black people in Hermanus (Zwelihle), a black-dominated town of the Western Cape Province in South Africa, had inadequate access to water and sanitation, when compared with the urban areas reserved for white people. It is apparent that it will be fair to apply Rawls's second principle in an attempt to benefit the least advantaged and addressing inequalities in Hermanus.

According to Laurent (2011), there are four types of inequalities, comprising exposure and access, policy effect, impact, and policymaking. However, distribution in the standard context cannot address the latter three inequalities, as distribution is more often applied to spatioscalar (space and time) concepts or events that can only address access and exposure. Distributive justice excludes the interrogation of processes and conditions as the consequence of inequities, i.e. procedural justice (Boone, 2008). Konow (2001), in support of Rawls,' rules in favour of the second justice principle, suggesting that the distributive justice principles (efficiency/compensation, need and accountability), together with context, should inform fair and equitable distribution. The following explanation of the distributive justice principles is a summary adapted from Konow (2001). These principles elucidate the importance of detailed analysis in distribution that distributive justice often fails to address.

Table 2-2: Principles of distributive justice

Principles	Explanation
Accountability:	Distribution considers the ability (discretionary) to influence output without accounting for inabilities (exogenous) that influence outputs. For example, Municipal A (1120km ² in area) with adequate resources (finance and skilled manpower) within a district achieved 100% of its planning target, whereas Municipal B (1121km ² in area) with limited resources achieved 50% of its planning targets, yet both received equal recognition for performance.
Compensation	Distribution considers trade-offs, regarding benefits, based on the ability to influence output. For instance, when a District Municipality allocates greater financial resources to municipalities without revenue, but with adequate human resources, and assigns officials to municipalities with adequate revenue, yet with inadequate personnel.
Need	Distribution considers the cost and benefits of priorities in addressing basic needs. For example, two municipalities made a submission for grants – a municipality with 56 000 households without access to water received a grant of R100 000 000.00 (\$6 451 612.00), whereas a municipality with 36 000 households with access to water received a grant of R30 000 000 (\$1 935 483.00). This principle

Principles	Explanation
	promotes the consideration of ethics (right or good) and desirability.
Context	Distribution considers the effects of influence on other resources. For example, when a municipality chooses a site for commercial development that proposes to reduce unemployment by 35%. The example illustrates the effect on the improvement of quality of life by providing job opportunities to the local residents.

Source: Own construction, 2018

Konow (2001:138) indicates that the accountability principle “calls for allocations to be in proportion to volitional contributions, e.g. a worker who is twice as productive as another should be paid twice as much if the higher productivity is due to greater work effort but not if it is due to innate aptitude.” The illustration in Table 2-2 indicates that there is a need to account for the ability of an institution or environment when distributing resources, activities, and services. In the planning context, the areas that suffer from inadequate planning due to apartheid and other unjust policies should receive more allocation of resources, activities, and services. The compensation principles advocates for trades-off regarding the distribution of resources, activities, and services. In planning, a budget that should have been allocated for the construction of infrastructure to an area that has adequate infrastructure, should be directed to an area without infrastructure and the maintenance budget must primarily be allocated to the former. Konow (2001:139) states that the need principle involves “a just allocation is simply one that is sufficient to meet each individual’s basic requirements for life.” For instance, an area that requires water supply as a basic need deserves a prioritised allocation. The principle of context considers the effects of distribution in a specific area to ensure fairness. By implication, the effects of distribution on a geographic area A may appear fair when compared to area B, but unfair when compared to area C. The circumstances of each area vary in terms of its conditions and characteristics.

Distributive justice, especially in the context of the Rawlsian approach, suggests that equality should play a role and emphasise the prioritisation of disadvantaged groups in addressing distributive injustices. It is clear that, within the contention of Brock (1973) , a distribution process should not appear to create further injustice while addressing injustices. Despite the advantages of Rawls’s approach to justice, Schlosberg (2004)

criticized Rawls' liberal theory of justice for its inability to focus on the fair distribution processes of environmental resources and benefits. Moreover, Rawls's second principle of justice about inequities views the least advantaged group with more value than others in a society. However, the application of this principle from a weak anthropocentric or an adaptive approach point of view can explain the rationale for prioritizing the least advantaged based on their extreme experiences. In spite of this criticism, the democratic South Africa in 1996 adopted a Constitution that incorporates a full chapter on the bill of rights (i.e., "everyone has the right to have access to adequate housing"), which implements Rawls's first principles of justice regarding liberties or equality. In addition to this, SPLUMA as a legislation of planning, containing section 7(a)(i) to (vi), promotes the principle of spatial justice in an attempt to address the imbalances created by past spatial planning practices and apartheid. The spatial justice principle also addresses distribution, access to land, and land tenure, in particular for the disadvantaged communities, informal settlements, and former homeland areas. This piece of legislation acknowledges the challenge of spatial injustices that are prevalent in the country (see RSA, 2013). The description of the spatial justice principle in the Act supports Rawls' difference principles as it relates to communities and certain previously disadvantaged people, planning and service delivery. De Visser and Poswa (2019) cite that the apartheid spatial injustice remains prevalent, and dominant, in the lives and settlements of many disadvantaged South Africans. Although the laws of the country make provision for these principles, there is a need for procedural justice to guarantee fair distribution of resources, activities, and services.

2.6.2 PROCEDURAL JUSTICE

In the preceding subsection, distributive justice, as Schlosberg (2004) argues, appears with the shortcomings of being devoid of procedures that lead to fair distribution of resources, activities and services. McNamara *et al.* (2013:16) refers to procedural justice as denoting "meaningful involvement and participation of relevant stakeholders in decision making processes, access to information, access to affordable and quality legal advice and legal rights" in respect of judicial review. In the context of this argument, fairness in any procedure is evident when interested and affected parties actively participate in decision-making with full access to information and appropriate representation. According to Millner (2011), procedural justice refers to the existence of

prescripts (laws, policies and regulations) that provide strategies for the participation of the public in decision-making on the implementation and enforcement of environmental programmes. These environmental programmes include plans, projects, policies and strategies that deal with socio-economic, natural, and cultural conditions. All these programmes are aimed at addressing socio-economic, natural, and cultural conditions. These procedures are also inherently environmental because the environment refers to nature, human beings, animals and plants and the inter-relationship thereof. The human aspect of the environment comes with the socio-economic and cultural conditions. Some authors perceive procedural justice solely within the context of participation as being restricted to participants. Gustavsson *et al* (2014), in a study on the management of a protected marine area, examined procedural justice in terms of participation. This notion of procedural justice reflects a short-sighted character of procedural justice, which might lead to a miscarriage of justice because of the fact that the achievement of justice also involves the treatment that a participant receives during participation. Whyte (2011) indicates that procedural justice is central to the fairness of participants being allowed to participate in decision-making and their acceptance of the extent of participation. The fair participation element of procedural justice is defined as participatory justice, which promotes significant participation of all people who are affected, or might be affected, by a decision in decision-making process (Fredericks, 2011).

The theories of procedural justices, which provide the basis of participation, include process control and decision control (Thibaut and Walker, 1975; 1978). Process control refers to “control over the process” and decision control refers to “control over the decision” (Thibaut and Walker, 1978:546). The former theory entails allowing participation in decision-making and the presentation of evidence to inform policy and decision-making. Process control and decision control are the requirements for fulfilling one of the principles of natural justice. Manyika (2016) argues that procedural justice originates from natural justice principles. These rules include the “*audi alteram partem* (hear the other side) and *nemo iudex in causa sua* (no one should be a judge in his own case)” (Baxter, 1979: 608; Saraswat and Srivastava, 2019:26). The former rule provides for representation, which allows participation in decision-making processes, whereas the latter addresses impartiality and bias in general. Peach (2003) revealed that the former rule is not applicable when an action or decision affects individual rights as courts previously found. The third rule of natural justice is that of “speaking orders or

reasoned decision” (Saraswat and Srivastava, 2019:26) and in South Africa, the Promotion of Administrative Justice Act (PAJA), 2000 (Act No. 3 of 2000) in addition to the first two rules makes provision for an administrator to provide reasons for finalized decisions (RSA, 2000a) in any matter including planning. In the definition of environmental justice that the USA Environmental Agency expresses, meaningful participation represents procedural justice beyond the number of participants involved in decision-making. The concept of meaningful participation involves the effect of participation in decision-making and the level of engagement afforded to participants (Solitare, 2005; Jacobs & Brooks, 2011). The definition of EJ that this study adopts states that fair distribution processes should allow equitable access to participation. The later theory of procedural justice is nothing less than meaningful participation, for its emphasis is on the impact of participation in decision-making. It highlights the influence of participation on the outcomes of a decision-making (Thibaut and Walker, 1978). Cele and Chipunga (2016) revealed that households residing along the Florida road in Durban expressed dissatisfaction with the municipal failure to consider their inputs in the precinct plan. Similarly, Dawson *et al.* (2017) revealed that villagers in proximity to the Nam Et-Phou Louey National Protected Area in the northern Laos felt their inputs didn’t influence management of ecosystem services. These two cases indicate that there is a problem regarding the suppression of public inputs in decision-making. In spatial planning, the consideration and incorporation of public inputs into policies and plans confirm the existence of the control that participation has over decisions.

In some countries, public participation is a mandatory and legal requirement in decision-making. In the European Union, public participation is enforceable through the Aarhus Convention (Mason, 2010; Poncelet, 2012), albeit with challenges regarding cost (Pedersen, 2014). A similar process is applied in India through Executive Order 13715 regarding traditional tribes (Whyte, 2011). In South Africa, the enforcement of public participation is achieved through the Municipal Systems Act, 2000 (MSA), the National Environmental Management Act, 1998 (NEMA), and the Spatial Planning and Land Use Management Act, 2013 (SPLUMA). The MSA regulates the preparation of integrated development plans, municipal administration, and provides a detailed process of participation. The NEMA regulates the management of the natural environment and the preparation of related plans and processes of environmental impact assessments. The regulations of this Act detail the conditions for participation requirements. SPLUMA

regulates spatial planning and land use management and details the public participation process on policy adoption, development applications and decision-making. Van Wyk and Oranje (2014) cite that SPLUMA legally prescribes meaningful participation of stakeholders in spatial planning. These laws regulate different areas, but they are comparative on their requirements of public participation. The process of adopting laws that uphold and emphasize public participation processes is an important endeavour towards achieving procedural justice.

In a study that examines justice in two mines in Chile and Esquel in South America, Urkidi and Walter (2011) found that there are mandatory public participation requirements in Chile, whereas these requirements are absent in the Argentinian town of Esquel. Various findings indicate that many countries have different degrees to which they view the value of procedural justice. Poncelet (2012:182-183) draws attention to the procedural restrictions that hinders public participation, as is evident from a case where Sweden's Supreme Court found that restrictions that do not "facilitate access to administrative and judicial procedures for environmental organizations must be rejected." Undoubtedly, policies and laws can entail provisions that restrict public participation in planning and environmental decision-making. This contention is evident in the Israeli Planning and Building Law, which makes no provision for the mandatory consultation of interested and affected parties (I&APs) in decision-making (Alexander, 2008). Alexander (2008) also argues that participation in Israel only exists by means of objections to programmes and appeal processes through a court of law. The findings of this study confirm that procedural justice is not only reflected through control over a process and decision (the opportunity to participate and influence of participation), but also includes other criteria such as appeals. According to Tyler (1988:104-105), the procedural justice criteria that Leventhal (1980) formulated includes "consistency, the ability to suppress bias, decision quality or accuracy, correctability, representation, and ethicality." Consistency entails upholding a certain standard in the application and interpretation of laws, policies, and rules, treatment of parties, and decision-making on similar matters, in particular, those of the same circumstances over time. The ability to suppress bias involves acting with impartiality throughout a decision-making process so as to avoid discrimination. The criterion of suppressing bias derives from the rule of *nemo iudex in causa sua*, also known as the "doctrine of bias" (Saraswat and Srivastava, 2019:28). In practice, regarding planning decisions in particular, where a member of an administrative

functionary (i.e., municipal planning tribunal) has either financial or personal interest, this may result in bias suspicions. In this regard, case law on the judiciary, confirms that the suspicion of bias is sufficient in proving bias⁸. In avoiding suspicion thereof, there is an expectation for an affected member to declare an interest and excuse himself or herself when a matter of interest is under discussion. Decision quality or accuracy underscores the importance of making decisions based on facts and objectivity. The correctability (appeal) in the criteria relates to the provision of opportunities to appeal decisions that are made on any planning matter, which is consistent with the findings of Alexander (2008). Therefore, representation refers to participation justice as described above and ethicality involves the moral and ethical obligation of parties in any decision-making process.

In South Africa, section 51 of SPLUMA provides that “a person whose rights are affected by a decision taken by a Municipal Planning Tribunal may appeal against that by giving a written notice of the appeal and reasons” (RSA, 2013), which stands in contrast to the laws of other countries. This provision affirms the existence of correctability in South Africa. In a matter of Chairperson of Municipal Appeals Tribunal, City of Tshwane and others v Brooklyn and Eastern Areas Citizens Association (case no: 1239/17), Judge Rogers AJA in the Supreme Court of Appeal with the concurrence of other four Judges defined an appeal as “concerned with the merits of the case, meaning that on appeal the second decision maker is entitled to declare the first decision right or wrong.”⁹ Appellants either appeal a condition of a decision or decision as a whole. In respect of planning decisions, section 51(3) of SPLUMA regulates the responsibility of an appeal authority to “consider the appeal and confirm, vary and revoke a decision” (RSA, 2013:56). In practice, when an appeal authority revokes a decision, it either replaces such a decision with a new one or remits a matter to the first decision-maker (either MPT or authorised official) for reconsideration. By implication, when an appeal authority replaces a decision

⁸ In a matter of *BTR Industries SA v Metal and Allied Workers Union* 1992 3 SA673 (A) in Par. 693I–J, the judge in then court now known as the Supreme Court of Appeal states that “I conclude that in our law the existence of a reasonable suspicion of bias satisfies the test and that an apprehension of the real likelihood that the decision-maker will be biased is not a prerequisite for disqualifying bias.” The Constitutional court later confirmed this test of bias by the Supreme Court of appeal in a matter of *South African Commercial Catering and Allied Workers Union (SACCAWU) v Irvin and Johnson Ltd (Seafoods Division Fish Processing)* 1999 7 BCLR 725 (CC); 2000 3 SA 705

⁹ The judgment in *Chairperson of Municipal Appeals Tribunal, City of Tshwane and others v Brooklyn and Eastern Areas Citizens Association* (case no: 1239/17) is available from http://www.justice.gov.za/sca/judgments/sca_2019/sca2019-034.pdf

with its decision, it refers to re-hearing the application as a whole. In the practice of courts as provided for in the Promotion of Administrative Justice Act (PAJA), 2000 (Act 3 of 2000) read with the Promotion of Access to Information Act, 2000 (Act 2 of 2000), a planning decision, which is an administrative action, is reviewable only after an appellant exhausts internal appeal processes (RSA, 2000; 200a). Tyler (1988:124) reviewed the criteria of Leventhal (1980) to include “representation (cover over process and decision), consistency (outcomes and process), impartiality (biases, dishonesty, effort, etc.), quality (decisions, efforts), ethicality (politeness and concern for rights) and correctability (appeal).” The criteria of procedural justice that Tyler (1988) provides is similar with that of Leventhal (1980), although with changes on the criterion of the ability to suppress bias which is referred to as impartiality and that of decision quality or accuracy which is referred to as quality. The Constitution of South Africa, in section 195(1)(d), emphasizes the importance of these procedural criteria by stating that “services must be provided impartially, fairly, equitably, and without bias.” By implication, planning authorities have a constitutional responsibility to promote procedural justice. The fundamental importance of procedural criteria in planning cannot be overstated. The Constitution as an overarching or supreme law provides a foundation to all other laws, as it relates to procedural justice. PAJA in South Africa, in fulfilling the fundamental obligation of procedural fairness enshrined in the Constitution, makes provision for a court of law to review any decision in an attempt to test the existence of procedural fairness in decision-making process (RSA, 2000a). This provision of the Act is consistent with the definition of procedural justice that McNamara *et al.* (2013) supports through its reference to a judicial review. However, a court of law only reviews a decision after an appellant has exhausted all internal procedures of appeal, such as those espoused in section 51 of SPLUMA (see RSA, 2013). The Constitution obligates planning authorities and the government to ensure fairness in decision-making, but PAJA and SPLUMA regulate the procedures that guarantee fairness in decision-making. The above discussion regarding the criteria of procedural justice underscores the plurality of procedural justice. The above discussion also shows that procedural justice includes elements beyond participatory justice (representation and its influence), including consistency, impartiality, decision quality, correctability and ethics. Above all, the existing environmental challenges, such as spatial injustices or inequalities, suggest that there is a compelling need for a diverse process of decision-making. Hence, Erdogan, Kraimer, and Liden (2001) argue that procedural justice is not unidimensional as it is not only about

participatory justice. Participation justice involves being afforded a seat a decision-making table to achieve EJ (Schlosberg, 2013; Banzhaf, Ma and Timmins, 2019). Despite the existence of the other elements, participatory justice remains elevated in procedural justice. Participation should be visible before any authority can implement consistency, impartiality, decision quality, correctability and ethics. Overall, procedural justice is a process that champions environmental management decisions (He & Sikor, 2015). In public participation, there are various typologies of participation that influence control over a process and decision. These identified typologies of participation include manipulative, passive, resource and incentive, consultative, functional, interactive, and mobilization-self oriented typologies (Pretty, 1995; Gustavsson *et al.*, 2014).

Table 2-2: Types of public participation

Types of participation	Description
Manipulative	Unelected representatives and people without a mandate becomes the voice of a community in statutory bodies (i.e., planning tribunals, boards) and other formal fora.
Passive	No participation in decision-making. Office bearers share final decision with the people for information.
Consultative	Participation takes the form of administrative and project leaders responding to questions of the people without allowing the public to define and analyse problems. Technocrats have no obligation to consider inputs of the people in decision-making.
Resource and incentive	The participation of the people is by contribution with no returns. For instance, a planning firm avails its data on land use of a specific area to a planning authority but excluded to form part of the team that plans an area.
Functional	Participation of people involves implementing decisions taken or achievement of predetermined specific goals. It allows people to organize themselves in groups and decides ways of approaches to implementation.
Interactive	Participation of the people is from the start to the end. It allows people to define and analyse problems, decides on

	alternative, implementation approaches and resources. It is open to people from various disciplines and groups. Participation is not seen as means toward goal achievement but as right that all people should enjoy to control over a process and decision.
Mobilization-self oriented	People at grass-root level initiate processes of changes independent of government and other agencies. People mobilize government to build facilities for social amenities (clinics, halls, school, etc.)

Source: Adopted and adapted from Pretty (1995) and Gustavsson *et al.* (2014)

Table 2-2 demonstrates that the participation control over a process and decision can take on many different forms. The only type of participation that appears more inclusive and meaningful than the other typologies is the interactive form of participation. This form of participation allows various stakeholders to accept representation in the decision-making process from the start (inception) to the end (implementation). The inputs of the public, in terms of interactive participation, are essential to decision-making. Functional participation only involves the people toward the end of the decision-making process, but this is still preferred over the restricted nature of consultative and passive participation. The resource and incentive forms of participation are regarded as the worst forms of participation because they involve contribution without gains. The manipulative kind of participation centralizes the existence of unauthorised representatives and serves this purpose throughout decision-making. The challenge exists when these representatives advocate in favour of their own interests, over the needs of the communities they claim to represent. The mobilization type of participation is a form that takes place when agencies and the government take no action on community needs. In South Africa, mobilization on service delivery occurs through protest actions that normally succeed in acquiring the government's commitment to deliver services. According to Kienast (2010), protest actions since the year 2004 in South Africa influenced the attention of government on municipal performance leading to the adoption of the local government turn-around strategy.

Millner (2011) also indicates that access to information is a core principle of procedural justice. This principle of procedural justice involves processes regarding how people can

access information about decision-making and actions in an attempt to explore when these people are unable to access information. Access to information, combined with technologies such as social media, promotes speedy accountability (Schwab, Bouckaert and Kuhlmann, 2017). Making information available to the public through all available platforms not only increases accountability but promotes transparency and openness thereby influencing public trust. The laws, rules, and policies in procedural justice are the mechanisms that ensure access to environmental justice, such as consultation, notices, access to information, standing, courts and tribunal reviews (p.194-196). The notices involve mechanisms to inform the public about processes intended for planning and implementation, rather than passive participation where decision-making excludes the public. Consultation, within the context of Millner (2011), represents a give-and-take scenario between a policy promoter and the public (meaningful participation), rather than only responding to queries. In South Africa, the Promotion of Access to Information (PAIA), Act 2000 (No. 02 of 2000) provides the means by which the public can access information. In practice, inadequate access to information affects meaningful participation. For instance, in a situation regarding the consultation process for a plan, prior access to information about the plan could encourage meaningful participation. However, if a participant in a decision-making process has no standing (the right to voice opinions, the right to participate and challenge processes), meaningful participation can become nugatory. In view of this, the process control over the participation process becomes unachievable. The judgment of the Supreme Court of Sweden discussed above, clearly illuminates the requirement of standing. Tyler (1988) found that many participants appreciated their participation in legal processes, although a significant number of participants appeared unsatisfied with the influence of their representation on decisions. This finding is similar to that of Cele and Chipunga (2016) and Dawson *et al.* (2017) where participants in decision-making became dissatisfied after their inputs did not inform policy decisions. This implies that participation in decision-making processes does not guarantee that representation will necessarily inform decision-making. The existing literature, particularly on legal and organizational matters, reveals that the fairness of a process regarding decision-making contributes to a positive perception of decision quality (Tyler, 1988; Kim & Mauborgne, 1991; Mossholder, *et al.*, 1998; Gangl, 2003; Forsyth, 2003). Undoubtedly, governance structures for decision-making, particularly in planning and other areas of service delivery, should guarantee the right of all people and the fairness of procedures. Hence, Millner (2011) underscores the

importance of tribunals and courts in extending access to EJ through decision review. In addition, correctability in the procedural justice criteria represents decision reviews. In terms of SPLUMA, planning tribunals are the means with which to ensure that decision-making is made accessible for both the interested and the affected parties in development. Further, as discussed above, the legislation provides for an appeal authority that deals with appeals on land use decisions. Despite the existence of appeal procedures, the absence of awareness among the public regarding the governance structures which ensure access to EJ remains a challenge. As such, Millner (2011) suggests that the precondition to achieving procedural justice is substantive justice. Likewise, Rawls (1995:70) states that “procedural and substantive justices are connected and not separate” and Gilabert (2005) underscores the point that there is no buffer that divides the two. Although the unity of both kind of justices is supported, the failure to unpacking substantive justice leads it to become subsumed by procedural justice. Therefore, the following subsection will unpack the debate regarding substantive justice.

2.6.3 SUBSTANTIVE JUSTICE

Substantive justice refers to the fair provision of the required governance tools so as to capacitate the general public to participate in decision-making (Millner, 2011). These governance tools involve institutions that advocate for EJ by looking at the public interest and capacity building regarding their rights regarding planning and decision-making processes (p.199). Some organizations in South Africa, such as the Earthlife Africa, Vaal Environmental Justice Alliance, South Durban Community Environmental Alliance (Cock, 2015), and SA Environmental Justice Network Forum advocate for the interests of the general public. However, these organizations have either limited or no programmes for capacitating the general public on issues of procedures in decision-making. Hence, public awareness about the rights of involvement in planning decision-making is crucial to participation. The current practice of South African planning reflects that only the rich and middle class citizens, and in particular the literate members of the public, understand the participation process to its full extent. In Australia, the Environmental Defender’s Office has developed toolkits to empower the public with information on tribunals, and occasionally provides free services to represent members of the public in tribunals (Millner, 2011) which advocates EJ (Masterman-Smith *et al.*, 2016).

Conversely, in South Africa, there are a lack of programmes that can provide awareness and capacity building of the work and process of municipal tribunals to members of the public. According to De Visser and Poswa (2019), there is incompetence in both the national and provincial governments in respect of the capacity to prescribe the manner in which municipal planning tribunals or officials could exercise their mandate of land use management. Conversely, in the experience of the author, provincial government is in a better position to capacitate municipal tribunals or officials regarding the implementation of land use management than the national government. Prior to the advent and implementation of SPLUMA, provincial government managed tribunals at provincial level (i.e., development tribunals and Townships Boards) had the authority to process and finalize land use decisions. The exercise of the municipal planning function for over 20 years provided the experience and skills to provincial governments on matters related to land use decisions through officials or tribunals. The tools that are available only targets the empowerment of municipal officials as opposed to members of the public. The practice of providing representation services to the public is; however, more evident in criminal law, where victims and offenders have an option to seek legal aid from the state. Given the lack of substantive justice in planning, the fairness of decision-making process on land use or policy will remain beset with injustices. By contrast, in Tanzania, the government has afforded capacity building to a committee of fishermen on the conservation and the effective and efficient management of the “Mnemba Island-Chwaka Bay Marine Conservation Area” (Gustavsson *et al.*, 2014:91-94). This form of capability building has practically enabled these fishermen to actively participate in the management of the conservation area. In planning, substantive justice emphasizes the need for awareness about spatial planning and its related processes, such as land use management, in an attempt to mobilize the public to take part in plan making and implementation.

It is quite explicit in the above illustration that the government has a fundamental role to play in the promotion of awareness and emancipation of the public with information on participation and the processes of existing governance structures. In practice, the government is best situated to provide capacity building because of the major responsibilities assigned to it by either the Constitution of a country or laws that regulate various functions. Planning decisions that are taken, notwithstanding the inability of people to participate and understand processes for accessing information, has the

potential to vitiate their quality of life drastically. In the process of operationalizing procedural justice through substantive justice, it is crucial to recognize the nature and the extent of participation in terms of who participates, why there should be participation, what the issues are, what the benefits of participation are, what the disadvantages of exclusion are, what modes of participation are available, and what the knowledge and capabilities of participants amount to. The endeavour to gain such understanding is only achievable through recognitive justice.

2.6.4 RECOGNITION JUSTICE

According to Whyte (2011:200) “recognitive justice requires that policies and programmes meet the standard of fairly considering and representing the cultures, values, and situations of all affected parties”. Recognition emphasizes that distribution should consider whether distributed resources and activities agree with the values, cultures, and situations of various groups. By implication, the groups’ value, in and of themselves, deserves recognition. Dawson *et al.* (2017) revealed that villagers residing in close proximity to a protected area registered their dissatisfaction regarding the failure to recognize their rapidly changing values from being subsistence farmers to commercial farmers. The failure to recognize the value that people have for resources or areas has the potential affect effective implementation of a proposed plan or policy. In the case of the villagers that Dawson *et al.* (2017) studied, the failure to recognize their values and culture, and inadequate participation, resulted in formal rules being replaced with informal rules or lawlessness. Figueroa (1999) views recognition justice to be about cultural identity, political recognition and self-determination because “individuals and cultural groups suffer from lack of inclusion, political disempowerment, and discrimination to the extent that inequitable distributions of socio-economic resources will undoubtedly be part of the impact of prejudicial attitudes and institutional forms of discrimination” (p.107). This argument underscores the dependency of fair distribution in the recognition of cultures and politics of various groups. Furthermore, recognition highlights the fact that participation should take the sensitivity (health, culture, values, age, etc.) and the exposure (situations) (Laurent, 2011) of participants into account. According to Voelkel (2018:2) exposure refers to “an individual’s contact with a stressor, either from living, working, or spending time in an affected location... [and that] sensitivity is the point at which exposure becomes dangerous to an individual’s health.”.

Therefore, the failure to recognise participants' exposure and sensitivity could lead to distributive injustice. Tsanoff (1956:14) points out that "justice expresses the moral demand for a thorough and balanced recognition of all the personal factors and values in a complex situation." Schlosberg (2004) also argues that unjust distribution derives from an absence of recognition of the differences that exist among various groups. This absence of recognition would be evident in planning where planners and other specialists exclude people of an area that the planning affects. Further, adding to the debate of recognition justice, Figueroa (1999:225) in his "bivalent approach to EJ proposes the deconstruction and destabilization of cultural identities". However, the author accepts the proposal would be difficult to achieve unless the approach identifies priority cultural areas for destabilization¹⁰. In the context of the weak anthropocentric perspective, recognition would mean identifying the experiential influences, whether positive or negative, that nature has on human beings, as well as those that human beings have on nature. The recognition of these influences provides the opportunity for planners to understand the intrinsic value of nature, as opposed to merely existing as a material tool, for human beings.

Miller (2003) cited in Schlosberg (2004) contends that recognition is an element that is integrated into procedural justice and that it does not exist as a separate element. Conversely, Schlosberg (2004) cites the view that recognition is not assumed or subsumed by distributive or procedural justice, but that it can instead be regarded as a standalone element of justice. The thought that recognition forms an integral part of procedural justice might have contributed to current challenges of recognition. For example, Whyte (2011) and Dotson and Whyte (2013) state that the Anangu people in Australia felt that their values were disrespected by tourists and non-aboriginals who continued to climb their sacred rock against their will. The tourists and non-aboriginals show symptoms of the unknowability syndrome, which is a recognition challenge. According to Dotson and Whyte (2013), unknowability in EJ entails the failure to detect immoral actions or inactions that are unacceptable and wrong. The action of the tourists confirms their failure to detect that climbing the rock is against the values and culture of the Anangu people. Unknowability has two dimensions, the first being "absent present" or the act of ensuring that existing social functions, situations, beliefs, benefits and

¹⁰ Robert Melchior Figueroa in Chapter six of his thesis titled: *Debating the paradigms of justice: the bivalence of environmental justice* discusses in detail the bivalent approach to EJ.

challenges remain undetected or unknowable, and the second being “present absent”, which is “wilful ignorance” by means of limiting the realization of an entire population’s issues (p.65-68). It is, therefore, arguable that unknowability influences the construct which procedural justice integrates as recognition. Unknowability influences this construct because it allows people to either wilfully ignore or detect values, cultures and situation. The integration of recognition into procedural justice will effectively result in the adequate consideration of values, situations, and cultures, because procedural justice is about access to justice. In this regard, NEMA in South Africa sets out principles for environmental management, and one of the principles states that “environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.” (RSA, 1998b). This principle explicitly promotes recognitive justice in managing human actions and their effects on the biophysical environment. It is, therefore, evident that recognition is by default a legal requirement in South Africa.

Recognition justice exists as a complementary element of distributive and procedural justice. It is complementary because it serves the purpose of recognizing specific values, cultures and situations. If one considers representation (participation), as an element of procedural justice, it is evident that it ensures full and meaningful participation of all groups but that it does not necessarily extend to recognition as defined in this section. Distributive justice concerns itself with the fair distribution of resources, activities, and services without understanding the cultural attitudes and values of various groups in respect of distributed resources, activities, and services. These concepts (distribution, procedural, and recognition), are independent within their various contexts, yet interrelated. Therefore, Schlosberg (2013) contends that the realization of recognitive justice relies upon the capability approach.

2.6.5 CAPABILITY APPROACH (CA)

According to Reed and George (2011) as well as Schlosberg (2013), the capability approach is imperative for achieving EJ as it makes capabilities a requirement for people, institutions and governments in an attempt to improve quality of life. It is clear that the achievement of EJ is indispensable to the ‘how’ question. In practice, the how question addresses the requirement and approach for the realization of planning goals.

Sen (2009:232) refers to the CA as a “general approach, focusing on information on individual advantages judged in terms of opportunity, rather than a specific design for how a society should be organised.” This articulation stands in contrast to the Rawlsian view of the original position based on the veil of ignorance, which fails to recognise the expertise and potential of people. The “capabilities approach to justice” accounts for the correlation between the needs of human beings and the functions of the natural environment (Schlosberg, 2013:44). This approach supports the philosophy enshrined in the land ethic of Aldo Leopold. The CA, therefore, considers the correlation between primary goods and human beings. It is a mechanism to evaluate outcomes and implemented actions to ascertain whether the actions enable or thwart the capabilities of individuals (McClymont, 2014). It is also an outcome-focused approach (Nussbaum, 2004). According to Beyazit (2011), Sen’s CA involves many components, including basic needs, capabilities, functionings, freedom, opportunities, and choices. These functionings pertain to the potential things that an individual can be or do in order to flourish in life, such as having access to basic service. Jacobson and Chang (2019: 113) refers to a functioning as anything that people “value doing or being”, which may include being educated or being free from life threatening diseases. Therefore, capabilities are about the ability to realize the aggregation of functionings in order to determine (through comparison and evaluation) which things to value, such as mobility (Beyazit, 2011), as well as the ability to pursue what is valued.

However, Sen failed to mention or highlight the list of required capabilities. According to Nussbaum (2001:79-79), capabilities include “life, bodily health, bodily integrity, senses, imagination and thoughts, emotions, practical reason, affiliation, other species, play and control over one’s environment.” Clark (2009:585) also states that the achievement of the “minimal level of each capability is fundamental to human dignity and decent human life”. Peeters, Dirix and Sterckx (2015:490) propose a “capability threshold”, which is defined as “including the focus on subsistence and survival.” The authors argue that, in realizing the threshold, there is a need to equally secure the social preconditions for that threshold while sufficiently achieving the material conditions that rely on the biophysical conditions (p.492). In this context, the CA advocates for the consideration of certain preconditions, such as education and sufficient nutrition, as the capabilities that lead to a good quality of life, and in particular, the requirements for the achievement of the minimum for each capability (Nussbaum, 2004). The literature does identify some

preconditions for achieving these capabilities. According to Peeters *et al.* (2015), there are social (i.e., enforcement of policy), ecological or biophysical (i.e., nature protection) and material (i.e., transportation) preconditions to capabilities that lead to good quality of life. Procedural justice, as a conduit for gaining access to justice, could therefore provide the means for identifying and understanding these preconditions. The identification of capabilities depends on a deliberative approach achieved through communication (Jacobson and Chang, 2019). This argument supports the fact that it is only through procedural justice, which incorporates participation, that planners can uncover preferred and required capabilities after successfully studying preconditions.

On the other hand, Anand, Hunter and Smith (2005) view the focus of the approach as being more related to the situations of people regarding quality of life (Qizilbash, 1997; Beyazit, 2011), human well-being (Clark, 2009) and human development (Nussbaum, 2004). Their understanding of the approach looks at the “interruption of the capabilities and functioning of a living system” or what keeps the system functional to provide for those who depend on it (Anand *et al.*, 2005:44). In this context, keeping something functional over time implies the maintenance of its function which then introduces sustainability in EJ. There is evidence in the literature which suggests that sustainability has found a home in EJ. In a study done on Cape Town, South Africa, Toronto, and Canada, Debbané and Keil (2004) extended EJ to include the boundaries of sustainability. Anand and Sen (2000) further extend the notion of sustainability in the CA, by arguing that the achievement of sustainability can be attained through the maintenance of the capacity that is required to achieve well-being. Peeters *et al.* (2015:487) present biophysical preconditions as being important in “maintaining the capacity to produce well-being.” This argument also implies that the functions of the biophysical environment require maintenance for its own survival and for the well-being of the human beings. In general, there are four categories of functions that the biophysical environment provides, namely the production and information functions (important for human survival, quality of life, recreation, tourism and well-being) as well as habitat, and regulation functions (important for maintaining environmental health/integrity through cooling of vegetation, soil erosion control, removal of air pollution, etc.) (De Groot *et al.*, 2002; 2003; Cilliers and Cilliers, 2015; Mullin *et al.*, 2018). It is implicit in these functions that there exists a clear relationship between the functions of the biophysical environment and the capabilities that Nussbaum proposed. On the

other hand, Van der Merwe (2009) emphasizes the need for pursuing other concepts in achieving sustainability – hence, the existence Reed and George's (2011) and Schlosberg's (2013) recognition of capabilities approach in EJ.

This approach addresses intergenerational justice, as being central to recognition justice. According to Van Der Merwe (2009), recognition justice considers conservation and preservation, including the application of cultural values across generations, to influence intergenerational justice in sustainability programmes. In contrast, Peeters *et al.* (2015) criticize CA for its failure to centralize the pivotal role that biophysical or ecosystem conditions play in having a good quality of life. The criticism of Peeters *et al.* (2015) underscores the instrumental value of nature to human beings and the intrinsic value of nature in itself. The fact that the material preconditions to capability are subject to biophysical conditions further elevates the latter conditions as being important. Clark (2009) criticizes capabilities as an element of the approach that can omit the ability to treat inequalities above the line of thresholds, and for the absence of empirical findings to inform this conception. Clark (2009) claims that there is an absence of empirical findings to inform the conception of capabilities, but it is possible that the proponents of the CA failed to use existing empirical findings. The capability approach, if applied without recognition and procedural justice, suggests an omission of a thorough evaluation of the inequalities in the ability of individuals. On the other hand, Qizilbash (1997:253) criticizes the CA for failing to consider the “equality of capabilities” arguing that some people face the ‘option’ of “adjusting to deprivation”, which is unjust. For example, people with low levels of expectation in leading a flourishing life have lower levels of capabilities than those that start with higher levels of expectation do (p.253). Interestingly, recognition justice advocates for the consideration of the situations for all groups, meaning in this case, the evaluation of different capabilities of people in a society. The capability requirement is not only central to that of human beings, but also includes that of the biophysical environment, political system, and socio-economic systems. These conditions have strengths and weaknesses in various areas. The understanding of the biophysical environment's ability to provide an instrumental value to human beings is crucial, because extraction or consumption can become more than the ability of the biophysical environment to sustain itself for the well-being of human beings and itself if it is not understood correctly. The political system includes laws and governing structures and if the ability of this system is unknown, areas of changes prior

to plan implementation would be ignored. In Europe, local government had to reform through hiving off some of its services through outsourcing to improve service delivery (Steen, Teles and Torteinsen, 2017). It is through a capability assessment approach that an institution can decide to either outsource or render a service on its own. In addition to this, the ignorance of areas containing weaknesses has the potential to maintain inequalities and render planning and implementation difficult. For instance, if a government assigns a function to a department that lacks the expertise to implement a program, the achievement of the program's goals will be either impossible or difficult. Lastly, understanding the ability of the socio-economic systems that exist in certain places can inform the requirement for the fair distribution of resources, activities, and services. Land audits play a crucial role in informing policy decision (Stephenson *et al.*, 2015) and contributing to distributive justice. Each and every area, town and country, has its own competitive and comparative advantages and weaknesses. For instance, if you plan for a new town, there is a need to understand where the people will work, where services (water, sewer and electricity) would come from and the adequacy of transport infrastructure. Land audits can be a good source of information in this regard as it also provides a detailed assets register for the location of utility services, such as water, sewer, electricity, road and storm water infrastructure).

In the midst of all these critiques, Beyazit (2011) argues that the CA posits the optimum application of human capabilities as being instrumental in leading to the development and improvement of human needs, opportunities, choices, freedom, and values, which is mostly ignored in policy development and implementation. Human capabilities do exist solely to fulfil the needs of human beings but also to maintain the value that nature has in itself. In general, the improvement of human needs depends on the sustained ability of the biophysical environment to understand and make choices regarding available opportunities. The Rawlsian first principle (liberties) of justice addresses freedom as a basic need and it is apparent in the CA that the ability to achieve change (i.e. improved quality of life) becomes limited without freedom. In South Africa's Constitution, the Bill of Rights provides a number of rights regarding the freedom that people must enjoy, which extends to the biophysical environment. Van Wyk and Oranje (2014) state that the Constitution provides rights that are crucial in spatial planning. By implication, South Africa has the basic need of freedom as a starting point with which to apply the CA in

planning. Therefore, a just policy approach is relevant in determining the effects of capabilities on quality of life.

2.6.6 JUST POLICY

Just policy enables the enforcement of measures to safeguard against environmental injustices. The just policy concept focuses on whether policy effects are fair during the phases of preparation, implementation, and enforcement. The UK Environment Agency has incorporated policy justice in its definition of EJ to consider the fundamental norms, standards, and principles of environmental policy with their effects on all environmental conditions (Laurent, 2011). There are justice principles (Konow, 2001), procedures (Millner, 2011; Whyte, 2011; Gustavsson *et al.*, 2014) and recognition measures (Laurent, 2011; Schlosberg, 2013) propounded in literature to inform distributive policy decisions, which is central to this notion of fairness. By implication, the application of the justice principle, procedures, and recognition measures should guide the implementation of fundamental norms, standards, and principles of environmental policy to influence the distribution of effects. Peeters *et al.* (2015) state that inequality in the distribution of environmental impact results from unjust policies on distribution. For example, Urkidi and Walter (2011) succinctly present the regulations in Chile regarding mining, which reflect injustices in respect of distribution, thus leading to mining conflicts, in particular with regards to the distribution of financial benefits.

The above example highlights the fact that policy decisions have an impact on distribution; hence, fairness should govern. In achieving EJ, the phases involved in policy adoption and implementation should espouse the five dimensions (distribution, procedural, substantive, recognition and capability approaches) of justice. In considering the effects of policy decisions, Whyte (2011) highlights the significance of corrective justice, which focuses on restorative measures, thereby ensuring fairness regarding the negative effects that are either likely to occur or are already occurring. According to Conrad (2011), restorative justice entails the change of moral behaviour, especially regarding actions, and improving approaches so as to redress injustices. The change of moral behaviour derives from restorative elements such as amends (van Ness, 2000), conferencing (Braithwaite, 2002; Strang, 2017) and reconciliation (Figueroa, 2010). In the practice of restorative justice, amending means correcting the wrong through

changed behaviour, apology, generosity, and restitution (van Ness, 2000). For instance, the democratic government in South Africa, although it is not the cause of injustice, has the responsibility to redress injustices after apartheid left scars of injustices. Conferencing in restorative justice involves a deliberation of the injustices that were created and an actionable agreement on approaches to redress them (Braithwaite, 2002). Reconciliation involves accepting the existence of unfair policy effects on environmental conditions and implementing programs and measures to redress these effects. In this context, just policy subsumes restorative and corrective justices in EJ. The fact that policy decisions should highlight the fair distribution of resources, services, and activities, the processes involved, applicable approaches, and the implementation measures in redressing injustices supports the fact that restorative and corrective justices become subsumed by other dimensions of EJ. Millner (2011) postulates that EJ should provide measures to improve the lives of those that are exposed to the brunt of environmental injustices. Just policy enables the enforcement of measures to safeguard against environmental injustices. Pedersen (2014) encourages the inclusion of compensation in EJ initiatives to ensure the redress of injustices. The compensation is, therefore, not only monetary but also an improvement of quality of life and the provision of trade-offs that can lead to life nourishment where inequalities exist. The application of the capability approach in EJ guarantees the amelioration of quality of life. Hence, Nussbaum (2004) and Peeters *et al.* (2015) argue for due diligence in providing and ensuring preconditions for capabilities. Just policy considers “equality in capability”, as suggested by Qizilbash (1997:253). Understanding these preconditions will address the inequalities that exist within the capabilities of society, thereby informing fairness in policy formulation and implementation. Moreover, Fredericks (2011) suggests the need to adopt indicators for monitoring the implementation of environmental justice. These indicators have the potential to assist policy implementers in an attempt to gauge the effects of implemented processes and policies. In practice, the targets for each indicator become important in the monitoring process, in order to assess the implementation of indicators. In this light, just policy advocates for measures in policy that can assess the effectiveness of policy implementation. The just policy principle entails the monitoring and evaluation of effects that can measure whether there exists fairness throughout the process of plan making, implementation and enforcement. The researcher suggests monitoring and evaluation to include the following:

- a) Fairness in public participation during planning and implementation;

- b) Procedural justice through developed criteria in decision-making;
- c) Fair distribution of resources, services and activities;
- d) Considering whether strategies and plans address inequalities in spatial planning;
- e) Considering whether the effects of distribution respond to spatial disparities;
- f) Considering whether there is contextual recognition in planning and implementation; and
- g) Having capabilities to implement spatial planning policies and plans.

The above areas of monitoring and evaluation are important because they intend to measure successes and failures in the process of achieving environmental justice.

2.7 CONCLUSION

In short, this chapter has shown that EJ has emerged as a response to the equity gap that existed in environmentalism. Most notably, the discussion highlights the importance of nature with its intrinsic value and not only as valuable for its role of sustaining the well-being of human beings. This argument alludes to the ethical and moral obligation that human beings have in protecting nature through the wise use of, and respect for, nature. Environmentalism appeared in the discussion as an idea that promotes this moral obligation to protect nature. The discussion also indicated the importance of learning from practical experiences to change behaviour as Aldo Leopold suggests in his land ethic. Understanding the inequalities and their effects on environmental conditions could easily facilitate changing the status quo of injustices.

According to Walker (2009b), environmental inequalities are at the centre of environmental functions and resources. The existence of inequalities presents evidence of unequal treatment in the distribution of resources, activities, and services. The discussion presented here states that if there is no protection of natural resources, nature will be unable to function for its own sake and for the survival of human beings. An inequity exists when human beings benefit from nature but extract and consume natural resources beyond the ability of nature to sustain itself. Furthermore, the unfair planning practices that results in the differentiated provision of resources, activities, and services between various classes and groups call for change in planning. It is for this

reason that the birth of EJ became inescapable. However, in practice, although EJ has evolved, spatial planning disparities remain evident in the geographies of many countries. It is apparent in the literature that the primary theme of EJ is fairness, throughout the planning processes and implementation. The above discussion indicated how the legislative framework of South Africa makes provision for most of the dimensions (distributive, recognition, substantive, and procedural) of EJ. In the literature, EJ appears with various dimensions, yet these are primarily discussed independently or only with partial integration.

Table 2-3: Summary of EJ dimensions

Dimensions of EJ	Summary of description
Distributive justice	This type of justice refers to the fair distribution of services, activities, and resources (socio-economic, natural, cultural, etc.) through the consideration of the needs, context, accountability, and compensation in any given planning area.
Procedural justice	Procedural justice guarantees fair opportunities to participate and influence planning, decision-making, and implementation through a process that is consistent, impartial, and objective with the highest level of ethics. In this justice, the decision-making process also provides for appeals of planning decisions by any aggrieved party.
Substantive justice	This form of justice promotes governance mechanisms that empower the public to participate in planning, implementation, and decision-making. These mechanisms include training, awareness programmes, authority's support for representation for members of the public in planning tribunals, and tools for planning.
Recognition justice	This kind of justice advocates for the equal recognition of all environmental conditions (socio-economic, cultural, and natural) in planning, decision-making and implementation. It entails the understanding of values, cultures, situations, experiences, beliefs, policies, legislation and other conditions of all parties that a planning process affects.

Dimensions of EJ	Summary of description
Capability approach	This dimension focuses on the assessment of the ability of any aspect of an environment (socio-economic, natural, cultural etc.) to sustain itself. These aspects of an environment also include the ability of planning authorities such as municipalities to plan, implement, monitor, and evaluate spatial plans in respect of human resource (experts), finance, and required technologies, to name but a few. The capability approach aids in the determination of the minimum requirements for a city, town or village to sustain itself.
Just policy	The just policy dimension promotes the fair consideration of planning, decision-making, implementation and enforcement effect on members of society (socio-economic and cultural conditions) and nature. This type of justice is also about the monitoring and evaluation of planning processes in the application of distributive, procedural, substantive and recognition justices, including the capability approach.

Source: Own construction, 2018

In the theory of EJ, there is a dearth of literature that considers these dimensions comprehensively in both application and definition. In conclusion, the study denotes that EJ is a concept that comprises six dimensions, namely that of the distribution, participation or procedural, substantive, recognition, capability approach and just policy dimensions. The distributive justice dimension is crucial to ensure fair distribution of resources, activities, and services. If this dimension is successfully achieved, it has the potential to show the positive environmental effects that the just policy dimension supports. However, distributive justice requires the application of procedural, substantive, and recognition dimensions of EJ so as to ensure the fair distribution of resources, activities, and services. The just policy dimension also becomes useful in the distribution process in ensuring the fair distribution of effects resulting from the application of the procedural, substantive, and recognition dimensions of EJ. The capability approach, in ensuring equity, becomes important when considered as a dimension that assesses the capability of human beings, socio-economic, natural, and cultural conditions to support and sustain distributed resources, activities, and services.

In the last instance, it is evident that the achievement of EJ requires commitment and social learning from all members of a society, and particularly the government and other agencies who champion the programs that can redress environmental injustices.

3. CHAPTER 3: PLANNING THEORIES AND ENVIRONMENTAL JUSTICE

3.1 INTRODUCTION

Roughly a century ago, the industrial revolution coincided with the early years of urban planning (Batty & Marshall, 2009). Urban and regional planning (also referred to as town and regional planning), which also includes spatial planning, incorporated a perspective that encapsulates socio-economic and biophysical activities aimed at forecasting, controlling and regulating urban and regional development (Pinson, 2007). It provides principles for plan-making, public participation, and implementation, among many others. Hall and Tewdwr-Jones (2011:3-5) define urban and regional planning in its conventional context as being spatial or physical, inclusive, multicultural, multi-objective and multidimensional, operating through the application of planning theory to produce and implement plans. The output of a plan, within the context of this construct, highlights the view that urban and regional planning looks at the orderly distribution of environmental activities (as defined in this study) to improve the well-being of urban and rural communities, for the present and future. The orderly distribution of activities reflects the distribution dimension of environmental justice (EJ) that is inherent in planning, coupled with the recognition of other socio-economic and biophysical factors. During the past few decades, planning theory and practice have introduced various planning models to direct development and growth in urban and rural regions, and the spatial distribution and interaction of activities in space.

Quite notably, Ferreira, Sykes and Batey (2009) state that spatial planning has adopted an integrated approach in many countries, which is not peculiar to land use planning or demand and control approaches, but rather implements planning that can consider the relationship between plans, programmes and policies in various fields and other social actions that take place within, and around, space. During the 1950s, collaborative planning and community participation also started to integrate planning theory and practice. According to Hall and Tewdwr-Jones (2011), planning should be executed, through a public discourse on public or private sector initiatives (urban development and management activities) between all interested and affected groups and individuals.

Currently, planning theory links planning processes (procedural) with inconsequential consideration of societal factors (substantive), which are likely to have an impact on public planning. According to Alexander (1992:8) cited in Archibugi (2004:431), substantive issues include human settlement, community facilities, health care services, economic development instruments, urban growth, zoning, physical environment and neighbourhood facilities. However, in practice, the approach that ascertains substantive issues is mediated by a contextual analysis that requires a communicative model of planning. The work of Faludi contributes to the procedural notion of planning due to its lack of the substantive perspective of planning (Archibugi, 2004).

Simmie (1987) states that planning theories that aim to determine and prescribe plan making fall under, what is commonly known as, action theories as opposed to explanatory theories, due to their normative assumptions. These theories include the rational, comprehensive theory, incremental theory, and mixed scanning theory. These theories relate more to procedures than substance. Planning in practice applies knowledge derived from natural science (to assist in guiding the production of plans) and social sciences (to determine and understand social effects of proposed plans) (Ferreira *et al.*, 2009). The latter source of planning knowledge highlights the substantive approach, which is more visible in theories such as the communicative, advocacy and collaborative planning theories. According to Khakee, Barbanente & Borri (2000), there is a need to integrate the knowledge of the local people with that of experts in planning. By implication, such action has the potential to increase the value of plans as well as their completeness. Interestingly, in practice and theory, the planning theory has not experienced a replacement, but rather a paradigm shift from rational-comprehensive planning to advocacy planning and communicative planning (Roy, 2011). Akin to this argument, Pissourios (2013) indicates that new thoughts in planning do not replace the existing theories. The new thoughts merely expand on the meaning and the application of existing theories. This chapter will therefore discuss the most prominent urban and regional planning theories that influence spatial planning in the context of EJ. These theories are crucial because they are all currently operative and can be useful in thinking about EJ. In the discussion, there is a clear articulation of the relationship that exists between each theory and the dimensions of EJ. Further, the debate introduces a new turn in urban planning theory and practice to be known as EJ in planning.

3.2 RATIONAL-COMPREHENSIVE PLANNING THEORY

The rational-comprehensive planning theory evolved during the time of Auguste Comte in the late 16th and early 17th centuries (Mäntysalo, 2005). The theory provides a step-by-step approach to problem solving and planning in general. Pissourios (2013: 85) summarizes the stages of the theory from literature as consisting of problem analysis and definition, formulation of a programme (strategic objectives), production of policy or plan alternatives, evaluation of identified options, and implementation, including the monitoring and evaluation of the selected plans. El-Kholei (2019) itemizes similar stages of the theory yet without the step of monitoring and evaluation. According to Ijeoma (2007), the rational planning theory is the most widely known and commonly accepted theory in the field of planning. Seasons (2003), as cited in Hostovsky (2006:382), states that the rational, comprehensive planning model is central in municipal planning, particularly in decision-making, and that most planners support this model. In South Africa, the Spatial Development Framework guidelines incorporate stages in the process that support this theory. These stages include policy context and vision directives, spatial challenges and opportunities, spatial proposals, and an implementation framework. The first two stages of these SDF guidelines support the first two stages of the rational-comprehensive planning theory. The stage of spatial proposals supports the steps of the rational-comprehensive planning theory that relates to the production of policy or planning alternatives and the evaluation of the identified options, whereas the last stage of the implementation framework supports the step of implementation. The only difference between the stages of the SDF guidelines and the rational-comprehensive theory is the fact that the SDF guidelines exclude monitoring and evaluation. This theory has furthermore dominated American planning practice (Hudson, Galloway and Kaufman, 1979).

According to Dodero (2010), the theory reflects a top-down approach. This notion of a top-down approach has attracted criticism for its lack of a grassroots feeding mechanism that allows for the participation of the general public. The rational planning approach supports the technocratic perspective, which is imbued with objectivity as opposed to subjectivity or a combination of both objectivity and subjectivity. Lindblom (1959) criticises the theory for being unrealistic, unachievable, and for its chauvinist approach, which centralizes control in its process and side-lines social and political concerns. In the

context of justice, fairness through this theory is uncertain, because of its focus on the technical aspects of problems and the forestalling of soft issues such as social implications. According to Hudson *et al.* (1979), the theory considers problems from a mathematical point of view by means of quantitative analysis, which uses technical and objective methods such as cost-benefit analysis and forecasting tools that require expert inputs. The inability of the theory to allow a process of assessing a problem through understanding the experiences, values, cultures, and circumstances of societies disqualifies it as a tool for achieving recognitive justice.

Arguably, Dodero (2010) points out that the application of this theory has contributed to planning failure in many places around the world, resulting from its failure to address the subtle recognition of social and cultural conditions in planning. According to Whyte (2011), in realizing recognition justice, the policy planner must acknowledge the experiences, values, conditions, and situations of various parties. The expert orientation of the theory limits the participation of the general public, thus rendering it procedurally unjust. The theory advocates for the relationship between the realization of goals and utilization of resources (Shahab *et al.*, 2019). The focus on goal and resources without engaging on equity issues contributes to the application of the theory from a technical perspective. The relevance of expert knowledge and experience in planning is necessary, but the social implication of its application deserves recognition. The theory tacitly assumes inequality through the explicit exclusion of non-expert parties. According to Millner (2011), the core of procedural justice is participation in the decision-making process. However, this theory promotes an authoritarian perspective, where the voiceless remain suppressed. The voiceless are parties whose views and experiences are made invisible. The issue that saliently perseveres in this theory is the absence of procedural justice features. The weakness of the theory in promoting participation illuminates its inability to advocate for substantive justice. The theory misses the opportunity to promote mutual learning among parties with distinct interests (cognoscenti and non-experts).

In practice, plans created through this theory have seldom advanced to implementation (Hudson *et al.*, 1979). This argument is evident in the Toronto Metropolitan area, where it took the metro 14 years to investigate a site selection for a landfill through the application of this theory (Hostovsky, 2006). The complexity involved in the application of

the theory, specifically the tools that are used, can explain the reason for the lengthy period of planning and delivery regarding the Toronto landfill sites. These tools may involve policies, guidelines, and instruments used throughout the application of the theory. The theory merely provides a framework for guiding the process to investigate and decide on alternatives. Dodero (2010) argues that, despite having well-prepared spatial plans, evidence in the existing literature illustrate the barriers to this theory, given its complexity and technicality in the implementation of urban planning strategies.

Further, the characteristics of the theory lack the assessment of capabilities. The theory disregards the capability of an institution to apply it (Lindblom, 1959). It is fair to argue that the basis of the theory relies on the justice of circumstances as it pertains to the social contract of equality and mutual advantage. The theory posits that all institutions have experts to apply the quantitative tools to address problems. Regarding the capability approach, achieving justice requires the minimum fulfilment of capabilities. In this regard, and practically in public institutions such as local government, the issue of capacity as a capability element remains a challenge. Hence, the existing literature as discussed in the preceding chapters points to the failure of spatial planning, particularly regarding implementation, and the fault in excluding community inputs. For instance, in Italy, seventy years after the enactment of a planning law, 1% of municipalities (91) remained without planning instruments or plans due to capacity challenges (Colavitti, Usai and Bonfiglioli, 2013). Hudson *et al.* (1979) still maintain that the rational-comprehensive theory is simple in spite of the challenges that exist in theory, because it provides a step-by-step approach in addressing planning challenges.

It can be said that the theory can contribute to achieving distributive justice, even though the theory does not appear to embody most of the dimensions of EJ. However, its contribution would require the application of the principles of distributive justice, namely accountability, need, context, and compensation. The information amassed through the application of these principles and the capability approach will therefore contribute to the input of the quantitative tools of the model, allowing projections and cost estimation of current and future needs. Furthermore, the availability of the information received through engagement and deliberation with non-experts will enable the analysis of the non-financial effects of financial cost on distribution. This theory is also likely to deliver a just policy, given the stage of monitoring and evaluation, because it allows for the

assessment of policy effects. However, the expert-driven model renders it impossible for determining substantive input on its evaluation. The just policy requires a balance of the policy effects to all members of the society but it takes a collective approach that encapsulates all other dimensions of the EJ to realize such a policy.

3.3 INCREMENTAL PLANNING THEORY

Incremental planning refers to the breaking down of the long-term planning horizon into smaller entities that are complete projects in themselves (Tillner, 2013). The theory evolved as an alternative to the rational comprehensive theory. Hudson *et al.* (1979) assert that Lindblom suggests that the theory existed as a result of massive criticisms levelled against the rational planning theory. The rational planning theory gave birth to the new theory after numerous attacks on its frame (Olesen, 2018). In practice, the theory introduces a process that permits plan implementation while plan development is in progress. This plan implementation is either government led or community led. A community in the De Achterhoek, Netherlands led an informal planning process that has attributes of incrementalism to establish green infrastructure such as parks and playgrounds; and a community centre (Meijer and Ernste, 2019). This community act indicates that while government is constrained because of service delivery demands and other impediments, community members can voluntarily and incrementally implement a part of a government plan. According to Lindblom (1959), the theory promotes the consideration of goals together with the selection of policies, while allowing a few alternatives based on experimentation at the decentralized level. The ability of the theory to allow for the decentralization of power to some degree is indicative of the traits of procedural justice. However, the consideration of few alternatives could lead to inequality in the implementation of plans. Accordingly, Lindblom (1959) describes the way of deriving most decisions as being a process of muddling through. The approach is an attempt to solve immediate short-term problems rather than pursuing the realization of a well-defined, long-term objective (Bokland, 1993). In practice, Hostovsky (2006), after studying the failure of the rational planning theory in waste management, argued in favour of incrementalism as it provides an opportunity for addressing concerns and issues as they appear. Drewes (2015) quoting Riddel (1987) states that an incremental approach on selectivity assists in removing plans and decisions with least benefits in favour of those with the potential to realize outcomes. In essence, in order for planners

to incrementally address issues, the identification of implementable decisions or plans with the potential to deliver outcomes is necessary.

In contrast, the rational planning theory advocated for long-term planning and the consideration of alternatives without limitations, although with an inability to consider societal issues associated with recognitive justice. Hence, incrementalism is concerned with addressing day-to-day societal challenges and problems in planning. The disjointed incrementalism that the theory proposes in looking at short-term and few alternatives (Archibugi, 2008), among others, can also influence recognition justice. The concentration of planning in a specific area can allow for a detailed analysis of context, leading to the recognition of existing circumstances. In practice, planning focuses on strategic plans that detail long-term goals without locally oriented plans. According to Ferreira *et al.* (2009:35), “strategic plans are indicative planning instruments made to improve decision-making processes and decision-makers’ constructive involvement in planning practice.” In South Africa, most municipalities adopt precinct or locally oriented plans in support of strategic plans such as the Spatial Development Frameworks (SDF). Subban and Theron (2016) argue that a SDF is a tool at a disposal of planners to influence spatial transformation, in particular on inequities between the rich and poor. Although the adoption of locally oriented plans could influence environmental justice, the existing challenge of poor incorporation of its dimension in planning will prevail. Hence, Roy (2011:7) presents planning as a “social struggle and mobilization for justice and opportunity.” Spatial planning, through its plans and systems in this context, becomes central to the achievement of justice, without any compromise. In terms of the rational planning theory, rationality informs decision-making based on alternatives, rather than on experiments. However, the understanding of inequality challenges is gained through the experience of the recipients, and not only through rationality. Aldo Leopold, in discussing the notion of land ethic, demonstrates the influence of experience to inform change. The Essays UK (2013) upholds the notion that rational planning and incremental planning are not entirely different theories of planning, because the latter theory is an extension of the former theory by its addition of a short-term perspective.

Lindblom (1979), in following the critiques of the incremental theory, explained the three elements (strategic analysis, disjointed incrementalism, and simple incrementalism) of the theory in great detail. Disjointed incrementalism allows for reactive planning as

decision-making to take place as problems become known. The notion of simple incrementalism, which allows for the selection of alternatives in line with the preferences of power holders (Lindblom, 1979), has the potential to unfairly exclude options that are beneficial to an inclusive social structure. An inclusive social structure is a structure that includes those with power and those without power, those of low-, medium- and high-income groups, males and females, and those with disabilities, together with various race, ethnic, religious and cultural groups and other affiliations. Rawls advocates for the original position, which ignores the conditions and characteristics of participating parties, but procedural and recognition justices require a process that is inclusive. Faludi (1973) argued against the theory for its limited consideration of alternatives and its focus on those with the power of influence. Larsen (2003) suggests that incremental planning is a mixture of intuitions and experiences, rather than a scientific technique that follows concrete steps. This mixture of intuitions and experiences is not only in the interest of those with power but rather for everyone in a society. The consideration of the interests and experiences of an influential group has the potential to focus the distribution of resources and policy effects or benefits toward a single group. The distributive justice approach calls for the equal allocation of benefits in addressing social and planning problems.

It is pertinently articulated in the literature that incrementalism supports decentralization of functions and power (Hudson *et al.*, 1979; Lindblom, 1959), but fails to present clear platforms for participation. In this regard, the theory is indirectly not pro substantive justice. The notion of substantive justice promotes platforms for the general public to influence decision-making. According to Mirafteb *et al.* (2008), in developing countries where the decentralization of planning is evident, local governments and their executives have insufficient leadership capacity to oversee and implement planning at the local authority level. Failure in the implementation of this reactive type of planning is thus impossible to avoid in the absence of leadership and capacity to facilitate or influence change. Hence, the focus of the theory is on institutional control regarding plan formulation and implementation. Furthermore, the theory concentrates more on what to do and implement on a day-to-day basis. The focus on what to implement, to some degree, shares responsibility for presence of unresolved inequalities. This contention derives from the stark fact that planners over the years have applied planning theories in practice, without successfully changing the status quo. Nonetheless, the attributes of the

theory, in particular the disjointed element, show the ability to enhance quality of life in a worse identified specific area with inequalities, as it could easily allow the application of the capability approach and distribution principles in that particular area. However, the delivery of full environmental justice through this theory is unlikely. In practice, the incremental way of doing things in planning is inadequate, more robust approaches given the failures of many stakeholders to incorporate sustainable development goals in existing strategies are necessary (Nikulina *et al.*, 2019).

Etzioni (1967) introduces the use of the mixed scanning theory (MST) that combines both the rational planning theory and the incremental planning theory, in an attempt to close the gap between the rational and incremental planning theories. According to El-Kholei (2018) the MST seeks to reconcile these two theories. The mixed scanning theory proposes achieving justice by supporting the simultaneous implementation of both long-term and short-term goals. According to Bokland (1993), in mixed scanning, the rational planning approach provides the fundamental decision-making process concerning aims and means, which results in the incremental approach supporting the daily implementation of the decisions made. The author propounds the mixed scanning theory as complementary to the rational planning approach (p.154). To further illustrate the theory in practice, it enables the analysis of a broad area (“wide”) and drawing of details for a specific portion (“zoom”) within an identified broad environment (Etzion, 1986: 8). The rational planning theory in the MST allow the consideration of more alternatives; however, the incremental planning theory in application undoubtedly considers the few, specifically those with power support. The theory in its current form fails to present an ability to achieve EJ fully. The lack of traits on distributive, recognition and procedural justice will invariably compromise EJ in this theory.

3.4 ADVOCACY PLANNING THEORY

Paul Davidoff, the theorist who developed the advocacy theory critiqued the rational comprehensive theory and suggested that plans must acknowledge the deeply political character of planning, which is hidden under the science of comprehensive rationality (Mäntysalo, 2005). The theory reacted to the marginalization of the socio-political issues in planning. Davidoff (1965) introduced the notion of advocacy planning, which calls on planners to advocate for the interest of the poor, unrepresented and minority groups in

neighbourhood planning. In South Africa, during the 1980, a group of middle-class white planners formed an advocacy planning organization to promote transformation through spatial planning (Harrison, Todes and Watson, 2007). The main beneficiaries of this transformation are the majority disadvantaged group of Black, Africans. However, Sihlongonyane (2018) states that this advocacy group of planners no longer exists or its activities have become subtle because most planners are pro-market and profit. This theory supports Rawls's justice principle by promoting socio-economic equity for the disadvantaged groups. Friedmann (2008) therefore views planners as being the champions of public interest. The theory furthermore supports substantive justice by encouraging governance to influence decision-making in planning. According to Healey (2003:107), the forms of the governance process includes "rational-technical process, top-down command-and-control practices, and bureaucratic rule-governed behavior". The governance process requires the representation of various actors. These multiple actors compete, participate in, and coordinate, the process. The actions of these actors are congruent with the types of governance (competition, participation, and coordination) that Yingjie *et al.* (2013) propose. Advocacy planners are more focused on the participative type of governance, which aims to influence decisions of state (coordination) and capital owners (competition). In addition to this, Millner (2011) highlights substantive justice as constituting a governance tool for the general public to participate in decision-making. Planners, as advocates of the minorities in planning, are therefore the governance tools who can facilitate the participation of the affected communities. In South Africa, there is a need for planners that will facilitate equity in areas, towns, and communities of disadvantaged people (De Beer and Oranje, 2019). The fragmented nature of the country, in particular the erstwhile homeland areas, requires planners that will champion spatial transformation. Swanstrom (2018) cites that equity planning is the main responsibility of local government. In principle, municipal planners should direct more efforts towards equity planning. In advocacy planning, the planner focuses on how the plan intends to influence or affect the interests of the poor. According to Hudson *et al.* (1979), the theory plays a crucial role in blocking plans that disregard issues of public concerns. The theory also supports the synoptic approach's consideration of technical aspects as well as the substantive issues that both the synoptic and incremental approaches ignore.

In practice, Chiodelli (2013) argues that urban planning and design are not only about technical activities but that they have a substantive political connotation, which can be attributed to the handling of space and has important effects regarding urban citizenship. It is precisely in this contention that advocacy planning excludes substantive views and constitutes an anti-objectivity construct of the rational planning theory. Therefore, the participation of all groups in a social structure is crucial; hence, this theory proposes that planners act as the tools for the involvement of the poor. Further, advocacy planning influences transparency in planning, rejecting the notion of planning without the people (Hudson *et al.*, 1979). In the context of justice, there must be fairness in planning. The transparency that this theory supports thus promotes openness in planning, allowing all parties to have equal access to planning decisions and implementation. Pezzoli (2018) summarizes literature indicating that equal access means all parties must have access to the same information and knowledge regarding a matter or policy that a decision would affect. In this case, the disadvantaged group would have the same information and knowledge through its representative, an advocacy planner. According to Olesen (2018), this theory is clear regarding the role that a planner plays in a planning process. Advocacy planning calls for the development and implementation of multi-objective plans that consider multicultural and diverse interests, in particular those of the minority, as opposed to a unidimensional plan. The plurality of plans directly and undoubtedly highlights the traits of recognition justice. The diversity of interests in plans implies the consideration of all conditions and the experiences of all parties, including the marginalized groups, who are often excluded in planning. In literature, the evolution of EJ concentrated on distributive justice for the minority (marginalized) in the case of USA (Bullard, 2001; Hamlin, 2008; Urkidi & Walter, 2011; Pedersen, 2011), and the majority in the case of South Africa. The advocacy planning approach, especially during the early days of environmental justice, championed the change of geographies to influence justice. To date, some non-profit organizations represent the interests of the general public to influence plans. Further, the advocacy planning approach presents a potential for considering capabilities. In the context of this theory, advocacy planners can block plans that would not contribute to the nourishment of the lives of the groups they represent. The planners can therefore advocate for the components of the capability approach, such as basic needs, capabilities, functionings, freedom, opportunities, and choices, which most plans exclude. According to Harwood (2003), advocacy planning

provides public planners with an opportunity to apply strategies that promote equity in the distribution of resources, activities and services for the marginalized groups.

The drawback of this theory is that, in the absence of advocacy planners, the interest of the poor, the disabled, the marginalized and the unrecognized, among others, can suffer injustices. Undeniably, the success of the theory is normally at the cost of the planner or an advocacy group. In this light, the willingness of advocacy planners and groups is at the core of the theory. Peattie (1968) cited in Hudson *et al.* (1979:390) critiqued the theory for blocking plans without mobilizing and advocating for alternative plans. In practice, and based on experience, advocacy planning is sometimes wrongly applied during Planning Tribunal hearings where representatives of parties argue for blocking developments in the interest of competition. This type of practice is prevalent in shopping complex developments or malls, which often disregard the potential of the development to improve the lives of the poor through job creation. Although malls create job opportunities, they are for customer consumption, (Landman, 2016) than the production of goods.

Furthermore, although the theory considers EJ traits in advocacy, it suggests an inequality in influencing interests between the poor and rich. It focuses on the interests of the poor without highlighting the need for achieving a balance of interests between the rich and poor. This balance of interest is also the reason that leads to Brock (1973:491) to suggest the “mixed principle” of justice as opposed to the Rawls’s second principle of justice, which promotes justice only for the disadvantaged group. Harwood (2003) reveals that in the city of Santa Ana, situated in Southern California, advocacy planning succeeded in transforming the lives of the poor, yet without full EJ. According to Cutter (1995), EJ is beyond class and race, is related to fairness in the improvement of quality of life for all. This articulation implies that the contextualization of advocacy planning should not only focus on the interests of the low-income group or the marginalized, but also rather equally consider the interests of all parties. More broadly, advocacy planning involves advocating for the sustainability of the environment as a whole.

According to Doussard (2015:298) in the Chicago City Hall, advocacy or “equity planners”, with proper planning instruments, found it hard to implement plans in the absence of political support. An equity planner in the absence of political support and

leadership which is often a barrier to planning needs the will to influence change, confidence and motivation (Krumholz and Hexter, 2018). In most cases, in South Africa and elsewhere in the world, politicians support ideas that indirectly or directly benefit their business interests at the expense of the poor. As a result, a social dilemma becomes conspicuous, as it calls for consensus, possible only through communicative approaches. Doussard (2015) proposes the elevation of advocacy to the higher hierarchy of decision-making and the geographies (regional, provincial and national) of an area as a means with which to bridge the gap of political resistance. In support of promoting advocacy planning, Lung-Amam *et al.* (2015) suggest that advocacy planning should begin in planning schools where teaching should focus young planners on the importance of understanding the experiences and challenges of the marginalized communities. In practice, the understanding of interests from various groups is attained through a communicative approach that allows for the participation of stakeholders. In this light, the transactive approach evolved to bring together the technocrats and society in addressing different interests.

3.5 TRANSACTIVE PLANNING THEORY

The transactive planning theory focuses on a specific group, rather than on planning for the unknown (Hudson *et al.*, 1979). It is a traditional theory of planning (Olesen, 2018) and prelude towards the theory of communicative planning (Shahab *et al.*, 2019). In essence, the philosophy of the theory guides the planning of any particular area. The theory is dependent on personal experience, knowledge, beliefs and participation as the first phase in addressing social and other planning problems (Hudson *et al.*, 1979). These dependent factors underscore the recognition of soft knowledge in technical planning processes. According to Friedmann (2011:15), knowledge involves “processed knowledge” (scientific and technical) and “experiential knowledge” (tacit and soft). In planning, processed knowledge involves the projection of population, calculation of demand capacity for engineering services, and the preparation of layout plans, whereas experiential knowledge involves knowledge about a place (history, customs, culture, values, etc.), socio-economic challenges and other experiences of residents.

Khakee (1998) states that professional or technical knowledge entails theoretical assumptions and systematic methods, whereas experiential or tacit knowledge entails

the way communities live their day-to-day life. According to Olesen (2018), tacit knowledge relates to the day-to-day planning practice which Schön (1983:50) refers to it as “knowing-in-action.” Experiential knowledge had a role to play in the introduction of environmentalism, and in particular, the environmentalism of the poor. For example, the poor fights against the introduction of technologies and processes that perpetuate the destruction of their norms and values. Friedmann (1973) introduced the theory to create a platform where technocrats, and by extension, planners, with technical knowledge engage, deliberate and agree with their clients on planning matters based on soft and technical knowledge. The theory influences the consideration of experiential or soft knowledge in planning to depart from the ideology of rational, incremental and mix scanning theories that present a technically oriented approach. Friedmann (2011) asserts that this theory bridges the gap that exists between the planners’ communication and the communities that the planning affects. Interestingly, in bridging the communication gap between the two parties, the theory excludes the advocacy planning approach. The transactive planning theory positions the planner as engaging a community, regardless of social status, as opposed to a planner engaging for, or on behalf of, a poor community. In the original planning paradigm, dominated by thoughts of the rational planning theory, planners decided on behalf of communities without soliciting their views. This transactive theory therefore places the importance of community views, and input in planning, in the foreground. Friedmann (2011:21–26) presents the theory as “mutual learning and life of dialogue.” In the context of mutual learning, planners learn experiential knowledge from clients (communities), while clients learn technical knowledge from planners. It is for this reason that Wray (2011) traces the origin of the theory from social learning theory. The mutual learning idea of Freidmann is not much different to Norton’s (1999) idea of the adaptive management, which he introduced as an alternative to achieve environmental related goals. In the context of the life of dialogue, planners must foster relations with communities involved in planning. These relationships aim to create trust and understanding for peaceful and prosperous engagement between parties. In a study regarding EJ on green infrastructure, the authors state that prior to investigation, a process of trust building took place to facilitate a positive relationship between them and the villagers (Dawson, *et al.*, 2017). By implication, communities are more free and open to work with a stakeholder or lead planner who is trustworthy. According to Hudson *et al.* (1979), the transactive planning

theory focuses on processes that influence learning and growth among participants and organizations in planning.

There is some level of relationship between transactive planning and EJ, because the theory corresponds with the requirements of recognition justice. According to Whyte (2011), recognition justice entails the consideration of experiential knowledge of all affected parties in the implementation of plans, policies, and programmes. The theory advocates for recognition justice, by ensuring the recognition of the layperson's in policy or plan preparation. The understanding of community experiences, which the theory introduces, presents an opportunity to achieve distributive justice in the area that the planning relates to. De Beer and Oranje (2019) cite that for as long as the exclusion some social groups is evident in planning for the socio-economic aspects of society, resistance remains an unavoidable valid response. The theory provides an opportunity for planning to target specific groups reducing the probability of resistance. The fundamental values of transactive planning theory that advocates for engagement between the technocrat and community provide an opportunity to understand context, needs of the community, level of delivery (compensation) and its ability to influence change (accountability). This character of the theory is congruent with the distributive justice principles that Konow (2001) cited as including context, need, accountability and compensation. It is through the transactive theory that the capability approach can somehow succeed, because it will allow the mutual understanding between a planner and client on the capabilities of a proposed plan to be responsive on the needs of a community (client). Conversely, in practice, plan implementation depends not only on context but on other factors outside the planner and its client, such as financial resources and sector services.

In the praxis of planning, although an agreement on priorities might exist between a municipality (planning authority) and communities (client), some of the priorities may include the competence of other sectors such as education and healthcare. The nature of planning is multidisciplinary (Harrison *et al.*, 2007; Bikam, 2016; Cilliers and Victor, 2018) and requires the involvement of other disciplines. In this regard, the theory cannot fully achieve the application of the capability approach by itself, as it excludes other interrelated sectors that influence contextual planning. Consequently, the theory might only partially achieve procedural justice, which requires the involvement of all parties

affected in planning. Hence, the focus of the transactive approach is mainly on the communication gap between the planner and communities. Further, the achievement of distribution and recognition in planning, without the capability to influence the outcome, is tantamount to planning for failure. Therefore, the theory in its raw nature cannot lead to just policy, for its focus is not fully incorporative of the EJ dimensions.

3.6 COMMUNICATIVE OR COLLABORATIVE PLANNING THEORY

In the existing literature, communicative planning is the dominant (Roy, 2011; Watson, 2003; Allmendinger & Tewdwr-Jones, 2002), popular (Sharma, Deswal & John, 2009) and influential (Dobrucká, 2016) concept or paradigm in planning, which indicated a shift away from the original planning theories such as the rational-comprehensive theory. In reality, the “communicative turn” (Healey, 1992: 143) introduces improvement in the application of planning theories, rather than an actual paradigm shift where a new theory is formed, disregarding the application of existing knowledge and theory. Hence, planning is still facing the challenge of incorporating the epistemology of natural science (roads, city plans etc.) and social science (social implications), in addressing and solving environmental problems (Ferreira *et al.*, 2009). Further, the theory introduces a communicative rationale, shifting away from a technical rationale (Yingjie *et al.*, 2013). The theory is about change through the understanding of a phenomenon by way of communicative action, rather than only exploring approaches for solving problems (March, 2010). This theory presents a direct relationship with procedural justice, for it foregrounds the participation of parties in planning. The communicative approach advocates for deliberation, argumentation and consensus building in planning among stakeholders with various interests. The existing literature shows that, in recent years, the communicative turn has emerged as planning that is collaborative, deliberative, communicative, argumentative, and about the importance of debate and bargaining (Harvey, 1989; Healey, 1992, 1993, 1997; Fischer and Forester, 1993; Forester, 1999; Muthoo, 2000). The foundation of these communicative typologies is similar; hence, the use of these conceptions is used interchangeably. It is a theory imbued with the principles of empowerment, consensus (Pugh, 2005; Roy, 2015), mutual understanding (Healey, 1992; 2003; Huxley, 2000), common good, equality (Roy, 2015), common interest (Muthoo, 2000), honesty, truth, and openness (Allmendinger and Tewdwr-Jones, 2002).

A number of scholars argue that the Habermasian theory of communication rationality and action has influenced and inspired the communicative turn in planning (Healey; 1992; Healey, 2003; Pugh, 2005; Deyle and Wiedenman, 2014; Roy, 2015; Dobrucká, 2016; Mattila, 2016; Duckett *et al.*, 2017). According to Roy (2015), the theory of communicative rationality and action that Habermas introduced posits that, central to democracy, is communication, deliberation, and argumentation among parties of different interests. Communication rationality promotes the reasoning of intersubjective understanding, communication, and argumentation, rather than individual rationale that is oriented towards the conception of “subject-object” (Healey, 1992:151) without the influence of the capital owners and state power (Huxley, 2000). Habermas (1984:10) cites that the “communicative rationality carries with it connotations based ultimately on the central experiences of the unconstrained, unifying, consensus-bringing force of argumentative speech, in which different participants overcome their merely subjective views and, owing to the mutuality of rationally motivated conviction, assure themselves of both the unity of objective world and the intersubjectivity of their lifeworld.” Central to the definition of Habermas, is consensus building, which implies that any argument and debate on a subject without consensus is meaningless. Habermas’s intersubjectivity point of view implies that, without a discussion between parties, there is no communication. In contrast, Bridge (2005) supports a communication rationality that accepts and espouses dissensus in the same level as consensus because of community diversity traits that are often in conflict. In as much as dissensus is acceptable, a common understanding among members of the community to enable planning progress is necessary. According to Özdemir and Tasan-Kok (2019), the role of planners in the midst of disagreements and conflicts includes, brainstorming (i.e., investigating conflict through surveys, focus groups, and debates), professional companionship (i.e., building relations through roadshows, workshops, and *ad hoc* visits) and co-creation (planning with communities through a planner’s guidance). The ability of a planner to effectively exercise these roles would require resources, in particular from the state. The shortcoming of the communication rationality in respect of the exclusion of those with power is a barrier to conflict resolution.

Huxley (2000) states that the exclusion of power and state in the approach encourages what the researcher calls a ‘no touch and feel’ approach, where one forestalls the other from engaging in deliberations. In practice, the state and developers often influence the

direction of actions e.g. in India, and particularly in Mumbai, the state influenced and led a land grab programme to establish an economic zone (Roy, 2011), creating injustices. Moreover, Voogd (2001:84) illuminates the point that in communicative planning, some stakeholders can exert pressure on other actors to agree, which is known as “communicative pressure.” This type of pressure is tantamount to a to-down approach to implementation, which becomes detrimental in achieving procedural justice. Deliberation or argumentation that is free of any influence appears in theory, as what Habermas calls, an ‘ideal speech situation’.

In this ideal speech situation, Habermas (1993: 31) argues that:

“Anyone who seriously engages in argumentation must presuppose that the context of discussion guarantees in principle freedom of access, equal rights to participate, truthfulness on the part of participants, absence of coercion in adopting a position and so on. If the participants genuinely want to convince one another, they must make the pragmatic assumption that they allow their ‘yes’ and ‘no’ responses to be influenced solely by the force of the better argument.”

The position of Habermas on the ideal debate situation is consistent with Rawls’s first principle of justice, which regards liberties with respect to freedom of accessing participation and equality in participation. According to Duckett *et al.* (2017) the fundamental values of an ideal speech situation include the absence of domination, deception, constraints and strategizing; while promoting egalitarian, intersubjective understanding; and the recognition of diversity and a plurality of knowledge, including evidence and inclusiveness. In this context, Habermas posits that deliberation of communities on the common good can take place, while providing a clear self-understanding of community participants without the influence of outside forces (Huxley, 2000). The ideal speech condition indirectly, and directly, circumscribes to the application of a technocratic perspective of environmentalism, which foregrounds expert evidence in participation. Additionally, Mattila (2016) accentuates the point that the communication action indicates the dictating role of the better argument and rationality in a deliberative process, as opposed to predetermined interests and identities. The notion of excluding predetermined interests and identities presents the theory with patent features of the capability approach that focuses on individual judgments rather than on preconceived ideas. However, it would be contrarious for the theory to address preconditions (social, biophysical and material) to capabilities, as these would mostly

require outside forces (state and other actors with power). Practically, the exposition regarding the communicative theory highlights the fact that any of the principles that inspire the theory do not pre-exist in the application of the communicative turn.

According to Pugh (2005), space, time and politics are the preconditions to a communicative approach. The relationship between space, time and politics in Soufriere (Saint Lucia) led to empowerment, as it placed the fisher people in a different, to be specific, lower social structure, space and time than competing parties in tourism. The Habermas's notion attracts criticisms in this regard and became viewed as promoting the invisibility of power, equivalent to the ignorance of inequality (Roy, 2015). The Habermasian approach espoused wilful ignorance, an attribute of unknowability that involves the exclusion of other aspects in discourses. Further, this foundation of the communicative turn presents the fundamental elements of Rawls' original position. Firstly, the original position suggests rationality that focuses on the understanding among parties without status, privileges, and class (veil of ignorance). The communicative turn in the context of Habermas views parties in a public sphere as devoid of preconceived ideas and positions. Secondly, it posits the common good as promoting the benefits for all parties equally.

According to Huxley (2000), the achievement of self-clarity (self-understanding, reflexivity, knowledge, questioning, and transparency to others) and consensus, without acknowledging inequality and state power in the collaborative approach is a problem. Cele and Chipunga (2016) contend that two factors underpin collaborative planning and include, first, a strong mutual and shared vision by all stakeholders and secondly, participation without hindrances. In practice, the second factor is unavoidable as challenges always compromise participation. Chapter 1 of this report reveals that public involvement in planning remains a problem. Brand and Gaffikin (2007:285-291) explicate that the foundation of the collaborative concept (ontology) is context and complexity that acknowledges tacit (soft) and experiential (hard) knowledge (epistemology) ascertained by open, honest and explicit deliberation (ideology), with the intention to build consensus through a face-to-face approach (methodology). This argument is congruent with the contention of Mattila (2016), which states that Habermas posited a discourse free from predetermination in the public sphere. Most notably, the public sphere provides an arena for communities to gather and debate the matter of interest, thereby aligning itself with

substantive justice. The public sphere notion supports a radical planning construct, which according to Hudson *et al.* (1979), advocates for planning by the people at a grass-roots level, based on their day-to-day experiences without state influence. Hence, the Habermasian theory excludes state and power. The public sphere of Habermas creates institutions for public involvement that are community-led and initiated. On the contrary, according to Yingjie *et al.* (2013), a “government-led participation” in the implementation of a renewal project in South Louguxiang, Beijing, introduced a communicative turn in Chinese planning that induced harmony in conflicting issues, by prioritizing the interests of the residents rather than those of the developers.

Theoretically, Habermas introduced a division between formal and informal institutions, with more emphasis on the formal, yet recognizing input from the informal institution (Mattila, 2016), with such input emanating from the public sphere argumentation. The context and complex ontology of the concept somehow fulfils the principles of distributive justice, although without all parties, distribution disparity is ineluctable. Watson (2003) contends that consensus emanating from a communicative approach leads to the successful resolution of community disputes, accretion of knowledge sharing among society members, and the influencing of more responsible state decisions. Tewdwr-Jones and Allmendinger (1998) cited in Ferreira *et al.* (2009:35) criticised the collaboration planning concept, by stating that it failed to bridge the gap regarding the desirability or possibility of consensus in a diverse and multicultural society, because of the fact that the theory allows biases. Similarly, communicative planning is open to abuse (Dobrucká, 2016) and ignores the relationship of actors and power differences that exist in the process, because of its focus on the process and actions of individuals (Watson, 2003; Healey, 2003; Fahmi *et al.*, 2015). In a study on Internet-based participation, Cheng (2013) revealed that in both cases studies (nail house event and PX project event), no consensus existed in the final decisions and that group polarization, exclusion of stakeholders, biases, and conflict became prominent in the process. The “nail house event” involved house owners who rejected to be relocated by real estate developers without compensation and the PX project event “is a mega project for developing a p-Xylene producing plant” (p.354). This articulation is analogous to the contention of Sager (2012:130), which state that neoliberal agencies and the government promote the “growth-first approach to urban development” through engineered power relations between the captains of the economy and the state. In this

context, the communicative turn approach translates to a process of “window dressing” (Voogd, 2001: 83) in an attempt to legalize pre-determined plans and strategies. As a result, there is a debilitation of the ethos of just policy, which centralizes fairness in policy implementation.

Roy (2015) revealed that in Atlanta, the Beltline urban regeneration development presented neoliberal planning with an all-inclusive and transparent planning process. However, this process promoted inequality in participation and decision-making based on self- or power-driven interests, and viewed consensus as a mere process for community buy-in or agreement in an attempt to legitimize political actions for the benefits of the neoliberal agenda (p.63-66). Likewise, in a study of an Islamic school development in the Camden area of Sydney in Australia, collaborative planning appeared impaired, as the process excluded the minority and intolerance of other religious groups or nationals (Muslims) in the Camden area became central to the contention against the school, during the process (Bugg, 2012). The process involved a few informal public participation meetings where deliberations took place in the absence of the applicants (developers) who required the school (p.208-209). According to Innes and Booher (1999), all stakeholders affected must enjoy equal opportunities of access to information and freedom of speech and must be respected and listened to. The equal opportunities in the communicative regime are therefore innately consistent with the principle of procedural justice.

However, given the criticisms and praxis of the communicative theory application, injustices in this theory remain inevitable. In practice, planners assume the facilitation role in the process, yet with double standards. The first standard is that of an advocate of the powerful and state, and the other standard is that of presenting neutrality for the common good. Accordingly, in spatial planning, planners have the role of facilitating democratic deliberation so as to foster spatial transformation and the reaching of consensus (March 2010; Cheng, 2013; Roy, 2015), while capacitating and empowering communities (Hostovsky, 2006; Brand and Gaffikin, 2007). Conversely, in practice, planners are not always neutral, as they advocate for the interest of the state and those of their employers. According to Pugh (2005), planners are normally not neutral, because they tend to empower those without knowledge, in an attempt to improve their own understanding, rather than to facilitate consensus building. Thonley (1991) cited in

Roy (2015:60) argues that planners hold a mandate from those in power (the state) so as to promote and support a market-oriented or neoliberal agenda in development. Moreover, it would be a fallacy to view planners, in particular those in government, as being disconnected from acting as the mouthpiece of state interests (Huxley, 2000). According to Cheng (2013:364), some Chinese people view planners as agents, voices, and experts of the state who should not facilitate dialogues. The challenges that the theory brings to the praxis of planning underscore the importance of understanding the role of planners in the context of justice. Lastly, Fahmi *et al.* (2015) state that the collaborative approach involves the transformation of the cooperative network (sharing of expertise and information) and coordination network (integration programmes for delivery) into collaborative networks (interdependency of actors and resources) in order to improve results. Undoubtedly, the communicative approach can influence EJ to a certain degree, owing to the traits that it shares with the dimensions of EJ.

3.7 ENVIRONMENTAL JUSTICE IN PLANNING

The previous sections explained planning theories in the context of EJ, but it is apparent from this discussion that none of these theories can, in isolation or tandem, fully achieve EJ. The first-generation planning approach, which includes rational planning or synopsis, incremental or disjointed incremental and mixed scanning planning theories, illustrated the ability to achieve distributive justice for the present and future generation. However, the challenge that exists in this generation approach is the lack of recognition, substantive and procedural justice. The existing gap of exclusion emanates from the lack of non-expert participation. As a result, the distribution of activities in space through this approach remains unjust, for it is not well informed. Additionally, the first-generation planning approach assumes that all societies have capabilities to meet their needs. The approach applies scientific and technical means of planning from a technocrat and expert perspective. These scientific and technical means result in plans that are difficult to implement. Additionally, the approach ignores the interdependence of sectors that aid to inform the capability for achieving planning objectives. Hence, deLeon and deLeon (2002) argue that an unsuccessful implementation emanates from the design of the planning process and implementation.

In contrast, the second-generation planning approach, which includes the advocacy, transactive and the communicative turn planning theories, evolved in an endeavour to address the weaknesses of the first-generation planning approaches. Although this second approach became known and applied, injustices remain unresolved, even on a global scale. The advocacy planning theories indirectly introduces substantive justice, as it became an instrument for the voices of the poor to reach decision-makers. This theory supports Rawls's principle of justice that advocates for the acceptance of socio-economic disparities if they benefit the poor or disadvantaged. Moreover, the transactive planning theory partially responds to procedural justice, as it allows for interaction between the client and the planner. Although this theory encourages the interaction between a planner and client, in practice, planning actions and outcomes not only affect the receiving community (client), but also adjacent communities and other sectors. The communicative turn in planning evolved to bridge the gap in communication, collaboration, and coordination. This planning approach extensively displays a high degree of inclusiveness, deliberation, interaction, argumentation, and agreements. Thus, it indirectly presents the procedural, recognition, substantive, and just policy dimensions of EJ, but remains unsuccessful in spatial planning in terms of closing the widening gap of environmental inequalities. In drawing from Khakee (2003), the first generation planning approach falls within the paradigm of rational planning, whereas the second generation planning approach falls within that of the communicative planning theory.

The failure of the first- and second-generation planning approaches in addressing environmental injustice demands the introduction of a new turn in planning, which is EJ planning. Archibugi (2004) contends that the theories of planning lead to theories on or about planning that emanate from their failure in practice. These theories on or about planning have supported town planners' interactions and cooperation, without the interaction and cooperation of planners from other substantive sectors, e.g., economic development, infrastructure and social welfare (p.428). The argument of Archibugi confirms that this problem still exists in planning theory. Byrne and MacCallum (2013) state that the Australian planning practice and education is silent on EJ. The lack of an explicit expression of EJ in the first- and second-generation planning approaches manifests especially in Australian planning, among those in many other countries. In the recent years, the paucity of literature evolved to introduce, debate and address justice in planning (Spirn, 2005; Salkin, 2006; Arnold, 2007; Soja, 2009, 2010; Stanley, 2009;

Iveson, 2011; Bassett, 2013; Byrne and MacCallum, 2013; Madden, 2014; Ling, 2015; Basta, 2016). The EJ planning approach can be seen as the third-generation approach in planning, which is about the explicit incorporation of the justice dimensions in spatial planning and implementation. This type of planning entails principles that are framed from the perspective of EJ.

3.7.1 PRINCIPLES OF ENVIRONMENTAL JUSTICE PLANNING

Arnold (2007) identified 18 principles of EJ planning. These principles, in a broad and summarized context, include the equal distribution of activities (policies, infrastructure, land uses etc.); recognition of conditions; involvement of all parties; prioritization of the least advantaged in planning; protection of nature (pollution, degradation) and society (from gentrification, exclusion, health hazard etc.); and the promotion of compatible land uses. The principles that Arnold propounded underscore the new turn in planning that promotes equality in planning the environment. Nonetheless, these principles only consider principles that address the distributive, procedural, recognition and just policy dimensions of EJ and exclude that of the capability approach and substantive justice. On the other hand, Khosravaninezhad and Akbari (2014) identified three principles of EJ that comprise socio-economic, ecological, and procedural equity principles. These principles excluded the principle of distributive justice, substantive justice, just policy, and indirectly address recognition justice and capability approach through both the socio-economic and ecological equity principles. In expanding the work of Arnold, Khosravaninezhad and Akbari, the researcher; therefore, reframes the EJ principles as follows:

- a) The just distribution of resources, activities, and services in space, based on the audit of environmental justice that considers the need, compatibility, accountability, compensation, and context.
- b) Promote the participation of all members of society through the adoption of governance platforms and processes.
- c) Promote and recognize diverse knowledge (experiential and expert) equally in planning and implementation processes.
- d) Consider the capability of the environment, state organizations and the general public that planning affects to achieve planning goals and outcomes.

- e) Support fair planning policies, strategies, programmes, and laws that promote the improvement of the quality of life for all.

These principles are consistent with the dimensions of EJ discussed in the previous chapter. The first principle supports distributive justice as it highlights fair distribution of activities through the use of distributive justice principles and consideration of compatibility. The distribution of activities would inform the fair distribution of resources and services. Table 3-1 classifies these principles in the context of environmental justice plurality.

Table 3-1: Principles of environmental justice planning

Principles of environmental justice planning	Dimensions of EJ
Just distribution of resources, activities, and services in space, based on the audit of environmental justice that considers the need, compatibility, accountability, compensation, and context.	Distributive justice
Promote the participation of all members of the society through the adoption of governance platforms and processes.	Procedural and substantive justice
Promote and recognize diverse knowledge (experiential and expert) equally in planning, and implementation processes.	Recognition justice
Consider the capability of the environment, state organizations and the general public that planning affects to achieve planning goals and outcomes.	Capability approach (capabilities)
Support fair planning policies, strategies, programmes and laws that promote the improvement of the quality of life for all.	Just policy

Source: Own construction, 2018

The second principle supports procedural justice because of its focus on the participation of all members in a society. This participation requires equal treatment during the planning, decision-making and implementation. The principle also supports

substantive justice by requiring the adoption of governance platforms and processes to enable participation. The requirement of platforms and processes places an obligation on policy makers and implementers, either public or private, to empower and support participants, and facilitate access to participation. The third principle aligns with recognition justice for its promotion and recognition of both expert and non-expert knowledge. This principle posits the recognition of all conditions of an environment. The recognition of these conditions is only possible through the incorporation of diverse knowledge in the planning and decision-making process. The fourth principle links directly to the capability approach by demanding the consideration of capabilities. This principle highlights the need to consider the ability of the environment, state organizations and the general public to achieve planning goals and outcomes. The capability approach indicates that the capability threshold is the minimum level of survival for an environment. By implication, this principle guides planners on assessing whether the environment, state organizations, and the general public would be able to sustain themselves after the implementation of a planned transformation. The last principle derives from the just policy dimension of EJ, which promotes effectiveness of implemented measures. This principle emphasizes the support of fair planning policies, strategies, programmes, and laws that promote the improvement of quality of life for all. The improvement of quality of life for all involves positive change in an environment as a restorative measure. The just policy promotes restorative justice which supports programmes that redress injustices. The demand of fair planning policies, strategies, programmes, and laws implies the equal distribution of implementation effects across an environment.

In light of the above principles, the propositions of the EJ planning approach includes the notion of spatial planning as a just distributive action (distributive justice), multi-stakeholder democratic planning (procedural justice), contextual experience and learning (recognition justice), a vehicle for governance (substantive justice), an action for capability assessment (capability approach) and an environmental restorative approach (just policy). The notion of spatial planning as a distributive action aligns to the first principle of EJ planning and the distributive justice dimension. This notion promotes spatial planning as distributive of resources, activities, and services in a fair manner. The second notion of multi-stakeholder democratic procedure supports the dimension of procedural justice and the second principle of EJ planning that focuses on participation

of stakeholders. This notion promotes the involvement of all stakeholders in a planning process which promotes equal treatment of parties and freedom of participation. The notion of spatial planning as a vehicle for governance also supports the second principle because it calls for the provision of platforms and processes regarding participation in a planning and decision-making process. This notion implements substantive justice as a dimension that centralises the empowerment of the participant in planning through governance. The notion of spatial planning, as an action for capability assessment, relates to the capability approach, which promotes the understanding of capabilities. This notion guarantees the consideration of the capability of the environment, state organizations and the general public, who are affected by planning to achieve planning goals and outcomes. The last notion of spatial planning as a restorative approach promotes the just policy dimension of EJ and the last principle of EJ planning. This notion requires spatial planning to promote measures that change the environment in a manner that promotes its integrity and health.

In practice and literature, these lenses have existed dependently or independently, yet without being categorically classified within the context of the EJ planning approach. Unquestionably, there is a dearth of literature on EJ in planning; hence, this new thought and lexicon of planning. The following section presents the author's conceptualization of EJ in planning through a detailed explanation of the propositions.

3.7.2 SPATIAL PLANNING AS A JUST DISTRIBUTIVE ACTION

Dewar and Kiepiel (2012) state that distribution in spatial planning, mainly through spatial development frameworks, is central in the economic, human settlement, environmental, social and engineering services agenda. By implication, without the distribution of resources, activities, and services in space, there is no spatial planning and no improvement in quality of life. Othengrafen (2010) states that spatial planning, as a profession, aims at the distribution of demography, resources, and activities by both the public and private sectors to shape the future of regions, cities, and towns. In the context of urban planning, it is traditionally applied to distribute land uses (Nikulina *et al.*, 2019). It is clear that spatial planning is a collective effort that influences the distribution of resources, activities, and services. Interestingly, Balbo (2014) notes that economic growth in most countries, in particular the distribution of resources, has brought about a

new chapter, benefiting those who had been previously excluded. The distribution of activities (land uses), resources and services (infrastructure, education, etc.) through spatial planning involves reforming, transforming and reshaping the spatial and social pattern of the environment. However, in reforming the environment, there is a need to understand environmental injustices that are evident in the area concerned. Arnold (2007:8) argues that planning should begin by undertaking an “environmental justice audit”, which can explain the background information, needs, interventions and support.

Spatial planning, as a just distributive action, focuses more on ensuring that there is fairness in the distribution of activities, resources, and services in space. Stephenson *et al.* (2015) in studying land audit for the municipal jurisdiction area of Matzikama provided a framework which could be useful to decide in the distribution of activities, resources, and services. Undertaking land audit from an environmental justice point of view will empower planners with information regarding inequitable distribution of land uses. Arguably, spatial planning as a just distributive action is spatial justice. According to Soja (2009:2), spatial justice “involves the fair and equitable distribution in the space of socially valued resources and the opportunities to use them.” Soja’s definition of spatial justice posits an obligation to treat the space fairly in the distribution of socially valued resource, activities, and services. The fair treatment of space implies respecting the intrinsic value that the space has in itself, while using the resources and services that the space provides. Soja does not directly engage with the values of nature. Although the definition provides for the consideration of values in the space, it is different from the definition of environment justice articulated in section 2.5 above. The environmental justice definition is clear about fair and equitable distribution of ‘environmental’ resources, activities, and services. The definition of EJ in this thesis therefore explicitly considers nature as part of a community that fair and equitable distribution affects. The distribution in the space, as Soja suggests, does not guarantee whether the space includes water, land, animals, human beings, and soil including the interrelationship of these aspects of the community. Although the notion of spatial planning as a just administrative action appears as spatial justice, Soja contends against the notion that spatial justice is a subset of other forms of justice. More explicitly, Soja (2010:53) views “environmental justice as a subfield of spatial justice.” In the context of the EJ planning approach expounded here, EJ is not a subfield of spatial justice, but rather a justice

notion that is broader than spatial justice. Spatial justice explains the spatial distribution of justice and injustices in space; hence, EJ is broad and beyond distribution.

Spatial planning as a just distributive action applies the principles of need, accountability, compensation, and context in achieving its objectives. The need principle implies that spatial planning contemplates the needs and priorities of the society that planning necessarily affects. This principle explains that distribution is fair if it meets the minimum basic needs of an individual (Konow, 2001). In this context, spatial planning achieves fairness in distribution if it assigns resources, activities, and services in a settlement, city, town, and region, which is equivalent to the minimum level of the socio-economic, cultural and biophysical conditions of life. With regards to accountability, the distribution of resources, activities and services corresponds with what each sector that is involved in the process can control. Konow (2001) highlights the point that in applying the principle of accountability, fairness in allocation depends on what the affected person controls. In this regard, spatial planning considers the feasibility of allocated activities to ensure implementable plans. On the compensation principle, the distribution of activities and resources is fair if it provides greater returns proportional to the needs of society achievable through trade-offs. Trade-offs allow a community that has more services to allow priority for services to less advantaged communities in exchange for a minimal level of service delivery. The work of Dawson *et al.* (2017) revealed that trade-offs are difficult to realize if decision-making ignores the values, interests and inputs of affected communities. Further, the distribution of activities in this principle aims to bridge the gap between activity demand and supply. For instance, areas with amenity uses that are not proportionate to their population require a balance through distribution. Lastly, the context principle presents fairness in the distribution of activities if there is a consideration of the effects thereof. Spatial planning directs and locates resources, activities and services in space, taking into account the positive effects. The positive effects encompass change and transformation in the existing unjust spatial structure of urban and rural geographies. Furthermore, spatial planning as a just distributive action applies the first- and second-generation planning approaches to attain its primary aim of achieving fairness in the distribution of resources, activities, and services. It is clear that the traditional and conventional planning approaches play a crucial role in this new turn in planning. For example, the rational comprehensive planning approach, combined with the communicative turn theories, can lead to the projection of current and future

distribution of activities in any urban and rural form. Spatial planning in its application is diverse and complex and addresses different interests from multi-stakeholders. Hence, the fair distribution of resources, activities, and services requires a democratic planning process that involves various stakeholders.

3.7.3 SPATIAL PLANNING AS A MULTI-STAKEHOLDER DEMOCRATIC PLANNING

EJ in its procedural justice dimension requires the fair participation of all stakeholders whom the planning processes and implementation could affect. According to Freeman (1984:46), a stakeholder is any person, sector or group that “can affect or is affected by the achievement of the organizations’ objectives.” In spatial planning, there are many stakeholders that influence and benefit from its intention. The multiple-stakeholders involved in spatial planning include the state (national, provincial, local), not-for-profit organizations, civil society, professional bodies, traditional leaders, parastatals (water bodies, energy bodies, telecommunication bodies, etc.), the private sector, political parties, and many other organizations. Spatial planning, in general, is a profession that is multidisciplinary in nature (Harrison *et al.*, 2007; Bikam, 2016; Cilliers and Victor, 2018). In local government, the challenge is always on how to manage a multidisciplinary team (Steen, Teles and Torsteinsen, 2017). It is crucial for a planner in government or private sector to be quite adept at managing diverse teams and stakeholders. Schoeman (2015) states that cooperation between planners and various stakeholders from other disciplines promote the coordination and integration of policies and plans. In the existing literature, Albrechts (2004) illuminates the importance of understanding and addressing the disparity that exists in power distribution among stakeholders throughout the planning process. Indeed, multi-stakeholders have different degrees of power and status. In some instance, as clearly discussed in the forgoing chapters, some stakeholders use power and status to influence a decision or to promote personal, economic and political interests. However, in addressing power and status differences, spatial planning in this approach adopts stakeholder management strategies that advocate for the understanding of actors, their relationships, and influences. In this context, there is a need for planners to analyse the interests and relationships of stakeholders in a planning and implementation process.

According to Missonier and Loufrani-Fedida (2014), there are five stages involved in a stakeholder analysis, which are aligned with stakeholder engagement. These stages include the identification of stakeholder and relations analysis; identification of stakeholder interests; the influence of each stakeholder's assessment; identification of existing disputes, conflicts and controversies among stakeholders; and analyses of the effects of these disputes, conflicts and controversies on the stakeholders' relations in the process (p. 1111-1113). In spatial planning, the multi-stakeholder approach requires a give and take style of engagement that leads to consensus through the mobilization of stakeholders in an attempt to achieve planning objectives and outcomes.

The conceptual approach to stakeholder management that Missonier and Loufrani-Fedida suggests is relevant in spatial planning to improve open dialogue and debate, and communication in general. Spatial planning, as an inter-organizational action regarding the text's definition, centralizes the communicative turn in its application. It underscores deliberative democracy that allows for equity and freedom in communication among stakeholders from various backgrounds and interests. The recognition of stakeholders from various backgrounds can ensure distribution to everyone regardless of social structure. According to Campbell and Marshall (2000), deliberative democracy is a practice that promotes open debate, interaction, and dialogue among parties to discover unknown facts, share knowledge and encourage mutual understanding and agreements. It bridges the gap of the first-generation planning approach which excludes other actors in planning. Further, spatial planning as multi-stakeholder democratic planning is a process that adopts the communication rationality of Habermas (1984) that accepts consensus and Bridge (2005) that accepts dissensus, with the recognition of the power and socio-economic inequality. It supports meaningful interaction, argumentation and deliberation to achieve agreement and consensus on any planning matter. This notion of planning adopts roles of planners (brainstorming, co-creation and professional companionship) propounded by Özdemir and Tasan-Kok (2019) to address disagreements and conflicts. Spatial planning recognizes the interdependence of various stakeholders with respect to resources and sustainability and it acknowledges the importance of all stakeholders in the planning and implementation processes. Regarding interdependency, the success of local government depends on the support from the national and provincial government. Benton (2013) argues that local government requires the assistance of the provincial

and national government to successfully deliver services. In South Africa, most rural and small urban municipalities are unable to conduct and sustain their planning functions due to their inability to generate revenue. As a result, these local authorities depend on grants from the national and provincial government, as well as from the private sector, to achieve municipal spatial planning objectives and outcomes.

The process of spatial planning as a multi-stakeholder democratic planning process can be likened to the process of building a house. The construction of a house requires a plan from a draughtsman or architect, and a structural engineer where more than one storey is involved with input from the client and approving authority. In the context of planning, there are professionals (i.e., architects, engineers and planners), the community (client) and authority (state) who are distinct and key stakeholders in these processes. In this light, the draughtsman or architect will not complete the plan without the satisfaction of the client, and there will be no plan actuation without plan approval. Spatial planning recognizes the value that each stakeholder holds in the planning processes. Further, a house requires a contractor with a team, inspectors and materials (such as sand, stones, bricks, cement, trusses, roof and floor tiles, reinforcement iron bars, etc.). In the context of these materials, each material item has a unique value to the completion, strength, and sustainability of the house. In the same way, spatial planning regard each stakeholder, not as superior to the other, but rather with unique intrinsic value to the success of spatial planning and implementation. Undoubtedly, a planning process that excludes other stakeholders will face resistance and failure in implementation. Bikam (2016:8) recommended “an integrated and multidisciplinary approach” to address the gap between health care related matters and spatial planning in general. This approach aims to ensure representation of all disciplines involved in planning including health professionals. However, the stakeholder democratic planning is not only multidisciplinary as it accounts for all community members as stakeholders, experts and non-experts.

3.7.4 SPATIAL PLANNING AS A CONTEXTUAL EXPERIENCE AND LEARNING

Spatial planning as a contextual experience and learning is about the achievement of recognition justice. It accepts that there are related and distinct contextual issues that planning must address in any environment. Spatial planning, in ensuring the fairness in

the distribution of resources, activities, and services engages through a multi-stakeholder engagement process. This multi-stakeholder engagement process brings together actors from different interests and cultural backgrounds. As a result, the process leads to the discovery of new knowledge and the contemplation of key cultural aspects from various stakeholders. According to Spirn (2005), the planning of the landscape of Mill Creek in West Philadelphia had to deal with a dearth of knowledge on the area and led to an implementation of EJ that shaped the space as containing unhealthy and unsafe physical conditions. The understanding context in planning assists in understanding contextual experiences, problems, values, norms and acceptable planning actions. Spatial planning, in this regard, bridges the gap of contextual exclusion through the encapsulation of both professional or technical and experiential knowledge.

In the UK, spatial planning as a contextual experience and learning is represented in the evidence-based planning approach. According to Morphet (2009), in the evidence-based planning approach, the demographic, socio-economic, cultural, and biophysical data analyses aid in the identification of areas for planning intervention and action. In this context, spatial planning mobilizes the undertaking of audits on environmental justice, as Arnold (2007) propounded. According to Coetzee, *et al.* (2014) an evidence-based approach is the means to understand the environment towards future planning. The authors indicate that planners cannot deliberately ignore the influence of evidence in understanding contextual issues of cities being planned for (p.8). Learning from experience to influence change is the adaptive approach that this notion adopts. Spatial planning focuses on specific areas, while taking into account the existing balance of socio-economic requirements against existing infrastructure, by demand and supply, for the present and the future. In studying water consumption in Mogalakwena local municipality, Rohr, Cilliers and Fourie (2017) revealed that the understanding of water-consumption patterns for each land use type should precede capital investment and interventions. In principle, planning for water supply for any land use requires planners to understand the current demand capacity and consumption to inform future plans. The understanding of balance requires professional or scientific knowledge, with the support of experiential knowledge. In this regard, spatial planning, through contextual analysis, can highlight areas of deficiencies in terms of resource, activities, and services (mixed land uses, infrastructure, public open spaces) and areas of concerns in terms of decay, decline in growth, and health and safety hazards including the protection of natural

resources to name, but a few. Further, spatial planning takes into cognizance experiential knowledge in an attempt to understand the functioning of, and changes over time in, the biophysical and cultural conditions of an area. The incorporation of this experiential type of knowledge extends learning to the technocrats, experts or planners involved in the planning process. However, in a study of rural EJ in Australia, Masterman-Smith *et al.* (2016) revealed that some participants criticized the domination of the state, organized groups, and industries over the experiential knowledge contributed to planning by residents at a grassroots level. This practice of dominance undermines the purpose of mutual learning and has the potential to cause residents' withdrawal from a planning process. More importantly, Harris and Moore (2013:1503) emphasize that learning through "the use of objects and artefacts, including diagrams, stories, posters, blueprints, anecdotes, scale models and in more contemporary settings-PowerPoint presentations, brochures, websites and video clips" improves knowledge sharing. That is to say, spatial planning ought to translate knowledge into reading material, such as maps and reports. Spatial planning is, therefore, a mechanism for improving learning through governance.

3.7.5 SPATIAL PLANNING AS A VEHICLE FOR GOVERNANCE

March (2010) argues that the acceptance of spatial planning effectiveness occurs when governance is central to the planning process. In this context, spatial planning ought to ensure the involvement of all parties through clear lines of participation. In accordance with substantive justice, spatial planning ought to put institutions for the participation of stakeholders in place. These institutions include clear guidelines and policies for participation, dedicated offices for public involvement, clear communication strategies, capacity building, and awareness programmes. Cele and Chipunga (2016) recommended a workshop as a means of community engagement for the residence of Florida Road precinct to share their knowledge and experiences that could influence the planning of the area. A workshop is, therefore, a governance tool proposed to influence spatial planning. Özdemir and Tasan-Kok (2019) perceive a workshop as a mechanism for a planner to exercise the role of professional companionship in an attempt to address disagreements and conflicts in planning. Spatial planning, in allowing the participation of multi-stakeholders, is indeed a vehicle for governance, although the institutions required for effective governance ought to be in place.

Albrechts (2003; 2004) states that in breaking through the injustices of resource and activity distribution, including the socio-economic, power, class, education, and gender inequalities, there is a need for the empowerment of general citizens and the least-advantaged groups. This empowerment involves mobilizing those with limited understanding of spatial planning through information sharing so as to broaden their knowledge on the subject. Pezolli (2018:192) advocates for “civic infrastructure” as a governance tool for mutual leaning and solving of practical planning problems. A “Civic infrastructure refers to formal and informal institutional as well as sociocultural means of connectivity used in knowledge–action collaboration and networking” (Pezolli, 2018:192). By implication, not only government provides platforms that promote deliberative planning towards addressing problems, but also community-led groups play a crucial role in problem-solving, conflict-resolution, and empowerment. Cruikshank (1994) notes that the actuation of empowerment is meant to empower one party and to further broaden the knowledge of any party on a particular subject; hence, parties can either volunteer, or be obliged to accept. However, spatial planning as a vehicle for governance does not apply coercive tactics to empower citizens, but rather mobilizes the citizens through consensus and agreement to allow learning. The empowerment of the general public will undoubtedly improve the level of public participation, multi-stakeholder participation and implementation processes in spatial planning.

In 2015, the researcher, as a Director Land Use Management in the Mpumalanga Department of Cooperative Governance and Traditional Affairs, initiated a program of empowering traditional leaders through workshops on spatial planning processes across the Mpumalanga Province. The program was intended to introduce spatial planning in traditional areas of jurisdiction and promote awareness of spatial planning matters. The experiential knowledge, in particular on challenges confronting traditional leaders in planning gained from the workshop, influenced the author’s contribution to the provisions that deal with the role traditional leadership in the Mpumalanga Provincial Spatial Planning and Land Use Management (SPLUM) Bill. It is vital that institutions responsible for spatial planning put governance institutions for its processes (plan-making and implementation) in place to promote inclusive and effective planning. In light of the new spatial planning dispensation in South Africa, which requires municipalities to establish municipal planning tribunals (MPTs), the need for governance institutions is an

unavoidable reality. However, to achieve planning outcomes through various dimensions of EJ, capability assessment is a precondition.

3.7.6 SPATIAL PLANNING AS AN ACTION FOR CAPABILITY ASSESSMENT

Spatial planning should become an action for capability assessment, which finds its resonance with the capability approach to justice. According to Sen (2009:232), the capability approach is about the advantages of an individual that could influence opportunities. The most salient components of the approach include basic needs, capabilities (ability to achieve functionings), functionings (what you can be or do), freedom, opportunities, and choices (Beyazit, 2011). These individuals refer to all members of an environment. That is to say, the advantages of the natural environment, socio-economic system, government and the public among others should influence opportunities. It is important to note that spatial planning, within the context of the natural environment, entails the assessment of natural resources' ability to supply the needs of society. For example, through spatial planning, the investigation of the yield capacity of underground water can aid in projecting the available water supply for present and future generations, particularly in borehole-dominated areas. In the context of land uses that support the socio-economic system, spatial planning allows for the investigation of the extent of densification in a specific area, resulting in the determination of densification and floor area ratio directives.

In addition to the above discussion, spatial planning through contextual experience and learning, enables the assessment of the basic needs of a given society. This assessment investigates and determines the basic spatial planning needs of a community. For example, a community may have no areas demarcated for housing, public open spaces, places of instruction or many other land uses. Spatial planning, therefore, incorporates the basic needs of communities in proportion to the population and in line with ruling planning design standards. Spatial planning makes it possible to define the spatial vision of a specific area (what the community wants its area to be) and the distribution of activities (how the community intends to use its space). By implication, spatial planning addresses the functionings related to the capability approach. More importantly, spatial planning as an action for capability assessment defines the opportunities that each area can provide to its residents. For instance, the collective

planning process enables the identification of key strategic areas for investment (i.e. industrial, residential, commercial and tourism). The collective nature of spatial planning also enables the process that adopts democratic means in support of freedom, choice, and agreements. In this regard, all stakeholders or actors involved in the process have equal rights to influence decisions and make their choices on alternatives through mutual understanding and consensus.

Further, spatial planning through stakeholder engagement can define the roles and responsibilities of each sector involved in the planning process through consensus and agreement. It supports the NDP approach of national consensus. This construct accepts the inequality that exists in capabilities. In practice, the capability (capacity) of an organization to implement spatial planning policies appears as the cause of implementation failure. In the existing literature, as discussed above, Colavitti *et al.* (2013) and Tilaki *et al.* (2014) revealed that the capacity challenge has compromised spatial planning implementation in most of the municipalities in Italy.

Lastly, the spatial planning approach as an action for capability assessment considers sustainability as a primary principle. In other words, spatial planning takes into account the social and material preconditions that influence capabilities. According to Peeters *et al.* (2015), there are social (education, sufficient nutrition, etc.) and material (biophysical features) preconditions that contribute to the achievement of a good quality of life. It is through spatial planning that strategies can be implemented to ensure the maintenance of the functions of biophysical features. Further, through the fair distribution of resources, activities, and services; spatial planning can identify and earmark areas for education (schools, colleges, and universities), health (clinics, hospitals) and facilities for the development of fulfilling capabilities.

3.7.7 SPATIAL PLANNING AS AN ENVIRONMENTAL RESTORATIVE APPROACH

Spatial planning is about transforming the environment to achieve planning outcomes. The planning outcomes derive from the thorough process of deliberative democracy (that recognizes cultural differences) and assessment of capability, leading to the fair distribution of resources, activities, and services. This research defined the term 'environment' as a system that includes components and functions of natural capital

(e.g. water, wetlands, soil, air, land) with its wildlife that shares a strong connection with the socio-economic and cultural conditions of human beings. Spatial planning, as an environmental restorative approach, is about correcting the injustices evident in an environment. As noted earlier in Chapter 2, Whyte (2011) emphasized the implementation of corrective justice, which centralizes fairness to redress the effects of environmental injustices that are either likely to occur or are already occurring. These injustices may include intentional and deliberate degradation of natural resources, lack of social amenities, lack of infrastructure provision, fragmented spatial patterns, the absence of mixed land use, sprawling, incompatible land uses, gentrification and displacement. The final outputs of spatial planning include spatial planning policies, plans, programmes and strategies implemented to influence change. These outputs, in the context of the restorative approach, require fair distribution in spatial planning or policy preparation and implementation across a society. Moreover, spatial planning policies, plans, programmes, and strategies comprise the means with which spatial transformation can assist in promoting justice. Spatial planning, as an environmental restorative approach, allows plans to consider incentives and compensation for planning initiatives that intend to achieve justice through spatial transformation. In the existing literature, Pedersen (2014) has supported the idea of compensation in EJ. This idea is not misplaced and could encourage the participation of developers in spatial planning and implementation. However, this idea is more contentious in the case of South Africa, where people believe that those that benefited from disposed land during apartheid should not receive compensation under land expropriation. The inter-organizational nature of spatial planning demands the existence of institutions that can mobilize stakeholders or different sectors in an attempt to espouse spatial planning implementation. In this context, these institutions relate to the means of involvement, benefits of the process (incentives and compensation) and leadership. However, in respect of the incentives and compensation, the target sector for the benefit is not the public sector, but rather the general public. In the context of the general public, the restorative justice is not just monetary in value, but rather reflective of a change in quality of life. Nonetheless, the public sector, through a multi-stakeholder engagement, can participate and agree in the process, with the goal of realizing spatial planning objectives and outcomes.

In addition, this notion of spatial planning promotes resilience. Holling (1973) introduced resilience as a concept to understand the ability of the natural environment to withstand any event or disturbance, and in particular disaster. To date, Folke (2016:3) argues that “resilience reflects the ability of people, communities, societies, and cultures to live and develop with change, with ever-changing environments.” In this context, spatial plans ought to provide options and alternatives that allow for the sustainability of regions, cities, towns, and communities in the midst of crises (e.g. financial, transportation, and poverty) and any other planning-related crisis.

Lastly, spatial planning as an environmental restorative approach fosters the monitoring and evaluation of the effects that the spatial planning policies, plans, programmes, and strategies bring upon the environment. Fredericks (2011) highlights the need to monitor and evaluate these effects within the context of a distributive, procedural, substantive, recognition and just policy. In this light, the monitoring and evaluation ought to take place throughout the stages of environmental justice planning. Subban and Theron (2016) indicate that the absence of monitoring and evaluation (M&E) contributed to the failures of the 1996 KwaZulu-Natal Provincial Growth and Development Strategy. M&E should be ingrained in the planning system to allow oversight and accountability on plan implementation. The evaluation should not only target what a tool must achieve but also several factors. Shahab *et al.* (2019:7) propose the criteria for evaluating planning tools as comprising “effectiveness, performance, efficiency, equity, acceptability, and institutional arrangement.” The monitoring and evaluation process is repetitive in planning and implementation, and not unique to the implementation stage of spatial planning policies. This process can therefore provide an opportunity to address the gaps in spatial planning policies, plans, programmes, and strategies prior to, during, and after implementation. The monitoring and evaluation processes provide indicators and targets set to gauge progress in the achievement of EJ.

3.8 CONCLUSION

In summary, this chapter shows that, in literature, there are traditional planning theories that fall within the first-and second-generation planning approaches. The former approach comprises the rational, incremental, and mixed scanning planning theories. The latter approach consists of the advocacy, transactive, and communicative planning

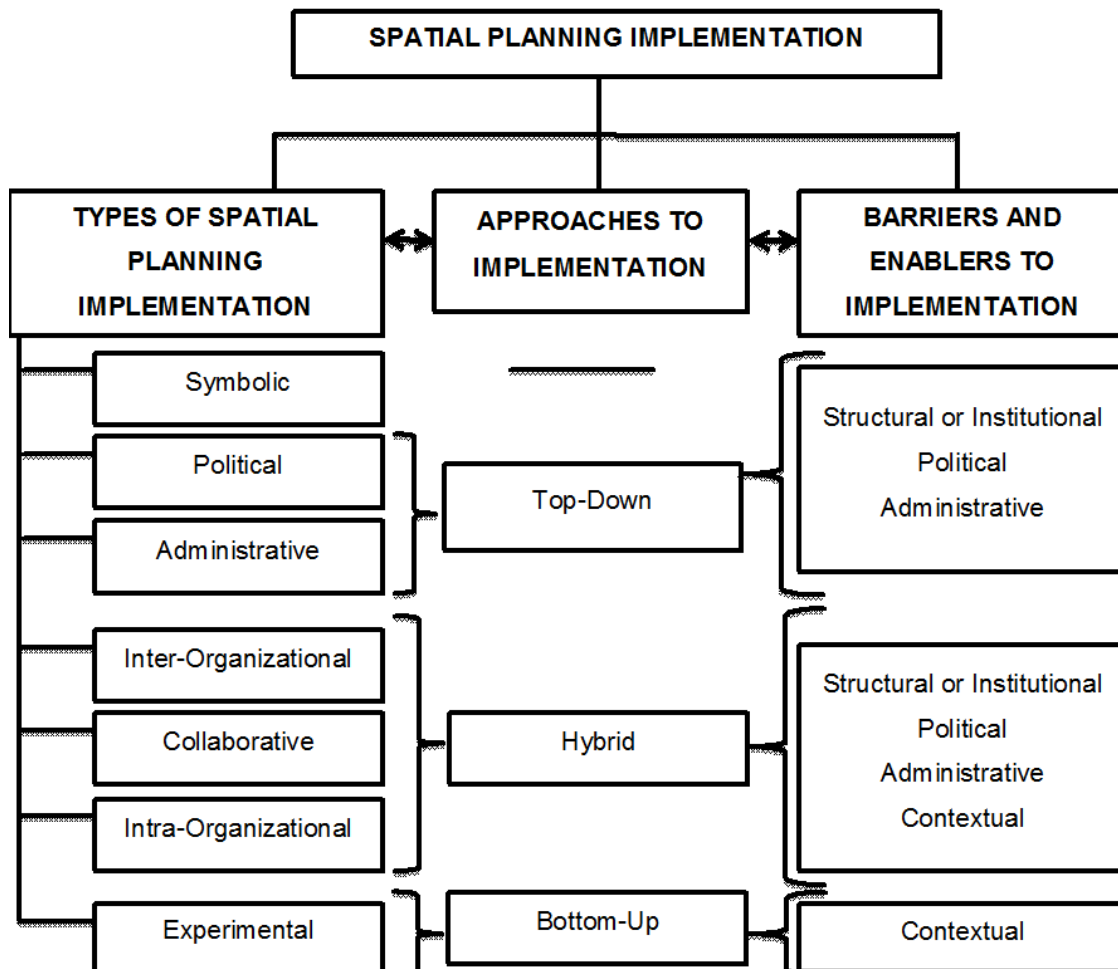
theories. It is apparent from the above discussion that the first-generation planning approach cannot address EJ, while the second-generation planning approach to some extent, in particular the communicative theory, responds to EJ. The above debate on these theories indicates the scourge of spatial planning's failure to achieve its planning outcomes. In the existing literature, Abukhater (2009) and Pissourios (2013) underscore that the problem of planning theory is not influencing practice, but rather the creation of a relationship gap between the two. This discussion shows that the existing theories of the two approaches, in their current state, cannot address EJ in planning theory and practice. In addressing this engulfing gap in planning theory, the discussion introduced the third generation planning approach, known as EJ planning. This approach advocates for planning principles that respond to all six dimensions of EJ. Further, the EJ planning approach introduces propositions that contextualize planning from the EJ perspective. These propositions unpack spatial planning as comprising just distributive action, multi-stakeholder democratic planning, contextual experience and learning, a vehicle for governance, an environmental restorative approach, and action for capability assessment. In conclusion, the EJ planning approach represents a new dawn in planning in an attempt to address spatial planning challenges.

4. CHAPTER 4: SPATIAL PLANNING IMPLEMENTATION

4.1 INTRODUCTION

This chapter discusses spatial implementation through an exposition of spatial planning, approaches to spatial planning implementation (SPI), types of spatial planning implementation, as well as barriers and enablers to implementation. Figure 4-1 represents the relationship that exists between these types of spatial planning implementation, approaches to implementation, and enablers and barriers to implementation. These relationships will be explained in the sections that are to follow.

Figure 4-1: Spatial planning implementation framework



Source: Own construction, 2018

4.2 SPATIAL PLANNING

Spatial planning shares no similarities with the physical planning of master plans and structure plans, for it adopts a communicative turn approach that seeks to create better communities. Coetzee (2012) states that the latter planning approach characterizes the modernist South African planning system (development control) of the apartheid era. This type of planning never succeeded in addressing social inequalities in South Africa, or elsewhere in the world. The modernist planning approach promoted exclusion for its expert-oriented approach and technical repertoire of planning. Further, it created industrialization problems that led to environmentalism and the environmental justice movements. This exclusion, by extension, disallowed planning from gaining and incorporating the insights of communities on socio-economic and environmental matters. Accordingly, Rittel and Webber (1973:162) argues that the first-generation planning approach is insufficient for resolving planning problems, in particular “wicked problems” that are contextual. Wicked problems are problems that are inherent in planning such as the problems that an engineer and scientist encounter on daily basis (p.160). Furthermore, in an attempt to describe wicked problems, a planner has to acquire detailed information about these problems as well as “an inventory list of conceivable solutions” (p.161). By implication, communities understand these problems differently and each community has its own solutions. The first-generation planning approach focuses on the principles of rational-planning, incremental theory and mixed scanning theories that, by implication, views planning in an apolitical context. Cloke and Little (1986) tersely explain that structure plans, as products of the first generation planning approach, presents planning as technical, scientific, rational and apolitical.

However, spatial planning introduced a new lens for construing planning and shaping space. The ability of spatial planning to shape, and have an impact, on planning outcomes depends on governance and necessitating an institutional approach in planning (March, 2010). The position of spatial planning is therefore not autonomous (Priemus, 1999), for it deals with societal problems. Spatial planning deals with land use related decision-making and conflict resolution of socio-economic and political problems in any given area while promoting sustainability (Cilliers and Victor, 2018). In addition, it involves various actors, rather than an individual. Healey (2003) underscores the point that governance involves processes of interaction through which societies, social

networks and, by implication, the government deal with, and address, the issues of common goods. Governance creates a platform for coordination, collaboration, cooperation and agreements. Spatial planning exists to support authorities, the general public and business society in developmental decision-making related to socio-economic and environmental aspects of life, for now and for the future. It is for this reason that Healey (1999) cited in March (2010:111) posits that the institutional approach allows for the acceptance and appreciation of planning in a system that is independent, yet interrelated to other actions that are both formal (government and its entities) and non-formal (not for profit organizations, business agencies, civil groups, organized interest groups etc.). However, the planning of the past remained independent and was exclusively related to the formal actions. The approach of planning that achieves its intention through deliberative, argumentative and collaborative processes is the second-generation planning approach (Rittel & Webber, 1973). Therefore, spatial planning falls within the ambit of the second-generation planning approach because it centralizes governance in its processes. In practice, the 2004 British planning reforms viewed spatial planning as transcending the land use planning of command and control, in favour of planning that coordinates and integrates policies and plans all the while regulating the use of land, including development, with other policies to shape space (Morphet, 2009; Baker & Hincks, 2009; Clifford, 2013). On the contrary, Taylor (2010) highlights the fact that the characteristics (wider, visionary, integrative, result-orientated, responsive, participative etc.) of the British system of spatial planning are not new and have existed in the contemporary urban land use planning. Hall and Tewdwr-Jones (2011), in support of Taylor (2010), highlight the point that the contemporary urban and regional planning approach improved to address the criticisms of the traditional planning approach. Nonetheless, the construct of spatial planning is; therefore, based on communicative, deliberative, argumentative, interactive and collaborative approaches, from inception to implementation. Further, the British spatial planning construct is evident in the new spatial planning reform of South Africa, which elucidates the need for participation, intergovernmental relations, and the incorporation of plan implementation in spatial development frameworks (SDF). In the literature, spatial planning appears as a “means of delivery” (Morphet, 2009:393) and a “delivery vehicle” for the basic needs (environmental and socio-economic infrastructure) of communities (Deloitte, 2007, cited in Baker and Hincks, 2009:178). In South Africa, SDFs are the means for the perceived delivery, while in Great Britain, the Local Development Frameworks (LDF), which the

2004 planning reform introduced, serve as the mechanism to deliver services. The postulation of spatial planning as a mechanism for achieving environmental justice (EJ) is, therefore, not misplaced. This approach of spatial planning, both in South Africa (context based) and Great Britain (evidence based), provides an opportunity for understanding justice issues in the context of distribution, the capability approach and recognition. Debatably, context and evidence are different concepts, yet they exist as interrelated and dependent.

Spatial planning has taken dominance in legal planning frameworks in recent years. The regulation of spatial planning in EU states, South Africa, and Great Britain, among others, requires public participation as an element of procedural justice. Faludi (2010) notes that the focus of spatial planning is on governance, reciprocal understanding, and agreement, as well as on commitments. These three focus areas underscore procedural, substantive, and to some extent, recognition justice in the context of the communicative turn approach. In emphasizing its communicative turn, Gallent, Morphet and Tewdwr-Jones (2008) highlight the point that this turn involves governance and coordination, without neglecting the technical aspects of planning. However, there is sparse evidence suggesting spatial planning's success in delivering EJ. Predictably, Othengrafen (2010) argues that spatial planning refers to the actions of not only the public sector, but also the private sector, that intend to shape the future space and the projected future distribution of land uses, population, settlement patterns, and socio-economic traits in societies in particular. In practice, the implementation of spatial plans remains a challenge that requires intervention. As will be discussed below, the literature indicates that there are a number of factors that contribute to the failure of spatial planning implementation. The author, therefore, defines spatial planning as an inter-organizational action that co-ordinates the policies and different interests of societies and different groups to transform and shape the environment through just procedures, for now and the future.

4.3 APPROACHES TO SPATIAL PLANNING IMPLEMENTATION

The existing literature highlights three approaches to policy or plan implementation, as the top-down, bottom-up and hybrid approaches. The top-down approach resonates with the first-generation planning approach. According to Koontz and Newig (2014), in

planning, the top-down approach allows state technocrats (experts) and other policy agencies to develop plans and thereafter distribute these to other stakeholders as final for sharing. In the context of this perspective, the first-generation approach of planning involves a technical connotation of planning that imposes policies on societies. The implementation of plans in this notion is state and expert driven. According to deLeon and deLeon (2002), the orientation of the top-down approach is command and control. This approach is therefore congruent with the perspective of physical planning (structure and master plans) that results in the command and control of land use, without hearing the voices of the beneficiaries of the resulting land use effects. More so, Clifford (2013) states that the promoters of the top-down approach view plan preparation from a rational approach that leads to a mismatch between planning (planned objectives) and practice (implementation results). In South Africa, the post-apartheid planning system introduced spatial planning in an attempt to redress the spatial disparities of the past. However, 25 years later, spatial justice remains a challenge. The first generation of planning created the divorce of implementation from plan-making which consequently perpetuated injustices (Chirisa, 2014). According to Byambadorj, Amati and Ruming (2011), the development and implementation of policy in Mongolia remains exclusive to the state, without public involvement. It is, therefore, undoubted that an approach that is state and expert oriented excludes most of the dimensions of EJ (distributive, recognition, procedural, substantive, capability approach, and just policy). Interestingly, the South African planning system of the democratic government is two-fold in nature (state and society), yet spatial planning outcomes still present challenges. The state includes bureaucrats, professionals and experts, whereas society includes the general public and non-profit organizations. The literature highlighted in the foregoing chapters of this research study clearly presents evidence to this effect.

On the contrary, the second approach (bottom-up) adopts the second-generation planning approach that is reflective of a communicative turn. The communicative turn tenure in planning is problem and conflict driven, with the ultimate intention of consensus building. According to Menzel (1987), the construct of the bottom-up approach posits that the outcomes of implementation takes place within a societal environment where conflict dominates. The contention of this approach is that the evidence and contextual experiences of society constitute the precondition to successful problem solving through policy preparation and implementation. Similarly, deLeon and deLeon (2002) highlight

the collaborative nature of the bottom-up approach, which considers societal diversity as a democratic approach. This perspective of plan implementation advocates for inclusiveness in plan preparation and implementation. This advocated inclusiveness is inadequate without the inclusion of the state and experts. As a result, the hybrid approach exists to bridge the expanding gulf between the top-down and bottom-up approaches emanating from the critiques of both approaches (Pülzl and Treib, 2007). The hybrid approach mainly combines the perspectives of the two approaches in application (p.90). In recent years, spatial planning, in developing countries like South Africa and in developed countries such as the EU states and Great Britain, advocates for the convergence of the top-down and bottom-up approaches (hybrid). Clifford (2013) succinctly presents literature propounding the view that plan or policy making, and implementation are indispensable. The indispensable nature of the two illuminates their interdependence through an inclusive argumentative process. It is through this approach that environmentalism and EJ arose to influence the streamlining of environmental and justice concerns into planning, which the top-down approach excludes. In the context of EJ, neither the top-down approach nor the bottom-up approach is adequate, when functioning in isolation from each other.

4.4 TYPES OF SPATIAL PLANNING IMPLEMENTATION

In the extant literature, there are seven types of implementation, being intra-organizational, inter-organizational (Schermerhorn, Jr, 1975; O'Toole, Jr. and Montjoy, 1984; Menzel, 1987; O'Toole, Jr., 1993; Koontz and Newig, 2014), administrative, political, experimental, symbolic (Matland, 1995; deLeon and deLeon, 2002; Mischen and Sinclair, 2009) and collaborative (Koontz and Newig, 2014). Matland (1995) classified the administrative, political, experimental and symbolic models of implementation according to their levels of conflict and ambiguity. According to Matland (1995), conflict arises when policy objectives are unclear, whereas ambiguity appears when uncertainty exists on implementation strategies and actors. Furthermore, ambiguity refers to the uncertainty on the intention of policy (what), the strategy (how) for the achievement of policy goals, and objectives (Mischen and Sinclair, 2009), actors to implement (who), and schedule of implementation (when). Differently, although related, Abbott (2005:238) defines uncertainty as "a perceived lack of knowledge, by an

individual or group that is relevant to the purpose or action being undertaken.” The following discussion explains each implementation typology.

4.4.1 INTRA-ORGANIZATIONAL IMPLEMENTATION

Menzel (1987) expounds the view that the intra-organizational implementation focuses on a micro-type of execution, based on the efficient utilization of institutional resources to achieve policy objectives. In this context, the dimension of the capability approach becomes relevant. The capability approach requires institutions, and by extension, local authorities and competent authorities mandated with the spatial planning function, in assessing their capability resources (i.e., finance, professional staff, experience, and knowledge) to implement policies. According to Konukiewitz (1983), in Germany, planners lacked the courage to implement plans, in particular, physical plans, for resistance reasons. By implication, the failure of executives in state institutions to provide leadership can easily account for the lack of courage. On the other hand, Schermerhorn, Jr. (1975) highlights the point that this typology of implementation emphasizes the understanding of the institutional ethos and internal attributes that constitute the impetus to the ability of an institution for delivering policy outcomes. In practice, and in particular from the practical experience of this researcher in South Africa, local authorities hardly consider the soft attributes (i.e., attitude, motivation, and passion) of their institution in respect of spatial planning implementation. The main factors that dominate local authority implementation are annual performance targets and budget expenditure. As an example on the failure of implementation; Long, Gu and Han (2012) explain that the rates of plan implementation dropped across the periods of five different plans (the years 1958, 1973, 1982, 1992 and 2004) in the Beijing metropolitan area, with the exception of between 1981 and 1991, being the period of policy reform.

Hence, the intra-organizational implementation approach calls for an institutional introspection on planning and implementation capabilities. According to Alexander (2005), intra-organizational implementation is a type of institutional design that leads to the establishment of institutional sub-directorates, area-specific task forces, or commissions, committees, and task teams, among many others, to champion an action. In this context, a local authority has the responsibility to develop and adopt a clear organizational structure that provides clear lines of responsibility, from infrastructure

service, planning and development, community and social services, environmental management, to other relevant sub-units, among others. Moreover, the principle of this perspective is relevant in plan making and implementation. In the literature, there are three institutional interdependency contexts for intra-organizational implementation, which consist of sequential (when resource need arises), pooled (shared resources), and reciprocal (mutual vision) contexts (O'Toole, Jr. and Montjoy, 1984).

In practice, during the preparation of the Kahama Strategic Urban Development Planning Framework (SUDPF) in Tanzania, the process resulted in the establishment of committees and task forces to unpack and resolve the critical contextual issues, during the processes of planning and implementation. However, the challenge that exists with this type of implementation is the notion of the institutional approach that resembles the top-down approach. According to O'Toole, Jr., and Montjoy (1984), intra-organization implementation aims at improving cooperation between the actors involved in the implementation within an organization. This notion is consistent with the transactive planning theory that advocates for cooperation and communication between two parties on a contextual level. Spatial planning challenges consist of diverse and complex problems that require the involvement of actors from other institutions. Undoubtedly, the Kahama SUDPF project involved not only one sector, but also other actors responsible for the delivery of specific services. Thus, inter-organizational implementation is necessary for overcoming the challenge of exclusion that the intra-organizational implementation presents in planning. In practice, this implementation approach is that of horizontal implementation at a local authority or departmental level, without vertical integration. The second-generation planning approach of the communicative turn requires the collaboration of all sectors (vertical and horizontal) involved in planning to reach mutual understanding and consensus on planning and the implementation of actions.

4.4.2 INTER-ORGANIZATIONAL IMPLEMENTATION

The inter-organizational implementation (IOI) approach provides a different, yet related perspective to that of the intra-organizational approach. Koontz and Newig (2014) elucidate the point that IOI requires decisions on actions from multiple actors through a deliberative, coordinative, and collaborative process, where bargaining and consensus

take place through leadership. It is evident in the spatial planning and land use management by-laws of municipalities in the Mpumalanga province of South Africa that plan preparation (i.e., spatial development framework) requires the establishment of an inter-governmental steering committee to oversee and influence the plan preparation and implementation process. This type of steering committee is a legal requirement and consists of stakeholders from various sectors or departments representing key performance areas (i.e., agriculture, rural development, economic development, land and environmental affairs, sport, recreation, art and culture, infrastructure). Similarly, Shaw and Lord (2009) contend that the British system of spatial planning introduced a requirement for the vertical and horizontal integration of policy and programme.

Menzel (1987:8) explicates IOI as a “macro-implementation” where implementation stakeholders influence each other through bargaining to deal with inter-organizational differences and conflicts. In the context of a steering committee, by implication, stakeholders make a substantive and constructive contribution to the plan-making and implementation regarding their issue-specific responsibility areas (i.e., agriculture, and rural development). If conflict becomes evident regarding this model, stakeholders engage and deliberate towards achieving mutual understanding and agreement. According to Menzel (1987), the ontology of the IOI centres on resources (i.e., finance, machines, and staff) and structural (i.e., circulars, guidelines, legal frameworks, and constitution) dependency among institutions. In practice, the provision of services that government institutions provide to the general public depends on the legal mandate of each institution. For instance, in South Africa, the responsibility for the construction of education and health facilities rests with provincial Departments of Public Works. Yet, spatial planning and implementation take place at a local level; hence, the inter-governmental interdependency is ineluctable. Furthermore, there are sectoral policies and legal frameworks that are independent yet related to spatial planning. For example, in South Africa, there is environmental legislation (administered at national and provincial level), such as the National Environmental Management Act, 1998 and the corresponding Sectoral Environmental Management Acts (SEMAs), the National Heritage Resources Act, 1999 and the National Water Act, 1998, that require compliance parallel to that of SPLUMA, which is managed by local authorities. In this regard, local authorities cannot implement their plans entirely and effectively without the support of the other sectors. Further, Chapter 5 of SPLUMA, read with the provision of

the Intergovernmental Relations Framework Act, 2005 (Act No 13 of 2005), supports the intergovernmental cooperation and the relations that this form of implementation espouses.

Schermerhorn, Jr. (1975:846) notes that the IOI influences “inter-organizational cooperation” (IOC) to address the gap in coordination (distortion, overlapping and replication). In most cases, uncoordinated development results in duplications and fragmented processes; hence, cooperation among sectors is crucial. The advent of communicative planning introduced spatial planning to overcome the challenge of interdependency and coordination. The IOI promotes the principles of procedural, substantive and recognition justice, which is reflected in their ability to allow the involvement of other stakeholders (vertical and horizontal) in planning and implementation processes. On the contrary, the intra-organizational model, as it relates to procedural, substantive and recognition justice achieves these aspects of justice only in a vertical context. The preconditions to the IOC include the scarcity of resources, implementation failure, value benefit, and internal or external pressures (p.848-849). Although IOI appears with preconditions in the literature, spatial planning implementation remains a collective responsibility among various sectors, including communities, whether or not preconditions exist.

The IOC comes with a cost, as it results in the loss of power to decide autonomously, fractured organizational reputation, and additional resource demand (p.849-851). These costs are likely to proliferate in the absence of justice being applied in the process. In the context of EJ, participation in any given process ought to equally benefit all involved stakeholders. However, the inequalities of power differences exist distinctly from site to site, and the management in the spirit of justice is necessary. According to O’Toole, Jr. (1993), the IOI consists of two inter-organizational arrangement structures, the public (i.e., inter-governmental, and grant reliance governmental parastatals), on the one hand, and the public-private (private control of resources) on the other hand. The former inter-organizational arrangement allows the intra-organization implementation at a vertical and horizontal level, respectively. Further, it allows for IOI at both vertical and horizontal levels and applies to the latter inter-organizational arrangement. In spatial planning, and particularly in South Africa, plan making rests mainly with the public sector, yet with input from the private sector through public participation. It is important to note that there is no

public-private partnership (PPP) in planning and that the process is legislated and devolved upon by the local authorities, although PPP still exists in spatial plan implementation to a lesser extent.

4.4.3 ADMINISTRATIVE IMPLEMENTATION

According to Matland (1995), administrative implementation is an execution approach with low levels of conflict (clear goals and statements) and ambiguity (clear means of and responsibility for implementation). Therefore, uncertainty entails what is unknown, difficult to be known and that which happens unknowingly. In practice, the legislative spatial planning framework often provides clear goals and clear mandates on implementation, specifically in terms of their administration. Nonetheless, challenges appear during implementation because of the gaps in the system. For instance, the South African Spatial Planning and Land Use Management Act, 2013, with its clear goals and implementation actors, introduced the challenges associated mainly with resources at the local authority level. The adequacy of resources influences the achievement of policy implementation outcomes; hence, failure results from poor management and monitoring of implementation (Matland, 1995). Administrative implementation should provide not only clear direction on policy goals and implementation actors but also incorporate the resources associated with each intended action. These resources necessitate intra- and inter-organizational implementation to foster inter-organizational cooperation in favour of supporting resources. In this regard, a local or competent authority without resources that implements spatial planning administratively presents an element of resource interdependence with other institutions. Also, the success of administrative implementation depends on capacity building. Coetzee (2010) states that a government structure with deeply rooted capacity building through leadership can achieve policy objectives. A proper institutional design that Alexander (2005) advocates for is critical in this model, especially from the intra-organizational perspective.

Matland (1995) argues that central to the administrative implementation is a systematic top-down approach, where bureaucrats implement for compliance. In practice, the inadequacy of administrative implementation is conspicuous in planning, since spatial planning outcomes subtly exist in societies due to the noncompliance-oriented approach.

The champions of this type of implementation are mainly bureaucrats. In the spatial planning system, land use management is an excellent example of administrative implementation that focuses on compliance. Land use management is about managing and controlling land use, mainly through town planning schemes or land use schemes. Hence, Görgens and Denoon-Stevens (2013) view it as the most powerful and prominent spatial planning tool. According to deLeon and deLeon (2002), in this implementation domain, the traditional practices of public administration dominate procedures. The conventional approach involves rational planning approaches that are bureaucratic and expert-driven. Barthwal and Sah (2008) contend that policy, plan-making, and implementation that assumes a traditional approach, which occasionally involves the participation of outside actors, deserves no support.

4.4.4 POLITICAL IMPLEMENTATION

Matland (1995) presents the political implementation model with a high level of conflict, yet with a low level of ambiguity. The high level of conflict is evident mainly because political actors often have well-structured individual policy goals that are incompatible (p.163). The principle of power-driven decision-making takes precedence in this model of implementation (p.163). In practice, particularly in South Africa, the national and provincial governments make the laws on spatial planning, whereas local authorities make and adopt by-laws and policies to implement national or provincial law. This example presents an inter-organizational implementation model in the context of policy integration and cooperation at vertical and horizontal levels. It is a common practice that in all these spheres of government, the voice of the governing party exerts hegemony. According to Malen (2006), policy implementation is a complex and diverse political process whereby the actors in the process influence the outcomes of implementation. Political leaders who are conscious of spatial planning dynamics are more supportive of spatial policies that persuade spatial parity. According to Grant (2009), the failure of the council in Calgary to support a policy of sustainable suburbs resulted in resistance and implementation failure. In this regard, and from an administrative perspective, the administrators, who are by extension planners, thus remain with an administrative nightmare in land use management and development.

Gustavsson *et al.* (2014) make note of the manipulation that exists in communicative processes. Most notably, politics comes to fruition through communicative means, and political power can lead to the coercive imposition of policies that benefit political interests. This type of implementation perspective is a top-down approach that forecloses societal conflicts in decision-making in the name of power and authority (Mischen and Sinclair, 2009). Spatial planning, in this regard, therefore intends to discover the interests of all actors in society and develop means for translating them into agreed themes and strategies for consideration in planning and implementation. However, political implementation without an understanding of spatial planning leads to window dressing for the legitimization of political decisions. It is the contention of deLeon and deLeon (2002) that this model, regardless of the consensus on objectives, leads to the 'how' in agreeing on policy objectives to become a new area of conflict. Therefore, capacity building for politicians in spatial planning, and its implementation is essential. Capacity building knowledge can also broaden their understanding of spatial planning and responsibility with regards to implementation. Within the context of EJ, it is evident that this model of implementation cannot work in its traditional form because the traditional approach focuses on power and political interests, rather than power for societal interests.

4.4.5 EXPERIMENTAL IMPLEMENTATION

The characteristics of the experimental implementation approach include a high degree of ambiguity and a low level of conflict (Matland, 1995). The outcomes in this model of implementation depend on the adequacy of resources and the participation of stakeholders within a micro-implementation context (p.166). This type of implementation takes an intra-organizational approach that concentrates at a micro-level, similar to the transactive planning approach. The Spatial Development Frameworks in South Africa, the Local Development Frameworks in England, and the Strategic Urban Development Planning Framework in Tanzania are good examples of experimental spatial planning. The development and application of these plans relate to specific areas or local authorities. In practice, two area-based initiatives in Khayelitsha and Mitchells Plain as part of experimental implementation failed to address poverty challenges due to inadequate interventions (Geyer, 2016). This type of implementation requires the full commitment of stakeholders to realize planning outcomes. Experimental implementation

presents a communicative turn approach, imbued with the principles of procedural, substantive, and recognition justice. According to Mischen and Sinclair (2009) and deLeon and deLeon (2002), the apparent intention of policy in experimental implementation espouses participation and societal knowledge and sharing through the bottom-up approach. In practice, the preparation of spatial plans requires the involvement of all stakeholders, although implementation is usually the responsibility of the state.

This approach strengthens intra-organizational cooperation. The intra-organization cooperation in this model implies the creation of networks within the society to deliberatively deal with contextual aspects. Matland (1995) underscores the point that contextual conditions, which are pervasive with regards to this process, are central to this perspective. Conversely, the experimental implementation model must, by implication, incorporate inter-organizational implementation in its application to augment resources. The findings of spatial planning studies discussed in the literature also show the inability of plans to influence spatial transformation (Crane and Swelling, 2008; Todes *et al.*, 2010; du Plessis, 2014b; du Plessis and Boonzaaier, 2014; du Plessis, 2014a). Spatial transformation requires interventions from both vertical and horizontal sectors in society. The experimental implementation approach entails the ability to reach agreement on policy goals, yet without the knowledge for delivering them (Matland, 1995). Plan implementation, at any given level, requires inter-organizational cooperation due to an unavoidable interdependency. Administrative implementation plays a crucial role in most of the spatial planning processes derived from legislation and administered by bureaucrats. However, at a contextual level where there is high political contestation, the notion of political implementation becomes evident, although with limited impact.

4.4.6 SYMBOLIC IMPLEMENTATION

Matland (1995) states that central to this implementation model is the strength of actors to influence the policy action through a coalition. Spatial planning implemented through this model has the potential to result in environmental injustices. This model is a system that the apartheid government applied in South Africa before 1994. According to Matland (1995), this type of implementation has high degrees of both ambiguity and conflict. Although the South African apartheid government achieved the objectives of disparities,

its policies in black areas presented ambiguity and conflict. The leadership of black communities in the former state territories had no power to influence spatial change that might yield spatial parity, and nor did the public. Matland (1995) expounds the view that in this model, neither the top-down nor bottom-up approach can influence processes; hence, the perspective is analogous to the political model of implementation. This approach presents a perspective of plan implementation that has no place in spatial planning. Spatial planning must uphold the principle that a plan that fails to define its objectives and its ability to achieve them is not a plan. The creation of plans that centralize uncertainty with regards to its intention and implementation is planning for failure. In this model of implementation, the uncertainty that exists on implementation; and the confusion of policy objectives present difficulties in the application of the other models of implementation (intra-organizational, inter-organizational, administrative, political, and experimental).

This model of implementation also makes the identification of key sector areas to promote intra- and inter-organizational cooperation cumbersome. Further, the perspective circumscribes administrative bureaucrats, specifically planners, from implementation due to the confusion of policy intentions. Again, from a political point of view, the approach could survive, although with challenges emanating from contestation and intolerance. The existing literature contends that this approach coerces action through a coalition. In practice, coalitions are temporary; therefore, there is a high probability of a short-lived coalition implementation, but spatial planning implementation is ongoing and iterative, for it entails planning for the present and future. In contrast, incremental planning introduced reactionary planning that addresses issues as they come up, which is planning for now, where the means of a coalition might unsafely be applied. Moreover, spatial planning is more about the collectiveness and inclusiveness than camps, factions, and coalitions. In considering the dimensions of environmental justice, this type of implementation is not suitable for achieving justice.

4.4.7 COLLABORATIVE IMPLEMENTATION

The preconditions to collaborative implementation include integration with other sectors as well as social, economic, and political conditions (Koontz & Newig, 2014). The collaborative implementation approach promotes the hybrid approach of implementation,

and its ontology is on the communicative turn that introduced various approaches to planning. The communicative turn in planning drives direction in spatial planning through the notion of deliberative democracy. The European spatial planning system, followed by that of England and South Africa, are good exemplars for spatial planning practices because it is imbued with the principles of the communicative turn in planning. Nevertheless, the implementation model of Matland excludes this type of implementation. The collaborative nature of the model makes it more likely to have a low level of conflict and ambiguity. The collaborative perspective promotes mutual understanding, trust, and consensus-building through argumentation, negotiation, and deliberation. According to Pugh (2005), the intention of communicative planning, which involves collaboration, is to bring together different interested parties in engaging with consensus building. Therefore, parties or actors with different interests in reaching consensus can agree on policy statements and objectives, including implementation strategies, schedules, and responsible agents or stakeholders. In the context of implementation, the results of the process can undoubtedly reflect a low degree of conflict and ambiguity.

Koontz and Newig (2014) highlight the point that effective leadership and interactive, coordinative and collaborative networks, as well as knowledge sharing, are the fundamental principles of collaborative implementation. The inter-organizational construct of collaborative implementation, however, is more of a give-and-take approach. The collaborative model of implementation requires planners to take leadership in the process because they exist as facilitators that can motivate, encourage and support participants. According to Roy (2015), planners have the responsibility to assume a neutral position while acting democratically in planning and implementation processes, but in practice, most influential planners represent the government and advocate for the policy positions of their employers. Nonetheless, collaborative implementation encourages inter-organizational cooperation as it recognizes these dynamics of spatial planning. This form of implementation represents the traits of all dimensions (distribution, procedural, substantive, recognition, capability approach, just policy) of EJ. The collaborative means of implementation allow parties to discuss the environmental injustices that exist in various areas. Consequently, the parties can agree on implementation measures and resources that can redress changes.

4.5 SPATIAL PLANNING IMPLEMENTATION BARRIERS AND ENABLERS

The success of spatial planning implementation emanates from factors regarded as enablers, whereas the failure of spatial planning implementation (SPI) emanates from barriers. From the literature discussed in this section, there is evidence to confirm the barriers to, and enablers of, the SPI, which share similarities in most of the studies commissioned between the year 1983 and year 2015 (Konukiewicz, 1983; Cloke and Little, 1986; Halla, 2002; Mark, 2003; Curtis, 2008; Grant, 2009; Knight *et al.*, 2011; Byambadorj *et al.*, 2011, Clifford, 2013; Chirisa, 2014; Ratulangi *et al.* 2015). However, the literature discussed in this section is not exhaustive of other findings and literature on SPI. The literature from the years 1983 to 2015 measures whether there are changes in the specific barriers to, and enablers of, the SPI over a period of three decades. According to these studies, the barriers to, and enablers of, the SPI fall within the classifications shown in Table 4-1:

Table 4-1: Classification of the barriers to and enablers of spatial planning implementation

Barriers	Enablers
Structural or institutional	
<ul style="list-style-type: none"> • Failure to communicate spatial planning policies • Uncoordinated planning • Absence of spatial planning policies at the disposal of officials • Inconsistence in policy implementation • Orientation of plans (process than outcomes) • Lack of leadership • Organizational culture • Ineffective collaboration • Inter-organization disputes and conflicts 	<ul style="list-style-type: none"> • Improved inter-organizational coordination and cooperation • Improved collaboration • Appropriate and improved management leadership • Change in organizational culture • Adoption of spatial planning implementation strategy • Responsive organizational structure

Barriers	Enablers
<ul style="list-style-type: none"> • Poor organizational support • Lack of prioritization of spatial planning 	
Political	
<ul style="list-style-type: none"> • Pressure • Interference • Lack of leadership • Poor support 	<ul style="list-style-type: none"> • Appropriate and improved political leadership • Capacity building to political leaders on spatial planning • Political Intervention • Resistance management
Administrative	
<ul style="list-style-type: none"> • Red-tape • Delays in implementation • Inadequate tools of trade (qualified and skilled personnel and finance) • Planning practice, attitude and culture • Separation of plan formulation and plan implementation. • Ambiguous policy documents • Lack of capacity building • Absence of plan monitoring and evaluation • Absence of spatial planning policies 	<ul style="list-style-type: none"> • Change in planning practice, attitude and culture • Continuous capacity building • Simultaneous plan formulation and implementation • Adoption of spatial planning implementation strategy • Plan monitoring and evaluation • Competent and skilful personnel • Adequate financial resources • Adoption of simple to read spatial planning policies
Contextual	
<p>Exclusion of context issues (i.e. socio-cultural, biophysical, economical)</p> <p>Lack of public participation</p>	<ul style="list-style-type: none"> • Mainstreaming of contextual issues • Public awareness and education • Improved public participation

Source: Own construction, 2018

The studies of Konukiewitz (1983) and Cloke and Little (1986), together with studies from two to three decades later, in particular those of Grant (2009) and Ratulangi *et al.* (2015), share similarities regarding findings on the barriers (i.e. uncoordinated planning, inadequate resources and political leadership) to SPI. These results are a manifestation of the SPI challenges that are persistently pervasive in the praxis of planning. In past decades, most countries introduced reforms in spatial planning, although implementation barriers remained formidable and inextricable. According to Clifford (2013), the reforms in England, which introduced the local development frameworks, failed to consider the resources required for implementation and the fine detail of implementation. It is clear that in the midst of spatial planning overhaul and transformation, the failure to consider all aspects of planning and implementation results in implementation failure. There is thus always a potential to improve the practice concerning spatial planning implementation. However, without a clear plan or adequate strategies, in theory and in practice, for improving spatial planning implementation, the persistence of the status quo is ineluctable. Table 4-1 classifies both barriers to, and enablers of, the SPI under the categories of structural or institutional, political, administrative and contextual. The section that follows discusses these categories.

4.6 BARRIERS TO SPATIAL PLANNING IMPLEMENTATION

4.6.1 STRUCTURAL OR INSTITUTIONAL BARRIERS

First and foremost, in planning, the failure to communicate spatial planning policies results in policy failure. Ratulangi *et al.* (2015) reveals that there is a lack of communication regarding the adopted spatial planning policies in Indonesia. As a result, development has been inconsistent with approved plans. The communicative turn in planning introduced the era of communication in attempt to bridge the communication gap. The failure to communicate policies underscores the administrative model of implementation, whereby bureaucrats prepare plans for compliance. It can be said that the inability to communicate results in the failure to implement and that procedural fairness is impossible without communication, especially within the context of EJ.

Grant (2009), with support by Byambadorj *et al.* (2011) and Ratulangi *et al.* (2015), reveals that uncoordinated planning and functions impede the success of spatial

planning implementation. The coordination of plans and functions is one of the core principles of the communicative turn in planning. In implementation, inter-organizational cooperation is crucial for promoting coordination. The poor coordination of plans results in ineffective, or absence of, collaboration and inconsistency in policy implementation. According to Curtis (2008), ineffective collaboration, which results in poor support of implementation, is directly related to the competence of personnel to facilitate collaboration. The failure to coordinate planning at the vertical and horizontal tiers of government has the potential to compromise implementation outcomes. Konukiewicz (1983) revealed that grant programmes, which intended to support spatial planning initiatives in three German regions, focused more on expenditure than on spatial policy objectives. The concentration of focus on expenditure, which relates more to processes than outcomes, posits an execution approach that is akin to the administration implementation model. In Zimbabwean urban areas, Chirisa (2014:55) found that urban planning, as a subset of spatial planning, is more concerned with management than spatial change, and primarily focuses on “force and control”. The practice in Zimbabwe presents the administrative and political modes of implementation, which adopts the top-down approach. However, the purpose of spatial planning is to influence spatial transformation, rather than merely complying with legal requirements. In the absence of plans that focus on planning impact and outcomes (substantive aspects of planning), implementation failure is unavoidable. Additionally, Halla (2002) revealed that the prioritization of development in the implementation of the SUDPF in Tanzania, had no expression in the implementation, but that the first-come-first-served principle applied. The second-generation of planning, in particular the communicative turn, evolved to create a platform for parties to agree on developmental priorities. The failure of implementers, agents, planners and government to focus on spatial planning priorities defeats the intention of spatial planning.

EJ requires an outcomes-oriented approach to drive planning and implementation, both in theory and in practice. In any private or public institution, leadership is central to success. Sweeting (2002) cited in Fahmi *et al.* (2015:6–7) identifies the factors that influence leadership as personal traits and the external and internal environment, which includes organizational design. In practice, an institution responsible for facilitating planning and implementation requires managers with the ability to influence direction in spatial planning implementation. Knight *et al.* (2011) have revealed that the South

African National Biodiversity Institute (SANBI) and the Department of Economic Affairs, Environment and Tourism (DEAET) of the Eastern Cape government failed to provide leadership in guiding the champions for each priority action. The inter-organizational implementation model becomes relevant in organization design to ensure proper placement of resources (finance, advisors, technology, etc.). Moreover, an institution without leadership is prone to a lack of organizational support in planning matters. According to Clifford (2013), local authorities in England did not support the implementation of LDF, given the inadequacy of resources. Similarly, Curtis (2008) shared the same rationale by explaining that local authority did not support plan implementation. It is apparent that the central government, which introduced the planning reform, failed to provide leadership in the process of influencing change.

Lastly, the fact that spatial planning requires multiple actors illuminates the complexity of the process. It is common that an environment with actors or stakeholders that have different interests is often susceptible to disputes and conflict. In the extant literature, Cloke and Little (1986) identifies inter-organizational disputes and conflicts as constituting a barrier to spatial planning implementation. Furthermore, inter-organizational disputes and conflicts normally arise from the aspect of interdependency and Menzel (1987) underscores the point that the interdependency conflict is either regarding financial resources and staff (resource interdependence) or related to approval and compliance with planning permissions (structural interdependence).

4.6.2 POLITICAL BARRIERS

According to Barthwal and Sah (2008), political leaders, whether from the ruling political parties or opposition political parties, often exert pressure on policy promoters and implementers. In this light, political pressure and interference become a barrier to implementation. Chirisa (2014) and Ratulangi (2015) also reveal that political interference influences planning direction and decision-making. In essence, political leaders apply their power and propel the direction of policy to favour their interests. According to Pretorius (2017: 31), political interference involves a “behaviour, action or idea” of a politician or political party that may hinder a government official or an administrative functionary to exercise its function and delegated powers in an impartial and apolitical way. In essence, political interference means that a politician or political

party unduly exercises its political powers to influence government administration and decisions in general. The use of power, which results in pressure and interference through the majority of a political party or coalition, is a construct of the political implementation approach. The existing political pressure and interference show that spatial planning is not apolitical. However, spatial planning is not and has never been about politics, even though it functions within a political space (Albrechts, 2003) and is reflective of a political process (Allmendinger & Haughton, 2010). Accordingly, urban planning and design (a subset of spatial planning) is not an exclusive technical, systematic activity with an implementation problem; but it instead has a substantive political connotation, precisely because the handling of space inherently affects urban citizenship (Cloeke and Little, 1986; Chiodelli, 2013). Hence, spatial planning promotes integration, inclusiveness, and cooperation. Mark (2003) reveals that planners direct more efforts to political priorities than on the intended strategic objectives of plans. Planners often prioritize political objectives for fear of consequences (loss of employment) because state planners (employees) implement spatial planning policies. In practice, planners in state institutions are expected to implement the mandate of political office bearers, although with proper procedures and ethics. Nonetheless, planners still have the responsibility to mobilize political office bearers through knowledge sharing and educational programs on spatial planning related matters.

Most notably, administrative barriers, such as the absence of policy, are exacerbated by political barriers in implementation. Byambadorj et al. (2011) reveal that, during the period of no spatial plan in Ulaanbaatar, Mongolia, development decisions remained free of planning grounds and rationale, but were rather political. By implication, in local government, no planner can impel a council towards a particular direction without the provisions of any ruling policy of the council. It is clear that there is a need for systems to mobilize political leaders at an institutional level. Spatial planning requires engagement, mutual understanding, and agreement on different interests. The poor engagement of political leaders in spatial planning is perhaps the rationale for the lack of political support. Accordingly, the lack of political will and support became evident in the implementation of planning principles in Canada (Grant, 2009). In the praxis of planning, political leaders hardly ever support spatial planning priorities that are incongruent with their priorities. Conversely, political leaders do support negotiated priorities that are agreed upon and approved for implementation. This action of political leaders represents

the current practice in South Africa, achievable through the integrated development plans of municipalities. Although this practice exists, the lack of political leadership contributes to the failure of implementation amid agreements. This argument is supported by Cloke and Little (1986), who state that political leadership and support affected the implementation of spatial plans in the rural areas of Gloucestershire. The process of spatial planning implementation, therefore, requires support and leadership from political office bearers. The political office bearers should, in effect, spearhead SPI to influence outcomes.

4.6.3 ADMINISTRATIVE BARRIERS

The implementation of policies, precisely spatial planning policy, is the responsibility of planners in state institutions. Conversely, planners in the private sector implement these policies through compliance with the ruling policy requirements. Clifford (2013), Chirisa (2014), and Ratulangi *et al.* (2015) found that the tardiness of SPI emanates from governance and bureaucratic red-tape barriers. The perplexing problem of implementation delay in government perhaps arises from institutional design. An institution that has no clear lines of functions regarding the roles and responsibilities of its members presents an administration failure. In accordance with the intra-organization perspective, implementation requires a well-defined organization of actors to achieve control over execution. More importantly, the administrative implementation approach that bureaucrats typically adopt has the potential to frustrate the urgency of spatial change and outcomes. This type of implementation appears in literature as a top-down approach (Matland, 1995), which imposes, and to a more significant extent prioritizes, government programmes that assume precedence over spatial planning. In addition, Ratulangi *et al.* (2015) reveal that the absence of policy can also be regarded as a reason for implementation delays. Spatial planning, in any society, requires proper planning to result in a plan that can readily be implemented. In the absence of such a policy, there is no implementation or spatial transformation.

The success of spatial planning also depends on the tools of trade that are made available as the means towards implementation. Undoubtedly, the inadequacy of these tools of trade (qualified and skilled personnel and finance) is a barrier to implementation. This observation is supported by the literature that states that the implementation of

SUDPF in Tanzania faced limited financial resources (Halla, 2002). Similarly, resources also presented a challenge to the implementation of England's LDF (Clifford, 2012) and the rural spatial planning policies in Gloucestershire (Cloke and Little, 1986). Moreover, in Indonesia, the barriers to the implementation of spatial planning appeared to include a lack of finance and competent professionals (Ratulangi *et al.* 2015). The tools of the trade can undeniably be regarded as the preconditions for the implementation of spatial planning. The inadequate tools of trade are also an issue of capability. The EJ construct advocates for the in-depth assessment of the institution's capability. The inability of an institution to implement a policy due to a lack of the tools of trade leads to a lack of a capacity barrier. However, the inter-organization lens of implementation exists to bridge this gap in resource inadequacy. The existing literature and theory on inter-organization suggest that this kind of implementation promotes a mode of cooperation that encourages negotiation with other stakeholders for support.

Additionally, the factors of the adopted planning practice, attitude and culture play a role in implementation failure. For instance, Clifford (2013) revealed that the practice in the implementation of the LDFs in England failed to achieve the expected outcomes. The planning practice is, therefore, inseparable from attitude and culture, which actively directs the success or failure of implementation. A practice that is not communicatively oriented and exists with an attitude and culture of devaluing inputs from other parties in planning and implementation is an example of a barrier that is pervasive in spatial planning implementation. Curtis (2008) reveals that the current practices of the Western Australia planning authority can be likened to people working in silos, thus encouraging poor information sharing, whereby, for example, transport engineers fail to share information with planners. This practice of exclusionary planning is incongruous with the fundamental principles of spatial planning, which necessarily incorporate integration. The practice, attitude, and culture define how planners act on implementation. Mark (2003) also reveals that the time that planners dedicate to the implementation of spatial planning monitoring and evaluation is less than that dedicated to spatial plan preparation and the processing of development applications. In this context, plan monitoring and evaluation become inadequate or absent. It is clear that an adopted practice, attitude, and culture that vitiate the importance of plan monitoring and evaluation can make the persistence of this barrier unavoidable. Lastly, the separation of plan-making (policy) and implementation is a factor that contributes to implementation failure. According to Cloke

and Little (1986:267), “policy and implementation are interactive rather than dichotomous.” Therefore, the process of plan-making should look at the preconditions for implementation throughout the development, as opposed to only regarding it during finalization and implementation.

4.6.4 CONTEXTUAL BARRIERS

The exclusion of contextual issues (i.e., socio-cultural, biophysical, and economic) in planning is also a reason for the failure of the SPI. For example, the findings on land reform and SPI in Ulaanbaatar, Mongolia, show that the master plan excluded the existing unique and distinct character of the districts that predominantly comprise make-shift dwellings (yurts). The exclusion of this unique character precluded the government from implementing its residential development plans. Yet, Cloke and Little (1986) emphasize that the implementation of policy happens in a site-specific context. This understanding of context provides the ability to amass first-hand information about a specific area to inform spatial planning. In essence, the notion of context is analogous to the notion of the evidence-based approach that the English planning reforms introduced. In Canada, plans to improve suburbs in three cities experienced resistance, based on contextual issues (Grant, 2009). The exclusion of contextual matters implies the exclusion of stakeholders in the process and, therefore, a lack of participation.

The communicative turn in planning, which dominates spatial planning, purposively supports cooperation and coordination. This second-generation of planning promotes the integration of contextual issues in spatial planning. In light of EJ, the exclusion of context is a recognition injustice. In considering the political implementation approach, political power can contribute to the lack of context integration in planning. The literature discussed above explicates that political leaders can influence policy planning and implementation in ways that exclude other planning issues. Further, the capacity of spatial planning policy promoters and implementers can be another reason for context exclusion. By implication, an SPI process facilitated by an incompetent planner can be equated with this barrier. For instance, if the implementation process fails to appoint design teams for a specific context, there is a high probability of context exclusion.

4.7 ENABLERS TO SPATIAL PLANNING IMPLEMENTATION

4.7.1 STRUCTURAL OR INSTITUTIONAL ENABLERS

Spatial planning exists to confront societal challenges that impinge on many facets of life. These facets of life trigger a hybrid approach at vertical, horizontal and operational levels. In this regard, there is a need for improved inter-organizational coordination and cooperation. In practice, Halla (2002) notes that the preparation and implementation of the SUDPF in Tanzania involved the establishment of intergovernmental steering committees for coordination and leadership. These committees existed to ensure the consideration and integration of policy positions and priorities of other sectors. In the UK, policy promoters and implementers view implementation as a process of negotiation where give-and-take, bargaining, and consensus take place on various matters, and in particular with regards to conflicts (Healey, 2003). Therefore, spatial planning requires collaboration platforms that can encourage engagements, interaction, argumentation, deliberation and negotiation for consensus building. Cloke and Little (1986) underscore the point that coordination and collaboration networks are the preconditions for improved collaboration. These coordination and collaborative networks are exactly what substantive justice promotes. Fahmi *et al.* (2015) highlight the fact that coordination networks have a role in plan integrations, whereas the collaborative networks address the resource and structural interdependencies of various actors. The intra-organizational perspective of implementation supports institutional design, which allows for the establishment of networks. Coordination, cooperation, and collaboration as the typologies of governance depend on appropriate and improved management leadership.

In practice, Gallent *et al.* (2008) have accentuated the view that clear leadership is a requirement for overcoming the parish (small government units in England) planning challenges. In reality, an institution ought to influence, encourage, direct and motivate the implementation of spatial planning but in the context of EJ, an institution ought to lead the quest for EJ in spatial planning. This change in organizational culture exists as an enabler for SPI. For instance, Mark (2003) revealed that not all departments in the 14 Ontario local municipalities supported the implementation of spatial planning monitoring and evaluation. In this regard, leadership must foster an organizational culture that values spatial planning monitoring and evaluation.

An organization (i.e., local municipality) that has previously adopted the culture of tardiness, incoordination, process-driven and autonomy in SPI ought to transform to a culture of urgency, coordination, collaboration, cooperation, outcome orientation, inclusiveness, and inter-dependence. Therefore, the new organizational culture necessitates the adoption of a responsive organizational structure. Alexander (2005) states that the transformation of an institution is primarily concerned with changing how planning and implementation unfold in practice. It is, therefore, crucial that a municipality must assume an institutional design with a clear line of functions within the context of SPI.

It is important to note that Coetzee (2010) cites the fact that many local municipalities in South Africa have no dedicated organizational units that deal with planning. Hence, the implementation of spatial planning is not exclusive to a planner but is instead a team-leading inclusive interest (i.e., infrastructure, environmental protection, and housing). These teams, existing within an organization, require structural capacities such as policies that can guide planning and implementation. A local authority or state department should have the capacity to prepare and implement guidelines, and other instruments, that promote efficiency and effectiveness in SPI. In Italy, seventy years after the introduction of new planning legislation, municipalities still lacked the professional prowess to review and update their spatial plans, owing to capacity constraints (Colavitti *et al.*, 2013). Therefore, the need for institutional capacity cannot be exaggerated. Lastly, an institution should adopt an SPI strategy. This strategy originates from the conception of a project strategy that Patanakul and Shenhar (2011) proposed. This strategy can assist spatial planning in focusing on achieving spatial change in conjunction with justice. According to Patanakul and Shenhar (2011:7), a project strategy refers to “the project perspective (why), position (what) and guidelines (how) for what to do and how to do it to achieve the highest competitive advantage and the best value from the project.” Therefore, in the context of spatial planning, the researcher defines an SPI strategy as the means with which to highlight the background and rationale (why) for spatial transformation (what) through practical means (how) with an achievable schedule (when). The table below provides a brief explanation of the elements that constitute an SPI strategy.

Table 4-2: Framework for spatial planning implementation strategy

Dimension	Explanation
Perspective (why)	<p>Contextual background: The contextual background provides insights on the context of a specific area regarding distribution of spatial planning benefits and harms, including its socio-economic, cultural, and biophysical conditions. The background also provides the spatial planning needs and priorities of all stakeholders in a society.</p> <p>Spatial planning objectives: The spatial planning objectives highlight the intention of spatial planning in the area concerning short- and long-term goals.</p> <p>Strategic conception: The strategic conception provides the relationship between the spatial planning objectives in the strategy and the overall objectives, vision, and mission of an institution (i.e. local authority).</p>
Position (what)	<p>Plan orientation: The plan orientation defines the expected outcomes of spatial planning strategies identified during plan-making.</p> <p>Plan confidence: The plan confidence explains the rationale for support of spatial planning strategies by all affected stakeholders. Further, this component articulates how these strategies will improve quality of life from biophysical, socio-economic, cultural to political points of view.</p> <p>Monitoring and evaluation criteria: The monitoring and evaluation criteria define the matrix for measuring the success and failure of spatial planning in achieving transformation and EJ. These elements involve an explanation of how the spatial planning strategies respond to the just policy dimension of EJ.</p>
Plan (how)	<p>Project definition: The project definition provides a list of projects identified for implementation in each spatial planning strategy towards achieving spatial planning objectives.</p> <p>Structural and institutional focus: This element focuses on the guidelines, policies, procedures, and instruments that implementation will adopt to ensure procedural and substantive justice. Further, it highlights the role and responsibilities of intra-and inter-organizational actors.</p>
Forecast (when)	<p>Temporal focus: This component provides time frames for the delivery of each project per spatial planning strategy.</p>

Source: Adopted and adapted from Patanakul and Shenhar (2011) project strategy

4.7.2 POLITICAL ENABLERS

Spatial planning involves various actors who provide technical input (i.e., planners, engineers, architects, lawyers, property valuers, environmentalists, and land surveyors) and non-technical input (i.e., politicians, NGOs, and the general public). An appropriate and improved political leadership is necessary to lead the quest for spatial planning in an attempt to guide change and direction. In all tiers of government, the hierarchy starts with political leadership, and improvement in that it would foster successful spatial planning implementation. However, there is a need to facilitate capacity building for political leaders regarding spatial planning and environmental justice. According to Debbané and Keil (2004), environmental justice in South Africa enjoys unwavering political support. Albrechts (2003) note that the Structure Plan Flanders project in Belgium had to become a political priority and find expression on the political agenda to gain recognition, especially since planners had access to politicians for capacity building on the purpose, impact, and rationale of the proposed plan (p. 258-259). Spatial planning promotes soft and hard knowledge sharing among all stakeholders in society.

However, political leaders should receive exclusive engagement in capacity building on spatial planning. The capacity building of political leaders could, to no small extent, encourage political intervention and support on spatial planning matters. Political intervention is not only possible in spatial planning challenges but also is other local government challenges. For instance, the Executive Mayor of the Oudtshoorn municipality in the Western Cape of SA intervened in the administration of the municipality by dismissing the municipal manager for financial mismanagement and irregularities (Felix, 2019). According to Surty (2010), if a municipal manager is a senior political deployee, an executive Mayor could find it challenging to implement consequence management on such an official. The political intervention has its dynamics that demand political support.

Spatial challenges in regions such as Dortmund in Germany, which have larger populations, have received more significant political intervention than those with lower populations (Konukiewitz, 1983). Various possible factors may have contributed to these inequalities in political intervention. In spite of these factors, environmental justice requires equal treatment while taking into account the existence of socio-economic, power and political inequalities. Grant (2009) states that in a study of barriers to the implementation of spatial planning principles in Canada, some of the respondents viewed political support as an enabler to spatial planning implementation. In practice, political leaders are the policy decision-makers; therefore, political support is a facilitator of successful implementation. Undoubtedly,

planning policies that have political support are likely to attract resources and succeed in implementation. Nevertheless, political support depends on the political will of political leaders. Allmendinger and Haughton (2010) argue that political leaders must have a political desire to lead a change in planning. As argued above, capacity building for political leaders on spatial planning can also broaden the spatial planning understanding of political leaders and, therefore, prompt political desire and will. In most cases, as evident in South Africa, the targets for receiving capacity building in spatial planning are mostly bureaucrats, as opposed to bureaucrats and political leaders receiving capacity building in equal measure.

According to Taylor (2010), cross-sector or inter-organizational planning requires sufficient power to prevent resistance to cross-sector participation and compliance. The required degree of power exists in political leadership. Political leadership that puts spatial planning on its agenda can put systems (policies and laws) in place that can compel cross-sector participation and compliance. In practice, all municipalities in Mpumalanga Province, South Africa, have adopted spatial planning and land use management by-laws that require cross-sector involvement in the preparation of SDFs and land use schemes. However, the insufficient power of these local authorities to summon the participation of provincial and national departments defeats the integrative approach of spatial planning. Undoubtedly, the intervention of municipal political leadership, through the engagement with political leaders in both provincial and national governments, can change the resistance culture of inter-organizational planning. In spatial planning, there is a compelling desire to plan for resistance management. However, the resistance propounded for management is not the one that leads to environmental justice. According to Ling (2015:14), in China, there has been a birth of “spatial resistance,” which involves grassroots protests against displacements and injustices emanating from urban renewal planning and development. It is, therefore, political resistance that requires proactive and reactive resistance management to mobilize spatial planning support. The management of resistance introduces a new practice that can appeal to outcomes.

4.7.3 ADMINISTRATIVE ENABLERS

The improvement of spatial planning implementation requires a change in planning practice, attitude, and culture. According to Taylor (2010), the British planning reform required a change in planning practice and culture, from a land-use style of planning to a mode of spatial planning. Similarly, the introduction of SPLUMA in South Africa required an improvement in practice and culture from both provincial and municipal decision-making on planning, towards municipal decisions on planning. The planning practice and culture that

excludes environmental justice in spatial planning requires the adoption of a new planning approach. The planning practice and culture that delays implementation and treats spatial planning and implementation in isolation is not result-oriented and excludes spatial planning monitoring and evaluation, which is unresponsive and autonomous, and thus needs an overhaul to improve implementation. The professionals in planning, who are by extension planners, have to adopt an attitude that is consistent with spatial planning support and outcomes and these planners require continuous capacity building.

According to Coetzee (2010), in the South African planning system, there exists a gap in knowledge and capacity. The introduction of change in practice is inseparable from the capacity building of those that change affects. The widening gap in knowledge and capacity is a consequence of having incompetent and unskilled personnel in spatial planning implementation. In the extant literature, Curtis (2008) reveals that the incompetence and lack of skills among planners contributed to the failure of spatial planning to integrate land use and transportation in a network city. There is a need for the appointment of qualified, competent, and professional planners to facilitate spatial planning processes (i.e., plan making, land use management, and plan implementation). However, having qualified, competent, and professional planners without financial resources can weaken spatial planning implementation. Limited financial resources appear as a challenge in spatial planning implementation (Halla, 2002; Curtis, 2008; Knight *et al.*, 2011) because implementation requires political intervention and support for the assignment of adequate resources in any planning endeavour. Moreover, an excellent spatial planning implementation strategy can provide a clear indication of resource requirements and their required sources.

Lastly, the success of planning implementation also depends on the adoption of spatial planning policies that are simple to read. Clifford (2013) revealed that certain LDF documents appeared too technical, and containing unnecessary jargon, during implementation processes. The implementation of spatial planning is not meant to confuse or create confusion, but rather to promote spatial transformation. A spatial plan with unclear objectives presents difficulties in the monitoring and evaluation of successes and failures. The planning practice of plan-making for experts and spatial change, rather than plan-making for the people and spatial change, is the planning practice that requires change.

4.7.4 CONTEXTUAL ENABLERS

According to Archibugi (2004), planning theory should not only highlight the process, but also evaluate its components, by itemizing them, defining the relationship, and assessing the context that planning relates to, as well as the expected desired outcomes. There exists a need for mainstreaming contextual issues in spatial planning, from plan-making to implementation. The contextual issues include the level of distribution in an area of housing, socio-economic opportunities and challenges, basic services, and other amenities. Further, experiential knowledge is crucial in informing planning on contextual issues. Khakee (1998) underscores the fact that experiential knowledge relates to context, for it is not technical knowledge but rather substantive in nature. Spatial planning is “a social struggle” (Roy, 2011:7) that is “context-dependent” (Sykes, 2008:547), “rooted in a specific cultural context” (Othengrafen, 2010:83) and takes place in a specific area with a unique character. The one-size-fits-all approach to spatial planning is difficult, if not impossible, to implement; hence the mainstreaming of context in planning is crucial.

Additionally, in the contextual space where spatial planning takes place, there is a need for public awareness and education about spatial planning. This public awareness and education would unquestionably promote knowledge sharing among stakeholders. Grant (2009) recommends awareness and education as constituting an enabler for successful spatial planning implementation. The general public must understand the rationale for, and benefits of, spatial planning; and consequently, fewer challenges are likely to arise in consensus building on planning aspects. More importantly, public awareness and education depend on improved public participation. Improved participation is the prerequisite for procedural justice and a requirement of the communicative turn in planning. The achievement of improved participation requires a collaborative, communicative, argumentative, and deliberative approach to planning. According to Ferreira *et al.* (2009), a collaborative planning approach is about the participation of stakeholders. Hostovsky (2006) averred that it is through communicative planning that a planner may capacitate communities and decision makers with the detailed context of environmental and planning challenges. The success in overcoming institutional, political and administrative barriers is a precondition to unlocking these contextual barriers. For instance, greater resources, political support and change in planning practice and culture, which includes institutional design that is responsive to context, will strengthen the mainstreaming of context into planning, knowledge sharing, and public involvement.

4.8 CONCLUSION

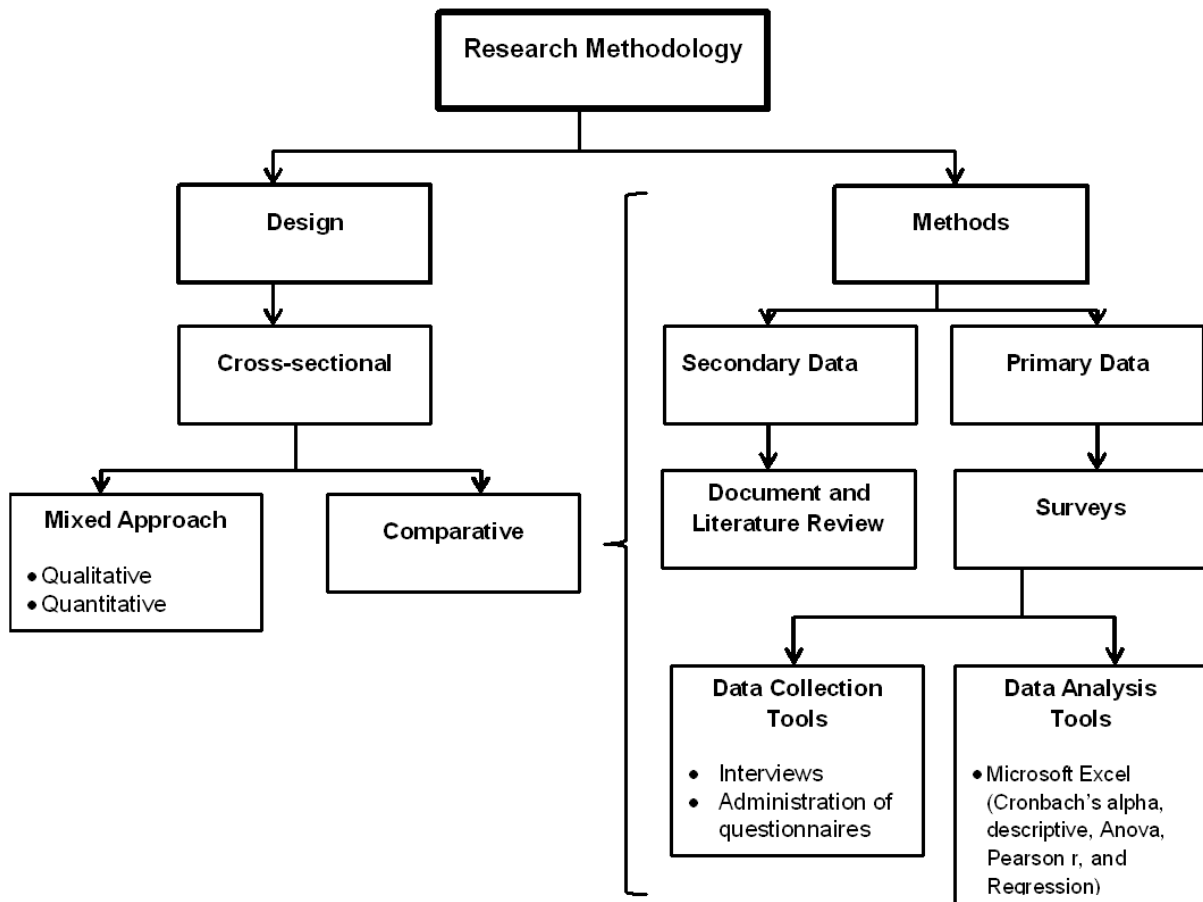
In brief, SPI entails putting plans that are prepared to address planning challenges and deliver planning outcomes into motion. It is apparent from the above discussion that SPI theory presents the top-down, hybrid, and bottom-up as approaches to implementation. There is a disappointing lack of literature on planning and implementation that suggest the most common approaches to implementation utilised by municipalities. However, the existing literature highlights various implementation types of which the majority of these forms of implementation are found on the public policy or administration theory (Schermerhorn, Jr, 1975; O'Toole, Jr. & Montjoy, 1984; Menzel, 1987; O'Toole, Jr., 1993; Matland, 1995; deLeon & deLeon, 2002; Mischen & Sinclair, 2009) rather than on spatial planning literature. By implication, there is a theory gap in SPI regarding the application of various forms of implementation. Nonetheless, the administrative and collaborative type of implementation is prevalent in planning theory and literature. Furthermore, this discussion introduced an SPI strategy that responds to the questions of why, what, how, and when in planning. This chapter also introduced the view that spatial planning consists of seven forms of implementation, comprising the symbolic, political, administrative, inter-organizational, collaborative, intra-organizational, and experimental. The above debate also highlights the existence of barriers to, and enablers of, SPI. These barriers and enablers share similarities upon comparing studies that were conducted between the years 1983 and 2015. In most of these studies, the categorization or classification of these barriers and enablers is either completely absent or very subtle. Hence, this study classified these barriers and enablers under four categories that comprise structural or institutional, political, administrative and contextual. From the discussion, it becomes apparent that there is no suggestion of a priority hierarchy for these barriers and enablers. Further, no study has confirmed whether these barriers and enablers could apply to the implementation of EJ through spatial planning. In conclusion, the approach to, and form of, implementation is crucial in realizing planning outcomes and planners are responsible for having a detailed understanding of the factors that are barriers to, or enablers of, the implementation of spatial plans.

5. CHAPTER 5: RESEARCH METHODOLOGY

5.1 INTRODUCTION

This study, as indicated in Chapter 1, aims to answer the main research question of how spatial planning could be restructured to address environmental justice (EJ) in order to improve the performance of spatial planning. Research is a process of investigation and inquiry utilized to discover new thoughts and knowledge (Swanson, 2005; Amaratunga *et al.* 2002). The process of research requires a methodology for investigating and inquiring about a phenomenon or subject so as to expand the existing knowledge. In general, research not only discovers new knowledge, but also assists in revealing a logic about what is happening, or has happened, concerning a studied phenomenon. This research study aims at exploring knowledge about how spatial planning can be restructured to address (EJ) in order to improve the performance of spatial planning.

Figure 5-1: Research methodology



The discovery of this knowledge requires sound and scientific methods of investigation to guarantee the study's reliability and validity. Therefore, this chapter presents the methods that were employed in realizing the main research aim as clearly demonstrated in Figure 5-1. The figure shows that the methodology entails the research design and methods that includes those for collecting and analysing primary and secondary data. The chapter starts with a discussion of the broad research setting, which is followed by a research design that is realised through a debate on the research time horizon, methodological choice, and strategy. Thirdly, the chapter debates the techniques that were employed to collect and analyse the data. Lastly, the chapter presents the research reliability and validity, limitations and ethical considerations.

5.2 BROAD RESEARCH SETTING

South Africa is located on the continent of Africa in the Southern African region and forms the proposed setting of the study area. South Africa has a total of nine provinces (see Figure 5-2), with a combined population of 51 770 560 (STATSSA, 2011). Table 5-1 presents the geographic area of the country.

Table 5-1: South African population and geographic area

No	Province	Area in square kilometres	% of land area distribution	Population
1	Limpopo	125 754	10,3	5 404 868
2	Mpumalanga	76 495	6,3	4 039 939
3	Gauteng	18 178	1,4	12 272 263
4	North West	104 882	8,7	3 509 953
5	KwaZulu-Natal	94 361	7,7	10 267 300
6	Western Cape	129 462	10,6	5 822 734
7	Eastern Cape	168 966	13,8	6 562 053
8	Free State	129 825	10,6	2 745 590
9	Northern Cape	372 889	30,5	1 145 861
Total		1 220 813	100	51 770 560

Source: STATSSA, 2011

The democratic government in 1994 established these provinces in an attempt to remove the earlier apartheid geographic regions within the country. Before 1994, in the time of apartheid, the country consisted of four provinces, namely the Transvaal, Orange Free

State, Natal, and Cape Province as well as a total of 10 homelands aligned with the Black African community ethnic groups as the means with which to achieve segregation (South African History Online, 2014). These homelands are set out in Table 5-2.

Table 5-2: Erstwhile homeland areas

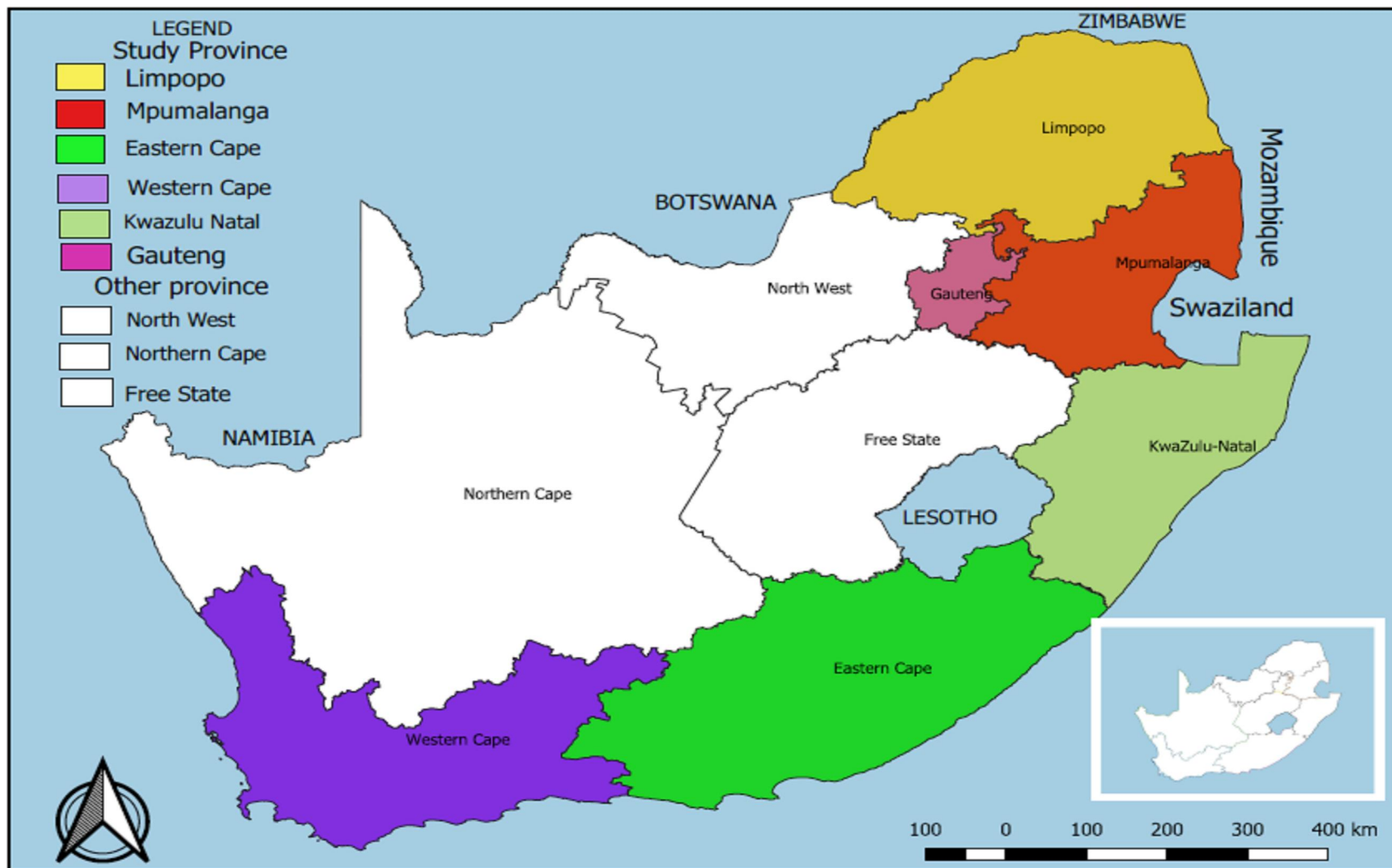
No.	Homeland	Ethnic Group
1	Transkei	Xhosa*
2	Ciskei	Xhosa*
3	Bophuthatswana	Tswana*
4	Venda	Venda*
5	KwaZulu	Zulu
6	Lebowa	Pedi
7	Kangwane	Swazi
8	QwaQwa	Sotho
9	Gazankulu	Tsonga
10	kwaNdebele	Ndebele

Source: South African History Online (2014)

* Granted independence status

These homelands predominately for Black people shared a mere 13% of the South African land area (Oranje and Merrifield, 2010; RSA, 2019a). This 13% of land allocated for these territories is undoubtedly the source of the land question and redistribution in the country. The redrawing of the country's boundaries, which led to the creation of new provinces, provided South Africa with a new geographic outlook. However, the recognition of traditional authorities in the country created an opportunity for the continued existence of the disbanded homeland areas because the demarcations of the jurisdiction areas for traditional authorities happened exclusively within the demarcated boundaries of these homeland areas. By implication, the democratic South Africa replaced the apartheid homeland system with that of traditional leadership, without changing the homelands' geographic boundaries. To illustrate this, Figure 5-3 illustrates the spatial representation of the demarcated jurisdictions of traditional authorities, with superimposed layers of the earlier homelands. Given this, apartheid is a scar that remains unintentionally institutionalized within the democratic structural systems of the country.

Figure 5-2: South African Map



Source: ESRI cadastral data

South Africa has more urban dwellers than rural dwellers; and the KwaZulu-Natal, Mpumalanga, Eastern Cape and Limpopo provinces appear with greater numbers of rural dwellers (Census, 2001). These provinces make up the majority of the areas under the jurisdiction of traditional leadership. The country also has 257 municipalities, of which 8 are metropolitan, 44 are district, and 205 are local municipalities (Municipal Demarcation Board, 2016) distributed across the nine provinces.

5.2.1 DEMOGRAPHIC CHARACTERISTICS

The population comprises more females (26 581 769) than males (25 188 791) across all provinces, except the Gauteng province, which has more males by a difference of 2%, as compared with females (Census, 2011). The population groups in the country include Black African (79.2%), coloured (8.9%), Indians (2.5%), whites (8.9%), and other members (0.5) (Census, 2011). The research uses the Census (2011) data as an official statistics from the Statistics South Africa. These statistics illustrate that the Black African community remains predominant in the country as a rainbow nation. The state has a total of 14 450 161 households that compose the total population of 51 770 560. These households include households within all types of dwellings (townhouse, cluster house in a complex, detached house, brick house, informal house). This classification also includes members of all socio-economic classes in the country. In the past 25 years, fourteen million of the people owning dwelling buildings, in particular, the poor and the middle-income group, benefited from the housing program of government (RSA, 2019a). Gurría (2017), during the launch of the OECD Economic Survey, argues that inequalities remain embedded in the geographies of the country. Globally, South Africa followed by Namibia takes the lead among countries with GINI coefficients of 0.60 and more (Waldman and Ojelabi, 2016). According to the RSA (2019a:23), between the years 2006 and 2015, the country's GINI coefficient regarding inequality reduced "from 0.72 to 0.68." The 0.04 reduction in the GINI coefficient in nine years indicates that SA would require over a century to address inequalities if the country fails to introduce effective reforms. Likewise, Wittenberg (2017), the World Bank (2018) and RSA (2019a) confirm the current inequalities that exist in South Africa. Although inequalities are present in the country, approximately 90% of the households have access to water, while roughly 6% and 16% of the households have no access to sanitation or electricity, respectively (Census, 2011). The scars of apartheid remain evident across all provinces, as two percent of the households continue to utilize the bucket system for sanitation. Further, the Census (2011) indicates that only 41% of the households have full title land ownership. This statistic underscores the prevailing problem of security of land and land ownership in South Africa, particularly among the Black African community. To illustrate this argument, a

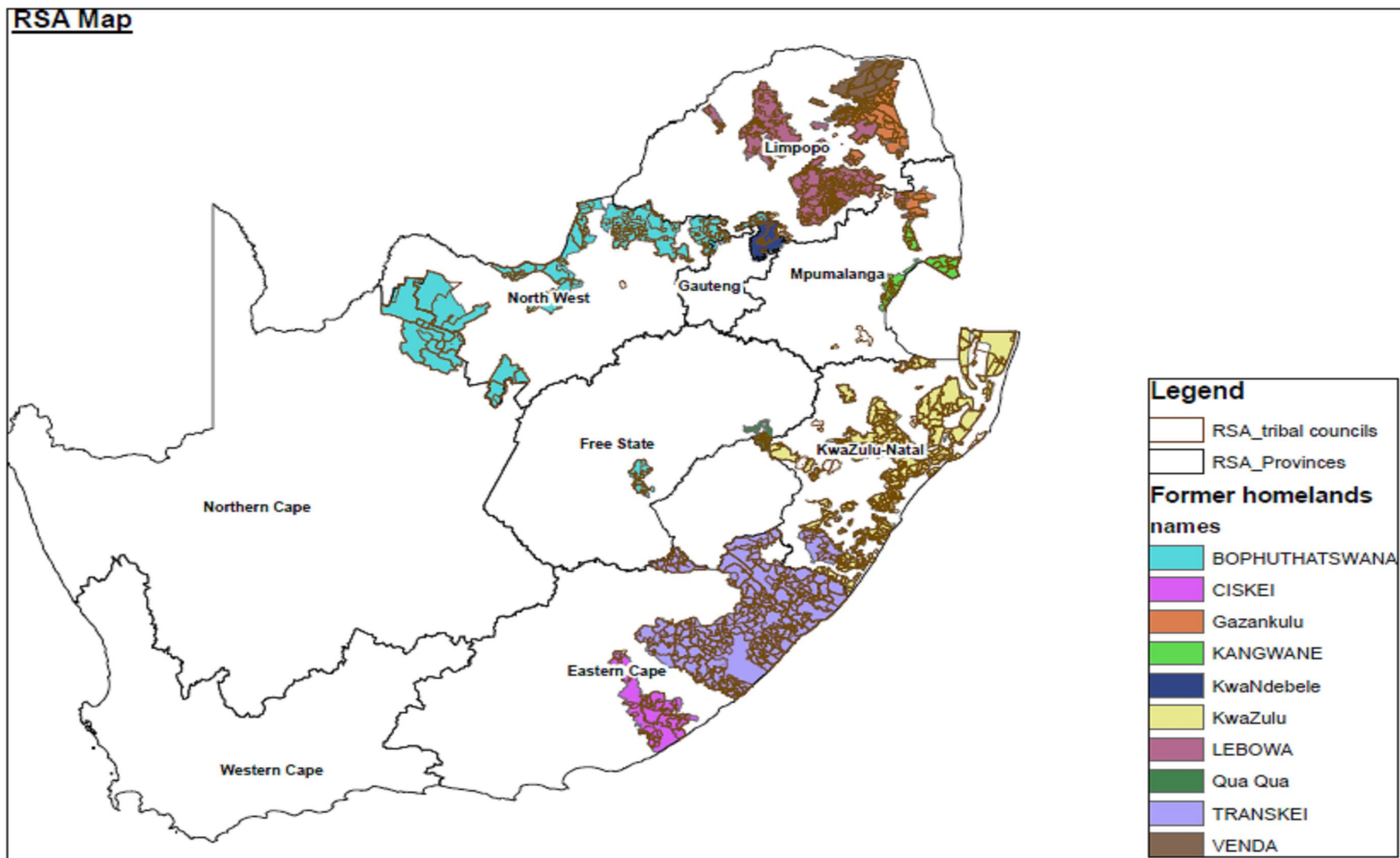
recent land audit report revealed that the white community owns 72% of land in the country, compared with less than 30% of land that is owned by the majority Black African community (Department of Rural Development and Land Reform, 2017). The land ownership demographic in South Africa, therefore, demonstrates and confirms the patent existence of inequalities in the country. The uncoordinated, slow pace and piecemeal approach of government to land reform (RSA, 2019a) is the cause of inadequate land ownership.

5.2.2 SOCIO-ECONOMIC BACKGROUND

South Africa, given the threefold nature of the challenges (unemployment, poverty, and inequality) that it endeavours to overcome, is not different to other developing countries regarding socio-economic challenges. According to Lundahl and Petersson (2009), the reforms in policy and programmes that the post-apartheid government introduced focused on promoting economic growth sustainability to redress inequality and reduce poverty through job creation. These policies and programmes have been ineffective with regards to reducing poverty, inequalities, and unemployment. Additionally, in comparing the inequalities of South Africa with other countries, South Africa remains at the top of the list of nations affected by disparities worldwide (World Bank, 2018). This revelation confirms the debates in the previous chapter that stated that apartheid scars persist in the geographies of South Africa. More importantly, forty percent of the country's population lives in poverty (World Bank, 2017). The high unemployment rate is the primary challenge that prevents the state from achieving the successful realization of reduced poverty and inequalities (p. 2). In fact, the South African spatial fragmentation, to some extent, contributes to its inability to overcome socio-economic challenges. In 2016, the unemployment rate reached the highest level ever observed and recorded (World Bank, 2017); although this is the case, the country experienced a drop in unemployment in the third quarter of 2017, from 27.7% to 26.7 as well as in the fourth quarter of the same year (World Bank, 2018). This one-percent decline in unemployment presents the limited opportunities that the spatial structure of the country provides, in particular for the South African youth. In the third quarter of 2019, unemployment in the country reached 29.1% (STATSSA, 2019). It is clear that the economy is not stable and socio-economic challenges continue to grow. According to the RSA (2019a) "the inability of the economy to create jobs coupled with the high-level entry requirements and the skills mismatch are some of the reasons advanced for the persisting structural unemployment." The economy will always struggle to be sustainable given inequalities, corruption, poor prioritization, and performance of local government. The country's NDP proposes an approach that is geared towards addressing these challenges (National Planning Commission, 2012). However, the review of the countries' performance in 25 five

years (1994-2019) captured in RSA (2019a) indicates that even post the adoption of the NDP, socio-economic challenges remain a reality.

Figure 5-3: Map showing former homelands with demarcations of traditional councils



Source: Created from cadastral data received from DRDLR

5.3 RESEARCH TIME HORIZON

This study is cross-sectional in design, as it includes planners with different years of experience, professional registration, and qualification, from three categories of municipalities in six participating provinces. These planners are important because the study entails the improvement of spatial planning implemented by planners in municipalities. According to Leedy and Ormrod (2014), cross-sectional research involves a sample of different groups studied and compared at a certain point in time, but not over time. The cross-sectional design enabled a cross-comparison of the performance of municipalities and provinces on the application of EJ in spatial planning. The factor that influenced the presence of this design in the study is derived from the study objective that emphasizes the reshaping of spatial planning towards achieving EJ. It became apparent that the realization of this objective would not be possible by studying a single municipality or province alone, but by examining various municipal practices across provinces. Moreover, the study investigates and observes the municipal planning practice in six dimensions of EJ across a number of provinces.

5.4 METHODOLOGICAL CHOICE

The research adopts a mixed research method that incorporates both quantitative and qualitative techniques of data collection and analysis. Johnson and Onwuegbuzie (2004:17) define mixed research as a method that entails the combination of “quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study.” Venkatesh, Brown and Bala (2013) drawing from other scholars contend that mixed-research is the third method of research paradigm after the first and second paradigms are represented by the quantitative and qualitative methods of research, respectively. Leedy and Ormrod (2014) state that this method not only includes the blending of methods but also the integration of conclusions derived from the collected and analysed data. The collected and analysed data include both primary and secondary data. According to Walliman (2011), primary data entails information on practical experiences, situations, events, observations, which is to say that it is “first hand” data (McNeill & Chapman, 2005: 131), whereas secondary data consists of information derived from journals, books, magazines, documentaries, the Internet, news bulletins, etc. The primary study data include the perceptions and experiences of planners regarding EJ in planning. On the other hand, the secondary data comprises information about the study subject (EJ and spatial planning) from academic journals and books, including relevant case studies and legal frameworks. The

mixed-method approach draws from pragmatism philosophy for its foundation. According to Dillon et al. (2000), pragmatism is about the consideration of the practicality of a proposed notion prior to its application. Pragmatism is, therefore, an empirical (Small, 2011), an adaptive approach (Norton, 1999; 2005) and based on practical consequences and experiences (Johnson and Onwuegbuzie, 2004). In this research, the application of this philosophy entails applying qualitative and quantitative methods, to enhance the researcher's understanding of the new turn of EJ in planning. The researcher interpreted the new approach and posited various principles and propositions that municipal planners would need to consider in order to score their potential for shaping spatial planning. The municipal planners scored the potential of these propositions through a Likert scale of strongly disagree, somewhat disagree, neutral, somewhat agree, and strongly agree. The Likert scale of strongly oppose, somewhat oppose, neutral, somewhat support, and strongly support became useful to planners in scoring the potential of proposed principles.

The choice of study methodology demonstrates a blend of research methodology in its strategy, data collection, and analysis. Shorten and Smith (2019) state that the mixing of methods extends not only to data collection and analysis but also to data interpretation. The blending of the research methodology provides the researcher with an extended opportunity to understand the study subject comprehensively (Nau, 1995 cited in Amaratunga *et al.*, 2002:24). Small (2011) points out that, recently, most empirical studies have applied more than one technique of data collection for a different data type. The data collection methods that are employed throughout the research project include the qualitative component, which consists of key informant interviews and a literature review and the quantitative component, consisting of the administration of questionnaires as the means of data collection. The mixed research method assists in responding to questions that quantitative methods alone cannot answer without the application of qualitative methods (Shorten and Smith, 2019). The three research questions that the study addresses require the application of both qualitative and quantitative methods. According to Franklin (2013:16), the "quantitative modes of research" view empirical and rational knowledge in isolation to each other, whereas qualitative modes of research consider both types of knowledge as being interconnected and interdependent. Hence, the study combines these two methods in an attempt to unpack the perceptions of planning experts regarding EJ in planning, in conjunction with the empirical experiences that relate to EJ of planners in municipalities. Qualitative methods enable a researcher to scientifically explain facts through reflection and perspective generation (Flick, 2009). The quantitative approach allows for the quantification of participants' experiences in local authorities, which is complemented by the insights from planning experts, in the private sector and government, on practices concerning EJ in municipal planning. Municipal

planning is a constitutional mandate, prescribed in Schedule 4, Part B of the Constitution of the Republic of South Africa, 1996, and includes the IDP, spatial planning, and land use management. The data collection discussion below presents the techniques employed in the collection of qualitative data (corpus review, interviews, and focus group) and quantitative data (administration of questionnaires).

5.5 RESEARCH STRATEGY

The research strategy includes the sample under investigation, the approach that is employed and methodological strategy. The section of the sample discussed below also presents the description of provinces, which were sampled from the broader population.

5.5.1 STUDY SAMPLE

The study sample comprises six of the nine provinces, being Mpumalanga, Gauteng, Western Cape, Limpopo, KwaZulu-Natal, and Eastern Cape. The combined population of these provinces is 44 369 157 (86% of the South African population), given the information in Table 5-1. Watts and Lyndsay (1996) view sampling as a solution to the challenge of being unable to examine and explore every available piece of possible evidence. In this context, sampling enables the researcher to study only six provinces and seventy-one municipalities within these provinces. There are, therefore, three categories of municipalities under investigation in this study, as set out by the prescribed categories in the Constitution of the Republic of SA in Section 155 and as set out in Table 5-3.

Table 5-3: Categories of municipalities

Categories	Description	Type	No. of Municipalities
Category A	“A municipality that has exclusive municipal executive and legislative authority in its area.”	Metropolitan	8
Category B	“A municipality that shares municipal executive and legislative authority in its area with a category C municipality within whose area it falls.”	District	44
Category C	“A municipality that has municipal executive and legislative authority in an	Local	205

	area that includes more than one municipality.”		
Total			257

It is important to note that, all three categories of municipalities fall under the sphere of local government governed by Chapter 7 of the Constitution and the Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998), the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000), and other legislation related to planning and land development.

a) Approach to the selection of provinces

The researcher employed the following steps in selecting the provinces:

- i) Identify all municipalities within provinces and the officials responsible for planning through the database from the provincial and national government. In some instances, websites of municipalities were useful in providing information. The identification included contact information, such as emails and official communication lines (either cell phone numbers or landlines).
- ii) Consult planners telephonically in municipalities, informing them about the research and the intention to request their involvement and participation.
- iii) Send questionnaires to all local authorities within provinces via email.
- iv) Send reminders every two weeks for responses.
- v) Assess response rate and exclude provinces that received a response rate of less than ten percent in 60 days.

In applying this step-by-step process, the researcher sent emails with questionnaires attached to municipal planning officials on 04 July 2017 and assessed the response rates on 05 September 2017. This exercise resulted in the exclusion of the Free State, Northern Cape, and North-West provinces because of low response rate. The response rates for these provinces were: Free State (eight percent), Northern Cape (three percent), and North-West (zero percent). The table below shows the distribution of municipalities in the sampled provinces.

Table 5-4: Distribution of studied municipalities within provinces

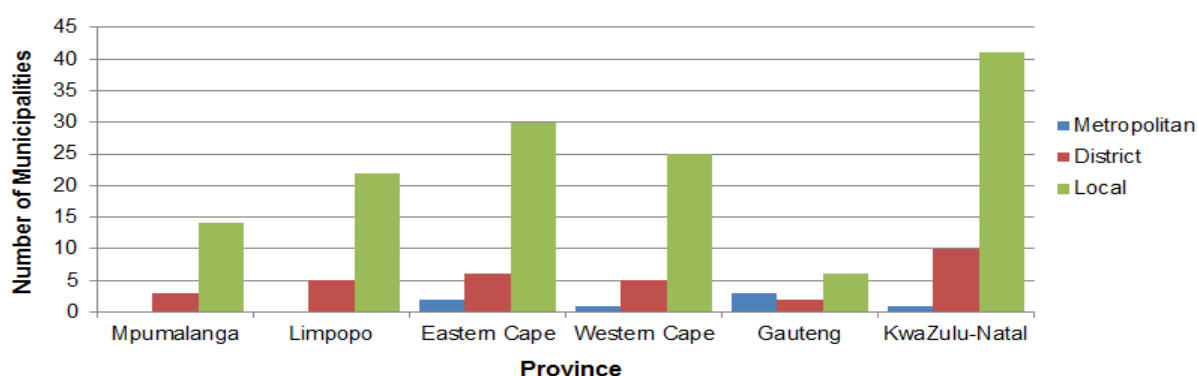
Provinces	Total of Municipalities	MWPF	Type of Municipality		
			Metropolitan	District	Local
Mpumalanga	20	17	0	3	14
Limpopo	27	27	0	5	22
Eastern Cape	41	38	2	6	30
Western Cape	31	31	1	5	25
Gauteng	11	11	3	2	6
KwaZulu-Natal	53	52	1	10	41
Total	183	176	7	31	138

Source: Own construction, 2018

MWPF= Municipalities with planning function

The study reveals that there are municipalities in the Mpumalanga, Eastern Cape, and KwaZulu-Natal provinces that depend strictly on the district for all municipal planning functions. It is interesting to note that the three affected municipalities in the Mpumalanga province had their municipal function transferred to a district municipality by Gazette in 2003. A Gazette is a publication that publishes laws and legal notices to comply with a legal requirement. The challenge of capability or lack of planning personnel contributed to the lack of municipal functions in these municipalities. Therefore, the study excluded these municipalities from the sample, leaving the study with a sample of 176 municipalities across all categories. It is apparent from the above table and the figure below that 88% of the country's metropolitan municipalities, 70% of the country's district municipalities, and 67% of the country's local municipalities had an equal opportunity of participating in the study. The researcher continually reminded municipal planners, within the six provinces, every two weeks to return questionnaires, up until 30 November 2017.

Figure 5-4: Number of municipalities with opportunity to participate



Source: Author's Fieldwork, 2018

However, the overall response rate is 40%, across all categories of municipalities. This 40% rate is the responses of studied municipalities considered together. Figure 5-4 demonstrates the number of responses per participating province. The discussion on the administration of questionnaires in subsection 5.6.3 shows in detail the distribution of municipal responses per province.

5.5.2 COMPARATIVE STRATEGY

The study, in its blend of methods, adopts a comparative strategy to show similarities and differences in literature and practices regarding the study focus area. According to Hammond and Wellington (2013), a comparative study is about discovering similarities and shared experiences across areas or contexts. This comparison strategy allowed the discovery of barriers to, and enhancers of, spatial planning implementation from various spatial planning studies. The list of these barriers and enablers presented in Table 4-1 is derived from the comparison of results from various planning implementation studies. This list became useful during the survey where participants indicated their agreement level with listed factors as barriers or enablers. Further, the strategy enabled an evaluation to be made of planning theories through the comparison of a theory with the elements of EJ. Hudson *et al.* (1979) and Pissourios (2013) provide the foundation for the comparison of planning theories in this study. This foundation enabled the researcher to define the comparative evaluation criteria for the study. Hudson *et al.* (1979:391) state that a “comparative evaluation” requires a researcher to adopt comparative criteria. In this regard, the study adopted comparative criteria that measure the adequacy of incorporating EJ dimensions into spatial planning theories, such as rational planning, incremental, mixed scanning, advocacy, transactive and communicative theories. A total of six EJ dimensions forms part of the criteria and Table 5-5 demonstrates the comparative evaluation criteria.

Table 5-5: Planning theory evaluation criteria

Criteria: EJ Dimensions	Description of criteria
Distributive justice (DJ)	Consideration of fair distribution
Recognitive Justice (RJ)	Recognition of cultures, values, and situations including conditions (natural, socio-economic, cultural etc.)
Procedural Justice or Public Participation (PJ or PP)	Meaningful and fair involvement of general public in processes.
Substantive justice (SJ)	Incorporation of means or tools to participation by all

Criteria: EJ Dimensions	Description of criteria
	parties and to capacity building and awareness.
Capability approach (CA)	Assessment of capabilities and sustainability
Just policy (JP)	Consideration of implementation measures, monitoring, and evaluation criteria and measures for redressing injustices.

Source: Own construction, 2018

Additionally, the comparison in the study produced comparative results on the performance of local authorities concerning the application of EJ in spatial planning. Further, the comparison allowed for the discovery of the commonly applied spatial implementation approaches and styles across municipal categories. Walliman (2011) suggests that the comparative strategy is useful in the comparison of past and present situations. However, this study focused more on the present practice across municipalities. The focus on the present practice enables the researcher to understand municipal practices within the context of post-apartheid planning in South Africa. Despite the fact that the study considers present practices, it incorporates a comparison of past and present practices concerning planning reforms in the country.

5.6 RESEARCH DATA COLLECTION

The research data collection involved a survey method and the use of various techniques applied in qualitative and quantitative studies. These techniques include interviews, administration of questionnaires, and a literature review. In supporting the use of these techniques, Franklin (2013) posits that a survey-based data collection technique consists of interviews and the administration of questionnaires. By implication, a study that applies a survey cannot be successful without utilising either the tool of interviews or the administration of questionnaires.

5.6.1 SURVEY

This study employed the strategy of a survey to study the attitudes and perceptions of planners about EJ practices in municipalities. The survey was conducted on a single planner from each participating municipality. The resource capacity differences in municipalities, and the fact that the survey studied the practice of a local authority as an institution, constitute the rationale for surveying one planner in every municipality. The survey did not regard the

level of the post that a respondent occupied in a local authority, but it is evident that the responses came from candidate, technical and professional planners.

(a) Registration of respondents with the Council of Planners

According to the Planning Profession Act, 2002 (Act No. 36 of 2002), practitioners in the field of town and regional planning ought to register with the South African Council for Planners (SACPLAN). The Act identifies three categories of registration applicable to all planners in various sectors. Table 5-6 demonstrates that a majority (52%) of the respondents are registered as professional planners, whereas 13% and 17% of respondents are registered as candidate and technical planners, respectively. The statistics of planners' registration with SACPLAN indicates that 2498 (58%) of planners are registered as professionals, whereas 1469 (34%) and 313 (7%) of planners are registered as candidate and technical planners, respectively (SACPLAN, 2019). It is apparent from the statistics that most planners register in the category of professional planners, and most municipalities have employed professional planners. On the other hand, 18% of the respondents confirmed not being registered with SACPLAN. The results indicate that there are municipalities in the country that would struggle to implement SPLUMA, given the requirement that most municipal by-laws require a professional planner to compile a town planning assessment report. Nonetheless, the diversity of the study participants regarding registration with SACPLAN allowed for the comparison of planners' perceptions with regards to the focus area of the study.

Table 5-6: Registration of respondents with council for planners

Categories of registration	Frequency	Percentage
Candidate Planner	9	13%
Technical Planner	12	17%
Professional Planner	37	52%
None	13	18%
Total	71	100

Source: Author's Fieldwork, 2018

The shortfall of the survey relates to the fact that it did not require participants to provide their SACPLAN registration numbers for verification. Despite this, the researcher added a control variable of 'none' (not registered) to the categories, in an attempt to reduce respondents' misrepresentations.

(a) Experience of study respondents

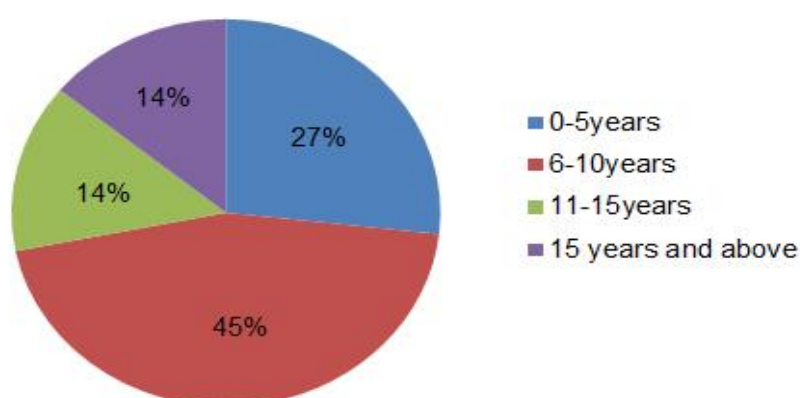
Table 5-7: Planning experience of respondents

Years of Experience	Frequency
0-5years	19
6-10years	32
11-15years	10
15 years and above	10
Total	71

Source: Author's Fieldwork, 2018

Table 5-7, when considered in conjunction with the pie chart (Figure 5-5), demonstrate that the majority of planners (55%) who participated in the study have between 6 and 10 years of planning experience. On the other hand, respondents in the categories of 11–15 years and 15 years and above share a similar percentage (14%) with regards to experience. The results indicate that older practitioners are not dominating planning practices in municipalities. It is likely that such practitioners might also be in the private sector or that they have retired or passed away. Table 5-6 also shows that 13% of the respondents are candidate planners. By implication, local authorities are becoming centres of experiential training for young planners. The experience variable, therefore, allowed the study to reveal whether there is an association between the familiarity of a respondent with EJ and the experience of that respondent.

Figure 5-5: Planning experience of respondents



Source: Author's Fieldwork, 2018

The study also revealed that there is no association between the experience of respondents and their registration with SACPLAN, which confirms that registration with SACPLAN is mandatory, and is not determined by the planning experience of a planner.

(b) Qualifications of study respondents

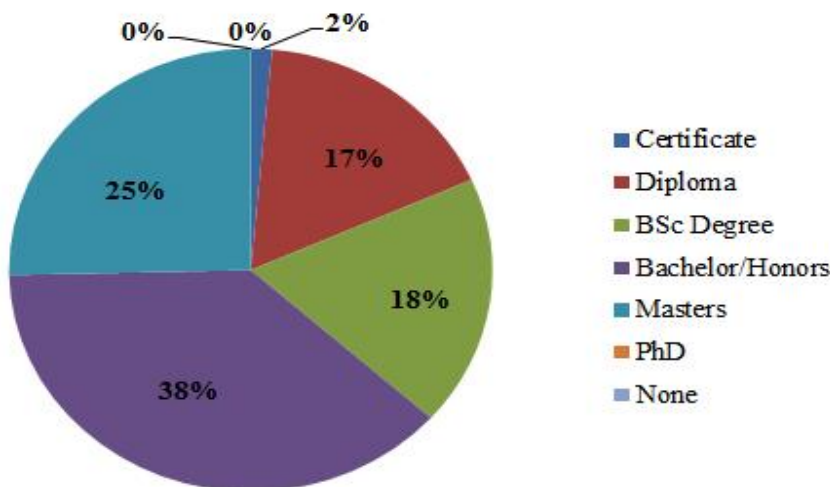
Figure 5-6 illustrates study respondents' qualifications. It is evident that no participant holds a Doctoral degree in planning and that 38% of the respondents have a bachelor degree, with 25% having a Masters, followed by 17% and 18% of respondents that have a Diploma and a BSc. Degree in planning, respectively.

Table 5-8: Qualifications of study respondents

Qualification	Frequency
Certificate	1
Diploma	12
BSc Degree	13
Bachelor's/Honours Degree	27
Masters	18
PhD	0
None	0
Total	71

Source: Author's Fieldwork, 2018

Figure 5-6: Qualifications of study respondents



Source: Author's Fieldwork, 2018

The correlation analysis between the qualification of a respondent and registration with SACPLAN shows no association between the two variables. By implication, the education level of a respondent does not influence the registration of a planner in any category of SACPLAN. The findings to a certain degree confirm the revelations in Sihlongonyane (2018) that during SACPLAN workshops on competencies and standards, planners were unhappy about registration of some planners as professional planners with only a master's degree in planning. The challenge on the registration requirement needs more attention to ensure quality planners in every category of registration. In the midst of concerns regarding the registration of planners without undergraduate qualifications, the 18% of planners with a master's degree confirm that municipal planners value personal growth and development while working. The recent continuous professional development (CPD) initiative that SACPLAN introduced has the potential to increase the number of municipal planners with post-graduate qualifications. It will be interesting to see the results of its implementation as it was met with resistance given the CPD points (120) requirement over a period of three years. SACPLAN released the CPD policy and procedure, dated March 2018 which detailed the CPD requirement (120 points over a three year cycle) (SACPLAN External Circular 1, 2018) and later reviewed it in May 2019 following the outcry of planners with the new CPD requirement of 75 points over a three year cycle (SACPLAN External Circular 1, 2019).

5.6.2 INTERVIEWS

According to Hammond and Wellington (2013), an interview entails an engagement between a researcher and an interviewee. This engagement or conversation allows the researcher to gain more insight on the studied subject from an interview. Interviews have several other advantages, such as the observation of body language, excellent quality of responses and response rates, and fluidity in controlling the discussion and environment (Bailey, 1987). However, the observation of a participant's body language is only possible if the interview is done one-to-one in a physical setting, and not telephonically. Visual interview mechanisms such as Skype may also provide an opportunity to observe body language. In general, body language offers information for drawing a conclusion on a studied subject, based on the reaction of an interviewee. A reaction to an interview is fundamental in controlling the line of questioning, in particular regarding instances where the interviewee becomes uncomfortable. The study interviewed some experts in planning from the private and public sector (both provincial and national). The use of interviews is common in planning studies (Mark, 2003; Grant, 2009; Todes *et al.*, 2010; Clifford, 2013; Chirisa, 2014; Steenkamp and Winkler, 2014; Ratulangi *et al.*, 2015) and the process employed in holding the interviews comprised the following steps:

- (a) Identification of interviewees;
- (b) Contacting and emailing to the identified interviewees information about the research that included semi-structured questions and consent forms requesting their participation;
- (c) Deciding on the approach for the interview (one-to-one, telephonic, Skype, etc.)
- (d) Scheduling of interviews and;
- (e) Undertake interviews.

The SACPLAN database of professionally registered planners constituted the source of information for the identification of the planning experts. The experts included participants known to the researcher and those appearing to have significant experience, given their registration year with SACPLAN. The researcher requested a total of twenty experts to participate in the study; however, a total of nine agreed to participate. These interviews took place during October 2017 and March 2018. Each interview took between 30 minutes and two hours. These interviews were held with planners from Mpumalanga (02), Gauteng (03), KwaZulu-Natal (01), Limpopo (02) provinces, and one from Australia who had previously worked in South Africa. According to Walliman (2011), interviews by telephone can address the distance factor in research data collection. The distance between provinces and the location of the researcher resulted in one-to-one interviews with six experts, and telephone interviews with three planning experts. The interviews consisted of semi-structured questions given to interviewees in advance, allowing participants an opportunity to prepare for the interview. McNeill and Chapman (2005:34) argue that semi-structured interviews “allow some flexibility and discretion”, whereby flexibility provides an opportunity for a researcher to expand and prepare follow-up questions for an interviewee. Moreover, the boundaries of an interview can become more transparent and controllable, at the discretion of a researcher, than those of an unstructured interview. The semi-structured interview questions included the following:

- (a) What is your understanding of environmental justice?
- (b) What is your view of environmental justice in the context of planning?
- (c) To what extent does South African spatial planning respond to environmental justice?
- (d) What do you think could be the barriers to and enablers of spatial planning implementation towards environmental justice?
- (e) What is your opinion regarding the environmental justice turn in planning?

5.6.3 ADMINISTRATION OF QUESTIONNAIRES

Walliman (2011) states that a questionnaire can be regarded as a tool for the collection of quantitative data through structured (closed and open-ended) questions, although they can also assist in qualitative data collection. A closed type of question refers to a line of inquiry that restricts a participant by providing a set of responses from which a respondent must select answers. On the other hand, an open-ended question is a line of inquiry that grants freedom of response to a participant, without any pre-determined answers. The questionnaire for this study included mostly closed-ended questions and only one open-ended question, which required the respondents to define the concept of EJ. The administration of questionnaires is the most popular tool for the collection of data, specifically in research (Crowther & Lancaster, 2005). In practice, studies of scholars like Cloke and Little (1986), Clifford (2012), and Hölzl and Nuisl (2014) have applied this technique in studies on planning implementation. McNeill and Chapman (2005) view a questionnaire as a document that lists questions for a study participant. The data required for collection defines the questionnaire's design with regards to sections and types, including the content of questions. Appendix 1 presents the questionnaire utilized during the study survey. The participants' email addresses enabled faster distribution of questionnaires. According to Walliman (2011), the use of email addresses also simplifies the process of sending reminders. The researcher continuously sent email reminders with the attachment of the questionnaire to the identified municipal planners. In cases where emails were returned, communication by telephone was made with the concerned officials to ensure the proper capturing of email addresses for the successful delivery of questionnaires and reminders.

(a) Questionnaire sections

The questionnaire used in this research consisted of ten pages that have sections that deal with privacy and confidentiality, contextual and demographic data, environmental justice in municipal planning, spatial planning implementation (SPI) and the EJ turn in planning. Appendix 1 of this research presents the survey questionnaire.

(i) Private and confidentiality

This section of the questionnaire introduces the research to a participant. According to Walliman (2011), an introduction to a questionnaire is fundamental in explaining the research and the rights of the participants. This section highlights the rights of the participant and the purpose of the research. In practice, respondents, and particularly government

officials, are reluctant to provide information on questionnaires. This reluctance from the experience of the researcher emanates from the fears that any information provided may get them into trouble with their employers. Therefore, explaining the purpose of the survey reduces the level of fear concerning their participation in the study.

(ii) Contextual and demographic data

The contextual and demographic data sought to establish the category of the municipality and the province where a planner works. This information enabled the comparison of experiences on EJ in planning. Further, the section allowed participants to indicate their registration status with SACPLAN, experience in planning, and qualifications. The above discussion in subsection 5.6.1 demonstrated the utility of these findings on municipal planners across the participating provinces.

(iii) Environmental justice in municipal planning

This section of the research questionnaire provided questions that enabled the researcher to uncover the extent to which South African spatial planning responds to EJ in municipal planning. The dimensions of EJ discussed in the foregoing chapter became useful in measuring the extent of EJ in municipal spatial planning through the use of Likert scales and Likert-type items. Clason and Dormody (1994) cited in Boone, Jr., and Boone (2012) distinguished between these two Likert measures. The authors state that the Likert-type items consist of single questions with various measures, yet without the use of combined results during analysis. On the other hand, the Likert scale consists of single questions with various measures (strongly disagree, disagree, neutral, agree, and strongly agree) that combine results into a single score during analysis (Boone, Jr. and Boone, 2012). This section of the questionnaire consists of single questions that allowed for analysis of the responses to be made, both individually and collectively, for an overall score. The section measured participating planners' familiarity with EJ using Likert-type items, such as 'not at all familiar,' 'slightly familiar,' 'somewhat familiar,' 'moderate familiar,' and 'extremely familiar.' In measuring the extent to which the municipal planning incorporated the dimension of procedural justice, participants had the liberty to choose from allocated alternatives on the method of public participation, type of public participation, and the stage at which the public participates in planning. Furthermore, the planners scored the level of public involvement on a scale of between 'not at all involved' and 'extremely involved'. The satisfaction level with public participation process in spatial planning policy making was scored on a scale of 'very satisfied' to 'very dissatisfied.' In addition, in measuring the procedural justice dimension,

respondents scored their agreement level (between 'strongly agree' and 'strongly disagree') about the extent to which municipalities' practice adheres to the procedural justice criteria. Lastly, municipal planners measured the level of importance regarding the procedural justice criteria. The analysis of the importance level (between 'not important' and 'very important') associated with each criterion enabled the researcher to conclude that municipalities view ethics in the planning decision process as being more important than all other factors in the procedural justice criteria.

Further, this section enabled the municipal planners to score the extent of substantive justice experienced in municipal planning. Municipal planners scored the frequency for municipal implementation of spatial planning awareness programmes using a scale that includes 'never,' 'rarely,' 'occasionally,' 'sometimes,' and 'frequently.' The respondents, with regards to the dimension of substantive justice, scored the ways in which the public gain access to spatial planning information, the tools municipalities use for information sharing, and the capacity building of communities, from many alternative responses. The questionnaire in this section also allowed municipal planners to score their level of agreement regarding the practice of municipalities on the fair distribution of resources, activities, and services, recognition of geographic and socio-economic context, sustainability factors in spatial planning, and the consideration of capability required to improve quality of life and spatial transformation. This section enabled a comprehensive discussion of the research question regarding the extent of EJ within the context of South African spatial planning, and in particular with regards to local government.

(iv) Spatial planning implementation

The literature on SPI widely covers this approach to spatial planning, but implicitly also considers the types of SPI. This section asked respondents about the approaches that municipalities use in SPI, including the types of implementation. The participants chose from alternatives to approaches that include top-down, hybrid, and bottom-up. On the types of SPI, municipal planners scored the frequency of applying each type of implementation using the scale of 'never,' 'rarely,' 'occasionally,' 'sometimes,' and 'frequently.' These measured types of SPI comprise the symbolic (coalition oriented), political (mandate driven), administrative (compliance-oriented), inter-organizational (internal and external sector coordination), intra-organizational (Internal coordination), collaborative (responsive, inclusive and integrative), and experimental (contextual or site specific) approaches to SPI. The understanding of the approaches to, and types of, SPI that municipalities adopted enables an analysis of whether either of the two has a relationship with the performance of a

municipality, with regards to the dimensions of EJ. Further, this section allowed planners to score the likelihood of each type of SPI to contribute to the achievement of EJ, using a scale of between 'extremely unlikely' and 'extremely likely'.

Debates in the literature (du Plessis, 2014a; du Plessis & Boonzaier, 2014; Chirisa, 2014; Ratulangi *et al.*, 2015) revealed the factors that contribute to the failure of spatial planning, as including implementation. Therefore, this section also enabled participating planners to score the effects of the impediments and enhancements that were identified as factors within the categories of structural, administrative, political and contextual barriers and enablers, on spatial planning towards EJ. The participating municipal planners scored the level of impediment of these factors using a scale of 'not a barrier,' 'somewhat a barrier,' moderate barrier,' and 'extreme barrier,' whereas the scale of 'not influential,' 'slightly influential,' 'somewhat influential,' 'very influential,' and 'extremely influential' applied in measuring factors perceived to enable SPI aimed at EJ.

Lastly, the section enabled participants to provide their levels of agreement using the scale of 'strongly agree' and 'strongly disagree' on the performance of municipalities concerning the dimension of just policy. The just policy dimension entails matters related to spatial planning monitoring and evaluation, during the stages of planning and implementation. The statements that participating planners used to score their levels of agreement comprise the municipal practice regarding the monitoring and evaluation of:

- ✓ whether fairness exists in public participation during planning and exists during implementation;
- ✓ whether fairness exists in the distribution of resources, activities and resources;
- ✓ whether fairness exists in the effects of distribution, in response to spatial disparities;
- ✓ whether fairness exists in the strategies that address inequalities in spatial planning;
- ✓ whether fairness exists in the contextual recognition in planning and exists in the contextual recognition in implementation;
- ✓ whether fairness exists in capabilities that implement spatial planning policies or plans

The above indicative statements provide the first step towards assessing spatial planning performance indicators as supported by Du Plessis (2014b), who argues that the indicators for the monitoring and evaluation of spatial plans remain either implicit or absent in spatial planning.

(v) The environmental justice-turn in planning.

This section allowed respondents to score the likelihood of spatial planning to assist in the achievement of EJ, employing the scale of 'extremely likely' to 'extremely unlikely.' Spatial planning is, in general, not viewed as a mechanism for achieving EJ. Hence, the study introduced propositions that present spatial planning in the context of EJ. The municipal planners also scored their level of agreement regarding these propositions. Lastly, the section enabled municipal planners to score their levels of support concerning the proposed principles of spatial planning towards EJ, utilizing the scale of 'strongly oppose,' 'somewhat oppose,' 'neutral,' 'somewhat support,' and 'strongly support.'

(b) Distribution of response rate

The study's response rate to the questionnaires that were distributed to municipalities in the sampled provinces is 40%, which is adequate when compared to other planning studies that received 28% (Hölzl and Nuissl, 2014) and 31% (Clifford, 2012) response rates. The table below shows the distribution of the responses according to the categories of municipalities.

Table 5-9: Distribution of questionnaires by municipal category

Categories of municipality	NDQ	NRQ	Percentage
Metropolitan	7	7	100%
District	31	12	39%
Local	138	52	38%
Total	176	71	40%

Source: Author's Fieldwork, 2018

NDQ=Number of distributed questionnaires

NRQ=Number of returned questionnaires

Table 5-9 demonstrates that there is no response rate less than 30% among the municipal categories. Further, Table 5-10 indicates the distribution of the 40% response rate among the participating provinces.

Table 5-10: Distribution of municipalities within provinces

Provinces	Total Number of Municipalities	Category of Municipality			Questionnaire Data	
		Metropolitan	District	Local	NRQ	% on Response
Mpumalanga	17	0	3	14	11	65%
Limpopo	27	0	5	22	6	22%
Eastern Cape	38	2	6	30	20	53%
Western Cape	31	1	5	25	9	29%
Gauteng	11	3	2	6	8	73%
KwaZulu-Natal	52	1	10	41	17	33%
Total	176	7	31	138	71	100%

Source: Author's Fieldwork, 2018

From the table above, it is apparent that the provinces of Limpopo, Western Cape, and KwaZulu-Natal provided less than 40% response rates. However, the response rates of these provinces did not affect the results of the study significantly, given the similar pattern in participants' responses to most research questions. The similar pattern on responses is evident with regards to their responses to the approaches and implementation types of spatial planning implementation, the familiarity of municipal planners with EJ, and the satisfaction of municipal planners with public participation in spatial planning policy making. More importantly, in considering all municipalities (257) that exist in the country, the study retains a response rate of 28%.

5.6.4 LITERATURE REVIEW

According to Hammond and Wellington (2013), a literature review is an overview of existing written thoughts concerning a specific field or subject with respect to various theories, concepts, and methodologies on the subject. The literature review undertaken for this study enabled the researcher not only to review existing literature, but also to provide a critical analysis of existing thoughts and ideas concerning the study subject. A literature review is not about the packaging of existing ideas, but the critical analysis of those ideas (Walliman, 2011). Academic journals and books on spatial planning and EJ provided substantial information on spatial planning and EJ practice, theories, concepts, methods, history, and development for review and analysis. The university library, and its internet resources for journals, was the source of most of the academic books and journals that were studied. The

efficient use of a librarian assisted in sourcing recent academic journals on the studied subject. The critical analysis involved gaining an understanding of the ideas espoused in literature, making practical sense of it, and analysing its implication. In undertaking the review, the researcher formulated a table that covers the authors of the studied material, objectives of the studied work as well as the methodology and findings. This table became useful in summarizing the reviewed articles on spatial planning and EJ to ensure that there are no omissions and losses of critical ideas, arguments, findings, and conclusions. This exercise simplified the comparison of findings from various studies. Ultimately, the literature review resulted in the:

- a) understanding of the provenance of EJ;
- b) discussion of the EJ dimensions;
- c) understanding of the gap evident in spatial planning theories and practice;
- d) introduction of the EJ turn in planning with propositions and principles;
- e) discussion of the approaches to and seven types of SPI;
- f) categorization of spatial planning barriers and enablers into four classes;

This review successfully responded to the research question that asks what environmental justice means in the planning context. Further, the review's results enabled the researcher to design a survey questionnaire that can adequately explore the extent to which South African spatial planning responds to environmental justice and uncover the factors perceived to impede and enhance SPI towards EJ.

5.6.5 DOCUMENT REVIEW

According to Hammond and Wellington (2013), documents may include letters, monthly, quarterly, and annual reports; minutes of committees, community or board meetings; directives, policies, laws, project reports, diaries, newsletters, memoirs, government plans and strategies, bulletins, presentations, census data, and financial reports. The study reviewed various laws that pertain to spatial planning so as to ascertain the level of EJ in their provisions and prescribed responsibilities of local authorities in municipal planning. The reviewed documents included the National Development Plan, Census 2011 data, a report on municipal performance about the implementation of SPLUMA, and reports on the economic outlook of the country. The review enabled the researcher to critically analyse the projected spatial direction of the country, performance of the nation on the socio-economic indicators, and the general performance and structure of municipalities in the implementation of SPLUMA. It is important to note that the research report actively integrates the debates

from the document review across the chapters of the study, without the need to include a separate chapter, i.e. policy and legal framework.

5.7 DATA ANALYSIS

This study applied both qualitative and quantitative tools of analysis, drawing from its mixed research approach. Positivism, interpretivism, and pragmatism are the founding philosophies for these analytical tools.

5.7.1 QUALITATIVE ANALYSIS

The qualitative analysis, in particular the data collected from interviews, entailed coding the data for alignment in different classifications. According to Swanson (2005), interpretive researchers believe that an individual interpretation of a subject gives birth to knowledge. The key informant interviews allowed the researcher to gain key informants' interpretations and the meanings they ascribe to EJ in planning. The researcher started the process of coding during interviews, by taking notes. In expanding on the coding after interviews, the tape recordings of participants who permitted audio recording, became useful for adding information that was omitted in the notes. Miles and Huberman (1994) argue that the reduction and display of data in qualitative analysis are the precursors of concluding results. In effect, the coding of data in this research allowed the classification of relevant data into categories for proper analysis. These categories include policy implementation, legal framework, participation, planning authorities, resources and skills. This process enabled the researcher to conduct an analysis by comparing, among others, the definition of concepts such as the environment and EJ. The analysis of the qualitative data provided an opportunity to confirm quantitative data with regards to municipal planning practice and EJ. This analysis complemented the quantitative analysis of the research.

5.7.2 QUANTITATIVE ANALYSIS

The first step of the quantitative analysis involved determining the population of returned questionnaires. A spreadsheet became useful for populating these questionnaires, where all questions appeared on the first row, with codes of respondents in the first column. Further, the researcher coded the questionnaire to ensure appropriate quantitative analysis. Before the application of descriptive and inferential analysis, the researcher cross-checked and verified all populated responses to address discrepancies. The study used a univariate

analysis, commonly known as descriptive analysis. According to Walliman (2011), descriptive analysis consists of frequency distribution, central tendency, standard deviation, and mean of research results. The researcher uses tables, pie and bar charts to present the distribution of responses. The use of these tables and charts assists in summarising the findings of the research. The descriptive analysis further enabled the ranking of frequency on most of the variables:

Table 5-11: Method for the ranking of variable

Ranking descriptions	Aggregation of %
Most frequently used type of implementation	Sometimes and frequently
Most likely implementation type to support EJ	Likely and extremely likely
Most impeding factor (barrier) of spatial planning implementation towards EJ	Moderate barrier and extreme barrier
Most enhancing factor (enabler) of spatial planning implementation towards EJ	Very influential and extremely influential

Source: Own construction, 2018

Table 5-11 demonstrates the manner in which the study ranked variables, such as the types of implementation used in municipalities, the implementation type that could support EJ and barriers to, and enablers of, SPI from the responses of municipal planners. The researcher achieved the ranking of these variables through the aggregation of percentages of certain measures as presented in Table 5-11. In the case where responses on variables shared a percentage on the aggregation, the performance on the other Likert scales informed the ranking. For example, two political factors (pressure and interference) impeding implementation obtained a constant percentage on both responses of the scale ‘moderate barrier’ (27%) and ‘extreme barrier’ (59%). However, on the scale of ‘not a barrier’, the factor of pressure received two percent and that of interference received four percent, whereas on the scale of ‘somewhat a barrier’ the factor of pressure received 11%, and that of interference received eight percent. Therefore, the most impeding factor between the two factors is that of political pressure, given the high percentage it received on the scale of ‘somewhat a barrier’, compared with the results of the political interference factor. The study also analysed the responses on the scales of agreement level within a positive or favourable context or a negative or unfavourable context. This analysis is presented in Chapter 9 of the research. All positive or favourable responses consist of the aggregation of percentages for responses on the scale of ‘somewhat agree’ and ‘strongly agree.’ On the other hand, negative or unfavourable responses comprise the aggregation of percentages for responses

on the scale of 'neutral,' 'somewhat disagree,' and 'strongly disagree.' Further, although the study excluded hypotheses, it applied bivariate and multivariate analyses to measure correlations of two and more variables. In this manner, the analysis intends to increase the research objectivity from a positivist point of view. In literature, positivist researchers view the world as more objective than subjective (Swanson, 2005) and these types of analyses enabled the researcher to understand, among other things, whether the level of respondents' familiarity with EJ has any association with the satisfaction of a respondent about distributive and recognition justice in municipal spatial planning policies. The Pearson's r aided in analysing the association or correlation between variables, whereas the regression analysis technique assisted in analysing the significance of relationships among variables. Lastly, the ANOVA analysis and two-tailed tests assisted the researcher in analysing the existence of a mean difference between variables and the significance thereof. These tests showed the degree of difference among the responses of participants. The distribution of the results on the mean differences for most findings is mentioned across the chapters of the research. The Microsoft Excel data analysis tool was used for the descriptive statistics, Pearson's r , regression and ANOVA analysis, which includes the calculation of the Cronbach's alpha for the study results. Appendix 4 of this report presents the calculations that were derived from the processed data.

5.8 RESEARCH RELIABILITY AND VALIDITY

The credibility of a research report depends on its reliability and validity. According to Black (2002), the driving forces of research quality are objectivity, reliability, and validity. Crowther and Lancaster (2005) state that most researchers compound the reliability and validity of studies, particularly in the analysis of qualitative data, to strengthen research acceptability and credibility. This study adopted a mixed research method and thereby ensured the high degree of reliability and validity for the collection and analysis of qualitative and quantitative data. Literature in research methodology defines reliability as the degree to which a method that is applied to data collection produces similar results, when utilized in different set-ups (Crowther and Lancaster, 2005; Flick, 2007; Hammond and Wellington 2013). The use of a cross-sectional design allowed for a sample that is cross-provincial and proved the use of a questionnaire to be a reliable technique, especially given the internal consistency that existed in the responses of participants across provinces and municipalities. It is apparent that if another scholar were to apply the same methods in municipalities of another country, the results will likely be the same. These results include findings on the municipalities' practice regarding the approach to and types of implementation and the consideration of distribution, procedural, substantive, recognition, capabilities, and just policy dimensions of

EJ in municipal planning. Flick (2007) argues that reliability is about the extent of consistency between and among various measures of the same subject. Cronbach's alpha became useful in measuring the internal consistency of responses, and the recorded consistency level across responses is not less than 0.9. The use of Cronbach's alpha supports the notion of positivism that promotes the utility of quantitative means of analysis. According to McNeill and Chapman (2005), positivists understand reliability as a technique applied in scientific methods of learning or research. By implication, scientific tools are essential in measuring reliability; hence, the use of Cronbach's alpha in this study. The incorporation of criteria previously used in research by authors such as Leventhal (1980) and Tyler (1988) in the questionnaire section of procedural justice also increases reliability. The simplicity of questions in the questionnaire increases both reliability and objectivity, all the while ensuring validity. Hence, other scholars would have to confirm the perceived reliability of other sections of the questionnaire in similar studies.

Research validity refers to whether the data that was collected, or the methodology that was used, addresses the purpose of the study (Crowther and Lancaster, 2005; McNeill and Chapman, 2005; Hammond and Wellington 2013). The categorization of the questionnaire into different sections, with descriptions intended to increase validity, ensured that participants provided appropriate responses. Furthermore, the researcher personally conducted the interviews to ensure that responses will correlate with the study purpose. In cases where interviewees experienced difficulties in understanding the content, the researcher provided a breakdown of the questions without responding to the question. Additionally, interviews enable the researcher to measure consistency between the responses of the municipal planners and those of experts. The research reveals that there is reliability and validity in the research findings, as is made evident in Chapter 6 to Chapter 9 of this study. The use of both qualitative and quantitative methods to confirm data accuracy is referred to as triangulation (McNeill & Chapman, 2005), which can be regarded as a method for bridging the gap between positivism that is based on quantitative measures and interpretive approaches that are based on judgments.

5.9 STUDY LIMITATIONS

The limitations of this study relates to the location, time horizon, methodology, and scope. The study focuses on the municipal planning practices of sampled provinces in South Africa, without attempts to include cross-national municipal practices. Further, the study restricted the respondents from each participating municipality to one person, given the differences in the capacity that exists in local authorities. The fact that the research mostly studied the

practice of local authorities and perceptions on the proposed turn of EJ in planning, the use of one respondent is viewed to have a negative effect on the research findings. In addition to this, the distances between provinces and the locations of critical informants made it impossible for all interviews to be held face-to-face. Inadequate financial resources also restricted traveling to most of the interviewees and respondents, and accordingly, the researcher utilized telephone communications for some interviews and emails for the distribution of questionnaires.

The study has also not studied the performance of municipalities from a longitudinal perspective, but instead applied a cross-sectional design. A longitudinal design, however, would only have worked if South Africa had an adopted EJ planning framework, currently under implementation. This type of design can, therefore, be effective after an overhaul of municipal practice that incorporates the requirements of EJ as revealed in this study. Thus, the guidelines or framework for implementing EJ in planning can serve as the basis for a later longitudinal study. The research focused mostly on the responses of municipal planners in understanding spatial planning practice on EJ, without assessing spatial development frameworks, land use schemes, and records of decision-making. Moreover, the study is not comprehensive in its approach of studying planners outside the employ of local authorities, as it focused on experts in planning, as opposed to the community of planners who work in the private sector. The length (10 pages) of the questionnaire administered in the study may also have negatively affected the response rate on the number of returned questionnaires. The challenge of response rate might emanate from the fact that the researcher did not undertake an exploration study with some municipal planners prior to the full scale survey.

5.10 STUDY ETHICAL CONSIDERATION

According to Crowther and Lancaster (2005), theories of ethics vary in determining ethicality, and it is thus crucial for a researcher to determine the ethical standards that can guide the research. The researcher followed the ethical standards prescribed by the University of Pretoria. In complying with the university's standards, the South African Local Government Association (SALGA) issued consent, granting permission for the undertaking of the study in all municipalities. The researcher found it unrealistic to secure approval from every municipality, and instead opted for submitting a permission request to SALGA. SALGA is an association that safeguards the interests of all municipalities in the country as affiliates. Subsequently, the university granted ethical clearance after considering the research proposal and permission letter from SALGA. Appendix 5 presents the ethical clearance approval. The researcher also issued interviewees in conjunction with consent forms for

completion prior to the scheduling of an interview. All interviewees signed the consent form as confirmation of understanding the set ethical standards of the research.

Further, the researcher observed and complied with the fundamental principles of ethics that define sound research. These principles, according to Flick (2007), include the availability of informed consent, avoidance of deception, respect of privacy and maintenance of confidentiality, data accuracy on collection and interpretation, respect of participants, and specific rights and responsibilities of the respondents. In literature, ethics refer to the fundamental principles of morals or codes of conduct that guide the manner in which people act, behave, or do what they do (McNeill and Chapman, 2005; Hammond and Wellington, 2013). Accordingly, Walliman (2011) argues that ethical issues are always relevant when research involves participants. The consideration of ethical issues in research also strengthens trust and relations between a researcher and participants. The questionnaire utilized in the study incorporated an ethical or moral statement that addresses the issue of responsibility, and the rights of participants in its section about privacy and confidentiality. The circulation of research questionnaires to the study participants through emails included the letter received from SALGA as an attachment. The SALGA letter reduced fears among participants, as in general, government officials are not in support of responding to questions about their institutions and practice in fear of being quoted based on the researcher's experience. Hence, McNeill and Chapman (2005) contend that safeguarding of participants' privacy and maintenance of confidentiality is essential in research. In ensuring confidentiality, the questionnaire neither required the name of a respondent nor the name of the specific municipality. Further, during the data population and analysis, respondents of questionnaires had unique codes issued to them, such as KZNM1 who represented KwaZulu-Natal province and metropolitan. Likewise, the analyses of the interview results included coding, whereby the identity of an interviewee was represented as KI and a random number, e.g. KI01, in attempt to maintain confidentiality. The interview results, therefore, did also not incorporate any identifying information for interviewees.

5.11 CONCLUSION

In summary, this chapter illustrated that the study adopted a mixed-research approach. It is apparent in the discussion that the study focuses on seventy-one municipalities, selected from six provinces within SA. These municipalities include seven metropolitans, thirty-one districts, and 138 local municipalities. Further, the chapter highlighted the fact that one planner represented each participating municipality, given the varying existing capacities in local authorities. The data collection methods included the survey through administration of

questionnaires, interviews of nine planning experts, and a literature review (books, journals, reports, legislation, etc.). The above discussion also illustrates that the analysis of data comprised qualitative and quantitative data analysis methods, drawing its foundation from the philosophies of interpretivism and positivism. Furthermore, the chapter revealed the limitations of the study as comprising its cross-sectional time horizon, local approach, inclusion of the perceptions of a limited number of municipal planners, inadequate financial resources for data collection as well as its lack of review of planning policies (SDFs or land use schemes), and records of decision-making. Lastly, the chapter demonstrated the researcher's compliance with ethical considerations. In conclusion, the researcher undertook the study by adhering to the research conditions that are proposed in the literature as important in ensuring the successful completion of a research study.

6. CHAPTER 6: THE ENVIRONMENTAL JUSTICE TURN IN PLANNING

6.1 INTRODUCTION

This chapter summarises findings on the perceptions of municipal planners about the environmental justice (EJ) turn in planning, as it concerns the proposed principles and propositions. Firstly, the chapter provides a brief evaluation of planning theories as an extension of the debates in Chapter 3. Secondly, a discussion about the findings on municipal planners' familiarity with, and understanding of, EJ follows. Lastly, the chapter concludes with a discussion on the potential value of the proposed third-generation planning approach.

6.2 SPATIAL PLANNING THEORIES AND ENVIRONMENTAL JUSTICE

Chapter 3 of this research report classified planning theories, and by extension spatial planning theories, into two categories that comprise the first-generation planning approach and second-generation planning approach. In literature, both Rittel and Webber (1973) and Cloke and Little (1986), perceive the first-generation planning approach to be apolitical, scientific and technical. The planning theories in this approach consist of the rational-comprehensive, incremental and mixed scanning planning theories. This study, however, suggests that these theories do not incorporate most of the EJ traits, with the exception of its partial incorporation of the just policy dimension of EJ. Table 6-1 shows an evaluation of spatial planning theories based on the literature and criteria that relates to the dimensions of EJ¹¹.

Table 6-1: EJ evaluation results in spatial planning theories

Planning approaches	Planning Theories	Criteria: Dimension of Environmental Justices							
		Distributive Justice	Recognition Justice	Procedural Justice	Substantive Justice	Capability Approach	Just Policy	Overall	
First	Rational planning	X	X	X	X	X	-	X	

¹¹ Bongane Ntiwane & Johnny Coetzee 2018 in a paper Titled "Environmental justice in the context of planning" available at <https://doi.org/10.18820/2415-0495/trp72i1.7> provide a detailed discussion on the findings regarding the extent to which spatial planning theories consider EJ.

Planning approaches	Planning Theories	Criteria: Dimension of Environmental Justices							
		Distributive Justice	Recognition Justice	Procedural Justice	Substantive Justice	Capability Approach	Just Policy	Overall	
generation	Incremental	X	X	X	X	X	-	X	
	Mixed scanning	X	X	X	X	X	-	X	
Second generation	Advocacy	-	-	-	-	-	-	-	
	Transactive	-	-	-	-	-	-	-	
	Communicative	✓	✓	✓	✓	-	X	✓	
	Overall	-	-	-	-	-	-	-	

Source: Own construction, 2018

X represents no incorporation

- represents limited incorporation and

✓ represents full incorporation

The above table clearly indicates that the first-generation planning approaches lack the incorporation of EJ requirements. The inclusion of society, as central to the achievement of EJ, is explained in detail in the preceding chapters. However, it is evident that an expert-driven policy takes precedence in the first three technical planning approaches; hence, the resulting failure to recognize substantive issues. The results in Table 6-1 show that these theories espouse the notion of just policy in their frameworks to a limited degree. The plan monitoring and evaluation that these theories incorporate in their structures respond to the requirements of just policy, because plan monitoring and evaluation in these theories require planners and implementers to assess the performance of an implemented plan. In a case where a plan appears ineffective, these theories make provision for the review of implemented solutions and adoption of new alternatives. The just policy requires the adequate monitoring and evaluation of the consequential effects that derive from an implemented spatial planning policy. In line with just policy, plans may become amended through a restorative approach if they appear to include negative effects on the environment. The restorative approach entails finding a way, by means of reconciliation, in addressing these effects and in some instances, is characterised by bargaining that involves compensation. The debates in literature and the confirmation that the National Planning Commission (2012) presents about the spatial inequalities evident in South Africa, constitute veridical proof that there is a lack of monitoring the effectiveness of spatial planning. The

researcher considers this lack of monitoring as central to the effectiveness of spatial planning because proper monitoring in implementation can lead the government to change its approach to spatial planning. Previous experiences of implementation facilitate an opportunity for learning about various successes, failures and potential areas of improvement. Therefore, monitoring and evaluation can assist planners and implementers in learning important lessons. The intention of these theories, with respect to their approach to monitoring and evaluation may have been good; however, their exclusion of the general public in planning and implementation is one of the reasons for their failures.

On the other hand, Table 6-1 indicates that the second-generation planning approaches, which include the advocacy, transactive, and communicative planning theories, have performed better than the first-generation planning approaches on their incorporation of EJ. According to Rittel and Webber (1973), deliberation, collaboration and argumentation are central to the nature of the theories that are contained in the second-generation planning approach. Table 6-1 highlights the point that the advocacy and transactive planning theories incorporate EJ, albeit to a less considerable extent. These theories allow distributive, recognition, procedural and substantive justices; and the achievement of just policy, which include the consideration of capabilities for the represented members, or the poor population, in the case of advocacy planning and the client or receiving community in the case of transactive planning theory. The limited extent of these theories in espousing EJ is unquestionable evidence that the achievement of EJ requires more than the current framework comprising these theories. EJ indubitably requires the consideration of all conditions of the environment, without the exclusion of any stakeholder.

Conversely, the results demonstrate that the communicative planning theory, which incorporates the collaborative and bargaining theories performed better than all the other planning theories. This theory on distributive justice enables all affected, and interested, parties to discuss the distributive injustices that exist in areas under planning. The fact that the theory allows various stakeholders to deliberate on planning matters supports procedural justice from the representational point of view. Further, the theory provides planning authorities or implementers with an opportunity to treat all parties that are involved in planning, equally and impartially, in fulfilment of ethicality as a requirement of procedural justice. This theory provides a platform of participation, which confirms the ability of the theory to achieve substantive justice. These findings underscore the point that the advent of the communicative turn in planning introduced the characteristics of justice by widening the scope of planning to include society in planning processes. Although the communicative turn performs best in a number of EJ dimensions, it presents no incorporation of just policy

requirements, and has limited incorporation of the capability approach requirements. The rationale for its failure on the two dimensions of just policy and the capability approach has its foundation in Habermas's notion of rationality. According to Roy (2015), Habermas's rationality underscores the fact that the influence of leadership or parties and predefined conditions play no role in deliberation and engagements. In effect, the capability approach requires planning to define capability for achieving outcomes. The exclusion of sectors such as government departments and parastatals in deliberations and the limited understanding of existing conditions (biophysical, socio-economic and cultural) of the environment makes it cumbersome to fully define the capabilities of these sectors and environments to support implemented plans. The definition of capabilities requires the participation of sectors in spatial planning to confirm their capability in achieving planning outcomes. Habermas's rationality approach, enshrined in the epistemology of the communicative turn, renders the capability definition as unattainable because the understanding and exposition of capabilities require those with power and influence to form part of planning deliberations. The successful realization of EJ demands commitment from the influential leaders in power. Moreover, measuring the effects of planning and implementation with regards to the spatial geography and quality of life is impossible without an understanding of the preconditions of an area and the inclusion of required sectors in spatial planning. Therefore, the communicative theory lacks the capability of fulfilling the critical requirement of just policy, which is dependent on the monitoring and evaluation of planning effects.

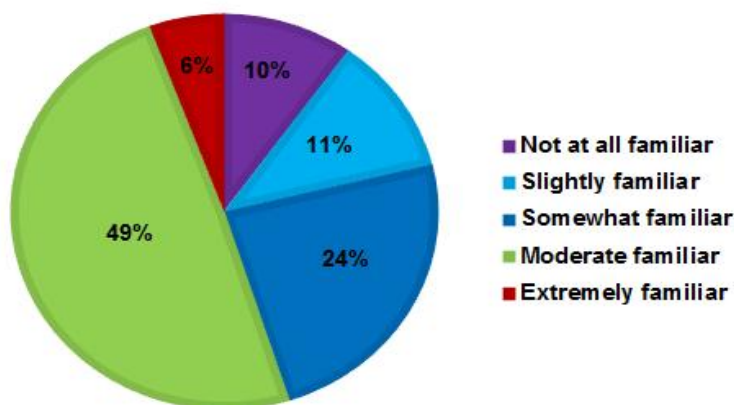
Overall, Table 6-1 indicates that both the first- and second-generation planning approaches incorporate EJ to a less considerable extent. Unquestionably, the EJ gap in planning theories illuminates the need for the EJ turn in planning. For instance, Byrne and MacCallum (2013) revealed the absence of EJ in Australian planning practice and education, which can be seen as a sufficient rationale for a new turn in planning practice. In Australia, this experience is analogous to the praxis of South African spatial planning, which preserves the scars of apartheid by retaining ineffectual performance on spatial transformation. The planning legislation of the country, SPLUMA, introduced spatial justice in its development principles. According to the legislation, the spatial justice principle aims to redress spatial imbalances, promote the inclusion of previously excluded persons and areas in planning, enhance the promotion of tenure rights and facilitate the upgrading of informal settlements and access to land by the previously disadvantaged groups. The principle of spatial justice addresses the distribution justice dimension of EJ through its goal of redressing spatial imbalances. In addition, this principle, from a recognition justice point of view, promotes the recognition of previously disadvantaged areas and persons in planning. However, the recognition of persons and areas without recognition of their socio-economic, cultural, and

biophysical conditions renders the recognition process incomplete. The shortfall of the principle of spatial justice in the Act lies in the absence of a detailed exposition of its requirements. Further, it fails to address capabilities of the environment to achieve its intended goal. The spatial justice principle is also implicit in the creation of platforms for inclusion, despite the fact that the principle merely refers to the inclusion of previously excluded persons. In what follows, support for the contention that EJ is unpopular among planners in the country will be explained.

6.3 FAMILIARITY OF MUNICIPAL PLANNING WITH ENVIRONMENTAL JUSTICE

The implementation of measures that can assist in achieving EJ depends on an understanding of the concept itself. Figure 6-1 shows that six percent of the planners in municipalities are ‘extremely familiar’ with the concept of EJ but this represents the gap that exists in planning education. This is supported by the fact that the regression analysis in Table A1 of Appendix 4 shows that there is no relationship between the education level of planners and their familiarity with EJ. Table A1 shows a coefficient of 0.22, with a *p* value of 0.06, between the education level of the municipal planner and their familiarity with the EJ concept. The coefficient of less than one demonstrates that the education level of municipal planners can only influence planners’ familiarity with the EJ concept by 22%. The *p* value also indicates that there is insignificant evidence to support this influence. This analysis indicates that the understanding of EJ is not evidenced by means of the qualification, suggesting an absence of EJ in planning education. Participant K108 revealed that streamlining environmental justice into the curriculum of planning schools could improve its flow into industry and an analysis of the education level and its influence with planners’ familiarity with the EJ concept confirms this articulation.

Figure 6-1: Respondents’ familiarity with environmental justice



Source: Author’s Fieldwork, 2018

On the other hand, 49% of the respondents are 'moderate familiar' with EJ, whereas 24% of them are 'somewhat familiar' but the achievement of EJ requires planners to adequately comprehend the importance of EJ. The high percentages on the scales of 'somewhat' and 'moderate familiarity' confirms the reason behind the unchanging status of South African spatial geographies, and spatial planning challenges in general. Municipal planners are not the only stakeholders involved in planning but are responsible to provide direction on planning matters. Political heads and managers in government depend on the plans that planners prepare for implementation. Further, the results indicate that only 11% of the participants are 'slightly familiar', while 10% of the planners are 'not at all familiar' with the concept of EJ. The finding of planners who are 'not at all familiar' with EJ confirms the argument of Byrne and MacCallum (2013), with regards to Australia, to some extent because these authors mention the absence of EJ in Australian practice and education. In addition to this, it can be said that the implementation of EJ in South Africa becomes implicit, given the absence of an EJ framework, which may also be the reason for municipal planners' unfamiliarity with EJ. SA is incomparable with the USA with respect to the streamlining of EJ into planning. The USA as revealed by Baptista, Sachs and Rot (2019) in the assessment of cities extensively incorporates EJ in its planning systems, in particular laws. South Africa in promoting EJ should first focus on developing a framework that is explicit regarding the integration of EJ in planning than a mere reference to spatial justice.

Furthermore, Tables A1 and A2 in Appendix 4 confirm that there exist no relationship between the experiences of planners, SACPLAN registration and the levels of familiarity with EJ. The statistical data presents a constant correlation (r) of 0.1 between the variable of experiences of planners and SACPLAN registration with their levels of familiarity with EJ. These results suggest that, all planners require capacity building about EJ in order to achieve it, whether they are experienced, inexperienced, registered or unregistered. Hence, the proposal of this study is to introduce a new turn of EJ in planning practice and theory in an attempt to improve the effectiveness of spatial planning in general. This new turn of EJ in planning is, therefore, a third-generation planning approach and **justice** is of prime importance to this approach. The survey questionnaire also requested planners to explain their understanding of EJ. Unsurprisingly, merely 45% of these planners responded to this question. Table 6-2 provides the municipal planners' understanding of EJ and although the respondents in the survey had the right to choose to respond or not to respond to any question in the questionnaire, the fact that over 50% of planners failed to explain EJ affirms that EJ is either unpopular or unknown among planners. The following discussion offers an analysis of municipal planners' responses about their understanding of the EJ concept.

6.4 PLANNERS' UNDERSTANDING OF ENVIRONMENTAL JUSTICE

Planners' understanding of EJ, as indicated in their definition of EJ, reflects their awareness of some of the EJ dimensions. This discussion commences with interviewed planners' understanding of the concept of the environment because of the fact that this concept tends to receive multiple interpretations, both in practice and in theory. The discussion then concludes with a detailed analysis of 'EJ' within the context of participants' responses.

6.4.1 THE VIEW OF PLANNERS ON THE CONCEPT OF ENVIRONMENT

The term environment encapsulates socio-economic, biophysical, and cultural conditions, and includes the relationship of these conditions. This study uses the term 'environment' to mean a system that includes the components and functions of the natural capital (e.g. water, wetlands, soil, air, and land), with its wildlife, and including the socio-economic and cultural conditions of human beings. This definition underscores the land ethics articulation of a biotic community and anthropocentric view, which advocates for a relationship between the natural environment and the socio-economic conditions of human beings. Participants KI04 to KI06 stated that the environment consists of both the social and physical environments. This indicates the dichotomous nature of the environment. It is also apparent that spatial planning cannot isolate the physical environment (living and non-living organism) from the social environment. KI06 also indicated that the term 'environment' consists of economic conditions but it can be argued that the economic conditions are an integral part of the social conditions. Spatial planning's attempts to improve social conditions rely on an understanding of the economic conditions that inform spatial planning policy direction and strategy. On the other hand, KI01 mentioned that the environment comprises the political, economic, social, institutional, technological, ecological and physical spheres, which represents a holistic view of the environment. This view, furthermore, illuminates the interdependency of conditions within a broader environment. These explanations stand in agreement with the argument of Brownlie *et al.* (2006), who posit that the environment consists of the social, economic and cultural conditions as well as the biophysical environment, and living organisms. This is also supported by the definition that NEMA provides. Furthermore, the National Planning Commission (2012:234) states that "the physical and social environment in which we are born and grow up is one of the most important determinants of every person's well-being and life chance". Therefore, South Africa comprehends the environment from a holistic point of view. Although the understanding of the concept of the environment is centred in both the physical and socio-economic conditions, KI06 argues that strategies for environmental

issues have exclusively prioritized the physical conditions of the environment in the past. This argument arises from the fact that, previously and prior to the adoption of NEMA, environmental laws and policy concentrated more on the physical environment. Conversely, in the past, spatial planning practice and policy viewed the biophysical environment as isolated from planning practice. In support of this argument, Ntiwane (2012) reveals that there exists a lack of biophysical consideration in the spatial development frameworks and land use schemes of municipalities within the Ehlanzeni District municipal area of jurisdiction in South Africa.

The challenges evident in planning, therefore, have an influence in broadening the scope of what is understood by the concept of environment. The exposition of the concept of the environment also forms the basis of the discussion on respondents' views on the concept of EJ.

6.4.2 THE VIEW OF PLANNERS ON THE CONCEPT OF ENVIRONMENTAL JUSTICE

EJ refers to the fair and equitable distribution of environmental resources, services, and activities to everyone, regardless of social structure, through recognition and the capability approach, providing equitable access to participate in appropriate procedures with substantive means towards achieving restorative processes and benefits. According to KI04, justice is about balance and fairness, which is congruent with Rawls' notion of justice as fairness. According to Rawls (2001: 14) "the theory of justice as fairness includes the idea of society as a fair system of societal cooperation and the idea of a well-ordered society, the idea of the basic structure of a society, the idea of the original position; the idea of citizens as free and equal persons and the idea of public justification". In spatial planning, the idea of society as a fair system of societal cooperation represents procedural, substantive and recognitive justices that allow for fair rules in terms of engagement, deliberation, argumentation, and collaboration. The second idea of a well-ordered society conveys the view that a society understands and accepts the required level of spatial transformation by reaching consensus on the adoption and enforcement of spatial planning policy and regulation. According to Rawls (2001), the third idea of society's basic structure refers to the balance between the political and socio-economic structures of society. In this context, spatial planning cannot make and implement plans without considering the ethos that is espoused in the legal framework, norms and standards, traditional customs, tenure rights and economic form of the country. Rawls (2001:15) also refers to a fourth idea as the "the veil of ignorance", which implies that society cooperates without any preconditions or status. In spatial planning, this perspective implies that the participation of parties should not identify

the class, sector or society that each party represents, when defining and agreeing on a course of planning that can redress injustices. The veil of ignorance, however, constrains the capability that parties in planning may present with. In addition, the fifth idea of citizens as free and equal, suggests that there should be fairness in the treatment of stakeholders in planning processes, as all parties have an equal responsibility to support causes aimed at improving their life. Finally, the idea of public justification implies that the rationale for spatial planning, and its implementation of policy, must exist in the public domain, so as to provide clarity whenever conflict or resistance becomes salient.

The Rawlsian theory of justice is, therefore, the foundation of any form of justice and Table 6-2 shows that 31% of the respondents underscored fairness as being a rudimental element of EJ. According to KI05, EJ is related to conservation from a physical point of view, whereas EJ regards the adequate supply and convenience of services and amenities in planned communities from a social point of view. This definition represents the original definition, whereby EJ focused on distribution. The definitions of EJ provided by respondents ECL10, ECD9, ECD33, KZNL29, WCLA4, KZNDF26, and WCLC19 correspond with the US Environmental Justice Agency's definition of EJ, as presented in Table 2-1. A total of 81% of the respondents support KI05's distributive justice notion, which can be understood along the perspectives of either procedural justice or recognitive justice but 22% of these respondents defined EJ exclusively within the context of distributive justice. This finding confirms that even though South African planners have a moderate familiarity with the conception of EJ; the majority of them comprehend the shift from distributive justice to other dimensions of EJ. Further, it is apparent from Table 6-2 that most of the planners (50%) also perceive EJ from the construct of procedural justice, which advocates for the involvement of society in planning and implementation. This can be explained by participating planners' background, especially concerning their experiences with integrated development planning regulated by the Local Government: Municipal System Act, 2000 (Act No. 32 of 2000) which requires public participation in planning policy adoption and accounts for the high percentage of procedural justice in their definitions. Furthermore, most of the planners who incorporated the procedural construct in their definition, also included the recognitive perspective of EJ. This is in line with Schlosberg (2004), who expressed the point that any initial thoughts on EJ necessarily relate to the dimensions of procedural and recognition justices.

Table 6-2: The views of planners on the concept of environmental justice

Respondents' Codes	Definition	EJ dimensions	Incorporation of fairness
ECL10	"The fair treatment and involvement of all people regardless of gender, race, wealth, background, with respect to planning development and enforcement of environmental law."	Procedural, cognitive, distributive	Yes
ECD9	"The fair treatment and the promotion of all people in the developmental programmes of government (from National, Provincial, District & Local municipality), implementation and enforcement of environment laws, policies, and regulations."	Procedural, cognitive, distributive	Yes
ECD33	"The fair application of environmental laws, policies, procedures and regulations without prejudices to people and the environment. EJ necessitates the full participation of all affected stakeholders in all procedures, decisions and actions taken."	Procedural, cognitive, substantive, distributive	Yes
ECL5	"Environmental justice obtains where relations between people, within and between groups of people, and between people and their environments are fair and equal, allowing all to define and achieve their aspirations without imposing unfair, excessive or irreparable burdens or externalities on others or their environments, now and in the future."	Procedural, cognitive, distributive	Yes
ECL6	"Involvement of people in the development and implementation of environmental policy."	Procedural, cognitive	No
ECL8	"a sound involvement of all people in relation to the implementation of environment laws and regulations."	Procedural, cognitive	
ECL14	"It is a process where there is a promotion of sustainable environmental protection. It is also a process where the environment is not compromised by economic development. Instead, there is a synergy between economic growth and environmental protection."	Distributive, capability approach, cognitive	No

Respondents' Codes	Definition	EJ dimensions	Incorporation of fairness
ECL18	"Environmental Justice entails the fair treatment of the environment."	Procedural, recognitive, distributive	Yes
ECL26	"It is the sustainable development that is fair on both the environment and the people, mostly the poor who are mostly affected by environmental degradation because of development."	Procedural, recognitive, distributive	Yes
ECL29	"Entails the protection and conservation of certain environmentally sensitive areas (forests, rivers, estuaries or certain biomes). It entails planning for certain climatic changes or disturbances such as tornadoes, floods etc., in order to protect communities that might be affected by such. It further entails awareness about environmental laws, threats, important "environmental area[s]."	Distributive, recognitive	No
ECL31	"Involvement of people to implement regulations."	Procedural	No
ECL32	"It is the sustainable development which is guided by the involvement of people from the planning phase to the implementation phase."	Procedural, capability approach	No
ECL39	"Ensuring equitable access and control of the world around us by all stakeholders that interact with it."	Procedural, recognitive	Yes
ECM2	"A concept that places the well-being of people at the centre rather than plants and animals. To ensure people (poor and powerless people) do not experience the deterioration of the environments i.e. water pollution, air pollution and inadequate housing."	Distributive, recognitive	No
ECM3	"It has something to do with fair treatment of all people irrespective of the race/colour of skin ensuring proper engagement in environmental planning and management."	Procedural, recognitive, distributive	Yes
KZNDC10	"Encompasses the implementation and enforcement of environmental laws in a	Distributive	No

Respondents' Codes	Definition	EJ dimensions	Incorporation of fairness
	sustainable and environmental manner.”		
KZNI44	“Promotes public participation in line with public administration justice Act.”	Procedural	No
KZNLB8	“The fair distribution and accessibility to environmental resources and impact.”	Distributive	Yes
KZNL16	“It is about ensuring that the best interests of the environment are prioritized to allow for the uninterrupted function/operation of such.”	Distributive	No
KZMLE22	“Process of ensuring that environmental systems/ processes are inclusive (open to people of all races and backgrounds) which also encompasses strengthened environmental protection in areas that were previously disadvantaged.”	Distributive	No
KZMLE24	“Representation of the environment in planning and development.”	Distributive, cognitive	No
KZNL29	“Fair treatment, transparency and meaningful involvement of all people regardless of their race, colour or income with regard to development, implementation and enforcement of environmental laws, regulations and policies.”	Procedural, cognitive, distributive	Yes
KZNL40	“Environment and development within urban space use sustainability principles.”	Distributive, capability approach	No
LLB8	“Relates to protecting the environment for the benefit of everyone else (citizen).”	Distributive	No
WCLA4	“It is social construct that all people (i.e. race, ethnicity, income-level, etc.) have access and the right to live and work in a clean, healthy and safe environment. This entails to have access to clean water and healthy food, green open spaces and recreational facilities, etc. Environmental justice is a key factor (or should be) of environmental legislation and policy that the ‘environment’ of all people should be equally healthy and sustainable.”	Distributive, cognitive	Yes

Respondents' Codes	Definition	EJ dimensions	Incorporation of fairness
WCLE28	“Ensuring that adverse environmental impact of developments not to have negative/unfair effects on the surrounding community/ies or person/s.”	Distributive, just policy	No
KZNDF26	“Seeks to strike and ensure safe environment for all people as well as their involvement in the processes of development, implementation of environmental laws or policies, while protecting people from environmental hazards and promoting healthy environment.”	Procedural, recognitive, distributive, just policy	No
ECL11	“It is about ensuring environmental protection and sustaining the environment.”	Distributive, capability approach	No
KZNLG37	“The right for the environment.”	Distributive	Yes
WCLC18	“Respecting environmental rights as per relevant environmental legislation.	Distributive	Yes
WCLC19	It relates to the effective and fair involvement of all people of different background and economic classes with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”	Procedural, recognitive, distributive	Yes
MPLC17	“The right to quality of living needs to be balanced with the right to share a quality environment by all. This requires the balanced integration of social, physical and economic environments to ensure sustainability of living at all levels of planning.”	Distributive, recognitive, capability approach	Yes

Source: Author's Fieldwork, 2018

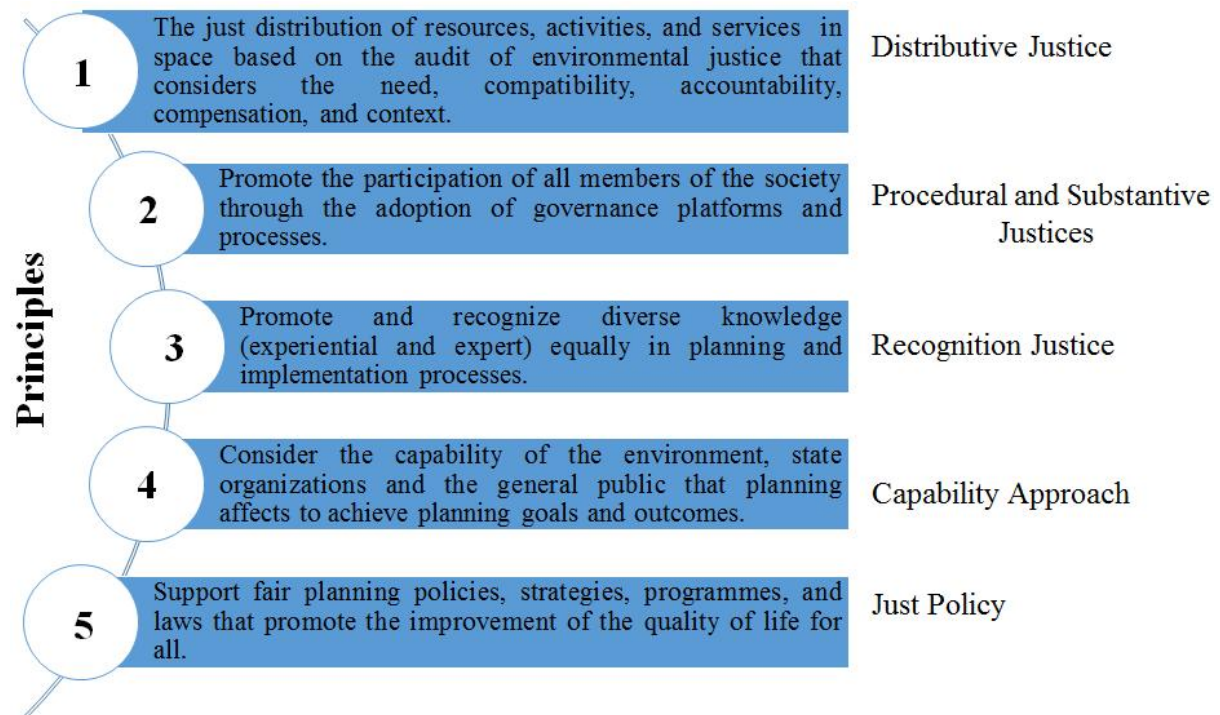
It is evident that only three percent of the municipal planners' views about EJ espoused the notion of substantive justice, whereas seven percent of the planners' definitions considered the capability approach by taking sustainability into account. The insignificant percentage of participants who responded with the incorporation of the construct of substantive justice indicate that planners are unaware of their responsibility to provide the institutions and means for public participation in spatial planning. The results also support the idea that substantive justice, the capability approach and just policy are unpopular dimensions of EJ among planners. The unpopularity of these dimensions relates to spatial planning's patent failure in redressing the spatial disparities and challenges that emanated from apartheid policies. This finding is in accord with the discourses surrounding EJ in the literature, which views the concept of EJ as firstly based on the distributive notion, before extending to include procedural and recognition justices. Therefore, the three dimensions of substantive justice, the capability approach, and just policy are the new lenses from which distributive, procedural and recognition justices can be viewed. Further, the results in Table 6-2 confirm that the environment is not exclusively about natural resources, as most of the respondents defined EJ as a notion that allows for a balance between the physical and socio-economic environments. This balance is crucial to guide the equal treatment of persons and various conditions of the environment. EJ as discussed in Chapter 2 requires the fair and equitable distribution of environmental resources, services, and activities to everyone. This distribution depends on the application of recognition, procedural and substantive justices, the capability approach and just policy and; therefore, it is crucial to understand municipal planners' support for the implementation of the proposed principles that underpin EJ.

6.5 SUPPORT OF ENVIRONMENTAL JUSTICE PRINCIPLES IN PLANNING

There are five proposed principles of EJ in planning, itemized in Section 3.7.1 of Chapter 3 in this report. This study's respondents indicated their levels of support by scaling each principle on the scale of 'strongly agree', 'somewhat agree', 'neutral', 'somewhat disagree' and 'strongly disagree'. Each principle aligns with a specific dimension of EJ, as illustrated in Figure 6-2. The realization of EJ in planning requires guiding principles that are supported by most planners and government. Figure 6-2 presents the principles of EJ in planning. These principles are interrelated as is seen in the just policy principle, which highlights the just distribution of resources, activities and services in space and depends on the other principles to achieve fair and equal distribution. The realisation of fair and equal distribution also requires participation of members of societies through participation platforms.

These members include both experts and non-experts from society, regardless of their social structure. EJ must also provide for the assessment of capabilities in ensuring the sustainability of distributed resources, activities and services. These capabilities include those of the natural, socio-economic and cultural environment, state organizations and the general public.

Figure 6-2: Principles of environmental justice in planning



Source: Own construction, 2018

The last principles indicate the achievement of distributive, recognition, procedural and substantive justices, and the capability approach, which requires the implementation of fair planning tools (policy, laws, strategies and programmes) aimed at achieving an improved quality of life for all. The principles linked to the just policy dimension of EJ makes provision for the assessment of the effects on the environment that emanate from policy implementation through monitoring and evaluation. The assessment of these effects provides information on their successes and failures in the realization of distributive, recognition, procedural, and substantive justices, and the capability approach. In essence, the second, third and fourth principles are instruments for fair and appropriate distribution of land uses, including effective spatial planning implementation, that can provide for adequate monitoring and evaluation of policy effects.

Table 6-3: Responses on the support of EJ principles in planning

Scale	Number of Responses from Municipal Planners				
	The just distribution of resources, activities, and services in space, based on the audit of environmental justice that considers the need, compatibility, accountability, compensation, and context	Promote the participation of all members of society through the adoption of governance platforms and processes	Promote and recognize diverse knowledge (experiential and expert) equally in planning and implementation processes	Consider the capability of the environment, state organization and the general public that affects to achieve planning goals and outcomes	Support fair planning policies, programmes, and laws that promote the improvement of the quality of life for all
Strongly oppose	2	0	0	0	0
Somewhat oppose	1	1	1	1	1
Neutral	11	6	5	4	3
Somewhat support	21	23	19	21	12
Strongly support	36	41	46	45	55
Total of responses	71	71	71	71	71

Source: Author's Fieldwork, 2018

Table 6-3 demonstrates that a high percentage of planners 'strongly support' these principles. The findings reveal that the just policy principle is the most supported principle, followed by the capability approach principle, the recognition justice principle and the procedural and substantive justices' principle. The just policy principle highlights the support for fair planning, policies, strategies, programmes, and laws so as to promote the improvement of the quality of life for all. This principle is the basis for planning and implementation in spatial planning and emphasizes the importance of responsive spatial planning policies. It is through this principle that planning can allow strategies in implementation, monitoring and evaluation of policy, and execution to identify its effect on quality of life and spatial geographies in general. Planning policy central to the South African practice could explain the support that the just policy principle received. South Africa on

national planning has shown strength in terms of policy although implementation proves challenging. These policies include among others the National Physical Development Plan that was however based on apartheid policy (Oranje and Merrifield, 2010), Spatial Development Initiative, and Spatial Development Perspective (Oranje, 2010). These planning policies have since been replaced by the National Development Plan, Integrated Urban Development Framework (IUDF), and National Spatial Development Framework (NSDF) that is yet to be approved. At a local government level, municipalities have spatial development frameworks and other policies that guide planning in their areas of jurisdiction. There is a need to assess the extent of EJ in the content of these policies than depending on the observation of municipal planners as presented in this study.

More importantly, the capability approach principle enjoyed the second most support, probably because of its considerations regarding the capability of the environment, state organizations, and general public affected by planning in achieving planning goals and outcomes. These results imply that planners in municipalities understand the critical role that capability plays in planning. The capability of the environment also includes the ability of the physical environment, which by its very nature complements the socio-economic environment. The determination of this capability can also aid in the identification of critical and sensitive areas of the natural environment that should remain untouched, all the while promoting socio-economic development. Further, the consideration of the capabilities related to socio-economic development allows for the identification of the competitive and comparative advantages of a given area. Ultimately, this exercise can lead to the identification of activity nodes and corridors for development, aimed at promoting integration. According to KI01, in agreement with KI04, development corridors may play a critical role in redressing injustices that exist in the country's spatial geographies. The Draft NSDF identifies "national spatial action areas that integrate nodes and corridors such as the national transformation corridors, central innovation belt, national resource risk areas, national urban regions, and arid-innovation regions" (RSA, 2019:141-180). The interventions recommended in the Draft NSDF regarding the national transformation corridors which are mostly in former homelands areas previously deprived through apartheid planning policies, if implemented, could promote distributive justice. The achievement of distributive justice would mean the realization of spatial justice. The consideration of the capabilities of state organizations will aid in understanding the roles of each sector and the resources that each sector intends to contribute. The municipal planners' support of this principle, by extension, indicates that the current praxis of planning lacks capability consideration. It is obvious that if adequate capability consideration was evident in planning, the country would have long overcome the challenge of fragmentation and disparities in general.

Further, the responses of planners indicate that the recognition principle, which promotes and recognize diverse knowledge, both experiential and expert in nature, in planning and implementation processes, is the third most supported principle. The results reflect the fact that the failure to recognize the disadvantaged group in spatial planning is tantamount to planning for failure. Disadvantaged groups have unique experiences, situation, cultures and customs that demands increased consideration in planning. The support for this principle is indicative of respondents' recognition of the fact that that not all people in society are educated, and that there are those who are old and illiterate. In most cases, in the experience of the researcher, the old and illiterate people often exists as the memory of an area, as they possess knowledge about natural hazards that previously occurred there and they are most aware of areas of cultural significance. This information is crucial in planning, in particular for the distribution of activities and services. In the case of South Africa, most rural municipalities have areas under the jurisdiction of traditional authorities. The existence of traditional leaders can, therefore, also be a rationale for planners' support of this principle. The previous dispensation of planning that precedes the SPLUMA legislation excluded the participation of traditional leaders, which contributed to the traditional leaders' rejection of SPLUMA implementation in the country. By implication, planners understand that spatial planning is a societal activity that involves multiple stakeholders, as opposed to only being directed by technocrats.

The fourth principle relates to the procedural and substantive justice principles that promote public participation through governance platforms. The results show that public participation is integral in the South African planning system. The spatial planning system of the country lacks an emphasis on the means with which to achieve participation but this did not preclude planners from supporting this principle. The SPLUMA places no emphasis on spatial planning education and awareness. The failure of the spatial planning framework to promote the mobilization of the general public regarding spatial planning matters restricts public participation to include only selected stakeholders who understand spatial planning policies. This principle promotes the provision of institutions and the means for the public to participate in spatial planning policy making and implementation processes. This principle is similar to the recognition principle, the capability approach and the just policy principles, in that it received a constant one percentage of responses that 'somewhat opposed' it in planning, and zero percentage of responses that 'strongly opposed' it. By implication, planners understand that planning is incomplete without the involvement of affected communities and other sectoral stakeholders. Furthermore, between four and eight percent of respondents decided to remain neutral about their support of these four principles. This

inconsiderable percentage of planners that are undecided on these principles is an indication that even though a majority of planners are unfamiliar with the concept of EJ, only few will require extensive capacity building to understand the importance of EJ in planning. The last principle under discussion, and the one that received the least support, is the distribution justice principle, receiving only three percent of 'strongly opposed' responses and one percent 'somewhat opposed' responses. The results indicate that, although respondents supported all principles, the principle of just distribution of resources, activities, and services in space (based on an audit of environmental justice that considers the need, compatibility, accountability, compensation, and context) highly unsupported when compared with the support for other principles. The least support of this principle indicates the inadequate attention given to equity planning in municipalities. The results on this principle show that South Africa's municipalities are not centres of equity planning as Swanstrom (2017) suggests regarding local government. Additionally, fifteen percent of the participating planners remained 'undecided' on their support for this principle. The results shows that indeed the understanding of equality in planning, particularly the distribution of activities, resources and services is a challenge in municipalities. Although this principle received the least support, 29% and 43% of respondents 'somewhat' and 'strongly' support it, respectively. The results show that municipal planners do recognize the importance of fairness in distribution. In a country ranked with the most inequalities, it is an expectation that planners would prioritize equity in planning. The more the country delays the introduction of EJ in planning and empowering of municipal planners on equity planning, there wider the gap of inequalities.

In general, the results also provide a sequence of prioritization for the proposed principles of EJ in planning. The study's findings on the support of these principles clearly indicate that the most critical element in spatial planning is policy and strategy aimed at improving the quality of life. Furthermore, knowledge of the capability of the environment and of the sectors involved, acquired through inclusive and fair public participation that recognizes all parties, can inform spatial planning policy and strategy. The understanding of the environment that is affected by planning practice also has the potential to promote spatial transformation through the fair distribution of resources, services, and activities. The study's respondents unanimously agreed that these principles are interrelated, as demonstrated in the correlation Table 6-4. Table 6-4 indicates that there is no relationship between participating planners' SACPLAN registration status, experience, education levels and support on the proposed principles of EJ. These results are similar to the analysis that revealed the absence of a relationship between municipal planners' education level and their familiarity with the EJ

concept. By implication, planners' registration with SACPLAN and their level of education does not affect the importance of supporting these principles.

Table 6-4: Correlation between planners' backgrounds and support of principles

No.	Correlation Variables	1	2	3	4	5	6	7	8
1	SACPLAN Registration	1.000							
2	Experience of planner	0.236	1.000						
3	Education of planner	0.021	0.046	1.000					
4	Distributive justice principle	0.013	-0.107	0.103	1.000				
5	Procedural and substantive justice principle	-0.202	-0.043	-0.131	0.405	1.000			
6	Recognition justice principle	-0.244	-0.127	-0.007	0.288	0.834	1.000		
7	Capability approach principle	-0.157	-0.240	0.069	0.423	0.562	0.571	1.000	
8	Just policy principle	-0.154	-0.253	0.045	0.289	0.542	0.718	0.706	1.000

Source: Author's Fieldwork, 2018

Further, the table demonstrates a weak positive relationship between the distributive justice principle and other principles ($r = < 0.5$), whereas the procedural and substantive justice principle registers a strong positive relationship with the recognition justice principle, and a moderately positive association with the capability approach and just policy principle principles ($r = 0.5$). These results, on the association between the procedural and substantive justice principles with the recognition justice principle ($r = 0.8$), confirm that public participation in planning and recognition of all parties are indispensable to spatial planning. The relationship between the procedural and substantive justice principles and the capability approach and just policy principle principles implies that the understanding of capabilities and the implementation of policies, strategies and programmes in spatial planning, in conjunction with the fair public participation of all parties are fundamental elements to achieving EJ in spatial planning.

In addition, Table 6-4 illustrates a moderately positive relationship between the recognition principle and the capability approach principle ($r = 0.5$) and a strongly positive relationship between the recognition principle and just policy principle ($r = 0.7$), which indicate that recognition is a requirement for defining capability and for attaining appropriate spatial planning policy implementation. In essence, if a planner fails to recognize the role that a technical service department plays in a municipality, the capability of this department to realize a set spatial direction will be unknown. Lastly, the results show a strong positive association between the capability approach and the just policy principles ($r = 0.7$), which

suggests that a municipality will find it cumbersome to achieve spatial planning policy outcomes if no capability to execute it exists. This capability exists in the form of knowledge and skills, which includes the tools of trade such as personnel and finance. In the case of a biophysical environment, planning for development without preserving streams, wetlands, lakes and riparian zones could affect natural flow of water leading to the death of other species. In practice, planning for development requires a planner to undertake environmental impact assessments, calculation of flood-lines, and investigation of the geotechnical conditions of an area. These investigations enable the determination of the capability of the biophysical environment, in supporting a development. In cases where flood-lines exist, the affected areas receive a zoning status of public open space for its own protection. In areas where a municipality grants authorization for development in such areas, additional conditions for implementation and compliance on earthwork becomes unavoidable. In general, municipalities do not recommend development in floodline areas. The climate change conditions make it a fatal flaw to recommend development in such areas. Recently, floods affected various villages in the neighbouring country of Mozambique. The experience of Mozambique regarding floods demands planners to plan resilient towns that would withstand disaster by disallowing development in flood prone areas.

6.6 SPATIAL PLANNING IN THE NOTION OF ENVIRONMENTAL JUSTICE

The spatial planning notion of EJ consists of the propositions discussed in detail in Section 3.7 of this thesis. The discussion that follows provides the findings and analysis of the participants' perceptions regarding their agreement with these notions. These propositions includes spatial planning as just distributive action (distributive justice); multi-stakeholder democratic planning (procedural justice); contextual experience and learning (recognitive justice); a vehicle for governance (substantive justice); an action for capability assessment (capability approach), and an environmental restorative approach (just policy)¹². The proposition of spatial planning as a just distributive action responds to the distributive justice principle that advocates for the just distribution of resources, activities, and services in space, based on the audit of environmental justice that considers the need, compatibility, accountability, compensation, and context. Both the distributive justice principle and the notion of spatial planning as a just distributive action promotes fair and equal distribution of resources, activities, and services. Secondly, the proposition of spatial planning as multi-stakeholder democratic planning addresses the first part of the procedural and substantive justice principle. This principle highlights the need to promote the participation of all

¹² Section 3.7 in Chapter 3 discusses these notions in great detail linking their application to planning practice.

members of society through the adoption of governance platforms and processes. The multi-stakeholder proposition, therefore, requires planning to involve all stakeholders in a society regardless of social structure. By extension, the application of this proposition would require planning authorities and government to treat participants fairly, impartially and with ethicality while processing decisions objectively and consistently. Thirdly, the proposition of spatial planning as a vehicle for governance implements the latter part of the procedural and substantive justice principle, which requires planning authorities to adopt governance platforms and processes in planning for participation. The governance proposition advocates for planning that promotes education and awareness on planning matters, which makes it easier for the general public to participate in planning and implementation processes. The proposition of spatial planning as contextual and experiential knowledge promotes the principle that recognizes all diverse knowledge equally in planning and implementation processes. This proposition presents a notion of planning that is not only meant for technocrats because of the idea that both technocrats and non-technocrats suffer the effects of planning. The recognition of both experiential and expert knowledge also enables the recognition of socio-economic, cultural, and biophysical conditions of the environment. The proposition of spatial planning as an action for capability assessment supports the principle that requires consideration of the capability of the environment, state organizations and the general public affected by planning. Spatial planning, in this regard, demands the consideration of capabilities in an attempt to achieve planning goals and outcomes. Lastly, the proposition of spatial planning as an environmental restorative approach promotes the principle for supporting fair planning policies, strategies, programmes, and laws that promote the improvement of quality of life. This proposition accepts that quality of life can only improve by means of fair planning tools. The proposition of spatial planning as an environmental restorative approach views planning as the means to develop the planning tools that can assist in redressing environmental injustices. These tools address the requirements of the principles of distributive, recognition; procedural and substantive justices as well as the capability approach.

6.6.1 PLANNERS' AGREEMENT WITH THESE PROPOSITIONS

The effectiveness of spatial planning to achieve EJ requires propositions that support an EJ framework. The results in both Table 6-5 and Figure 6-3 indicate that most planners, or 50% of respondents to be exact, strongly agree that spatial planning is a multi-stakeholder democratic planning approach and a vehicle for governance. These findings agree with Hall and Tewdwr-Jones's (2011) claim that planning, and by extension spatial planning, happens

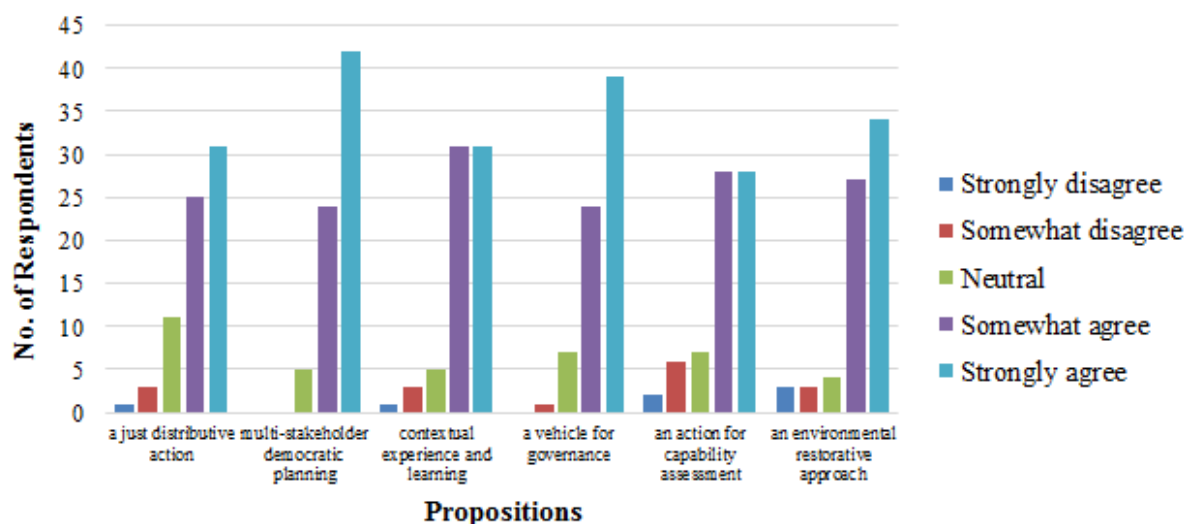
through an inclusive society. By implication, spatial planning is not exclusively for experts, but demands a fair inclusive process for its success. Further, the results show that planners recognize procedural and substantive dimensions of EJ as being fundamental in spatial planning. This recognition constitutes an existing expansion of the second-generation planning approach in spatial planning practice, yet with its own challenges of justice.

Table 6-5: Planners' agreement with propositions of spatial planning in the notion of EJ

Scale	Number of responses on Propositions: Spatial Planning as					
	a just distributive action	multi-stakeholder democratic planning	contextual experience and learning	a vehicle for governance	an action for capability assessment	an environmental restorative approach
Strongly disagree	1	0	1	0	2	3
Somewhat disagree	3	0	3	1	6	3
Neutral	11	5	5	7	7	4
Somewhat agree	25	24	31	24	28	27
Strongly agree	31	42	31	39	28	34
Total of responses	71	71	71	71	71	71

Source: Author's Fieldwork, 2018

Figure 6-3: Planners' agreement with propositions of spatial planning in the notion of EJ



Source: Author's Fieldwork, 2018

The third-generation planning approach requires planners and planning authorities to prioritize fair public participation in spatial planning by providing governance mechanisms to

ensure effective participation by the public. It is through this approach that justice in planning will become more visible, instrumental and effective. Additionally, the zero percentage for respondents who either 'strongly' or 'somewhat' disagreed with the proposition that spatial planning is a multi-stakeholder democratic planning reflects the fundamentalist nature of this proposition. Similarly, zero percent of municipal planners 'strongly' disagreed with the proposition of spatial planning as a vehicle for governance, with the exception of one percent of the respondents who 'somewhat' disagreed with it. Unquestionably, the improvement of planning theory by the acknowledgement of the communicative turn has, to a considerable degree, contributed to the perception of planners on these two propositions.

On the other hand, the proposition of spatial planning as an environmental restorative approach received the third most responses, by receiving 49% on 'strong agreement' from municipal planners. This is followed by the proposition of spatial planning as a just distributive action and the proposition of spatial planning as a contextual experience and learning, which shared a percentage of 44% on the same scale of 'strong agreement'. The proposition of spatial planning as an environmental restorative approach recognizes that spatial planning can improve the quality of life for everyone through fair responsive planning tools. The agreement of respondents with this proposition highlights the point that appropriate spatial planning has the potential to redress any physical and socio-economic injustices. In essence, appropriate spatial planning is a planning approach that applies the EJ principles in planning. In agreement with this contention, 55% of the municipal planners stated that spatial planning is likely to assist in the achievement of EJ, whereas 31% of the municipal planners perceived it with an extreme likelihood. These findings cast no shadow of any doubt on the ability of spatial planning to achieve EJ. The three propositions that spatial planning as a just distributive action, a contextual experience and learning, and an environmental restorative approach also received percentages between one and four on the scale of 'strongly disagree', with four percent being noted on the scale of 'somewhat disagree' concerning planners' responses. The insignificant percentage of respondents who disagree with these propositions is an indication of confidence regarding these statements among municipal planners.

The proposition of spatial planning as a just distributive action received a disappointing percentage of 15%, concerning the 'undecided' and 'neutral' responses, especially compared with the responses about other propositions that achieved percentages between seven and ten on the same scale. This percentage shows a pattern that is consistent with the fact that the distributive justice principle obtained the least support from respondents. The study's respondents satisfactorily agreed with the proposition of spatial planning as a just

distributive action even though responses to this principle also reflect the highest number of undecided municipal planners. Furthermore, the respondents agreed the least with the proposition of spatial planning as an action for capability assessment. It is evident that municipal planners perceive the need for other actions to address the issue of capability. Further research on this proposition can provide a more detailed explanation on this phenomenon. Although the proposition of spatial planning as an action for capability assessment received the least agreement, only three percent of the municipal planners 'strongly' disagree with it, whereas eight percent of them 'somewhat' disagree with it. The results show that the proposition obtained a constant 39% of responses on both the 'somewhat' and 'strong agreement' scales. Although with insignificant agreement on responses, planners do acknowledge the importance of capabilities in planning.

The regression analysis (see Table A3 of Appendix 4) of municipal planners' qualification, experience, and familiarity with EJ (independent variables) with their agreement about these six propositions reveals the absence of an association. The analysis demonstrates that there is a less than 3% chance of these variables to influence the municipal planners' support for the proposition of spatial planning as just distributive action, multi-stakeholder democratic planning, a vehicle for governance, contextual experience and learning, and an environmental restorative approach. Another analysis shows that these independent variables have a 12% chance to influence municipal planners' support for the proposition of spatial planning as a capability assessment. The regression analysis on this proposition explains the rationale for the minimal support it received that municipal planners afforded to it, as evident from the above discussion. The independent variables' (municipal planners' qualification, experience, and familiarity with EJ) minimal influence on the support of these propositions indicates that municipal planners, in general, agree that spatial planning is one mean, among others, with which to achieve EJ.

6.7 THE PLACE OF THE THIRD GENERATION PLANNING APPROACH

In the existing literature, there exists a plethora of reports on the lack of EJ in planning theory. Accordingly, this research addressed these reports with findings that indicate the gap that still exists in planning theories. The third-generation planning approach, to be specific the EJ turn in planning, has a place in both planning theory and practice. This approach, in theory, calls for the centralization of justice in planning application and conception. The approach illuminates the major principles that must guide planning theories. According to KI04, the third-generation planning approach can be a good system, whereas KI02 views the

approach as a good idea. This approach does not introduce any stages for its implementation, but rather presents guiding principles for incorporation in existing theory.

Further, the EJ turn in planning can improve the existing planning theories. For instance, in terms of enhancing the rational comprehensive theory, this approach requires the recognition of experiential knowledge, fair public participation supported by governance means, recognition of capability to receive and deliver planning outcomes, distribution of activities based on accountability, compensation, context and needs, as well as the evaluation of planning effects that consider all stakeholders throughout the planning and implementation process. This approach can also contribute to the communicative turn in planning, by requiring the consideration of inequalities and capabilities evident among stakeholders who participate in planning. In practice, the contention of KI04 is similar to the comments of other key informants to the effect that SPLUMA is a good spatial planning system, but with poor implementation. By implication, without proper implementation of spatial planning policies, the ineffectiveness of this new approach is unavoidable. KI01 stated that this new approach should allow the handling of planning issues in an uncomplicated way, while promoting easy-to-read policies. The standard requirement of the approach, therefore, involves the equal involvement of experts and non-experts in spatial planning processes. By implication, all strategies and processes employed in the formulation and implementation of spatial planning policies should accommodate all stakeholders equally. The discussion in Section 3.3, regarding the EJ principles in planning, provides the details and requirements of each principle. These details and requirements function as the precise guidelines for their application. More importantly, KI05 noted the importance of producing guidelines for the application of EJ in planning. Chapter 10 of this study provides detailed guidelines for the implementation of EJ in planning. Further, Section 3.7 of this report explains spatial planning in detail, from the perspective of EJ. Undoubtedly, the substantive argument advanced in this research constitutes guidelines that perhaps could become useful to most planners in the implementation of this approach. The approach can promote fairness in policy implementation, leading to improved quality of life. According to KI02, in practice, there is a need for roles and responsibilities to be clarified for effective implementation of this approach. Furthermore, KI03 asserts that an aggressive approach is needed for the implementation of EJ principles in spatial planning. Therefore, this aggressive approach will be characterised by an exposition of the roles and responsibility of each scheduled activity. In the context of spatial planning praxis, development principles are pervasive and part of the planning lexicon, yet the outcomes of their application remain marginal. The need for aggressive application would, therefore, require support across all sectors (academic, government, private etc.) of planning.

6.8 CONCLUSION

In short, the above discussion reiterated the need for the EJ turn in planning. However, this EJ turn requires capacity building on the part of planners in local government. The requirement for capacity building derives from the finding that merely 6% of planners in the studied municipalities are 'extremely familiar' with the concept of EJ and, although, the majority of these planners are moderately familiar with the EJ concept, only 45% of them provided their understanding of this concept. This finding is a confirmation that EJ is not popular among planners or in planning practice. The study also shows that the planners who provided their perceptions of the concept, ground it in the traditional notion of distributive justice, which necessitates the need for EJ education in planning. With regards to the EJ principles in planning, the study reveals that the principle that promotes the support of fair planning policies, strategies, programmes, and laws that can promote the improvement of quality of life is the most supported by planners. This principle represents the just policy dimension of EJ, and by implication, it takes precedence over the other principles of EJ in planning, as propounded in this study. The study also reveals that there is an interrelationship among all the principles of the EJ turn in planning. Therefore, their success in implementation depends on their simultaneous application. Furthermore, the results reflect that the backgrounds of planners (SACPLAN registration, experience, and levels of education) have no relationship with the support of each principle. It is also evident from the results that most municipal planners agree that spatial planning constitutes multi-stakeholder democratic planning, contextual experience and learning, a vehicle for governance, an environmental restorative approach and action for capability assessment, and just distributive action. In conclusion, EJ in planning introduces a new perspective of spatial planning that aims to address, not only distribution challenges but also substantive issues that are often poorly managed in planning. These issues include procedures, participation, empowerment; planning knowledge and capability as a response to sustainability and other planning effects.

7. CHAPTER 7: FACTORS IMPEDING AND ENHANCING SPATIAL PLANNING IMPLEMENTATION TOWARDS ENVIRONMENTAL JUSTICE IN MUNICIPALITIES

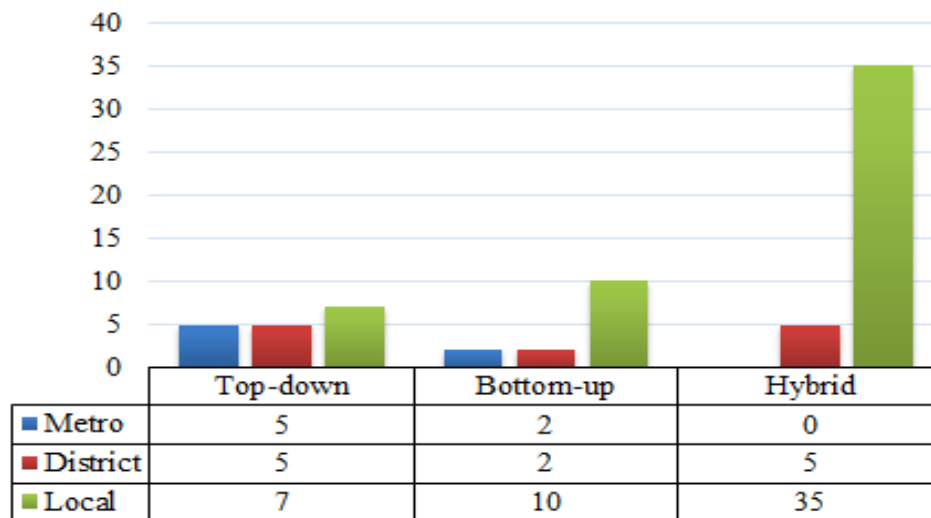
7.1 INTRODUCTION

This chapter responds to the question that relates to which factors are perceived by municipal planners to be either enhancing or impeding in the realization of environmental justice (EJ), especially in relation to the implementation of spatial planning. In addressing this question, the chapter starts by presenting the findings on the approaches to, and types of, spatial planning implementation (SPI) used by each participating municipality. In addition, it would also be ineffectual for this study to address this question without advancing an account of the appropriate and preferred approaches to, and types of, SPI that exist in municipalities. The chapter concludes with a discussion of the barriers and enablers that are perceived to enhance or impede the achievement of environmental justice in SPI.

7.2 MUNICIPAL APPROACHES TO SPATIAL PLANNING IMPLEMENTATION

The foregoing chapter on SPI demonstrates the existence of three spatial planning implementation approaches. These approaches comprise the top-down, bottom-up and hybrid approaches. The results shown in Figure 7-1 indicate that more municipalities use the hybrid approach (56%) in the implementation of spatial planning policies, when compared to the presence of the top-down (24%) or bottom-up approaches (20%) alone. These results confirm the fact that the participating municipalities give greater consideration to technical and substance matters in planning. The integrated development planning (IDP) process, which is legislated in South Africa, also explains the use of both approaches because it requires municipalities to conduct extensive public participation, thereby enabling communities to voice their planning needs. In terms of the planning process, it is important to note that public participation is unavoidable, even if the municipal council can independently facilitate and implement a plan. Although there are some municipalities that favour the top-down approach based on command and control, most municipalities do tend to recognize soft issues through the bottom-up approach. However, the adequacy of implementation in employing either the bottom-up or hybrid approaches remains contentious. Figure 7-1 illustrates a high number of responses indicating that local municipalities employ the hybrid approach more readily than other categories of municipalities.

Figure 7-1: Spatial planning implementation approaches in local municipalities (N=71)



Source: Author's Fieldwork, 2018

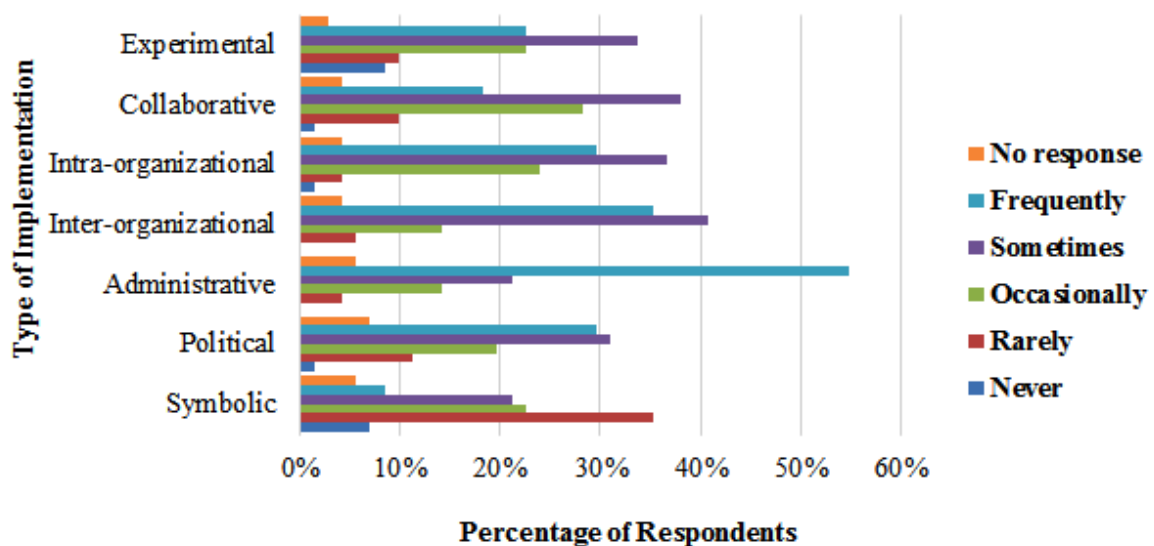
From the above figure, it becomes apparent that metropolitan municipalities appear to apply either the top-down or bottom-up approaches, while exhibiting a preference for the former. Connelly (2010) identifies weaknesses of public participation, by examining the review process of the City of Johannesburg's (CoJ) spatial development framework (SDF), which included a single platform of engagement, thereby hindering full participation in the process. The results of this study indicate that most metropolitan municipalities implement spatial planning policies utilizing the top-down approach, which supports Connelly's (2010) finding.

Nevertheless, the results overall illuminate the central nature of the second-generation planning approach, or communicative turn, in municipal planning. The reason for communicative planning's recognition can be attributed to the legal requirement of public participation in the South African planning legal framework. Moreover, the findings revealed that there is no difference ($p > 0.1$) between the responses of municipal planners on the application of approaches to SPI, when compared to the mean values of the responses on approaches used. However, the study reveals a significantly weak positive relation between municipal categories and the approach used to implement spatial planning, $r = 0,4$, $p < 0.001$. In this context, a change in the approach that is used has a weak significant association with the category of a municipality, which implies that there is no significant evidence of an association, from which to generalize metropolitan municipalities' use of the top-down approach to implementation in other metropolitan municipalities.

7.3 MUNICIPAL SPATIAL PLANNING IMPLEMENTATION STYLE OR TYPE

Each municipality adopts a style of spatial planning implementation in one way or other and to varying degrees. The results, therefore, indicate that municipalities prefer various styles or types of SPI. Section 4.4 in Chapter 4 of this report discusses seven types of SPI, comprising the administrative, symbolic, political, intra-organizational, inter-organizational, collaborative, and experimental types. Figure 7-2 and Table 7-3 illustrate the findings from the study in relation to each type of implementation. In addition, the discussion below presents analytical evidence on the type of implementation that each participating municipality uses.

Figure 7-2: Frequency of using a type of spatial planning implementation (n=71)



Source: Author's Fieldwork, 2018

7.3.1 ADMINISTRATIVE, SYMBOLIC AND POLITICAL

The results with regards to these styles highlight the fact that the most frequently applied type of SPI is the administrative type. The highest number (55%) of responses from municipal planners confirms that most municipalities focus more on compliance with legislative and governance frameworks than on outcome-oriented approaches. The results also accord with Long *et al.* (2012), who state that the Beijing Metropolitan's 2004 spatial plan, promoted a high rate of legal compliance. It appears that the fulfilment of administrative requirements is the most critical element in spatial planning. In this regard, the persistent use of the administrative type of implementation in South Africa can explain the persisting spatial disparities that remain evident in the country's geographies. Planners are more concerned

with fulfilling administrative requirements, as opposed to responding to the spatial planning challenges that affect society. The administrative nature of planning in the country can effortlessly facilitate the achievement of the just policy principle that supports fair planning policies, strategies, programmes, and laws that promote the improvement of the quality of life for all. The results imply that planners in the country with proper guidelines could be effective in realizing the just policy principle. It would be of interest to see whether in supporting a legal compliance approach, planning policies do promote conformity. Conformity measures the ability of a policy to achieve its intended objectives (Shahab *et al.*, 2019). It is undeniable that the South African spatial pattern remains divided, fragmented and segregated. Chapter 4 of this report revealed implementation as a severe planning challenge. Although implementation is problematic, the question of whether planning policies achieve their intended objectives requires answers to inform policy reforms or overhaul.

The findings also show that 35% of the municipal planners view their municipalities as rarely applying the symbolic type and 8% percent of these planners indicated that this type of implementation is never applied in their municipalities. The rare application of the symbolic mode of implementation confirms the notion that it is avoided because of its high level of ambiguity and conflict. The existence of coalition municipalities, particularly in the Gauteng, Eastern Cape and Limpopo provinces, explains the responses of 8% frequency on the use of the symbolic type of implementation. In these provinces, the general local government elections in 2016 led to the creation of coalition governments in some municipalities. Undoubtedly, implementation in such cases occurs more through reaching a consensus on sustaining a coalition than achieving spatial planning outcomes. Conversely, the coalition of the Liberal Democrats and Conservatives in Great Britain in around 2010 overhauled the spatial planning system (Sheppard & Ritchie, 2016). Municipalities that adopt the symbolic type of implementation often apply an uncertainty rule where there is no guarantee of policy implementation. Policy implementation necessarily takes place where consensus on planning priorities exists among parties in a coalition government. This style of implementation could assist in the achievement of all the principles of EJ if all parties in a coalition government are in agreement with plan implementation. Some municipalities in South Africa, where coalitions do exist, have, however, experienced either a collapse of the coalition or delayed plan implementation. The Buffalo City and City of Tshwane metropolitan municipalities are good examples where a coalition government collapsed. In the City of Johannesburg, the coalition government prioritized previously disadvantaged areas of the City improving services, including working conditions of its employees. Unfortunately, the City Mayor resigned owing to party politics, which could threaten the stability of the coalition government. The pro-poor or disadvantaged areas approach of the City Mayor in the

implementation of service delivery plans is an equity-oriented planning style that promotes EJ. This practice in the City of Johannesburg is not a general confirmation that a coalition government is innately equity-oriented in service delivery.

Lastly, it is evident from the results that the political type of implementation is evident across all categories of municipalities. Thirty percent of municipal planners believed that their municipalities use this type of implementation frequently, while 31% responded with sometimes and 20% responded with occasionally, whereas a mere 1% and 11% of respondents confirmed the political style as never or rarely used, respectively. The fact that municipal governance involves council authority confirms the statement that a political style that is mandate driven can persist in implementation. This type of implementation often compromises programmes that could aid in addressing spatial planning challenges, in particular, where political support is absent. In another study, Grant (2009) finds political support as a conduit towards achieving successful SPI. The fact that most municipalities in the study use the hybrid implementation approach overshadows the top-down ideal of a political style. It is by implication that any politically driven policy or mandate would require societal buy-in, given the recognition of substantive matters in municipal planning. In the praxis of spatial planning, politicians could advance their intentions through community polarization, which is also consistent with the findings of Cheng (2013). In practice, it is possible for planners to support a political style in planning that advocates for the promotion of justice than that which advances the personal and economic interests of a politician. This style can only facilitate the realization of EJ if any mandate intends to achieve EJ.

7.3.2 INTER-ORGANIZATIONAL AND INTRA-ORGANIZATIONAL

Cooperation and coordination in planning is a way to ensure the participation of various stakeholders in planning, decision-making and implementation. The results in Table 7-3 show that 41% of municipal planners view their municipalities as applying the inter-organizational implementation approach 'sometimes,' whereas only 35% of the respondents' municipality use it 'frequently.' These results reflect the fact that the vertical and horizontal integration approaches are used on occasion, as opposed to being used frequently in SPI. In planning, the implementation of an inter-organizational style from an EJ perspective aids in bringing other sectors in a local level platform to provide capacity in terms of services and resources that a municipality does not have. The participation of these sectors typically happens through inter-governmental forums and committees. In effect, inter-organizational implementation facilitates the achievement of substantive justice as it promotes the

establishment of forums and committees for the participation of various sectors in planning and implementation. The introduction of the integrated development plan through the MSA, 2000, intended to improve the vertical and horizontal integration. In practice, IDPs have been unsuccessful in integrating all plans, in particular, those from the vertical level (provincial and national government). As a result, the President of the Republic during the 2019 budget speech stated that “the lack of coordination between national and provincial governments, between departments and particularly at local government level, has not served us” (The Presidency, 2019). The articulation of the President confirms the existing problem, as revealed in the responses of the municipal planners. Municipalities are incomplete without the assistance of the national and provincial governments (Benton, 2013). As a result of this lack of coordination, on the 19 September 2019, President Cyril Ramaphosa launched a District Coordination Service Delivery Model aimed at improving inter-organization coordination (The Presidency, 2019a). This plan is meant to be One Plan for a district integrating all plans of a district or metropolitan municipality, with those of sector departments and the private sector (i.e., mining houses) in a single plan. The intention of this model is similar to what IDP has to achieve. It is yet to be seen whether this model renders IDPs redundant or not. Inter-organizational planning and implementation promote multi-stakeholder involvement in planning. According to COGTA (2019), the model intends to coordinate planning, ensuring the participation of civil society, citizens, and all levels of government (local, provincial, and national).

The proposition of spatial planning, as multi-stakeholder democratic planning, promotes an inter-organization implementation approach. The multi-stakeholder in this planning refers to stakeholders from various sectors. The results show that there exists a need for the government to cultivate working relations between the national, provincial and local spheres of government. In response to this, Steytler (2017) notes that the Constitutional Court refused to entertain a litigation case between the national government and the government of KwaZulu-Natal in favour of cooperative governance. The National Planning Commission (2012) also identifies the need to revive efforts of working together, between all spheres of government, to achieve an improved built environment with just development. In facilitating intergovernmental relations (IGR), the government introduced and accented the Intergovernmental Relations Framework Act in 2005. On the other hand, the District One Plan approach is now the tool to cultivate relations across the spheres of government, the general public, and the private sector, in particular on service delivery. It is important to note that 6% and 14% of municipal planners confirmed that their municipalities apply the inter-organizational style of implementation ‘rarely’ and ‘occasionally,’ respectively. As a result, the national and provincial governments implement programmes that ineffectively contribute

to the achievement of spatial planning towards EJ. In practice, municipalities are responsible for the overall planning within their areas of jurisdiction; however, various sectors have the responsibility of providing their respective mandated services. The inadequate application of the inter-organizational style of implementation implies that the persistence of spatial planning injustices will remain evident. For instance, the planning of an integrated human settlement in isolation can lead to planning integration on paper, rather than in the physical environment. The district coordination model may, if appropriately implemented, redress silo planning and implementation.

On the other hand, the intra-organization style, which is concerned with the horizontal integration and interaction within municipalities, appears more evident in the municipal planners' responses, yet with limited frequent use. Intra-organizational implementation is meant to address capabilities from an EJ perspective. At a local government level, this style of implementation would allow a municipality to confirm its capacity on civil and electrical engineering to redress an existing imbalance, particularly in deprived areas. The municipal responses indicate that the application of this style is adopted 'sometimes' (37%) more than 'frequently' (30%) but, in practice, municipalities in the country adopted an intra-organizational implementation by establishing departments and sub-directorates to facilitate the implementation of municipal functions, such as municipal planning. This organizational configuration is congruent with the contention of Alexander (2005) on intra-organizational implementation. It is clear that the challenges to the implementation of this style in municipalities are coordination and cooperation. The responses of the municipal planners demonstrate that municipalities employ the intra-organizational implementation 'sometimes,' as opposed to 'frequently.' This finding could mean that internal departments in municipalities interact exclusively amongst themselves on critical matters. The challenge of poor coordination between departments within a municipality also represents a lack of intra-organizational implementation of spatial planning. Practically, an interviewee in support of this finding indicated that a municipality in one of the sampled provinces had a backlog of over 400 development applications awaiting comments from one of its internal technical departments. The unnecessary delay caused by the internal technical department is a veridical reference of the existing poor cooperation among officials in a municipality. Intra-organizational implementation can assist in such instances by promoting cooperation between officials within an institution (O'Toole, Jr., and Montjoy, 1984). The poor cooperation that affects development presents evidence that the officials in the technical department lack an understanding of the priorities about spatial transformation and about planning in general. The quest for resolving challenges of injustices in spatial planning is not exclusive to technical strategies but requires both intra-organizational and inter-

organizational cooperation. This requirement is congruent with the requirements of multi-stakeholder democratic planning. The results in Figure 7-2 illustrate the point that the implementation of spatial planning through an intra-organizational style is most often done half-heartedly. Furthermore, these results support the need for reforms in practice through changing the attitudes of municipalities and their officials in an attempt to promote cooperation and coordination in planning.

7.3.3 COLLABORATIVE AND EXPERIMENTAL

Various scholars in the literature argue that collaborative means in planning have the potential to influence planning outcomes (Healey, 2003; Cheng, 2013, Roy, 2015; Mattila, 2016), yet the studied municipalities do not reflect such applications. It is the finding of the study that the collaborative and experimental styles are the least frequently employed SPI styles. Table 7-3 shows that the municipalities use the collaborative implementation style 'frequently' (18%) less than 'sometimes' (38%) and 'occasionally' (28%). These findings, can to some extent, explain the challenges of spatial transformation that exist in the geographic architecture of South Africa. The literature views the collaborative form of implementation as being reflective of deliberation and argumentation, with the intention of consensus building through democratic means, such as include bargaining (Brand & Gaffikin, 2007; Koontz and Newig, 2014). It is, however, unacceptable that most municipalities apply the collaborative form of implementation 'less frequently,' despite the fact that they reportedly support the hybrid implementation approach, which stands central to this style of implementation. The construct that arises from the results is one that presents municipalities as unable to facilitate collaboration, especially given the high percentage of 'sometimes' responses on the scale that relates to the application of collaborative implementation. The results inform the rationale underlining the inability of the South African government, and specifically the national department responsible for spatial planning, to influence traditional leaders to support the implementation of the Spatial Planning and Land Use Management Act, 2013. In fact, the country's traditional leaders rejected the spatial planning reforms that the Act introduced with effect from 01 July 2015. In a workshop on the Mpumalanga Provincial Spatial Planning and Land Use Management (SPLUM) Bill with the traditional leaders that took place on the 15th and 16th October 2019 where the author participated, it became apparent that traditional leaders rejected SPLUMA for its failure to make provision for the role of traditional leaders in planning. However, the Mpumalanga Provincial SPLUM Bill makes provision for the role of traditional leaders in the preparation of spatial development frameworks, land-use schemes, and planning decisions in general. Watson (2003) clarifies

that the consensus deriving from collaboration is ineluctable in community dispute resolution. In this context, through the collaborative style, the extrication of what appears to be a formidable challenge in the implementation of spatial planning becomes possible. The results on the use of this kind of implementation are similar to the findings concerning the use of the intra-and inter-organizational styles. The collaborative implementation style from an EJ perspective serves to influence the implementation of the capability approach. This style, through collaboration, allows sectors to bargain, agree, and commit on services and resources prepared and ready to offer in any development. The results indicate that municipalities appear to trivialize this communicative approach in the implementation of spatial planning policies and plans developed through planning. The second-generation planning approach, which includes the communicative turn, evolved to close the overwhelming gap, not only in the planning of societal issues but also in the implementation of plans. The failure of coordination and cooperation through the intra-organizational, inter-organization and collaborative type of spatial planning implementation occludes the path towards EJ in planning.

On the other hand, the experimental style is a site-specific type that most municipalities only use on some occasions ('sometimes'), as presented in Table 7-3. Municipalities use this type, particularly when preparing precinct plans or local spatial development frameworks. This style of implementation is essential in realizing recognition justice as it allows a detailed contextual analysis of any area through experiential and expert knowledge. In practice, the development of precinct plans is not prevalent in municipalities, except in those with adequate financial resources. The highest percentages of municipal responses on the use of the administrative style can explain the 'sometimes' response to the experimental implementation. It appears that most municipalities, after the adoption of their SDFs, shelve them without initiating detailed planning for spatial priority areas. In the experience of the researcher, municipalities effectively use SDFs when considering development applications. These development applications include applications for the changing of land use rights (zoning) and requests for township establishments, subdivisions and consolidations. The corridors (i.e., national transformation) that the NSDF recommends are necessitating detailed planning in all identified affected areas to achieve spatial transformation. The lack of implementing this experimental style by municipalities is likely to defeat attempts towards spatial transformation. Matland (1995) accentuates the point that this type of implementation often results in clear goals, yet often remains with a lack of implementation. It can be said that the success of the experimental style of implementation depends on the other forms of implementation. In practice, planning for a specific area would not succeed if there is no intra-and inter-organizational cooperation, collaboration, and political support. In general, the

results underscore the lax approach that municipalities adopt in the implementation of spatial planning policies.

7.3.4 RANKING OF IMPLEMENTATION STYLES USED BY MUNICIPALITIES

The responses of municipal planners indicated the use of various implementation styles in municipalities. Table 7-1 reveals the administrative style as being the most frequently used spatial planning implementation type, with the symbolic style as the least frequently used in the municipalities. The findings derive from a ranking of the frequency of the use of the various implementation styles. The aggregation of the municipal planners' responses of 'sometimes' and 'frequently' informed the ranking of these styles. The ranking results show that municipalities focus more on the compliance with standard requirements, all the while displaying limited results with regards to spatial transformation.

Table 7-1: Frequency ranking on the use of implementation style

No	Types of Implementation	Sometimes and Frequently (%)
1	Administrative	76
2	Inter-organizational	76
3	Intra-organizational	67
4	Political	61
5	Experimental	57
6	Collaborative	56
7	Symbolic	29

Source: Author's Fieldwork, 2018

The ranking shows that the intra-organizational implementation approach is in a debilitating state in municipalities and, therefore, requires a reinvigoration for more frequent application. Likewise, municipalities are not foregrounding collaborative implementation in spatial planning, thereby allowing spatial problems to remain ingrained in the country. Moreover, the regression analysis in Table 7-4 shows that there is no evidence of an association between the categories of municipalities, the name of provinces, and the experience of respondents with the type of implementation that a municipality uses. The only association that is evident is that of a province, where a particular municipal planner works, with the inter-organizational implementation style, yet with no significance. The results posit that the category of the municipality and the province where a municipal planner might work, or the experience that a municipal planner has, do not determine the type of SPI used in that municipality. However,

Table 7-2 indicates that there is a significant difference between the responses of municipal planners in the use of each type of implementation. The Cronbach's Alpha of the results is 0.91, indicating that the results have good reliability regarding internal consistency. Given the mean results, there is a difference between the responses of municipal planners, but there is no association between the type of implementation, either category of municipality, the experience of a respondent or the province where a municipal planner works.

Table 7-2: Mean variance on the frequency of using each implementation style

<i>Implementation Type</i>	<i>Average</i>	<i>Variance</i>
Symbolic	2.71831	1.6338
Political	3.5493	2.02254
Administrative	4.09859	1.77586
Inter-organizational	3.92958	1.40926
Intra-organizational	3.76056	1.47042
Collaborative	3.49296	1.42495
Experimental	3.43662	1.76378

Scale: Never (1), Rarely (2), Occasionally (3), Sometimes (4) and Frequently (5), n =71

Significant difference between the use of styles mean, at $p < 0.001$ (*one-factor Anova test*)

Source: Author's Fieldwork, 2018

Table 7-3: Frequency of application for implementation types (n=71)

Types of Implementation	N	Mean	Median	Mode	Never (%)	Rarely (%)	Occasionally (%)	Sometimes (%)	Frequently (%)	No response (%)	Total (%)
Symbolic	71	2,7	3	2	7	35	23	21	8	6	100
Political	71	3,5	4	4	1	11	20	31	30	7	100
Administrative	71	4,1	5	5	0	4	14	21	55	6	100
Inter-organizational	71	3,9	4	4	0	6	14	41	35	4	100
Intra-organizational	71	3,7	4	4	1	4	24	37	30	4	100
Collaborative	71	3,5	4	4	1	10	28	38	18	4	100
Experimental	71	3,4	4	4	8	10	23	34	23	3	100

Scale: Never (1), Rarely (2), Occasionally (3), Sometimes (4) and Frequently (5)

Table 7-4: Regression analysis on the use of each implementation type with other variables (n=71)

Types of Implementation	Regression Correlation Coefficient		
	Category of Municipality	Province	Experience
Symbolic	-0.131*	-0.30	0.17*
Political	-0.069	0.05	0.05*
Administrative	0.081	-0.30	-0.36**
Inter-organizational	0.033	0.85*	0.00
Intra-organizational	-0.122	-0.11	0.07
Collaborative	0.085	-0.35	-0.04
Experimental	-0.033	0.21	0.01

$p < 0.10^*$, $p < 0.05^{**}$, $p < 0.01^{***}$, $p < 0.001^{****}$

Source: Author's Fieldwork, 2018

7.3.5 LIKELIHOOD OF EACH IMPLEMENTATION TYPE SUPPORTING ENVIRONMENTAL JUSTICE

The results show that each type of implementation has a potential to influence SPI towards achieving EJ. The encumbrance in spatial planning is the implementation of spatial planning policies through the isolation of other styles. In the context of EJ, the administrative style aids in the accomplishment of the just policy dimension and principle. To achieve this would require the inter- and intra-organizational styles to guarantee the participation of all sectors and the public at vertical and horizontal levels. Both the intra-organizational and inter-organizational styles, coupled with the collaborative implementation, contribute to practical capability assessment. The capability approach requires consensus and participation of various sectors and stakeholders to confirm their capability in any planning and development process. Moreover, these styles support procedural and substantive justices through participation and provision of platforms and institutions for public involvement such as forums and communities, to name a few. The political style, if its implementation is carrying a mandate that supports transformation and justice, in general; therefore, it is vital in the culmination of planning and implementation. EJ supports the symbolic style of implementation if political parties in a coalition government are in agreement with the implementation of plans that advance justice and equity. Lastly, the experimental style promotes recognition justice and capability approach facilitating detailed planning of a specific area. Planning happens in space and requires detailed analyses to understand the capacity of the environment, society, and government to sustain itself from both experiential and expert knowledge. Table 7-7 indicates that municipal planners are of the opinion that the intra-governmental (55%), inter-governmental (52%), administrative (41%), collaborative (44%), political (41%), experimental (34%), and symbolic (27%) types of spatial planning implementation are likely to contribute towards the achievement of EJ. Although respondents support each style of implementation distinctly, a combination of the styles could better influence EJ as clearly described above. Quite notably, respondents highlight the point that the administrative (35%), collaborative (28%), inter-organizational (20%), intra-organizational (18%), experimental (15%), political (11%) and symbolic (8%) styles of implementation are extremely likely to support planning in achieving EJ. The results on the Likert item of extremely likely represent the fact that the administrative form can succeed when collaboration first complements it between the vertical and horizontal levels of coordination to promote EJ. The analysis also supports the integration of these styles in the implementation of spatial planning. Table 7-5 provides the ranking on the type of implementation that is 'most' likely to contribute towards EJ. The aggregation of municipal

planners' responses on the likelihood items of likely, and extremely likely, informed this ranking.

Table 7-5: The ranking on the likelihood of implementation style towards EJ

No.	Types of Implementation	Likely and Extremely Likely (%)
1	Administrative	76
2	Intra-organizational	73
3	Collaborative	72
4	Inter-organizational	72
5	Political	52
6	Experimental	49
7	Symbolic	35

Source: Author's Fieldwork, 2018

The results show similarities between the ranking of the administrative style on the frequency of use and the likelihood of its ability to influence EJ. The rationale may be the legislative nature of spatial planning in the country that makes compliance unavoidable. Accordingly, South Africa has a good legislative framework on spatial planning that incorporates principles towards EJ (KI01, KI02, and K04). It is evident to note that the collaborative style appears as the third most likely style of implementation towards EJ on the ranking, which suggests an acceptance of the intra-organizational form. These two styles appeared less used by municipalities; hence, the results on the likelihood reveal that municipalities are aware of their impact on SPI. It is apparent that municipal planners require motivation to implement these types of implementation, which is achievable through befitting leadership. According to Coetzee (2010), appropriate leadership in government is central to the achievement of policy objectives. Table 7-8 shows that there is no evidence of a relationship between the types of implementation, the category of a municipality, the province where a municipal planner works and the experience of a municipal planner. The results of this association share similarities with the findings on the use of the implementation types because of the shared absence of evidence about the relationship among the mentioned variables.

Table 7-6: Mean variance on the likelihood of using each implementation style

<i>Type implementation</i>	<i>Average</i>	<i>Variance</i>
Symbolic	2.985915	1.442656
Political	3.323944	1.279276

<i>Type implementation</i>	<i>Average</i>	<i>Variance</i>
Administrative	3.985915	1.185513
Inter-organizational	3.746479	1.220523
Intra-organizational	3.704225	1.325553
Collaborative	3.859155	1.151308
Experimental	3.394366	1.242254

Source: Author's Fieldwork, 2018

Scale:

Extremely Unlikely (1), Unlikely (2), Neutral (3), Likely (4) and Extremely Likely (5)

Significant difference between the mean of likelihood of each style, at $p < 0.001$, $\alpha = 0.91$

Further, Table 7-6 presents similar findings with that of the use of each implementation type, signifying that there is a significant difference between the mean on the responses of municipal planners and a high-reliability level on the internal consistency concerning the likelihood of each type of implementation to contribute to EJ.

Table 7-7: Descriptive statistics on the likelihood of application for implementation types (n=71)

Types of Implementation	Mean	Median	Mode	Extremely Unlikely (%)	Unlikely (%)	Neutral (%)	Likely (%)	Extremely Likely (%)	No response (%)	Total (%)
Symbolic	3	3	3	6	21	34	27	8	4	100
Political	3,3	4	4	6	15	25	41	11	1	100
Administrative	4	4	4	1	1	18	41	35	3	100
Inter-organizational	3,7	4	4	1	1	21	52	20	4	100
Intra-organizational	3,7	4	4	3	3	17	55	18	4	100
Collaborative	3,8	4	4	0	6	20	44	28	3	100
Experimental	3,4	3	4	4	13	32	34	15	1	100

Scale from: Extremely Unlikely (1), Unlikely (2), Neutral (3), Likely (4) and Extremely Likely (5)

Table 7-8: Regression analysis on the likelihood of each implementation type with other variables (n=71)

Types of Implementation	Regression Correlation Coefficient		
	Category of Municipality	Province	Experience
Symbolic	-0.13	0.09	0.09
Political	0.01	-0.43	0.21*
Administrative	0.10	-0.06	-0.05
Inter-organizational	0.07	0.46	-0.23
Intra-organizational	-0.12	0.05	0.15
Collaborative	-0.16	-0.21	0.02
Experimental	0.05	-0.06	-0.20

$p < 0.10^*$, $p < 0.05^{**}$, $p < 0.01^{***}$, $p < 0.001^{****}$

Source: Author's Fieldwork, 2018

7.4 FACTORS PERCEIVED TO ENHANCE AND IMPEDE SPATIAL PLANNING IMPLEMENTATION

There are a number of barriers and enablers identified in literature, and this study classified these into four categories (structural, political, administrative, and contextual). In this context, the discussion that follows provides findings about all the factors that municipal planners perceive as enhancing (enablers) or impeding (barriers) to the implementation of spatial planning in achieving EJ within the context of each identified category. Table 7-9 and Table 7-11 present these perceived factors as barriers and enablers. The identified categories comprise structural, political, administrative and contextual categories.

Table 7-9: Perceived barriers to spatial planning implementation towards EJ

Structural Barriers	Political Barriers	Administrative Barriers	Contextual Barriers
<ul style="list-style-type: none"> ✓ Failure to communicate spatial planning policies ✓ Uncoordinated planning ✓ Absence of spatial planning policies at the disposal of officials ✓ Inconsistency in policy implementation ✓ Orientation of plans (process than outcomes) ✓ Lack of leadership ✓ Organizational culture ✓ Ineffective collaboration ✓ Inter-organization disputes and 	<ul style="list-style-type: none"> ✓ Pressure ✓ Interference ✓ Lack of leadership ✓ Poor support 	<ul style="list-style-type: none"> ✓ Red-tape ✓ Delays in implementation ✓ Inadequate tools of trade (qualified and skilled personnel and finance) ✓ Planning practice, attitude, and culture ✓ Separation of plan formulation and plan implementation. ✓ Unclear policy documents ✓ Lack of capacity building ✓ Absence of plan monitoring and evaluation 	<ul style="list-style-type: none"> ✓ Exclusion of context issues (i.e. socio-cultural, biophysical, economical) ✓ Lack of public participation

Structural Barriers	Political Barriers	Administrative Barriers	Contextual Barriers
<ul style="list-style-type: none"> conflicts ✓ Poor organizational support ✓ Lack of prioritization of spatial planning 		<ul style="list-style-type: none"> ✓ Absence of spatial planning policies 	

The structural category addresses issues of policy and governance. To illustrate policy issues, Table 7-9 indicates the factors in this category that are perceived as barriers to SPI. These factors include the failure to communicate about spatial planning policies, orientation of plans, and the absence of spatial planning policies. Factors perceived as barriers regarding governance issues include lack of leadership, lack of prioritization of spatial planning, ineffective collaboration, uncoordinated planning and organizational culture, poor organization support and inter-organization disputes and conflicts. The political category includes factors that address the influence of politics in planning. Table 7-9 demonstrates the political factors perceived as barriers as comprising political pressure and interference, poor political support and lack of leadership.

The category of administration responds to the issues that relate to bureaucratic challenges, effectiveness, conduct of municipalities and policy. These issues include red tape, delays in implementation and inadequate tools of trade as barriers. Table 7-9 also identifies factors under the administration category as including an absence of plan monitoring and evaluation; and a lack of capacity building as barriers under the issue of effectiveness. On the issue regarding the conduct of municipalities, the factors of municipal practice, attitude, and culture appear as barriers to the implementation of spatial planning. Lastly, the contextual category responds to the issues of procedure and recognition and Table 7-9 presents the lack of participation as a contextual barrier to SPI. The exclusion of context issues, as a barrier to SPI, is also a factor of recognition in planning.

Table 7-10: Overall mean difference among barriers (n=71)

Barriers	Overall Mean of Barriers	Significance	Cronbach's Alpha
Structural	3,1	0,15	0,99
Political	3,2	0,1	0,99
Administrative	3	0,01	0.97

Contextual	2,9	0,6	0,97
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Scale: Not a barrier (1), somewhat a barrier (2), Moderate Barrier (3) and Extreme barrier (4)

Source: Author's Fieldwork, 2018

It is evident that spatial planning has the potential for assisting in the achievement of EJ, given the responses of municipal planners. Fifty-five percent of the respondents stated that spatial planning is 'likely' to support the realization of EJ, whereas 31% viewed it as 'extremely likely' in supporting the attempts at achieving EJ. The respondents also support spatial planning, given its notion of addressing both physical and socio-economic environmental challenges, in this context. The results show that there is a compelling need to comprehend the factors perceived to enhance or impede spatial planning in realizing EJ.

Table 7-11: Perceived enablers of spatial planning implementation towards EJ

Structural Enablers	Political Enablers	Administrative Enablers	Contextual Enablers
<ul style="list-style-type: none"> ✓ Improved inter-organizational coordination and cooperation ✓ Improved collaboration ✓ Appropriate and improved management leadership ✓ Change in organizational culture ✓ Adoption of spatial planning implementation strategy ✓ Responsive organizational structure 	<ul style="list-style-type: none"> ✓ Appropriate and improved political leadership ✓ Capacity building to political leaders on spatial planning ✓ Political Intervention ✓ Resistance management 	<ul style="list-style-type: none"> ✓ Change in planning practice, attitude and culture ✓ Continuous capacity building ✓ Simultaneous plan formulation and implementation ✓ Adoption of spatial planning implementation strategy ✓ Plan monitoring and evaluation ✓ Competent and skilful personnel ✓ Adequate financial resources ✓ Adoption of simple to read spatial planning policies 	<ul style="list-style-type: none"> ✓ Mainstreaming of contextual issues ✓ Public awareness and education ✓ Improved public participation

The categories of structural, political, administrative and contextual enablers of spatial planning towards EJ presented in Table 7-11 address the same issues as the categories of barriers to spatial planning. The structural category identifies the enabler concerning the adoption of spatial planning implementation strategy as a response to the policy issue. This category also identifies numerous enablers that can assist in addressing governance issues, which includes improved inter-organizational coordination and cooperation, improved collaboration, appropriate and improved management leadership, change in organizational culture, and a responsive organizational structure. These enablers respond to the factors identified in the structural category of barriers. The political category of enablers addresses the manner in which politics can positively influence planning. The enablers of spatial planning towards EJ identified in this category, as shown in Table 7-11, include appropriate and improved political leadership, capacity building for political leaders on spatial planning, political intervention, and resistance management.

The issues that enablers under the category of administration address include bureaucratic challenges, effectiveness, conduct of municipalities and policy. Table 7-11 indicates the need for competent and skilful personnel and adequate financial resources as the spatial planning enablers' attempt to address the bureaucratic challenge of inadequate tools of trade. The enablers presented under the issue of effectiveness include plan monitoring and evaluation, continuous capacity building, adoption of spatial planning implementation strategy, and simultaneous plan formulation and implementation. The enabler of change in planning practice, attitude and culture under the administrative category responds to the issue of municipal conduct, which can adversely affect the performance of spatial planning. The adoption of simple to read spatial planning policies as an administrative enabler respond the barriers of policy issues, which include the failure to communicate spatial planning policies, orientation of plans, and an absence of spatial planning policies. Lastly, the factor regarding the mainstreaming of contextual issues under the category of contextual enablers responds to the recognition issue, which addresses the barrier that relates to the exclusion of context issues in planning. Public awareness and education, and improved public participation, as contextual enablers, respond to the barrier of a lack of participation and addresses procedural issues in planning.

Table 7-12: Overall mean difference between enablers (N=71)

Enablers	Overall Mean of enablers	Significance	Cronbach's Alpha
Structural	4, 1	0,98	0,99

Enablers	Overall Mean of enablers	Significance	Cronbach's Alpha
Political	4	0,01	0,94
Administrative	4, 2	0,02	0.98
Contextual	4	0,01	0,97

Scale: Not at all influential (1), slightly influential (2), somewhat influential (3), very influential (4), and extremely influential (5)

Source: Author's Fieldwork, 2018

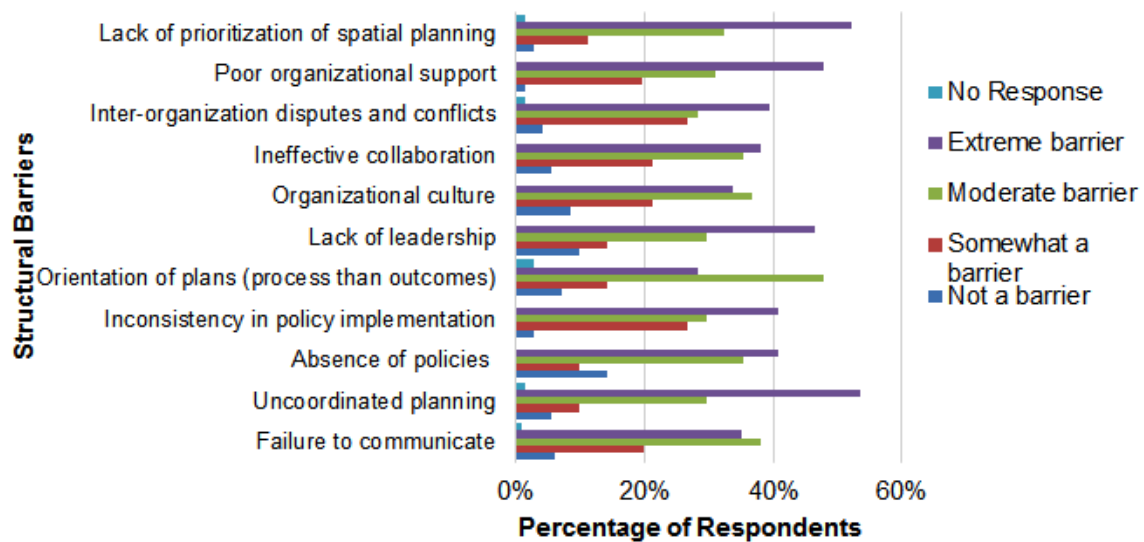
7.4.1 STRUCTURAL FACTORS THAT IMPEDE SPATIAL PLANNING IMPLEMENTATION

The findings in Figure 7-3 illustrate the fact that there is a low percentage of municipal planners who identified the structural barriers as not being factors perceived to impede SPI towards EJ, with the exception of the factors on the absence of spatial planning policies and lack of leadership, receiving 14% and 10%, respectively, on the 'not a barrier' scale. The rationale for some municipal planners in viewing the factor on the absence of spatial planning policies as not being a barrier, might be the fact that most municipalities are legally mandated to adopt spatial planning policies, such as SDF. This finding is in accord with the high percentage of respondents who believe that their municipalities use the administrative style of spatial planning implementation. The view that a few municipal planners perceive the lack of leadership factor as not being a barrier confirms the fact that the impact of appropriate leadership in some municipalities remains unknown. If municipalities are aware of the effect that leadership has on planning, the country would have long realized spatial transformation. Pretorius (2017) reveals that in the province of Free State, the lack of governance and leadership is a challenge of local government. According to RSA (2019a: 201),

“Weak leadership is reflected in ineffective, unstable councils and governance structures, unstable administrations and conflictual relationships between political leadership and management.”

It is thus not an overstatement that municipalities without leadership risk poor governance and service delivery. Leadership, if appropriately applied, has the potential to influence and support planning initiatives aimed at improving quality of life of a society in any given area.

Figure 7-3: Responses on structural barriers to implementation (n=71)



Source: Author’s Fieldwork, 2018

The responses in Figure 7-3 demonstrate that 54% of municipal planners consider uncoordinated planning as an extreme barrier and 52% of these planners also view the lack of spatial planning prioritization as an extreme barrier, when compared to other factors. The results regarding the high number of responses on the barrier of uncoordinated planning could in some way explain municipal planners’ responses regarding the frequency on the use of intra-and inter-organizational implementation styles in municipalities. The figure also shows that most municipal planners (48%) viewed the factor about the orientation of plans as a moderate barrier compared to the other factors on the same scale of measurement. Although municipal planners consider this barrier as such, in practice, it could be that one of the factors associated with the failure of spatial planning to be effective. In demonstrating a clear picture of these barriers, it is, therefore, pivotal to identify the structural factors that municipal planners most evidently perceive as barriers to the realization of EJ through the implementation of spatial planning. Table 7-13 presents the ranking of the structural factors perceived to impede the implementation of spatial planning towards EJ the most. The aggregation of responses from municipal planners on the Likert scale of ‘moderate barrier’ to ‘extreme barrier’ informs this ranking. The results reveal that a lack of spatial planning prioritization and uncoordinated planning are the most readily identified structural barriers to SPI in the endeavour to achieve EJ.

Table 7-13: Ranking of structural barriers

No.	Barriers	Moderate barrier and extreme barrier (%)
1	Lack of prioritization of spatial planning	84
2	Uncoordinated planning	84
3	Poor organizational support	79
4	Orientation of plan (process than outcome)	76
5	Lack of leadership	76
6	Absence of spatial planning policy	76
7	Ineffective collaboration	73
8	Failure to communicate	73
9	Inconsistency in policy implementation	71
10	Organizational culture	71
11	Inter-organizational disputes and conflicts	67

Source: Author's Fieldwork, 2018

The ranking indicates that a lack of spatial planning prioritization is the factor that can impede SPI towards EJ the most. These results support the view of planning expert KI03, who posited that the lack of adequate budget allocation by municipalities for spatial planning matters is reflective of the scant recognition that spatial planning enjoys in local authorities. Uncoordinated planning is also seen at the highest ranking, given the existing collaboration challenges in municipalities. Although the factor of ineffective collaboration ranks 7th, the factors of coordination and collaboration are interdependent. The factor of poor organizational support is the third highest ranking structural barrier in planning. In essence, it can be said that the prioritization of spatial planning is impossible in instances where there is no organizational support of spatial planning. Table A4 in Appendix 4, which statistically shows the correlation between these structural barriers, confirms the above argument. The correlation analysis shows that there is 0.69 relationship between the barrier regarding poor organizational support and lack of spatial planning prioritization, which confirms a moderately positive association between these two variables. Furthermore, the orientation of planning precedes the lack of leadership in the ranking, which makes it apparent that the structural implementation of policies should change to focus on the outcomes, rather than fulfilling specific procedural requirements.

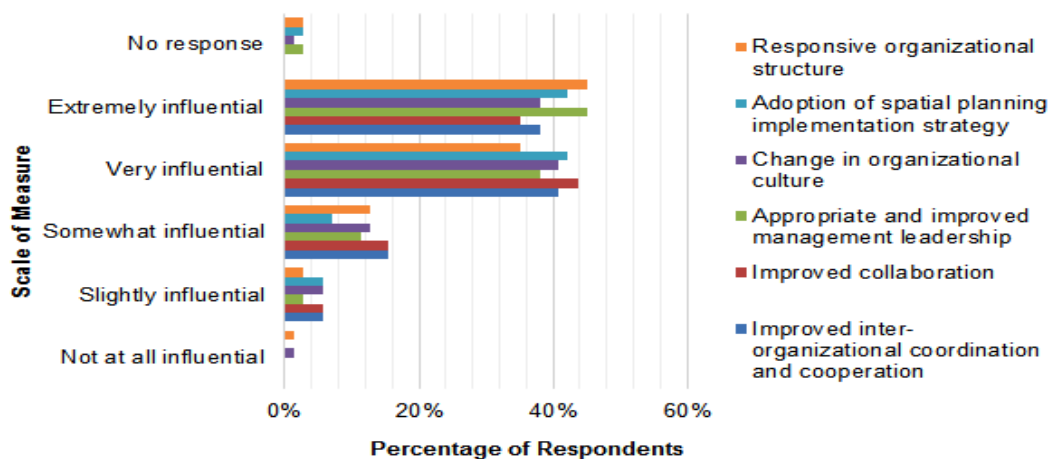
Although leadership appears as the fifth impeding factor in the ranking, it has an impact on the function of a municipality in delivering spatial planning policy objectives, particularly

environmental justice. Table A4 in Appendix 4 statistically confirms that there is no relation between any type of SPI used by the municipalities and the respondents' views on these barriers; given the less than 0.3 correlation revealed in the analysis. Further, although the inter-organizational disputes and conflicts structural barrier rank as the factor that is least perceived to impede the realization of EJ through spatial planning, Table A4 in Appendix 4 indicates that it has a moderately positive relationship with factors such as the orientation of plans, ineffective collaboration, poor organizational support, and lack of spatial planning prioritization. This finding underscores the fact that a planner cannot solve a dispute if collaboration is weak and that implemented plans are insensitive to critical issues. In addition, a municipality that fails to support and prioritize spatial planning would find it cumbersome to solve planning related disputes and conflicts. Lastly, Table 7-10 indicates that there is no difference regarding the manner in which participants viewed these structural barriers. In this regard, it is possible that these obstacles can be generalised as they may have the same weight for any planner working in any category of a municipality.

7.4.2 STRUCTURAL FACTORS THAT ENHANCE SPATIAL PLANNING IMPLEMENTATION

Similar to the findings on the structural factors perceived to impede EJ in the implementation of spatial planning, Table 7-12 shows with an excellent degree of reliability that there is no significant difference between the responses of planners with regards to the structural factors that are perceived to enhance, or enable, SPI towards environmental justice. By implication, the results indicate that the findings of factors perceived to impede EJ in the implementation of spatial planning could be the same if researched in municipalities and provinces other than those participating in this study.

Figure 7-4: Responses on structural enablers to implementation (n=71)



Source: Author's Fieldwork, 2018

Figure 7-4 demonstrates that all the structural factors (enablers), to a certain extent, enhance EJ in the implementation of spatial planning. The study reveals that a significant percentage of municipal planners recognized factors, such as the responsive organizational structure (45%), appropriate and improved management leadership (45%), adoption of a SPI strategy (42), change in organizational culture (38%), improved inter-organizational coordination and corporation (38%), and improved collaboration (35%), as being extremely influential in enhancing the implementation of spatial planning towards achieving EJ. Further, Table 7-14 presents the ranking of these factors as enhancers that could influence spatial planning implementation in the achievement of EJ. The aggregation of municipal planners' responses on the Likert scale of 'very influential' to 'extremely influential' determined the ranking of these structural enablers. It is clear in Table 7-14 that the adoption of the SPI strategy emerged as the most prominent factor in the ranking of the factors perceived to enhance spatial planning towards EJ.

Table 7-14: Ranking of structural enablers

No.	Enablers	Very influential and extremely influential (%)
1	Adoption of spatial planning implementation strategy	84
2	Appropriate and improved management leadership	83
3	Responsive organizational structure	80
4	Improved inter-organizational coordination and cooperation	79
5	Change in organizational culture	79
6	Improved collaboration	79

Source: Author's Fieldwork, 2018

This finding can explain the first ranking of spatial planning prioritization as a factor perceived to impede spatial planning towards EJ. Arguably, it is then obvious that municipalities fail to prioritize spatial planning owing to a lack of implementation strategies. In agreement with this finding, KI05 tersely contended that municipalities have good spatial plans at their disposal, such as the SDFs, which were prepared with an intention to address and redress spatial imbalances, yet are devoid of implementation strategies and resources. The SPI strategy requires the recognition of spatial planning as a flexible project that is on-going with clear, realistic, and achievable outcomes. This strategy ought to first respond to the question of 'why' spatial planning is necessary. In regard to this point, a thorough account of injustices evident within a given area in respect of the distribution of resources,

activities (land uses), and services provides the basis for responding to the 'why' question. Second, the strategy ought to respond to the question of 'what' influence spatial planning or a plan (i.e. SDF) would have in a given area. The strategy should explicitly, without the use of jargon, define the expected outcomes of the plan, and present its ability to improve the quality of life of people and transform spatial geographies through the application of EJ principles. Additionally, the strategy should also highlight the criteria it adopts to ensure effective monitoring and evaluation of SPI, consistent with the just policy principle of EJ in planning. Thirdly, the strategy ought to respond to the question of 'how' spatial planning or plans intend to achieve the expected outcomes. In doing so, the strategy should fully present the projects identified for the achievement of each outcome, together with related objectives. Further, it should cite the precepts and guidelines that will inform the SPI, including the required resources and responsible stakeholders or sectors. Lastly, the strategy ought to respond to the question of 'when' the spatial plan intends to achieve its outcomes and related objectives. Ostensibly, a spatial plan with such an implementation strategy could, to a greater extent, consolidate support for spatial planning, thereby resulting in its prioritization.

The second factor in the ranking is the appropriate and improved management leadership, followed by a responsive organizational structure. The results show that proper management and leadership will play a role in improving spatial planning support and planners' morale in the implementation of spatial plans. It is interesting to note that the factor of uncoordinated planning was ranked as the second most impeding barrier, yet the factor of improved inter-organizational coordination and cooperation ranked fourth in the ranking of enablers. This finding implies that, without appropriate leadership, it would be cumbersome to realize effective coordination in spatial planning. The study also reveals the factor concerning change in organizational culture and improved collaboration to be last in the ranking of factors perceived to enhance spatial planning towards EJ. Debatably, the need for change in organizational culture requires a strategy to inform it. The SPI strategy, supported with good leadership, ought to inform an overhaul of the organizational structure and culture, which is necessary for the achievement of spatial planning outcomes.

7.4.3 POLITICAL FACTORS THAT IMPEDE SPATIAL PLANNING IMPLEMENTATION

Barthwal and Sah (2008) argue that political leaders invariably influence policy-making and implementation. As a result, political factors that municipal planners perceive to impede spatial planning implementation towards EJ have the potential to obstruct spatial planning

processes. The results in Table 7-15 show agreement among municipal planners on the significant levels of each political factor (barrier).

Table 7-15: Responses on political barriers (n=71)

Political Barriers	Not a barrier	Somewhat a barrier	Moderate barrier	Extreme barrier	No Response	Total
Pressure	3%	11%	27%	59%	0%	100%
Interference	4%	8%	27%	59%	1%	100%
Lack of leadership	8%	10%	35%	44%	3%	100%
Poor support	4%	11%	27%	52%	6%	100%

Source: Author's Fieldwork, 2018

Table 7-15 represents the result that political factors, such as political pressure and interference, share a constant percentage (59%) of respondents who perceive political factors as constituting an extreme barrier, with a potential to impede spatial planning towards achieving EJ. Few municipal planners identified these factors as not being barriers. The political leadership and discipline of politicians in some municipalities can be one of the reasons for the fact that few municipal planners viewed these factors as not being barriers. Conversely, 44% and 52% of municipal planners perceived the lack of leadership and poor support factors, respectively, as being extreme barriers to the implementation of spatial planning in achieving EJ. Table A5 in Appendix 4 statistically shows that there is a moderately positive relation (0.6) between the factors of pressure and interference, including that of interference and a lack of leadership. These findings imply that a spatial planning process that is driven by political pressure results in political interference. Moreover, where political interference exists, there is a suggestion that political heads lack the leadership trait of understanding the planning of governance processes. There is also no relation between these two factors (barriers) and the style that each municipality applies in the implementation of spatial planning. The correlation analysis in Table A5, Appendix 4 presents these political barriers with a correlation value of less 0.3, when related to the style that each municipality applies in the implementation of spatial planning. Furthermore, Table 7-15 indicates that the barrier of poor political support received 52% of responses after the first two factors, revealing it as being an extreme impediment towards EJ in SPI. Statistically, Table A5 in Appendix 4 is similar to the first two factors because it shows that the style that a municipality applies in the implementation of spatial planning has no association with any the political barrier of poor support. This revelation is a patent indication that no spatial

implementation style is immune to the political factors that impede implementation. Table 7-16 presents the ranking of these political factors perceived to prevent the implementation of spatial planning towards EJ. The aggregation of municipal planners' responses on the Likert scale of 'moderate barrier' to 'extreme barrier' informs the following ranking of political barriers.

Table 7-16: Ranking of political barriers

No.	Barriers	Moderate barrier and extreme barrier (%)
1	Pressure	86
2	Interference	86
3	Poor support	79
4	Lack of leadership	79

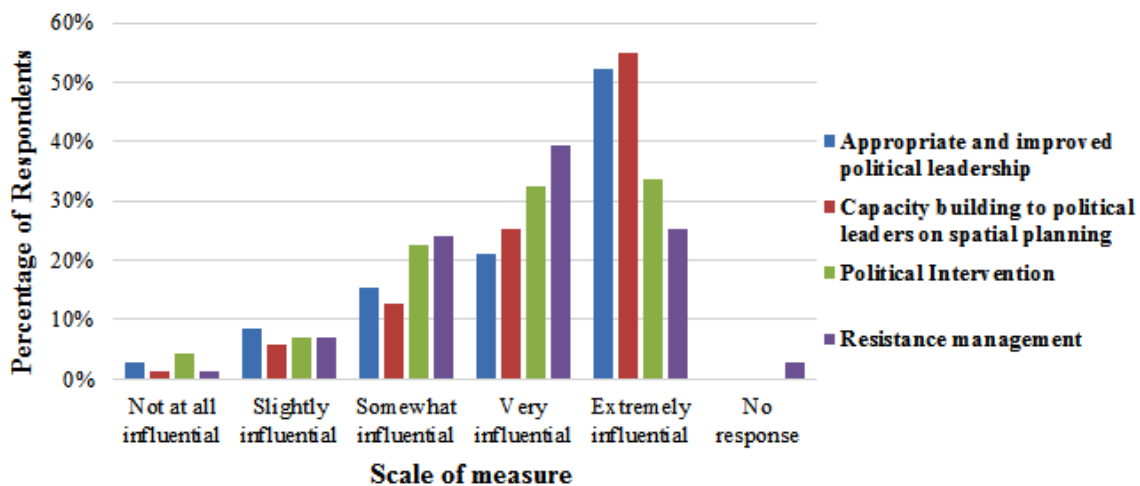
Source: Author's Fieldwork, 2018

The findings on the ranking show that the factor of political pressure is a barrier perceived to have the most potential in preventing SPI towards EJ. In the experience of the researcher, political pressure is more prevalent during election periods when campaigning is evident. During this period, political leaders coerce administrators, and by extension municipal, provincial and national planners, to implement programmes (i.e., settlement planning for the construction of low-cost housing) that appeal to the majority for voting support mobilization purposes. Most competent and skilful experts reject government appointments due to the appalling challenge of "political-administrative interface" (RSA, 2019a), which is interference. In practice, political interference, in particular where an official defies a political instruction may result in the unfair dismissal from employment. However, on the ranking, the political interference factor share a constant percentage (86%) with the factor of political pressure, but received more responses on the scale of 'not a barrier' and fewer responses on the scale of 'somewhat a barrier', which qualified it for the second place in the ranking. This rationale also applies to the ranking of the factors of poor support and a lack of leadership. Lastly, Table 7-12 shows that the distribution of responses from the study respondents presents no difference. Indeed, the results on the distribution of responses affirm that the study will not result in varied responses, if tested in another country or provinces that were excluded from the study sample.

7.4.4 POLITICAL FACTORS THAT ENHANCE SPATIAL PLANNING IMPLEMENTATION

In the midst of political factors that municipal planners perceive to impede the implementation of spatial planning in achieving EJ, it is important to note the factors or enablers that are perceived enhance implementation. Figure 7-5 reveals the responses of municipal planners regarding these factors.

Figure 7-5: Responses on political enablers (n=71)



Source: Author's Fieldwork, 2018

It is evident from the above figure that 55% of municipal planners perceive capacity building for political leaders, while 52% of them perceive the appropriate and improved political leadership, as being 'extremely influential' factors in enhancing the implementation of spatial planning towards EJ. The respondents' support of capacity building for political leaders on spatial planning posits that capacity building, with regards to the importance of planning, is the prerequisite for preventing political pressure and interference in planning and implementation. The SPI strategy discussed above can, to some extent, assist in mobilizing political leaders. Nonetheless, political interests in a political space are ineluctable, but the mitigation of political barriers is not. On other factors, 25% and 34% of respondents perceive the factors of resistance management and political intervention as being extremely influential in enabling SPI to realize EJ. In addition, 34% of the municipal planners that perceived political intervention as being an extremely influential factor might have had experiences with community unrests. In practice, this factor has the potential to influence the prioritization and support of spatial plan implementation, which addresses the issue of community unrests. However, the political intervention factor also depends on the understanding that politicians have about spatial planning. According to RSA (2019a), political will is crucial in addressing

local government challenges. The District One Plan, known as the District Coordination Model discussed above, could succeed given its political support and will. The President of the Republic, by championing this model and Cabinet's approval of its implementation, is sufficient to confirm political will on its implementation. A percentage of between 21 and 39 of the municipal planners perceive these factors (resistance management and political intervention) as being very influential whereas a percentage of between 7 and 24 of the planners perceive these factors to be either 'somewhat' or 'slightly influential', with a percentage of less than five regarding them as 'not influential at all'. The limited responses on the Likert item of 'not influential at all' show that all these factors have, to a certain degree, the ability to enhance the implementation of spatial planning towards EJ.

Table 7-17 presents the ranking of the political enablers. The ranking of these political enablers derives from the aggregation of municipal planners' responses on the Likert scale of 'very influential' to 'extremely influential.'

Table 7-17: Ranking of political enablers

No.	Enablers	Very influential and extremely influential (%)
1	Capacity building to political leaders on spatial planning	80
2	Appropriate and improved political leadership	73
3	Political intervention	66
4	Resistance management	64

Source: Author's Fieldwork, 2018

Regarding the ranking of these factors, the above table confirms capacity building for political leaders on spatial planning as being the political factor perceived to most enhance spatial planning to achieve EJ. A statement made by the National Planning Commission (2012), which suggest that the spatial disparities that remain evident in the South African spatial geographies emanates from the lack of spatial planning prioritization, support, and intervention by political heads, supports these results. It is also evident that the municipal planners elevated the factor of capacity building for politicians in their responses because of their understanding that EJ through spatial planning, depends on political support. The second-ranking factor is appropriate and improved political leadership, consistent with the second ranking of a structural factor (enabler), which promotes a similar notion of management. The fourth-ranked factor is resistance management, which precedes the factor

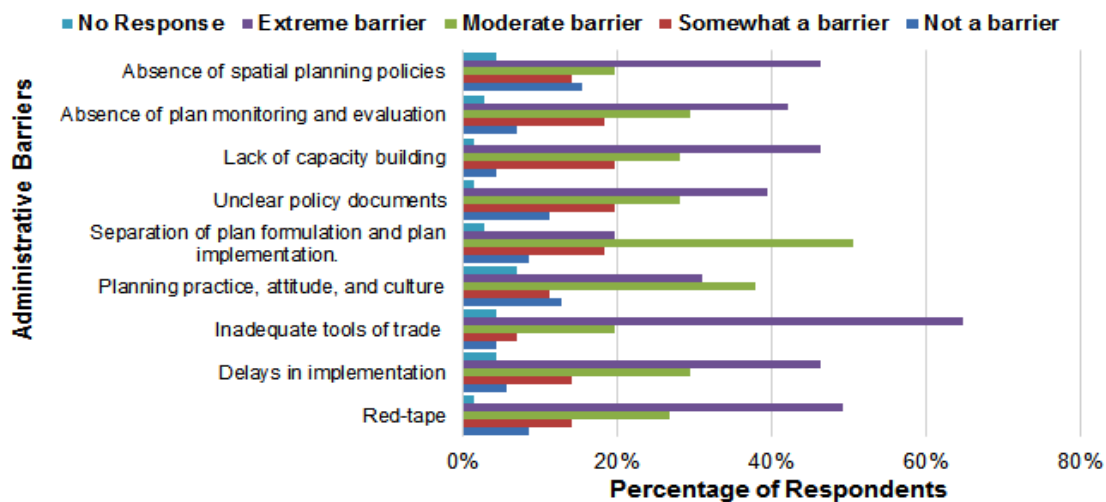
of political intervention. Capacity building for politicians can, therefore, assist in preventing political resistance in the implementation of spatial planning policies. In practice, planners ought to involve political structures at the onset of planning, rather than limiting their involvement to the stages of implementation, so as to cultivate and mobilize support. In Australia, the development of the Triangle Area within the City of Port Phillip left a community aggrieved, as participation occurred during planning and not during implementation, resulting in a political decision of development abandonment (Legacy, March and Mouat, 2014). This example demonstrates the power that politicians have in the implementation of spatial planning. In addition to the findings that identify the political factors that are being perceived as barriers, Table 7-12 demonstrates that there is a significant, excellent and reliable difference between the responses of municipal planners concerning the political factors that enhance the realization of EJ. This difference implies that the results on the political enablers can be different if it were to be tested with another sample other than that of the study. Therefore, the generalization of these results is not advisable. Although a difference on responses exists, Table A6 in Appendix 4 shows that there is no trace of an association between the approach to, and type of, SPI a municipality uses and the category of a municipality, given the correlation value of less than 0.2. These results resemble that of the political factors that are perceived to impede the implementation of spatial planning because of a shared correlation with the above variables. By implication, the support of municipal planners for these political enablers is not dependent on the approach to, and type of, SPI used in a municipality or the category of a municipality where a planner works. Consequently, the researcher argues that these factors have the potential to improve a political outlook of spatial planning in the sampled participating municipalities.

7.4.5 ADMINISTRATIVE FACTORS THAT IMPEDE SPATIAL PLANNING IMPLEMENTATION

Earlier in the discussion, the study findings revealed that municipalities use the administrative style to implement spatial planning policies. The study identified a total of nine administrative factors perceived to impede SPI in realizing EJ. Figure 7-6 illustrates the fact that responses of municipal planners, at a maximum of 65%, perceive the factor of inadequate tools of trade (qualified or skilled personnel and adequate financial resource) as the extreme administrative factor that is a barrier to the implementation of spatial planning aimed at realizing EJ. Further, the study discovered that planners in municipalities perceive the factor of red tape as the second most impeding factor, at 49%, followed by factors such as delays in implementation, lack of capacity building, and absence of spatial planning

policies, with a consistent 46% of responses on the same scale. The red tape in municipalities and government, in general, emanates from their onerous bureaucratic requirements stipulated in the processing of planning decisions. Although SPLUMA, as a planning reform in the country, introduced better processes, municipal planners perceive red tape as being an extreme barrier.

Figure 7-6: Responses on the administrative barriers (n=71)



Source: Author's Fieldwork, 2018

The results demonstrate that factors such as the planning practice, attitude and culture, unclear policy documents, and absence of spatial planning policy attained the highest percentages of between 11 and 15 on the Likert item of 'not a barrier', when compared with other factors. These percentages present these factors with an insignificant effect on the implementation of spatial planning in the quest of delivering EJ. The study reveals that planners perceive the barrier of the separation of plan formulation and implementation as not being an extreme factor, at a response rate of 20%, but with a strong moderate response rate of 51%. The results indicate that, although this factor cannot collapse implementation, it contains the potential to impede its success. Further, the results in Table A7 of Appendix 4 indicate the existence of an association between these factors. The results in Table A7 presents the barrier of red-tape with a moderate positive relation ($r = 0,6$) to the barriers of delays in implementation, separation of plan formulation and plan implementation, and unclear policy documents. These results highlight that red tape causes delays in implementation, especially when there is an unclear policy. The results in the same table also show that the barrier of unclear policy documents has a positive moderate relationship

with the barrier of lack of capacity building ($r = 0.5$), absence of plan monitoring and evaluation ($r = 0.6$), and absence of spatial planning policy ($r = 0.6$), which suggest that an under-capacitated municipal planner can perceive policy as being unclear even when this is not the case. Further, a unclear policy can make plan monitoring and evaluation difficult. The statistical results also indicate that a municipality without a spatial planning policy would have no direction on land use directives and restrictions. Table A7 represents the administrative barrier regarding the absence of plan monitoring and evaluation as showing a strong positive relationship with the barrier regarding the absence of spatial planning policy. By implication, plan monitoring and evaluation happens on the implementation of an adopted plan or policy.

Despite the positive relationship that these factors have, there is a need to rank them in priority. Table 7-18 demonstrates the ranking of these factors. This ranking derives from the aggregation of responses from municipal planners on the Likert scale of 'moderate barrier' to 'extreme barrier'. The results in Table 7-18, when compared with other factors, explicitly identifies the barrier of inadequate tools of trade as being the perceived administrative factor that can impede the implementation of spatial planning in achieving EJ the most.

Table 7-18: Ranking of administrative barriers

No.	Barriers	Moderate barrier and extreme barrier (%)
1	Inadequate tools of trade	85
2	Delays in implementation	76
3	Red tape	76
4	Lack of capacity building	74
5	Absence of plan monitoring and evaluation	72
6	Separation of plan formulation and plan implementation.	71
7	Planning practice, attitude, and culture	69
8	Unclear policy documents	66
9	Absence of spatial planning policies	64

Source: Author's Fieldwork, 2018

This researcher maintains that a municipality with adequate resources in respect of finance and personnel would associate the factor of inadequate tools of trade with other scales of the measure. A regression analysis statistically supports this argument, as it reveals a weak

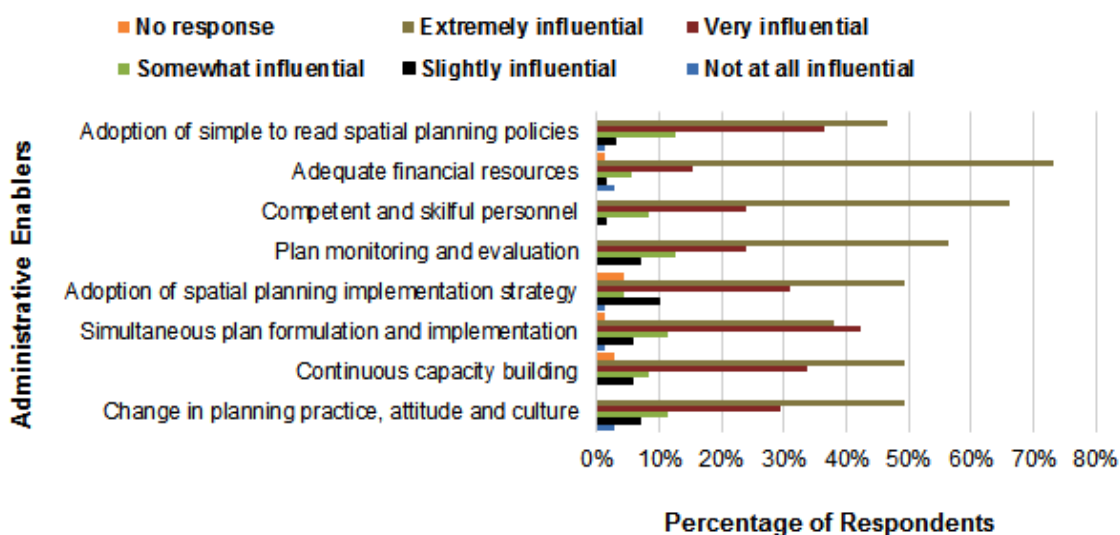
and positively significant association ($r(69) = 0.2, p < 0.001$) between the category of the municipality where a respondent works and the factor of inadequate tools of trade. The lack of spatial planning prioritization emerged as the highest-ranking structural factor perceived to impede spatial planning in its attempt to achieve EJ. In considering this impeding administrative factor, it is debateable that a municipality that fails to prioritize spatial planning would lack the motivation to mobilize resources for the implementation of spatial planning policies and programmes. Furthermore, the factor of delays in implementation ranked as the second-most pertinent barrier to the implementation of spatial planning towards EJ. As explained above, Table A7 in Appendix 4 indicates that the delay in implementation factor has a moderately positive association with the third-ranked factor, which is red tape. In practice, the researcher has observed that red tape invariably affects the implementation of spatial planning. For example, the researcher experienced a delay of more than 12 months in the implementation of a land tenure upgrading programme due to red tape emanating from approval delays in the office of the executive authority of another provincial department. The study reveals the barrier of the absence of plan monitoring and evaluation as the fifth factor in the rank. Most interviewees argue that municipalities often fail to monitor and evaluate the implementation of spatial planning. Unquestionably, monitoring and evaluation in planning exist to provide feedback on the successes and failures of a municipality in spatial planning, but the existing spatial scars of apartheid in South Africa remain dominant because of ineffective monitoring and evaluation of spatial planning implementation. Although factors such as the planning practice, attitude, culture, unclear policy documents and absence of spatial planning policies appear at the bottom of the ranking, ignoring them may have untoward consequences for spatial planning programmes that attempt to promote EJ. Lastly, Table 7-10 above indicates an excellent, significant difference between the responses of respondents concerning these factors.

7.4.6 ADMINISTRATIVE FACTORS THAT ENHANCE SPATIAL PLANNING IMPLEMENTATION

Figure 7-7 illustrates that 73% of respondents perceive adequate financial resources, while 66% of respondents view competent and skilful personnel planning, as being enhancers that exert an extreme influence on the implementation of spatial planning in the realization of EJ. These two factors, classified under the tools of trade, are indeed crucial in SPI if the intention is to achieve EJ. In practice, KI02 contends that municipalities must set aside at least between five and ten percent of their annual budgets to fund the implementation of spatial planning policies and programmes. This action would address the under-resourcing of

actions and initiatives to implement spatial planning policies. Accordingly, the municipal planning function of spatial planning and land use management is generally, under-capacitated and under-budgeted, specifically in small and struggling municipalities (RSA, 2019a). The interviewee stated that, without financial resources, spatial planning may find it cumbersome, if not impossible, to achieve EJ. Moreover, the lack of capacity is a challenge confronting most provinces in the country, especially concerning the implementation of SPLUMA. The researcher participated in the National Spatial Planning and Land Use Management Forum meeting, held on the 06 October 2017 in Kempton Park, South Africa, where at least five provinces, of which four are participants in this study, presented the factor of inadequate capacity in municipalities as a SPLUMA implementation challenge, which is consistent with the findings of this study. The challenge of inadequate planners in municipalities that Todes and Mngadi, (2007) identified through the analysis of existing data is still a reality and a cause for concern.

Figure 7-7: Responses on administrative enablers (n=71)



Source: Author's Fieldwork, 2018

Conversely, although the factor of adequate financial resources received the highest percentages of responses on the Likert item of 'extremely influential', the ranking of these factors in Table 7-19 presents competent and skilful personnel as being the highest-ranking enabler, succeeded by the factor of adequate financial resources. The aggregation of municipal planners' responses on the Likert scale of 'very influential' to 'extremely influential' informed the ranking. Undoubtedly, a spatial planning implementation strategy would require a planner who is quite adept at spatial planning to forecast the implementation resource requirements, i.e. budget. In practice, some government departments (e.g. the National

Department of Public Works) that implement spatial planning related programmes typically fail to spend their allocated budgets because of the lack of capacity or skills to execute. The factor of responsive organizational structure ranked as third in the ranking of structural factors perceived to enhance SPI, which should support the factor of competent and skilful personnel.

Table 7-19: Ranking of administrative enablers

No.	Enablers	Very influential and extremely influential (%)
1	Competent and skilful personnel	90
2	Adequate financial resources	88
3	Adoption of simple to read spatial planning policies	83
4	Continuous capacity building	83
5	Plan monitoring and evaluation	83
6	Simultaneous plan formulation and implementation	80
7	Adoption of spatial planning implementation strategy	80
8	Change in planning practice, attitude, and culture	80

Source: Author's Fieldwork, 2018

Further, Figure 7-7 above illustrates the result that respondents also perceive plan monitoring and evaluation (56%) as being an extremely influential factor, whereas 49% of respondents perceive factors such as the change in planning practice, attitude, and culture, continuous capacity building and adoption of SPI strategy at the same scale of measure. In practice, the provincial and national government are responsible for the monitoring of local government through the support and monitoring function. The Constitution of the country provides that "each provincial government must establish municipalities in its province in a manner consistent with the legislation enacted in terms of subsections (2) and (3) and, by legislative or other measures, must (a) provide for the monitoring and support of local government..."(RSA, 1996). On spatial planning and land use management, section 9(1)(b) of SPLUMA states that the-

"Minister must monitor-

- (i) Compliance with the development principles, and norms and standards;
- (ii) Progress made by municipalities with the adoption or amendment of land use schemes;

- (iii) Quality and effectiveness of municipal development frameworks and other spatial planning and land use management tools and instruments; and
- (iv) The capacity of provinces and municipalities to implement this Act” (RSA, 2013:18)

Further, section 10(5) of SPLUMA states that “provincial government must develop mechanisms to support, monitor and strengthen the capacity of municipalities to adopt and implement an effective system of land use management following this Act” (RSA, 2013:20). The poor performance of government in the past 25 years on spatial planning, as revealed by the National Planning Commission (2012) and RSA (2019a) is proof that practical evaluation and monitoring of implemented plans are absent. Development in local government and the country, in general, contributes to economic growth, job creation, alleviation of poverty, and bridging the gap of inequality. In the absence of municipal monitoring and evaluation regarding efficiency in dealing with development-related matters, the provincial and national governments are toothless in their support responsibility. Efficiency denotes the distribution and most advantageous use of resources over a or at any given period (Shahab *et al.*, 2019). The monitoring of efficiency enables the identification of red-tape and the need for sharing of resources, among others. Schoeman (2015) also indicates the roles of these spheres of government in the implementation of SPLUMA, to include alignment, coordination, formulation, enactment, application, and integration in various areas of the Act, but omits that of support. It is only possible to understand areas of support after any of these spheres complete the monitoring and evaluation of municipal performance on plan implementation (i.e., SDF and land use scheme). The new spatial planning system of SPLUMA introduced municipal planning tribunals (MPTs), authorized officials, and appeal authorities. The provincial government has the responsibility to monitor the functionality of these SPLUMA institutions of decision-making. In the case of MPTs and appeal authorities, monitoring areas include seating of these structures, percentages of finalized decisions measured against referred applications, and compliance with operational procedures, the Act, and other municipal policies. In the case of a dysfunctional MPT or appeal authority, given its failure to convene hearings, finalize decisions, and noncompliance with ruling prescripts, the provincial government has a legislated obligation to intervene and provide support. The action of monitoring and evaluation is not meant to police municipalities but rather improve the performance of municipalities. In the experience of the author, the Mpumalanga Provincial Government in its COGTA department adopted a tool to monitor the land use management performance of municipalities, which comprise evaluation indicators for authorized officials, MPTs, appeal authorities, enforcement, building control enforcement, by-law, and land use scheme. The findings from most municipal evaluations done quarterly resulted in the province intervening by assisting some municipalities with funding and

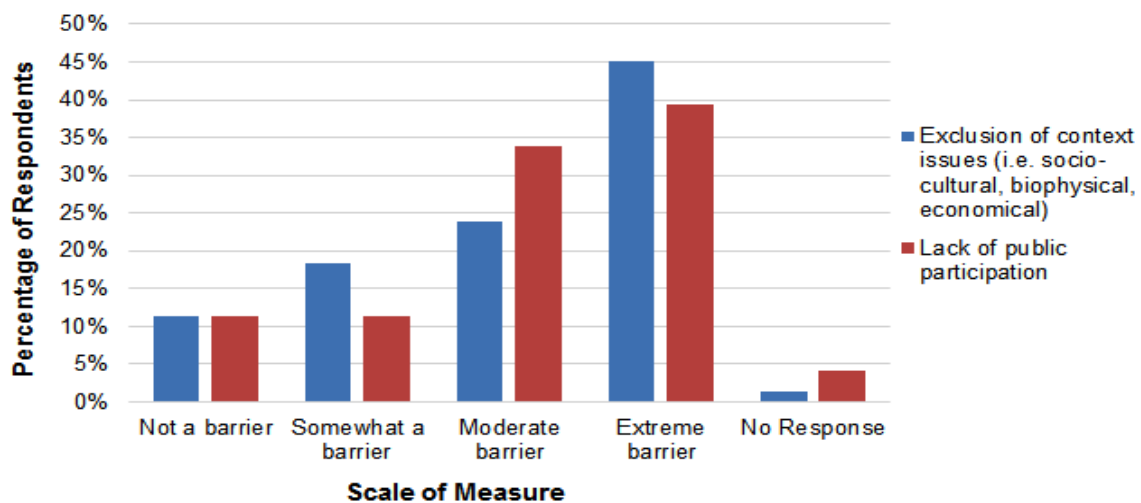
technical advice regarding the preparation of land use schemes, training of MPTs and appeal authorities, preparation of model operational procedures for MPTs and appeal authorities, and deployment of professional planners to assist with the evaluation of development applications. The province would not have intervened without the results from monitoring and evaluation.

Additionally, in the ranking, the adoption of simple-to-read spatial planning policies factor appears third, although it received 46% of responses from the municipal planners on the test of extremity. The results on the rankings show that after securing skills and resources, unambiguous spatial planning policies should drive the quest for achieving EJ. The affirmation that existing skills requires capacity building becomes apparent in the fourth ranking of continuous capacity building administrative factor. However, as shown in Table A8 of Appendix 4, there is statistically a weak, positive relation ($r = 0.3$) between continuous capacity building and competent and skilful personnel. By implication, competence and skills are not a precondition for capacity building in local government. All professionals, whether competent and skilful or not require continuous training. According to the RSA (2019a), planning professionals in the private and public sectors should, from time to time, receive capacity building. The continuous professional development that SACPLAN introduced, as described in section 5.6.1 of this report strives to ensure continuous training for planners across sectors of the economy. The factor of plan monitoring and evaluation received responses that ranked it the fifth-most influential factor, followed by the other enablers presented in Table 7-19. The fact that plan monitoring and evaluation precedes the adoption of implementation strategy indicates that monitoring should start from the inception process and endure towards the adoption of a strategy. This finding is consistent with the just policy dimension of EJ, which requires monitoring and evaluation throughout a planning process. Table A8 in Appendix 4 indicates the absence of an association between approaches to, and the type of, implementation that a municipality uses and these factors. Further, Table A9 in the same appendix shows that a province where a planner works holds a perfectly positive significant ($r = 1$) relationship with the element of simultaneous plan formulation and implementation. This finding indicates that the province defines the extent to which respondents perceive this factor as being an enhancer of SPI towards EJ. Therefore, consistent with the above finding, Table 7-12 in section 7.4 indicates that there is a significant difference (mean =4. 2, $p < 0.05$, $\alpha=0.98$) between the responses of concerning how planners in municipalities within various provinces perceive the influence of each identified factor on the implementation of spatial planning toward EJ.

7.4.7 CONTEXTUAL FACTORS THAT IMPEDE SPATIAL PLANNING IMPLEMENTATION

There are two contextual factors perceived to impede SPI in its endeavour to realize EJ. Figure 7-8 describes the perceptions of municipal planners on the identified factors with regards to the implementation of spatial planning. It is apparent in Figure 7-8 that most respondents (45%) perceived the exclusion of context issues as being a factor with the potential to ‘extremely’ impede the success of spatial planning in achieving EJ, when compared with the lack of participation (factor) in the same scale. Conversely, 11% of the respondents perceive both factors as not being barriers to the implementation of spatial planning to realize EJ.

Figure 7-8: Responses on the contextual barriers (n=71)



Source: Author’s Fieldwork, 2018

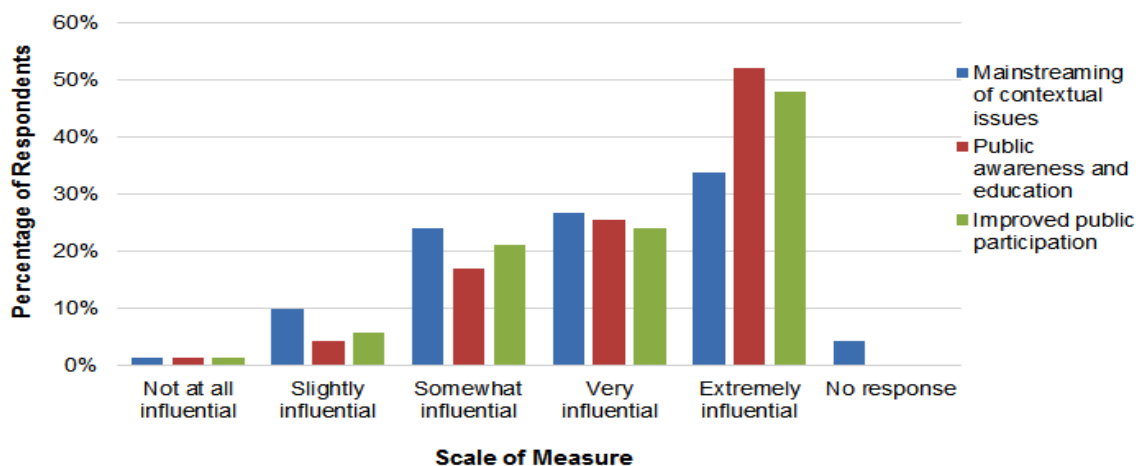
The exclusion of contextual issues appears with the highest percentages but it ranks second based on the aggregation of municipal responses on the Likert scale of ‘very influential’ to ‘extremely influential’, at 69%, when compared to the lack of participation at 73%. These findings underscore the point that the lack of participation, as a contextual barrier and as procedural issues, is the impeding contextual factor that can most readily compromise the achievement of EJ through the implementation of spatial planning. The results of the ranking of these factors confirm the notion supported by recognition and procedural justices, which states that participation is the means with which to streamline contextual issues into planning.

The statistical analysis presented in Table A10 of Appendix 4 demonstrates that there is a strong, positive ($r = 0.7$) association in the manner in which respondents perceive these two

factors but it exists as either having a negative relationship or zero relationship with the approach to, and the type of, SPI that a municipality uses. By implication, the lack of participation in planning contributes to the exclusion of contextual issues. In practice, planners have a responsibility to gain an understanding of the contextual issues through adequate, fair and meaningful participation, which must guide the requirements of plan making and the proposition of the intended outcomes of plan implementation. Campbell (2016) confirms the idea that town and regional planners have the potential to improve and enhance the planning outcomes and development of small towns. The study also found no difference and excellent reliability on internal consistency, in the distribution of respondents' responses concerning their perceptions on contextual barriers, as presented in Table 7-10. Arguably, the replication of these results in any municipality is possible and acceptable.

7.4.8 CONTEXTUAL FACTORS THAT ENHANCE SPATIAL PLANNING IMPLEMENTATION

Figure 7-9: Respondents on contextual enablers



Source: Author's Fieldwork, 2018

Figure 7-9 illustrates the responses of municipal planners to three factors that are perceived to influence the implementation of spatial planning towards EJ. The findings indicate that 52% of respondents perceive public awareness and education as being the most pertinent factor perceived to enhance or influence spatial planning. Further, 48% and 38% of respondents perceive improved public participation and mainstreaming of contextual issues into spatial planning, respectively, as existing contextual factors with the potential to enable spatial planning to achieve EJ through its implementation.

Table 7-20: Ranking of contextual enablers

No.	Enablers	Very influential and extremely influential (%)
1	Public awareness and education	77
2	Improved public participation	72
3	Mainstreaming of contextual issues into planning	66

Source: Author's Fieldwork, 2018

The ranking of these enabling or enhancing factors of spatial planning indicated in Table 7-20 shows that the contextual enabler with the most potential is public awareness and education, followed by the factor of improved public participation. These results indicate that the involvement of the general public requires municipalities to empower the general public with knowledge on spatial planning through awareness and educational programmes. The empowerment of the general public is consistent with the requirements of substantive justice. In practice, KI01, KI05, and KI06 confirmed that members of the public hardly ever attend consultation meetings for the preparation, or review, of SDFs and land use schemes. The lack of knowledge by the general public regarding spatial planning and its policies could be the reason for the inadequate responses to calls for public consultation meetings on spatial planning policies. Hence, the high ranking of the public awareness and education enabling factor. It is apparent that the prerequisite to the mobilization of the general public to participate in the spatial planning process is the empowerment of the public on spatial planning related matters. In support of the argument, the statistical results in Table A10 of Appendix 4 indicate a perfectly positive relationship between the factors of public awareness and education and public participation. This finding is consistent with the high ranking of the political factors perceived as constituting enablers to spatial planning. Planning in the country must move away from only being administrative but to also adopt a society-oriented approach. This approach has the potential of allowing planners to give communities that planning affects the time for engagement and knowledge transfer. Subsequently, there could be several community-led developments that planners can facilitate through co-creation. In practice, co-creation enables a planner to provide supervising to a community that creates its plan (Özdemir and Tasan-Kok, 2019). Furthermore, the ranking about the factor of streamlining contextual issues into spatial planning at the bottom of the ranking explains the need for prior mobilization of the members of the public who are affected by planning. These factors have no association with the approach to, and the type of implementation that a municipality uses in spatial planning. By implication, the factors mentioned here have an influence regardless of the approach to, and type of implementation, that a municipality

applies. The study also reveals that there exists an excellent, reliable and strongly significant difference (overall mean =4, $p < 0.05$, $\alpha=0.97$) between the responses of the respondents concerning their perceptions of these factors.

7.5 CONCLUSION

In summary, the above discussion reveals that most local municipalities in South Africa employ a combination of the bottom-up and top-down approaches in their implementation of spatial planning. In confirming this conclusion, the study reveals a the lack of difference ($p > 0.1$) between the responses of participants on the application of approaches to SPI. This finding signals a real shift away from an authoritative or command approach in municipalities, which often excludes the public in planning decision-making process. Further, the chapter demonstrated that 55% of the studied municipalities apply the administrative form in implementing spatial planning. By implication, planners in municipalities prioritize compliance as opposed to planning outcomes. It is apparent from the findings that the least-employed forms of implementation, in their ranking of application, comprise the symbolic, collaborative, and experimental approaches. Hence, the top four frequently implemented spatial planning forms comprise the administrative, inter-organizational, intra-organizational, and political approaches. The fact that the collaborative style of SPI is applied the least often identifies one of the reasons for poor municipal spatial planning implementation. In essence, collaboration can be seen as the means with which to bargain with other sectors, regarding the required support. Therefore, collaboration cannot be separated from the inter-organizational and intra-organizational styles of implementation. Further, the results in the chapter also demonstrated municipal planners' ranking concerning the likelihood of each form of SPI to contribute towards EJ. The participating municipal planners ranked the likelihood of these implementation forms, as contributing to EJ according to a hierarchy that posits the administrative style as most important; followed by the inter-organizational, collaborative, intra-organizational, political, experimental styles and lastly, the symbolic style of implementation. This ranking is consistent with the above argument concerning the collaborative form of implementation.

Further, the chapter also discussed the factors that are perceived as containing the potential to impede or enhance spatial planning towards EJ. The highest ranked factors that planners perceived to impede spatial planning towards EJ across the four categories of barriers include the lack of spatial planning prioritization, political pressure, inadequate tools of trade, and the exclusion of context. The chapter also identified the adoption of a SPI strategy, the

capacity building of political leaders on spatial planning matters, the presence of competent and skilful personnel, and public awareness and education as the highest ranked factors, perceived by municipal planners as having the potential to enhance spatial planning in the achievement of EJ. In conclusion, the success of spatial planning in leading the quest of achieving EJ requires a thoughtful consideration of these factors among others so as to proactively address planning challenges and uncertainty.

8. CHAPTER 8: THE TEST OF DISTRIBUTION, RECOGNITION, CAPABILITY APPROACH AND JUST POLICY DIMENSIONS OF ENVIRONMENTAL JUSTICE IN SPATIAL PLANNING

8.1 INTRODUCTION

The implementation of spatial planning requires policies, such as SDF's and LUS's, for the successful realization of its intended outcomes. A spatial development framework (SDF) in South Africa is a tool that guides development in realizing spatial planning objectives. A land use scheme (LUS) is a tool for achieving the objectives of the SDF through the regulation of land uses. This section will reveal the perceptions of municipal planners on the degrees to which municipalities, and spatial planning policies, take distributive and recognition justices, the capability approach, and just policy into account. This chapter will also discuss the results related to the just policy dimension within the context of the three dimensions mentioned above. In this regard, the researcher will introduce the view that the determination of effectiveness in spatial planning is iterative throughout the planning and implementation process.

8.2 DISTRIBUTIVE JUSTICE IN SPATIAL PLANNING

Distributive justice in spatial planning is a prerequisite, as opposed to an optional guideline. Spatial planning, as a just distributive action, promotes the distribution of resources, activities, and services in a fair and equal manner. It is, therefore, pivotal to comprehend the praxis of spatial planning, particularly in municipalities, concerning distributive justice. The study's respondents, who are municipal planners by extension, scored their levels of satisfaction with spatial planning policies (SPP) on the distributive dimensions of EJ as well as their agreement regarding distributive justice in municipal planning. The item that measured distributive justice in planning states that the municipality considers the demands and needs of resources, activities and services in planning. In measuring the satisfaction level, respondents scored their satisfaction with regards to the ability of municipal spatial planning policies in addressing fairness in the distribution of resources, activities and services in planning. Further, participating planners stated their agreement to a statement indicating whether the municipality evaluates and monitors the effects of distribution, in response to spatial disparities. This reflector statement relates to the requirements of the just policy dimension of EJ and its concomitant principle in planning.

8.2.1 DISTRIBUTIVE JUSTICE IN SPATIAL PLANNING POLICIES

Distributive justice exists in planning attempts to redress imbalances in the distribution of resources, activities and services, such as various land uses. The principles of distributive justice in EJ planning requires a just distribution of resources, activities and services in space based on the audit of environmental justice, which considers the need, compatibility, accountability, compensation, and context. Table 8-1 shows the respondents' satisfaction with spatial planning policies, regarding the fair distribution of resources, activities and services in planning.

Table 8-1: Satisfaction with distributive justice in SPP

Satisfaction Levels	Frequency	Percentage
Very dissatisfied	7	10%
Moderately dissatisfied	2	3%
Slightly dissatisfied	1	1%
Neutral	15	21%
Slightly satisfied	19	27%
Moderately satisfied	22	31%
Very satisfied	5	7%
Total	71	100%

Source: Author's Fieldwork, 2018

Table 8-1 indicates that a marginal percentage (7%) of municipal planners appear 'very satisfied' with the fair distribution of land uses, and related resources and services, in spatial planning policies. The findings also imply that spatial planning policies are not addressing contextual issues with regards to distribution effects. Spatial planning policies should guide distribution in various areas of a municipality, both in their content and application. Further, this level of satisfaction implies that an incompatibility of land uses arises from spatial planning policies in certain areas. For instance, a spatial planning policy, which distributes activities such as the erection of buildings for various uses, within a sensitive biophysical area, creates not only degradation but also incompatibility. The fair distribution principle requires the distribution of resources, activities and services to areas where they are most needed. A planning area that requires resources, activities, and services is not exempt from incompatibility in spatial planning policies. In practice, the distribution of activities requires a consideration of the relationship between land uses and the convenience factor. In support of this argument, KI01 indicated that the most critical factor in spatial planning is

convenience. Accordingly, KI01 argued that convenience plays a crucial role in improving fairness in accessing amenities within a town or settlement. Over and above the argument of KI01, the CSIR (2012) provides detailed guidelines for the provision of amenities in proportion to a population. Table 8-1 shows 31% of the municipal planners as being ‘moderately satisfied’, 27% of them ‘slightly satisfied’, and 21% of the participants remaining ‘undecided’ in the matter. By implication, spatial planning policies require improvement in achieving the goal of fair distribution in planning practice. The scourge of spatial planning policies’ poor performance, especially from the perception of municipal planners, can be ascribed to the absence, or poor reflection, of fairness in planning theories as reflected in Chapter 3. Table A11, in Appendix 4, reveals that the familiarity of respondents with EJ has no relationship with their satisfaction regarding distributive justice in SPP. The statistical results indicate a correlation value of 0.1, with regards to municipal planners’ familiarity with EJ and their satisfaction with distributive justice in SPP. By implication, the challenge of distributive justice in planning policy is a general one, as opposed to being a unique impediment to a specific group of planning authorities or municipal planners.

8.2.2 MUNICIPAL CONSIDERATION OF DISTRIBUTIVE JUSTICE DURING PLANNING

The process of mainstreaming distribution justice in SPP depends on the planning process that will result from the adoption of a specific SPP. Table 8-2 presents the frequency of municipal planners’ responses on the agreement with the item that measured the extent to which planners believe that a municipality considers the demands and needs of resources, activities, and services in planning. Although there is an insignificant level of satisfaction with SPP, Table 8-2 demonstrates a contradiction between the satisfaction level with SPP and the corresponding agreement about distributive justice in municipal planning.

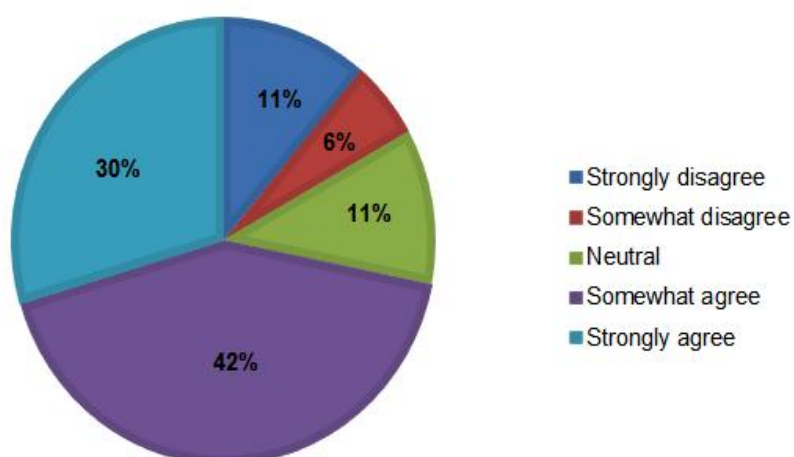
Table 8-2: Municipal consideration of distributive justice during planning

Agreement Levels	Frequency
Strongly disagree	8
Somewhat disagree	4
Neutral	8
Somewhat agree	30
Strongly agree	21
Total	71

Source: Author’s Fieldwork, 2018

The findings in both Table 8-2 and Figure 8-1 illustrate the fact that municipalities do take the demand and need for resources, activities, and services in planning into account. Consequently, there is a recognition of context regarding the effects of distribution in an area and trade-offs regarding the distribution of resources, activities, and services. Indeed, the statutory process of integrated development planning requires the collation of community needs, especially with regards to water, sanitation, electricity, human settlement, and amenities. Hence, the marginal frequency of respondents who ‘somewhat disagree’ or ‘strongly disagree’ with the statement measuring the extent to which their municipalities consider the needs of resources, activities, and services in planning. This IDP process results in the prioritization of community needs because the process of agreeing on priorities involves trade-offs between areas that are in need of service delivery. The insignificant level of respondents’ satisfaction with spatial planning policies, in considering distributive justice, reflects planning’s focus on compliance, as opposed to having a focus on changing spatial patterns. In support of this argument, KI03 accentuated the point that legal compliance requirements often surpass the implementation of spatial planning policies in planning. It is important to note that legal compliance, without effectiveness, can allow a municipality to improve the annual Auditor General’s audit outcomes, but not the realization of spatial planning outcomes. It is apparent that the data collected on the demands and needs of communities during planning, specifically regarding the IDP processes, remain as proof of the existing levels of compliance. As a result, communities continue to face the brunt of the effects of spatial planning failures.

Figure 8-1: Municipal consideration of distributive justice during planning



Source: Author’s Fieldwork, 2018

It is evident that, if municipalities expressed the needs and demands of communities in spatial planning policies and implementation, the country will have subtle spatial disparities. In support of this, Table 8-3 represents a weak, positive association between the municipal planners' agreement that their municipalities consider the needs and demands of resources, activities, and services in planning and the corresponding satisfaction level with SPP related to distributive justice. The table indicates a correlation of 0.4 between these two factors.

Table 8-3: Correlation of a municipal category, EJ familiarity, and distribution variables

Variable No.	Correlation Variables	1	2	3	4
1	Category of Municipality	1.000	-0.095	0.022	-0.008
2	Planners' familiarity with EJ	-0.095	1.000	0.137	0.213
3	Satisfaction with distributive justice in spatial planning policies	0.022	0.137	1.000	0.438
4	Municipal consideration of needs and demands of activities and resources in planning	-0.008	0.213	0.438	1.000

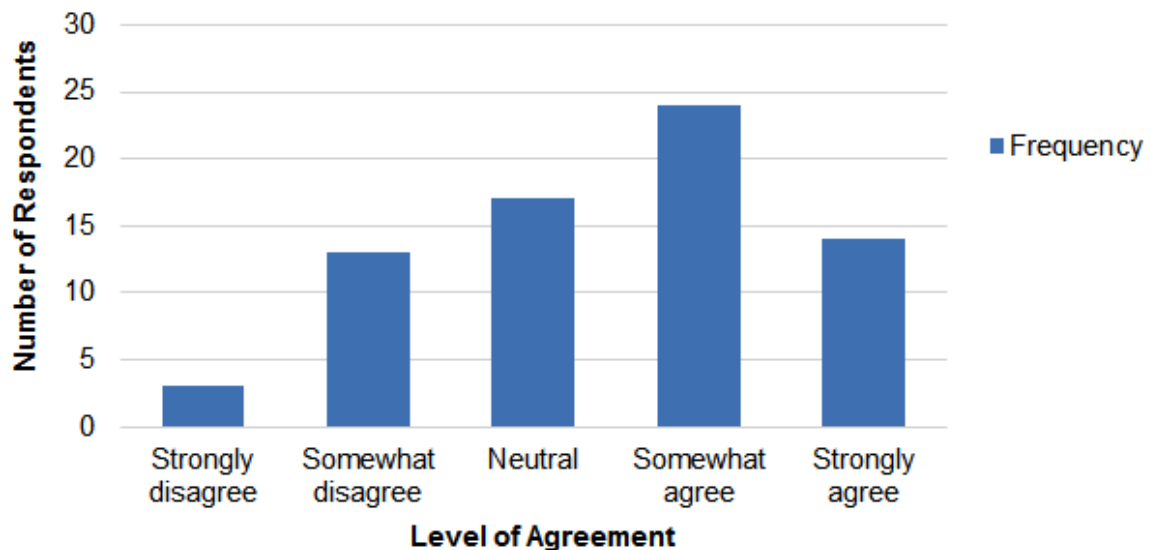
Source: Author's Fieldwork, 2018

The weak, positive relationship confirms that the availability of data on community needs and demands does not guarantee its consideration in spatial planning policies. Therefore, the argument of KI03, who stated that the implementation of EJ requires an aggressive approach, becomes relevant. It can also be said that the implementation of EJ principles in planning has a significant role in improving spatial planning outcomes. Further, Table 8-3 statistically presents no relationship between the category of a municipality where a municipal planner works with either the satisfaction with distributive justice in SPP or a municipality's consideration of needs and demands of resources, activities and services. By implication, the category of a municipality (metropolitan, district, and local) does not influence the responses of municipal planners in the context of these two variables. In essence, there is a general demand for the modification of spatial planning policy making processes to improve on the distribution factor. The foregoing chapter stated that this study aims at strengthening existing planning theory and practice, rather than replacing the existing constructs. In this context, the distribution principles discussed in Section 2.6.1 have the potential to propel planning towards achieving the fair distribution of activities and resources.

8.2.3 MUNICIPAL EVALUATION AND MONITORING OF DISTRIBUTIVE EFFECTS IN PLANNING

The environmental justice dimension of just policy requires the evaluation and monitoring of the effects that occur throughout the process of distributing resources, activities, and services in planning. The principle of just policy entails the support of fair planning policies, strategies, programmes, and laws that promote the improvement of the quality of life for all. The monitoring and evaluation of implementation is a tool that can estimate whether a policy or programme encourages the improvement of quality of life. The study's respondents rated their levels of agreement with the statement that measures whether the municipality evaluates and monitors the effects of distribution, in response to spatial disparities. Figure 8-2 provides the results of the monitoring and evaluation of the distribution effects in planning. The analysis of this figure indicates that 35% of the municipal planners 'somewhat agree' with the reflective indicator, whereas 18% of the municipal planners 'somewhat disagree' with the statement. Further, a total of 20% of respondents are in 'strong agreement' with the above statement, whereas 4% of them 'strongly disagree' with it.

Figure 8-2: Municipal evaluation and monitoring of distributive effects in planning (n=71)



Source: Author's Fieldwork, 2018

These results indicate an insignificant level of agreement on the statement that municipalities monitor and evaluate the effects of distribution in planning. The distribution of activities (i.e. land uses) demands a post-process of assessing whether the impact of the distribution is positive or negative. This impact, among others, will confirm the existence of fairness in the distribution. In practice, the land use management processes have a role in

confirming fairness in the distribution of resources, activities, and services. For example, an area that is earmarked for activities that do not accommodate its requirements, or population, tends to attract copious objections from communities. According to the descriptive analysis of the results, the responses of the participating municipal planners reflect an average mean score of 3.4, which is equivalent to feeling neutral on the matter. From the results, it is also evident that 24% of the respondents preferred to remain undecided.

The high percentage of municipal planners, who responded with 'neutral', as evident from the mean results, is a veridical validation that monitoring and evaluation of effects in the area of distribution are not yet dominant in municipal planning. This finding explains the ineffectiveness of spatial planning policies to transform spatial geographies. It can be mentioned that the unchanging spatial imbalances in the country to some degree emanate from the failure of planning authorities and planners to assess spatial planning performance on the distribution of resources, activities, and services. The results also show differences when comparing the responses to the municipal consideration of the needs and demands of resources, activities, and services in planning with the responses to the monitoring and evaluation of the distribution effects because 30% of municipal planners strongly agree that planning considers the needs and demands, while 20% of them strongly agree that there exists monitoring and evaluation of distribution effects in their municipalities.

8.3 RECOGNITION JUSTICE IN SPATIAL PLANNING

The recognition justice dimension of EJ in planning requires the recognition of experiential and expert knowledge to ensure the comprehensive recognition of various conditions. In practice, the principle of integration often advocates for the inclusion of various conditions and plans in planning. However, the integration principle is also implicit in bridging the gap between experiential and expert knowledge. In South Africa's planning practice, integrated development planning allows the agglomeration of sector plans, yet these are not necessarily informed by experiential knowledge. In most cases, sector departments adopt plans that are unresponsive to the relevant community's needs. Consequently, the integration focuses on compliance, rather than responsive planning. The respondents provided their agreement levels regarding the item that states that the municipality takes the geographic and socio-cultural context in SPPs into account. In addition, the municipal planners participating in the study indicated their satisfaction levels with the municipal spatial planning policies (i.e. SDF) in the recognition of socio-economic, natural, cultural and other

factors. The results also reveal the levels of agreement that municipal planners scored in response to the reflective indicator that measures whether that the municipality evaluates and monitors contextual recognition in planning and implementation.

8.3.1 RECOGNITION JUSTICE IN SPATIAL PLANNING POLICIES

The success of spatial planning in contributing to the improvement of quality of life depends on the recognition of all conditions that affect the environment. In this regard, the researcher proposes spatial planning as contextual experience and learning. Table 8-4 presents the satisfaction levels of municipal planners on spatial planning policies in recognition of socio-economic, natural, cultural and other factors.

Table 8-4: Satisfaction with recognitive justice in SPP

Satisfaction Levels	Frequency	Percentage
Very dissatisfied	6	8%
Moderately dissatisfied	4	6%
Slightly dissatisfied	3	4%
Neutral	13	18%
Slightly satisfied	18	25%
Moderately satisfied	20	28%
Very satisfied	7	10%
Total	71	100%

Source: Author's Fieldwork, 2018

It is apparent from Table 8-4 that an insignificant number of respondents appear dissatisfied with the recognition dimension of EJ in SPPs because 8% are 'very dissatisfied', 6% are 'moderately dissatisfied' and 4% are 'slightly dissatisfied'. Although the dissatisfaction level is marginal, only 10% of respondents are 'very satisfied' with the recognition of socio-economic, natural, cultural and other factors in SPPs. Therefore, the results indicate that there is a gap in spatial planning regarding recognition because 63%, which represents an aggregation of responses on the Likert scale of slightly satisfied, moderately satisfied and very satisfied, of municipal planners perceive their municipalities positively with regards to the recognition of environmental conditions in spatial planning policy. Despite this shortcoming, the findings assist in illustrating the importance of the EJ principle that promotes the recognition of experiential and expert knowledge in planning. This principle aims at enhancing the recognition of various environmental conditions in planning. The

dissatisfaction level of planners confirms that inadequate integration still exists in planning, which is derived from the nature of planning practice that adheres to compliance, thereby compromising spatial planning effectiveness. The results on the spatial planning implementation styles provide the most compelling evidence for the compliance-oriented attitude that drives municipalities.

8.3.2 MUNICIPAL CONSIDERATION OF RECOGNITIVE JUSTICE DURING PLANNING

Recognition justice requires the consideration of environmental conditions in planning. Table 8-5 and Figure 8-3 (pie chart) demonstrate that most respondents (46%) ‘strongly agree’ with the statement that their municipalities recognize socio-economic, natural, cultural and other factors during planning processes. These results are not surprising, for it is a legal requirement for planning processes to integrate sector plans that address various conditions of the environment.

Table 8-5: Municipal consideration of recognitive justice during planning

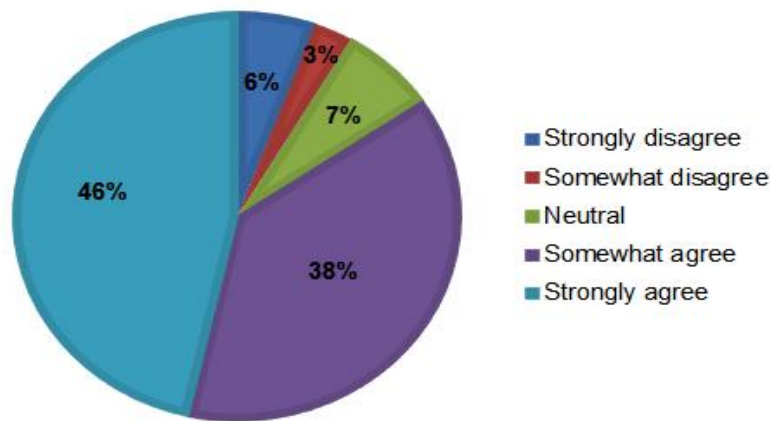
Agreement Levels	Frequency
Strongly disagree	4
Somewhat disagree	2
Neutral	5
Somewhat agree	27
Strongly agree	33
Total	71

Source: Author’s Fieldwork, 2018

However, the results of the satisfaction level regarding the streamlining of these environmental conditions into spatial planning policies present a different implementation practice. The study findings, in this regard, also demonstrate a lack of effective and responsive spatial planning implementation. By implication, an integrated development plan that integrates sector plans in the planning practice of South Africa has a negligible effect on spatial planning policies. Arguably, this implication arises from the conflict that is visible between the provisions of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000) and those of the SPLUMA concerning spatial development frameworks. The former requires an SDF as an element of a municipal IDP, whereas the latter presents it as a standalone plan with a legal status. In light of this conflict, good practice would require a spatial development framework to inform integrated development planning. The insignificant

number of municipal planners who disagree with the statement that relates to recognition in municipal planning indicates a strong awareness of environmental conditions in municipalities.

Figure 8-3: Municipal consideration of recognitive justice during planning



Source: Author's Fieldwork, 2018

Likewise, and consistent with the results of distributive justice given above, Table 8-6 statistically shows that there is no association between the category of a municipality where planners work, their satisfaction with recognition justice in spatial planning policies and their agreement with the statement regarding the municipal recognition of environmental conditions. Therefore, the results indicate that all municipalities, regardless of category, recognize various environmental conditions in planning but the effectiveness of this recognition remains questionable.

Table 8-6: Correlation of a municipal category, EJ familiarity, and recognitive variables

No.	Correlation Variables	1	2	3	4
1	Category of Municipality	1.000	-0.095	-0.026	0.001
2	Planners' familiarity with EJ	-0.095	1.000	0.093	0.202
3	Satisfaction with recognitive justice in spatial planning polices	-0.026	0.093	1.000	0.457
4	Municipal recognition of socio-economic, natural, cultural and other factors in planning	0.001	0.202	0.457	1.000

Source: Author's Fieldwork, 2018

In addition, Table 8-6 indicates a weak, positive association between respondents' satisfaction of recognition justice in spatial planning policies and the municipal recognition of socio-economic, natural, cultural and other factors in planning. In validating this association, the regression analysis shown in Table A11 of Appendix 4 confirms this association as significant, with a p-value of <0.001, yet with an adjusted R square (r^2) of 20%. Therefore, there exists no guarantee that a municipality that recognizes environmental conditions in planning will consider them in spatial planning policies and implementation, because the r^2 results show that there is only a 20% chance that a municipality will recognize and consider these conditions in spatial planning policies and implementation. In support of this, Ntiwane (2012) points toward a lack of streamlining environmental issues into spatial planning policies with regards to municipalities in the Ehlanzeni District of the Mpumalanga province in South Africa. The new turn toward environmental justice in planning provides the means with which to improve the streamlining of environmental conditions into spatial planning processes, policies and plans. The two-tailed test (see Table A12 in Appendix 4), which was applied in the analysis of the relationship between the mean scores of respondents on their agreement with the statements that municipalities consider the needs and demands of resources, activities, and services in planning and recognize socio-economic, natural, cultural and other factors in planning, reflects a significant difference, with a p-value of <0.001 with a 95% confidence level and excellent reliability ($\alpha=0.92$). The t-test results indicate that planners agree more in response to the statement that municipalities recognize socio-economic, natural, cultural, and other factors in planning, than to the statement that the municipality gives consideration to the needs and demands of resources, activities, and services in planning. This analysis underscores the point that the poor achievement of planning outcomes emanates from distributive challenges evident in spatial planning. These results, by implication, also expose the weaknesses of integration in planning because of the fact that the recognition of challenges does not translate into effective implementation in policy.

8.3.3 MUNICIPAL MONITORING AND EVALUATION OF CONTEXTUAL RECOGNITION IN PLANNING

The monitoring and evaluation of contextual recognition in planning mainly confirm the comprehensive nature of planning policies with regards to all affected stakeholders and environmental conditions. The results regarding the municipal consideration of contextual factors in planning reveal that most municipalities recognize these factors in planning. It is,

therefore, crucial to ascertain municipal planners' perceptions with regards to the extent to which their municipalities assess the adequacy and effectiveness of contextual recognition.

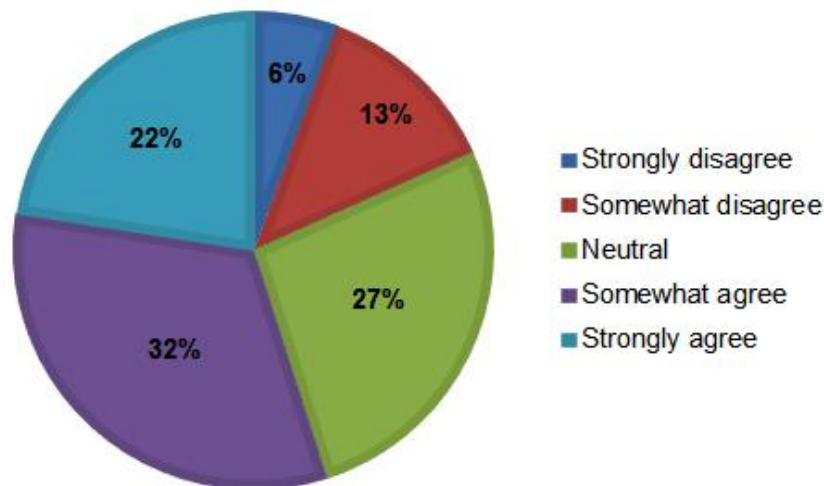
Table 8-7: Municipal monitoring and evaluation of contextual recognition in planning

Levels of Agreement	Frequency
Strongly disagree	4
Somewhat disagree	9
Neutral	19
Somewhat agree	23
Strongly agree	16
Total	71

Source: Author's Fieldwork, 2018

Table 8-7, read with Figure 8-4, indicates that 16 municipal planners (22%) are in 'strong agreement' with the statement that the municipality evaluates and monitors regardless of whether there is contextual recognition in planning and implementation. This percentage (22%) indicates poor practice in the monitoring and evaluation of contextual recognition in planning.

Figure 8-4: Municipal monitoring and evaluation of contextual recognition in planning



Source: Author's Fieldwork, 2018

The results further present a marginal six percent of respondents who 'strongly disagreed' with the indicator in question and a total of 27% of respondents who preferred to remain undecided. These results are, to a considerable extent, similar to the results of the

monitoring and evaluation of distribution effects in planning. It can be said that a planner who practises monitoring and evaluation in spatial planning would not be undecided with regards to confirming the existence of such a practice. The revelation of the findings on monitoring and evaluation of contextual recognition highlights the reason for the gaps that are still evident and that perpetuate contextual exclusions in the spatial planning practice. Proper monitoring and evaluation in planning will not only uncover the recognition gap in policy-making and implementation, but also enable planning authorities to enhance spatial plans through review processes.

8.4 MUNICIPAL CONSIDERATION OF CAPABILITIES IN PLANNING

The EJ principle in planning that relates to the capability approach requires a consideration of the capability of the environment, state organizations, and the general public, all of which are affected by planning in pursuit of planning goals and outcomes. There are two reflective indicators or statements that participants responded to as an indication of their agreement. The first statement required a respondent to rate their agreement level with a statement that asked whether their municipality considers the capabilities required to improve quality of life and spatial transformation. The second statement asked whether their municipality considers sustainability factors in planning. The latter statement is relevant to the capability approach because this approach requires the conscious consideration of sustainability in planned activity.

8.4.1 CAPABILITY TO IMPROVE QUALITY OF LIFE AND SPATIAL TRANSFORMATION

Table 8-8 indicates that there is a high percentage of municipal planners who strongly agree with the statement that the municipality where they work considers the capabilities required to improve and enhance quality of life and spatial transformation. These results are an expression of the fact that most municipalities are aware of the requirements for realizing improved quality of life and spatial transformation. By implication, a municipality that is knowledgeable of the capacity requirements for achieving spatial planning outcomes is in a better position to improve quality of life and spatial transformation. However, without appropriate spatial planning implementation strategies, the understanding of capability requirements becomes redundant.

Table 8-8: Capability to improve quality of life and spatial transformation

Levels of agreement	Frequency	Percentage
Strongly disagree	6	8%
Somewhat disagree	2	3%
Neutral	11	15%
Somewhat agree	25	35%
Strongly agree	27	38%
Total	71	100%

Source: Author's Fieldwork, 2018

The untransformed spatial geography of the South Africa confirms that there exists perplexing barriers to spatial planning implementation. Furthermore, Table 8-8 shows that 15% of the respondents appeared 'undecided' on the statement regarding knowledge of capabilities whereas 3% and 8% 'somewhat' and 'strongly disagreed', respectively. These results indicate that there are municipalities that facilitate spatial planning, but without consideration of the available capability to deliver spatial planning outcomes. Further, the researcher observed, in practice, that integrated development plans and the component of SDFs in municipalities invariably record and maintain a list of a significant number of programmes and projects, but without a budget. This confirms the lack of proper introspection regarding the capabilities that are needed to accomplish service delivery programmes and projects. Section 155(6)(b) of the Constitution requires that a provincial government must "promote the development of local government capacity to enable municipalities to perform their functions and manage their own affairs" (RSA, 1996) but, in practice, a provincial government can only provide capacity support, if they are aware of an incapability challenge in a municipality. The inter-organizational style of implementation can assist in this regard, by ensuring that a provincial government is aware of municipal support requirements. Additionally, the discussed spatial planning implementation strategy represents an opportunity for planning authorities to evaluate the capability for implementing planning programmes and projects. As discussed in Chapter 7, this strategy is crucial for the realization of environmental justice. Provincial governments also experience resource and capacity constraints, notwithstanding the Constitutional mandate of provincial administration. For instance, in the year 2014, the Mpumalanga Provincial Government put a moratorium on the appointment of personnel in effect, thus rendering capacity support to local government difficult. Moreover, the required capability is not limited to human resources, but extends to include the environment, as it relates to sustainability, regarding its resources, activities, and

services. It is, therefore, evident that the realization of sustainability without capability is unattainable.

8.4.2 SUSTAINABILITY FACTORS IN PLANNING

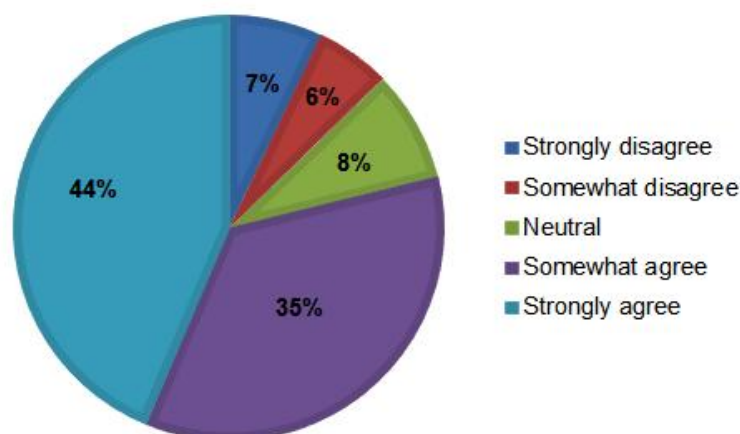
The results in Table 8-9 and Figure 8-5 confirm that municipal planning does consider sustainability factors, particularly within the spatial planning context. The marginal six percent of municipal planners who remained undecided in confirming whether the municipality where they work considers sustainability factors in planning affirms that most municipalities are familiar and quite adept at employing the sustainability principle in spatial planning.

Table 8-9: Sustainability factors in planning

Levels of Agreement	Frequency
Strongly disagree	5
Somewhat disagree	4
Neutral	6
Somewhat agree	25
Strongly agree	31
Total	71

Source: Author's Fieldwork, 2018

Figure 8-5: Sustainability factors in planning



Source: Author's Fieldwork, 2018

However, the question of whether sustainability is achievable remains debatable. Hence, the criticism of South African sustainability for its failure to achieve environmental justice (Patel

2006 cited in Walker, 2009b). In this context, the South African framework for sustainability stands no chance in addressing environmental justice, given the considerable lack of familiarity of municipal planners with the concept of EJ.

This study advocates for the achievement of sustainability through a comprehensive assessment of an environment's capability to sustain itself. Table 8-10 indicates that there is no association between the category of municipality where a planner works and the agreement level to the statements that measure the knowledge of capability. The statistical results in the table show that these factors have a correlation value of -0.07, which confirms that municipalities, in general, have the same understanding of capabilities and sustainability in spatial planning.

Table 8-10: Correlation of a municipal category, EJ familiarity, and capability variables

Variable No.	Correlation Variables	1	2	3	4
1	Category of Municipality	1.000	-0.095	-0.072	-0.047
2	Planners' familiarity with EJ	-0.095	1.000	0.167	0.119
3	the capabilities required to improve the quality of life and spatial transformation	-0.072	0.167	1.000	0.810
4	Sustainability factors in planning	-0.047	0.119	0.810	1.000

Source: Author's Fieldwork, 2018

Moreover, Table 8-10 indicates the absence of a relationship between the planners' familiarity with EJ and the two capability variables. The results reveal a strongly positive association ($r = 0.8$) between the responses to the capabilities required to improve and enhance quality of life and the spatial transformation and sustainability factors in planning. Further, the regression analysis presented in Table A13 of Appendix 4 shows a strong, positive relationship between these two capability variables, which is also significant with a p-value of <0.001 . These results confirm that the capability approach is appropriate to aid in the achievement of sustainability in spatial planning. Furthermore, this confirmation supports the contention of van der Merwe (2009), who states that there is a compelling need for alternative concepts to guide the achievement of sustainability. Additionally, the two-tailed test specifies that there is no difference (p-value of 0.8, $\alpha=0, 97$) between the mean scores, concerning the responses of municipal planners, regarding these two variables. By implication, a similar tendency of respondents to agree with the capability reflective statements is evident in the results.

8.4.3 MUNICIPAL MONITORING AND EVALUATION OF CAPABILITY TO IMPLEMENT

Municipal planning is a constitutionally mandated function of local authorities, and as such, municipalities ought to have the capability to implement spatial planning policies and plans (SPPPs). In the literature review discussed in Chapter 4, there is evidence of spatial planning implementation challenges. Consequently, there is a need to ascertain whether local authorities monitor and evaluate their required capability to implement SPPPs. In measuring that, municipal planners rated their levels of agreement with the reflective statement that measures the extent to which the municipality monitors and evaluates its capabilities so as to implement spatial planning policies and plans. Table 8-11 demonstrates the responses of the participating planners regarding their agreement to the above statement.

Table 8-11: Municipal monitoring and evaluation of capability to implement

Levels of Agreement	Frequency	Percentage
Strongly disagree	5	7%
Somewhat disagree	8	11%
Neutral	11	15%
Somewhat agree	29	41%
Strongly agree	18	25%
Total	71	100%

Source: Author's Fieldwork, 2018

Table 8-11 indicates that most planners in municipalities 'somewhat agree' with the statement that their municipalities monitor and evaluate their capabilities to implement SPPPs. The high percentage of the municipal planners who 'somewhat agree' with the statement under discussion implies that planners in municipalities are unsatisfied with the level of monitoring and evaluation of the capabilities that are needed for implementation. However, 25% of the respondents 'strongly agree' with the statement. The minimal response of 'strong agreement' to this statement corresponds with the existing spatial planning challenges and the contention of the study's interviewees, who stated that the implementation of spatial planning policies is very poor. The regression analysis in Table A14 of Appendix 4 demonstrates that the category of a municipality has no influence on the practice of a municipality, regarding the monitoring and evaluation of the municipality's capability to implement SPPPs. Table A14 indicates that the category of a municipality has a zero percent chance to influence the practice of a municipality or the monitoring and

evaluation of the municipal capabilities to implement SPPs. Additionally, the study reveals that most municipal planners are of the view that their municipalities have dedicated personnel to monitor and evaluate the performance of municipal spatial planning policies.

Table 8-12: Municipal personnel to evaluate and monitor the performance

Levels of Agreement	Frequency	Percentage
Strongly disagree	7	10%
Somewhat disagree	6	8%
Neutral	15	21%
Somewhat agree	21	30%
Strongly agree	22	31%
Total	71	100%

Source: Author's Fieldwork, 2018

It is evident that most municipal planners agree with the statement that their municipality has or should have, dedicated personnel to monitor and evaluate the performance of municipal spatial planning policies; however, the majority of the responses fall along the scale of 'somewhat agree' (31%), 'neutral' (21%), 'somewhat disagree' (8%) and 'strongly disagree' (10). These results reveal that there is no substantial, or unanimous, agreement with regards to the presence of dedicated personnel to monitor and evaluate the implementation of SPPs. This is supported by the fact that the discussion about the factors perceived to impede spatial planning implementation revealed that capacity in municipalities remains a challenge.

Schoeman (2015) states that SPLUMA, in the midst of under-capacity, introduced a planning reform that created more work for municipalities, which remains a challenge for local government. This under-capacity is also evident in the problematic implementation of spatial plans in local governments in Iran (Tilaki *et al.*, 2014). Therefore, the prioritization of spatial planning, as relevant for addressing implementation capability, remains important. In practice, the implementation of SPLUMA leads to a delay of implementation in most municipalities, given the existing inadequate capability to implement. As a result, scholars such as Subban and Theron (2011) advocate for the use of shared services among municipalities to circumvent the gap of under-capacity. Additionally, this inadequate capability can be attributed to a lack of the technical understanding in executing SPLUMA requirements, financial resources and personnel required to attend to planning. The preceding chapter highlighted competent and skilful personnel as constituting the most influential factors towards the implementation of spatial planning. It is clear that the

achievement of planning outcomes will be difficult without competent and skilful personnel. The delays in the implementation of SPLUMA indicate that the formulation, adoption, and enactment of the legislation excluded the evaluation of the municipalities' ability to implement. The responses of less than 50 % on the agreement with the statement in question underscores the lack of priority that is afforded to spatial planning monitoring and evaluation in local government. In the experience of this researcher, an observation of municipal monitoring and evaluation is more about compliance than effectiveness but, in reality, the planners employed in local authorities concentrate mostly on development control, by extension land use management, rather than on monitoring and evaluating the efficacy of SPPs in achieving the intended outcomes.

8.5 CONCLUSION

The above debate precisely shows that there is an EJ gap in the practice of spatial planning in municipalities. The discussion reveals municipal planners' disdain with the extent to which their municipalities consider distributive and recognition justices in spatial planning policies. Hence, municipal planners seem positive about the consideration of these dimensions during planning processes. This suggests that there is a serious challenge concerning these aspects of EJ in municipal planning policies, especially when compared with the practice of municipalities, in dealing with spatial planning. Further, the results revealed that there is no relationship between the category of municipality where planners work, the planners' familiarity with EJ, and their satisfaction with these dimensions of EJ in municipal SPP. The chapter concludes that the dissatisfaction of municipal planners regarding the consideration of the distributive and recognitive justices in SPP is not peculiar to a specific group of planners; it is present throughout the sampled municipalities. The discussion also indicates that less than 40% of the municipal planners strongly agree that municipalities consider the capabilities to improve quality of life and spatial transformation. It is apparent that the insignificant percentage of municipal planners who strongly agree with the above statement on capability is a cause for concern, given the unchanging spatial pattern of the country. In addition, the findings reflect a strong, significant and positive relationship between the satisfaction of municipal planners regarding their consideration of capabilities in the municipal planning process and sustainability factors. This finding affirms that the capability approach is likely to influence sustainability practices in planning. It is also evident from the findings that most municipal planners are unsatisfied with municipal monitoring and evaluation of the process throughout planning and implementation. By implication, there is a weak practice of planning monitoring and evaluation in municipalities, confirming the

inadequacy of just policy in planning. Lastly, the discussion reflects that a majority of the planners confirm that their municipalities have no dedicated personnel for planning monitoring and evaluation. In conclusion, the chapter fully validates the need for EJ in planning practice.

9. CHAPTER 9: PROCEDURAL AND SUBSTANTIVE JUSTICE IN SPATIAL PLANNING

9.1 INTRODUCTION

The criteria for procedural justice, as applied in this study and discussed in Chapter 4, comprise five criteria: representation and its influence on decision-making, consistency, impartiality (lack of biases), decision accuracy (facts and objectivity), correctability (allowing appeals on decisions), and ethicality (doing what is good and right). On ethicality, Leopold (1949:262) argues “a thing is right when it tends to preserve the integrity, stability and beauty of the biotic community.” By implication, planning authorities have a responsibility to treat members of a society with truthfulness and honesty and make decisions that are devoid of negative impact on the quality of their lives. The discussion below provides the findings from municipal planners’ responses on the spatial planning performance of municipalities, existing as planning authorities about procedural justice, based on the aforementioned criteria. The chapter also looks at the substantive justice practice in municipalities, as a complement to procedural justice, particularly regarding the criterion of representation. The chapter concludes with a discussion about the importance of these criteria.

9.2 REPRESENTATION AND INFLUENCE ON DECISION-MAKING

Prior to an analysis of the findings on how municipalities perceive their level of affording the public an opportunity to participate and the influence of this participation on decision making, the study presents results from municipal planners’ responses on the method, types, stages, and levels of public participation or involvement during the preparation of spatial planning policies in their municipalities.

9.2.1 METHOD OF PUBLIC PARTICIPATION (PP)

The study participants had to respond to the question of how public consultation takes place during the preparation of spatial planning policies (SDFs and LUSs). The methods that municipalities use for consultation constitute the platform for gaining access to information and participation, which is promoted by substantive justice. The study reveals that 30% of municipal planners confirmed ward community meetings as being the most commonly used

method of community consultation in spatial planning policy making. It is important to note that the Demarcation Board in South Africa is responsible for ward demarcation.

Table 9-1: Methods of public participation

Methods of Public Participation	Frequency	Percentage
Selective consultation	12	17%
Sectoral consultation	14	20%
Mass community meeting	18	25%
Ward community meeting	24	34%
Other	3	4%
Total	71	100%

Source: Author's Fieldwork, 2018

Ward consultation meetings allow for the discussion of how planning affects, or could improve, a specific ward. This type of consultation provides the potential for considering contextual issues comprehensively. Table 9-1 shows that the second most used in this regard comprises mass community meetings (25%), followed by sectoral consultations (20%) and selective consultations (17%). The mass community meeting method entails the combination of all wards in a single session. In the experience of the researcher, it is often difficult to control a large mass of people when discussing policy. The process typically results in chaos. Typically, a mass meeting can be effective after initial ward consultation meetings have been conducted. This effect can be attributed to the fact that participants gain awareness in ward meetings regarding the planning policy in question. A ward meeting is not a meeting of a ward committee but that of people residing within the jurisdiction of a demarcated ward. Kienast (2010) concludes from the work of other scholars that the use of ward committees in public participation is impractical and unsuccessful. A ward councillor with capacity on spatial planning is an available resource that could effectively mobilize communities to participate in planning matters. Moreover, the sectoral consultation method is analogous to the ward consultation method, although it appears exclusively in sectors. Only 17% of municipal planners agreed that their municipalities use the selective consultation method. This method deals mostly with site-specific issues, whereby consultation only involves the affected parties. Therefore, the selective consultation method promotes procedural injustices to a greater extent. The correlation results in Table A15 of Appendix 4 indicate that the method used by a municipality has no relationship with the applied type of spatial planning implementation. Table A15 presents the correlation value of these factors as less than 0.2. The correlation results imply that a public participation method

is necessary to any spatial planning implementation, regardless of its characteristics or effects. Further, the implementation of spatial planning will not culminate in the realization of its goals and outcomes if there is no adoption of an effective public participation method. Furthermore, the researcher recommends the use of a mixed public participation method in spatial planning, despite the various methods that municipalities use. Mixed public participation includes the use of sectoral and selective consultation in conjunction with ward and mass community meetings. The collective use of these methods aims at addressing procedural injustice through the promotion of a multi-stakeholder democratic planning.

9.2.2 TYPE OF PUBLIC PARTICIPATION

Table 9-2: Type of public participation in spatial planning policies

Types of participation	Frequency	Percentage
Manipulative	4	6%
Inform public about decisions	10	14%
Respond to queries after decision	2	3%
Meaningful engagement	45	63%
Engage on initiative of public	8	11%
Other	2	3%
Total	71	100

Source: Author's Fieldwork, 2018

Table 9-2 demonstrates that most municipal planners (63%) are of the view that their municipalities apply meaningful engagement during spatial planning policy implementation. The findings on the higher percentage of the use of this type of public participation confirm that local authorities have a clear understanding of public involvement. However, a study on public perception of the various types of engagement may disprove this notion. The fact that 14% of municipal planners believe that their municipalities do not engage meaningfully, but rather only inform the public about decisions, also known as passive participation, emphasizes the need for continuously capacitating municipalities on public participation. The results from the responses of the municipal planners further show that a mere 11% of the municipalities engage in spatial planning policies that were initiated by the public. By implication, if a sector of society does not request participation in the policy preparation process, public participation is absent. In the context of procedural justice, such a process can undoubtedly be regarded as unjust. Additionally, the results reveal that most municipalities do not believe in passive public participation but that participation is limited to

responding to queries, which occur after the decision-making process. The municipalities' identified practice, regarding the application of public participation in the preparation of spatial planning policy, is proof of municipal procedural maturity on the control over the planning process. Table A15 of Appendix 4 shows no relationship ($r = 0.0$) between the method of public participation and the type of public participation that a municipality applies. Therefore, this analysis affirms that a local authority can implement public participation in any strategy of public participation.

9.2.3 STAGE OF PUBLIC PARTICIPATION IN PLANNING

It is self-evident that public participation in spatial planning occurs at different levels and is dependent on the practice of a municipality. Some scholars have found public participation in South African planning to be present, but meaningless and inadequate in its execution (Todes, 2004; Thwala, 2009; Todes *et al.*, 2010; Connelly, 2010; Cash and Swatuk, 2011). The results of municipal planners' responses presented in Table 9-3 provide the reasons for the public participation's poor performance in planning, and by extension, in spatial planning.

Table 9-3: Stages of public participation in planning

No	Stages of Public Participation	Frequency	Percentage
1	At inception	41	58%
2	After plan completed, but before council approval	27	38%
3	After council approved plan	3	4%
4	At inception and After plan completed, but before council approval	0	0%
	Total	71	100%

Source: Author's Fieldwork, 2018

Table 9-3 illustrates that 58% of respondents believe that their municipalities involve the public at the inception stage of policy and plan preparation. The practice of these municipalities indicates the value that is attached to public involvement. The involvement of the public at the early stages of "planning is invaluable" and requires prioritization (Cele and Chipunga, 2016) to reduce conflict and policy resistance. On the contrary, 38% of the municipal planners confirm that their municipalities allow the public to participate in the process after the completion of a policy or plan, but before council approval. The results also indicate that there is limited participation after plan approval. The number of respondents

who confirm this stage (38%) is less than the 58% of respondents who confirmed the first stage, but the percentage is significant. By implication, some municipalities value an expert-oriented approach to policy making more than a simultaneous application of both expert and experiential knowledge. The findings indicate the existence of an unfair procedural practice, which has no place in the lexicon of environmental justice. In practice, planners and administrative functionaries prefer to complete a draft plan or policy without consultation to facilitate speedy finalization of a plan. Consequently, an unjust process that omits critical recognition aspects of planning prevails. The involvement of the public, when occurring only after plan completion, renders the public participation inadequate and meaningless. The involvement of the public at this late stage in the process represents a missed opportunity, which could have allowed for increased ownership of the process and the resulting policy. Moreover, public awareness on spatial planning will take longer to improve, especially if municipalities continuously exclude the public on plan and policy preparation at the outset of the process. Further, the results reveal that only four percent of the respondents confirm their municipalities involving the public after a municipal council has approved a plan. The legislated nature of public participation and the administrative orientation of planning implementation may be the reason for the least percentages of municipalities that exclude public participation prior plan approval. In general, a plan that has not undergone public participation as legislation requires, if challenged in a court of law, may be found is invalid. Lastly, Table 9-3 shows that none of the municipal planners confirm their municipalities involving the public at inception and after plan completion, but before council approval. This finding may mean that there has been an improvement in public participation given the results of Connelly (2010) that revealed the City of Johannesburg providing a single platform of participation during the review of its SDF in the year 2007.

9.2.4 LEVEL OF PUBLIC INVOLVEMENT

It is evident, from literature and practice, that public participation does take place in the spatial planning processes of the country. However, it has challenges that render it meaningless, ineffective and inadequate. The study respondents measured the level of public involvement in spatial planning policy making in order to provide an overview of the extent of involvement from the municipal planners' points of view. The above results in Table 9-3 demonstrate that the involvement happens either at inception or after plan completion, but mostly right before the council's approval.

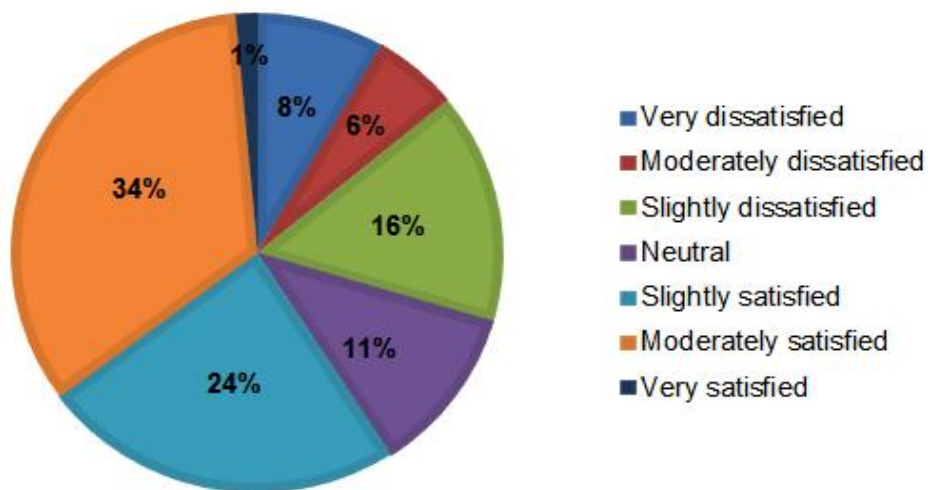
Table 9-4: Level of public involvement in spatial planning policy making

Levels of Public Involvement	Frequency	Percentage
Not at all involved	1	1%
Slightly involved	9	13%
Somewhat involved	16	22%
Moderate involved	36	51%
Extremely involved	9	13%
Total	71	100%

Source: Author's Fieldwork, 2018

Table 9-4 shows that a total of 64% municipal planners have a favourable perception (aggregation of responses of 'moderate' and 'extremely') regarding the involvement of the public in the process of spatial planning policy making. On the contrary, a total of 37% respondents presented with a negative perception of public involvement in planning, as indicated by an aggregation of responses on the scale of 'not at all', 'slightly' and 'somewhat'. This negative perception is a direct result of the practice of involving the public after plan completion. Table A15 of Appendix 4 shows a weak, positive relationship ($r = 0.4$) between the frequency of use for the collaborative type of spatial planning implementation and the level of public involvement in plan preparation, compared with other types of implementation where no such association (r is less 0.3) exists. By implication, the success of collaboration in planning depends on public involvement. The regression analysis in Table A17 of Appendix 4 shows that this relationship is significant at a p-value of < 0.001 . Further, the analysis indicates that there is a strong (16%) chance that an increase in the frequency of using the collaborative type of implementation can influence the level of participation. The use of any form of implementation is not a determinant of the level of public involvement in the preparation of spatial planning policies, which is similar to the results related to the public participation stage. Moreover, Table A15 in the same appendix indicates that the method applied for public participation ($r = -0.1$) and the types of PP ($r = 0.0$) have no association with the level of public involvement in policy-making. In essence, the use of meaningful ward community meetings is not sufficient for improving participation by the public. Furthermore, the public's awareness of spatial planning practice is a precondition for public involvement. The pie chart below, read with Table A16 in Appendix 4, indicates that most of the planners (41%) have a negative perception (neutral, slightly dissatisfied, moderately dissatisfied, and very dissatisfied) of the practice of the public participation process in spatial planning policy making.

Figure 9-1: Satisfaction with PP process in spatial planning policy making



Source: Author's Fieldwork, 2018

It is apparent from Figure 9-1 that only 1% of the municipal planners are 'very satisfied' with the public participation process (PPP), whereas 34% are 'moderately satisfied' with the process. These results indicate that 59% of municipal planners have a favourable (slightly satisfied, moderately satisfied and very satisfied) view about the process of public participation in municipalities during the preparation of spatial planning policies. By implication, the process of public participation in spatial planning is unfair and requires improvement given the significant 41% of municipal planners' negative perception of it. Additionally, Table A15 in Appendix 4 shows that there is a weak, positive relationship ($r = 0.4$) between the level of involvement and the satisfaction of planners with the PPP in the preparation of spatial planning policies. Therefore, the level of involvement in planning has a minimal effect in driving the satisfaction of municipal planners with the PPP during the preparation of SPP. The satisfaction will rather derive from the constructive contribution that the process can yield through meaningful participation as opposed to only involving people for compliance purposes e.g. by means of passive participation. Further, Table A18, in the same appendix, shows a regression coefficient of 0.87, at a p-value of < 0.001 , which confirms that the level of public involvement has a strong positive effect on the satisfaction with the public participation process in spatial planning. The findings illustrate that planning will, in the absence of fair and adequate public involvement, maintain unsatisfactory performance due to ineffective public participation.

9.2.5 REPRESENTATION IN PLANNING DECISIONS

Representation in planning is about giving the public, or interested and affected parties, an opportunity to participate in spatial planning processes and decision-making. Representation fulfils the *audi alterem partem* rule found in natural justice (Baxter, 1979; Peach, 2003; Manyika, 2016; Saraswat, D. & Srivastava, 2019). In gaining an understanding of the municipal practice on representation, the study respondents (municipal planners) provided their agreement levels to a statement that related to the extent to which the municipality offers opportunities to affected parties in presenting their case prior to decision-making. In section 7(e)(iv) of SPLUMA, the good governance principle of development requires spatial planning and implementation to “include processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them” (RSA, 2013). Therefore, public participation in planning decision-making is not a privilege, but a mandatory requirement.

Table 9-5: Representation of parties in planning decision-making

Levels of Agreement	Frequency	Percentage
Strongly disagree	4	6%
Somewhat disagree	1	1%
Neutral	14	20%
Somewhat agree	17	24%
Strongly agree	35	49%
Total	71	100%

Source: Author’s Fieldwork, 2018

Table 9-5 demonstrates the responses of municipal planners, which confirm that most local authorities do afford parties an opportunity to participate and make presentations in planning and decision-making processes. Table 9-5 indicates that 49% and 24% of the respondents perceive their municipalities as affording participation opportunities to parties in a planning decision-making process. In a study of the Florida Road precinct in Durban, Cele and Chipunga (2016) revealed the impact of inadequate public representation during the planning phase given the fact that the majority of respondents indicated that they were either not given an opportunity to make input or preferred not to answer. The results of less than 100% of planners in strong agreement with the existence of representation in planning confirms the example of the Florida Road precinct where the eThekweni metropolitan municipality failed to solicit input from the majority of the area’s residents. In practice, the

weakness of the opportunity to participate is not experienced throughout the process, but mostly occurs in the stages when mandatory participation happens, particularly on policy-making. Moreover, poor awareness of spatial planning renders people unable to react to public notices that call for representation, comments, and objections against any planning matter, as stated by KI02. For example, one of the requirements for a property rezoning application is the publication of a public notice calling for comments, representations, and objections. In this case, members of the affected community have to read the details of the notice with an understanding of their right to submit comments, representations or objections. In the experience of the researcher, members of the public often react after approval and operationalization of a proposed development due to the conflicting effects emanating from such development. The results in Table 9-5 also show that 27% of the respondents have negative perceptions regarding the extent of their agreement to the statement that their municipalities afford opportunities to parties in the planning decision-making process, as indicated by an aggregation of respondents' responses on the Likert scale of 'neutral', 'somewhat disagree' and 'strongly disagree'. In practice, the Grahamstown High Court judgment on the matter of *Karren Zimmerman v Ndlambe Municipality and Others* (case no. 226/2017) reveals that the Ndlambe Municipal Planning Tribunal concluded a development application without affording the applicant an opportunity to make representations, prior to decision-making, as an objector¹³.

The example of the Grahamstown High Court judgment affirms the existence of a questionable practice in some municipalities regarding representation in spatial planning processes. The failure of allowing representation indicates that the Ndlambe municipal processes lacked control over planning decision-making. Local government mostly operates where people live and the exclusion of the public in planning decisions contributes to a lack of public trust and confidence. KI01 argues that politics dominates participation during spatial planning policy consultation. The dominance of politics in representation can also be said to emanate from the public's lack of awareness about spatial planning. Further, KI06 contends that representation in a planning tribunal on land use management during the decision-making process depends on the facilitator. This contention becomes relevant, because of the fact that legal practitioners dominate representation in municipal planning tribunals (MPT), rendering it difficult for unrepresented members of a community to argue their case. Section 45(1) of SPLUMA neither explicitly provides nor disallows legal practitioners to be authorised agents of applicants or parties to an application. The Act in section 45(1)(b) only provides that "a land development application may be submitted by a person acting as the

¹³ The Judgment in *Karren Zimmerman v Ndlambe Municipality and Others* (case no. 226/2017) is available from: <http://www.saflii.org/za/cases/ZAECGHC/2017/76.html>.

duly authorised agent of the owner” (RSA, 2013: 52). The duly authorised person also participates in planning or appeal tribunal (where applicable) representing a client or property owner. Most property owners who have applications that require their participation as applicants or objectors in tribunals often seek the service of a legal practitioner with a small number of them being represented by a planner. In the experience of the author, having participated in the then Mpumalanga Townships Board, and currently participating in the MPT of the City of Mbombela, it is rare to find a property owner, an objector or appellant representing himself or herself. In cases where objector has no representative and has to argue against a senior legal counsel, the facilitator or chairperson of a tribunal becomes relevant. According to KI06, if a facilitator of an MPT is knowledgeable on planning and legal matters, respect becomes a central feature of representations. In ensuring a fair process, the facilitator must assist the unrepresented party by unpacking matters that could be of technical and legal nature to ensure adequate participation.

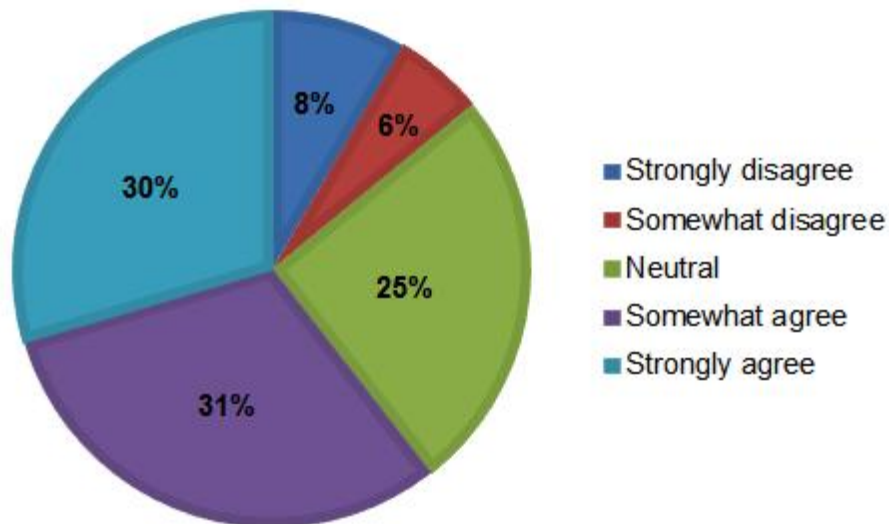
9.2.6 INFLUENCE OF REPRESENTATION ON PLANNING DECISIONS

In practice, decision-makers hardly listen to members of society that object to development during decision-making, often leading to appeal processes (KI03). The case between Karren Zimmerman and the Ndlambe Municipality and Others is a perfect illustration of this argument. Similarly, in a matter of Van Rensburg and another v Naidoo and others (case no: 155/09), the Supreme Court Appeal in May 2010 set aside a decision of the Member of Executive Council (MEC) for the Department Housing, Local Government, and Traditional Affairs in the Eastern Cape regarding the failure to consider submitted objections in deciding on a planning matter¹⁴. The failure of the MEC to consider objections insinuates public participation to be a process of formality and compliance. It reflects an inadequacy in dealing with the matter, given the failure to consider submitted objections. In support of KI03, KI04 states that local authorities approve developments, irrespective of concerns, which leads to dire consequences. These consequences include litigation and adverse effects on public health, convenience, and safety. The Ndlambe municipality suffered a great cost in the litigation which could have been avoided by practicing procedural justice. Moreover, Figure 9-2 indicates that 39% of the municipal planners disagree with the statement that the representations of parties influence decision-making, thus confirming the assertions of KI03 and KI04 stated above. By implication, procedural justice in municipal planning remains distorted, especially given the existence of municipalities that disregard the representation of parties in decision making. Further, Figure 9-2 indicates that 61% (as evident from an

¹⁴ The *Van Rensburg and another v Naidoo and others*: Case no: 155/09 is available from: <http://www.saflii.org/za/cases/ZASCA/2010/68.html>.

aggregate of responses on the Likert scale of 'somewhat agree' to 'strongly agree') of the municipal planners are of the view that representation plays a crucial role in the process of decision-making in their municipalities.

Figure 9-2: Influence of representation on decision-making



Source: Author's Fieldwork, 2018

The significant percentage (61%) of municipal planners who agree with the statement related to the influence of representation in decision-making reveals the moderate presence of this practice in municipal planning. KI06 mentions an instance where an objection to a petrol port development resulted in the construction of an overhead bridge that never formed part of the initial plan of the development. Further, Puren, Goosen and Jordaan (2013) found that at least 81% of objections received by the Tlokwe Local Municipality influenced planning decisions. These two illustrations demonstrate the intrinsic value of representation, if it is granted adequate consideration in planning decisions. Table A19 of Appendix 4 indicates that there is a moderately positive, significant relationship ($r = 0.63$ at a p -value of <0.001) between the level of agreement on representation and its influence on decision-making. The statistical results indicate that representation does influence municipal decision-making. However, the results reveal a positive effect of representation in influencing a planning decision, but with a confidence level of 39%, which suggests that there is only a 39% chance that an increase in the representation agreement can increase the level of agreement that influences decision-making. By implication, this analysis is consistent with the argument of KI03 and KI04, who stated that decision-makers do not adequately consider representations in decision-making. The Western Cape High Court, in two separate cases (the year 2010 and 2017) dismissed planning review applications because objections that were made

against applications, which planning authorities dismissed and granted approval of, lacked merits¹⁵. By implication, some residents within a planning area object, not on the basis of affected individual rights, but rather to frustrate and delay development. In a country with extreme inequalities and spatial fragmentation, planning authorities should stand vigilant when dealing with undue and unnecessary delays to development aimed at promoting spatial transformation.

9.2.7 MONITORING AND EVALUATION OF PUBLIC PARTICIPATION FAIRNESS IN PLANNING

The just policy, as discussed in the preceding chapters, is about the impact that a programme or policy will have in changing quality of life. This effect demands monitoring and evaluation throughout the planning process. The study's respondents provided their levels of agreement to the statement that the municipality monitors and evaluates the level of fairness in public participation during planning and implementation. The monitoring and evaluation of fairness in public participation aims at discovering areas of procedural improvement.

Table 9-6: Monitoring and evaluation of public participation fairness in planning

Levels of agreement	Frequency	Percentage
Strongly disagree	8	11%
Somewhat disagree	6	9%
Neutral	17	24%
Somewhat agree	18	25%
Strongly agree	22	31%
More	71	100%

Source: Author's Fieldwork, 2018

Table 9-6 demonstrates that 44% of municipal planners perceive their municipalities in a negative light with regards to monitoring and evaluating the fairness of participation in planning and implementation. The aggregation of municipal planners' responses on the Likert scale of neutral, somewhat disagree and strongly disagree account for this negative

¹⁵ See *Hout Bay and Llandudno Environment Conservation Group v Minister of Local Government, Environmental Affairs and Development Planning, Western Cape and others* (case no: 23827/2010) available from: <http://www.saflii.org/za/cases/ZAWCHC/2012/22.html> and *22 Rawson Street Body Corporate and Another v Knysna Municipality and Another* (case no: 22136 /2015) available from <http://www.saflii.org/za/cases/ZAWCHC/2017/46.html>.

perception. These results show a closely related pattern with the results of municipal planners' responses to monitoring and evaluation with regards to distribution and recognition elements, as discussed in Chapter 8. Further, the results show that 56% of planners perceive their municipalities positively by 'somewhat' and 'strongly' agreeing with the statement that the municipality monitors and evaluates the level of fairness in public participation during planning and implementation. Table A20 of Appendix 4 indicates that there is a moderately positive relationship ($r = 0.5$) between the municipal agreement on the monitoring and evaluation of participation fairness and the monitoring and evaluation of the distribution of activities, contextual recognition, and capabilities. This relationship underscores the importance of just policy throughout the process of planning. In essence, Table 9-6 highlights the need for municipalities to control fairness of participation in spatial planning through adequate monitoring and evaluation. The review of participation performance can, therefore, result in strengthening overall representation in spatial planning.

9.2.8 TOOLS FOR EMPOWERING THE PUBLIC ABOUT SPATIAL PLANNING

The substantive justice approach advocates for the provision of institutions and tools for empowering or capacitating the public with information on any planning matter. The study identifies the tools that municipalities utilize to capacitate the public on spatial planning information. These tools include newsletters, pamphlets, manuals, planning forums, and campaigns.

Table 9-7: Tools for awareness on spatial planning policies

Tools	Frequency	Percentage
Newsletters	27	38%
Pamphlets	8	11%
Manuals	2	3%
Planning forums	20	28%
Campaigns	1	1%
None	9	13%
Other	4	6%
Total	71	1

Source: Author's Fieldwork, 2018

Table 9-7 indicates that newsletters constitute the tools that are utilized the most as a means to create awareness for capacitating the general public about spatial planning, given the

38% of responses in this category. Twenty eight percent of respondents reported planning forums as being their municipalities' primary tool for capacitating the society. However, in the practice of South Africa, officials from government departments, and parastatal, who are responsible for planning, dominate planning forums more than the general public does. Some municipal planners (11%) also confirmed the use of pamphlets, whereas 13% of respondents confirmed that their local authorities use no tool for spatial planning awareness. A more practical approach will be to use a combination of these tools. Furthermore, budget constraints can also hamper the production of newsletters, pamphlets, and manuals in practice. An improvement in the planning budget would necessarily depend on the prioritization of spatial planning in municipal programmes. In Table 7-13 above, the lack of spatial planning prioritization appeared as the most identified structural impediment to implementation. The lack of budget for spatial planning and land use management in local government identified in RSA (2019a) confirms the lack of spatial planning prioritization. Given this structural impediment, the enhancement of the system stands to result in nothing, if planning remains at the bottom of municipal priorities. It is time for politicians to grant spatial planning and land use management the attention it deserves if serious about spatial transformation. If the attitude of undermining planning by failing to resource spatial planning adequately is persistent, in the next review of 25 years performance, the results may share similarities with those revealed in the current 25-year review report, if not worse.

Table 9-8: Access to information

Areas for information Access	Frequency	Percentage
Municipal offices	30	42%
Municipal website	1	1%
Ward councillors	1	1%
Libraries	0	0%
Other	1	1%
Municipal office and website	12	17%
Office, ward councillor and libraries	4	6%
Office, website and other	7	10%
Office, website and ward councillor	7	10%
Office and ward councillor	3	4%
All	5	7%
Total	71	100%

Source: Author's Fieldwork, 2018

The Table 9-8 shows that municipal offices are the primary source for accessing information about spatial planning. By implication, if a member of the public has not visited a municipal office, the scheduled participation in spatial planning will be unknown. Although the scheduling may be unknown, the PAIA, 2000, provides measures for the general public to request any information concerning processes, or decisions that a municipality has taken, on any mandated function. In the case of *Izette Huijink-Maritz vs the Municipal Manager of the Matjhabeng Local Municipality* (Case number: 2050/2016), heard on 08 June 2017, the Free State Division High Court of South Africa ruled that the first point of departure before approaching a court of law in an attempt to order a municipality to disclose information is to pursue and exhaust all available internal procedures. This judgment suggests that if a municipal information officer (i.e., the municipal manager) refuses to provide a record of the reasons for a decision that has been made on a planning matter, a member of the public must first appeal to the municipal executive authority before approaching a court of law. The provision of the Act furthermore underscores the existence of measures for accessing information regarding public administration, and by extension, spatial planning.

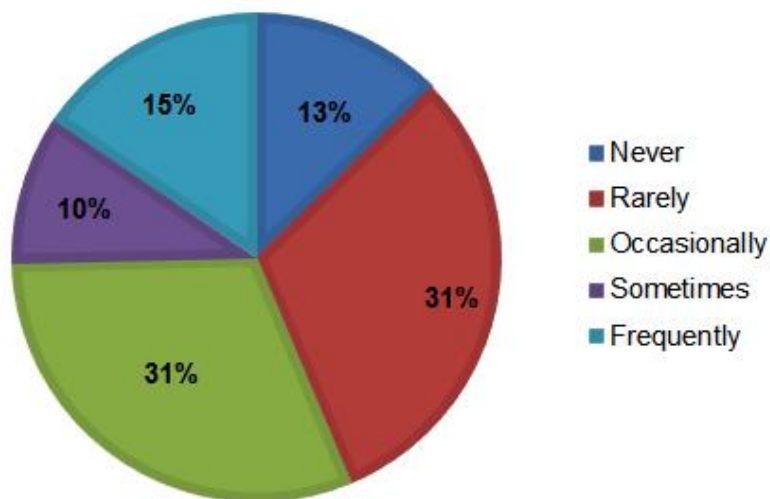
17% of the municipal planners confirmed that their municipalities are employing both municipal offices and website as points of access to information. The shortfall of a website is that a member of the public without access to the internet will remain unable to access information. It is quite impressive that the method of public participation in most municipalities appears to be the holding of ward community meetings, although the use of ward councillors as alternative sources of information on spatial planning presents a negligible effect. In this regard, the ranking of the political enablers in Table 7-18 revealed that the provision of capacity building to political leaders as the most enhancing factor towards achieving spatial planning implementation. By implication, if more councillors become knowledgeable about spatial planning, more information on planning matters will become available to all communities within a ward. A councillor without basic knowledge of spatial planning may lack the drive to mobilize ward community meetings regarding planning matters. The results of this study illustrate the need to efficiently use the ward system of municipalities to firstly empower ward councillors as the means with which to constitute an alternative point of access to information concerning spatial planning. This practice will bridge the gap between the members of the public who have access to the internet, social media or who are in the proximity to municipal offices, and those who are without access to the internet and live farther away from municipal offices.

9.2.9 IMPLEMENTATION OF SPATIAL PLANNING AWARENESS PROGRAMMES

In understanding substantive justice in the context of capacity building, it is essential to ascertain the perceptions of municipal planners on the municipal implementation of spatial planning awareness programmes. The implementation of these programmes aims to empower the public about the question of why they should participate in spatial planning initiatives, processes, and programmes. In this regard, the public will be in a position to make representations on proposed spatial planning policies and development.

Figure 9-3 demonstrates that a significant number of municipalities 'rarely' or 'occasionally' (constant 31%) implement spatial planning awareness programmes. The results highlight the point that the problem of spatial planning awareness is not only a challenge for politicians, but also a challenge that exists for the general public. By implication, there is a failure of spatial planning awareness to the general public. It is evident that a different study that focuses on the perception of the general public will not conclude differently. Moreover, 13% of the municipal planners stated that their municipalities never implement these programmes.

Figure 9-3: Implementation of awareness programmes



Source: Author's Fieldwork, 2018

In addition, the study found no association ($r = 0.15$, $p > 0.10$) between the frequency of implementing spatial planning awareness and agreement about representation in municipal planning decision-making process (see Table A21 in Appendix 4). This analysis indicates that the implementation of awareness programmes is not a precondition to the representation opportunity that a municipality grants to members of the public on planning

matters. In principle, a local authority has a responsibility, regardless of whether it informed the public about a planning process or not, to afford members of the public an opportunity to make representations concerning a matter under decision-making. SPLUMA, in general, supports this principle, as it makes provisions for public consultation during policy making and development approval processes.

9.3 CONSISTENCY

Consistency in planning is crucial for promoting fairness in spatial planning policy making and implementation. In practice, planning authorities ought to show consistency in the treatment of parties during planning and decision-making, application of planning policy, distribution of activities, recognition of stakeholders and conditions, and prioritization of planning initiatives. The study reveals that most of the responding municipal planners perceive their municipalities as being consistent in decision-making. Table 9-9 presents the distribution of responses on the extent to which each respondent agreed with the statement that the municipality is consistent in its planning decisions. The table indicates municipal planners' positive perception, as indicated by responses on the statement, which is evident when aggregating the respondents' responses on the scale of 'strongly agree' and 'somewhat agree' (66%).

Table 9-9: Municipal consistency in planning decisions

Levels of Agreement	Frequency	Percentage
Strongly disagree	7	10%
Somewhat disagree	7	10%
Neutral	10	14%
Somewhat agree	25	35%
Strongly agree	22	31%
Total	71	100%

Source: Author's Fieldwork, 2018

However, municipal planners' positive perspective is not without its doubts. Table 9-9 shows that only 31% of municipal planners 'strongly agree' with the statement regarding the consistency of municipalities' planning decisions, which is a cause for concern. On the other hand, 34% of municipal planners' scores reflect a negative perception. The interviewed planners in private planning practice expressed varying perceptions about municipal

consistency in planning decisions. Table 9-10 presents the perceptions of some of the interviewees in this respect.

Table 9-10: Perceptions of interviewees about municipal consistency in planning decisions

Interviewees	Perceptions
KI04	Municipalities are 90% consistent.
KI02 and KI09	There is consistency, but politics leads to inconsistency.
KI05	There is no consistency, planning authorities disallow something in one area and later allow it in the same area without valid reasons.
KI03	Municipalities are fairly consistent.
KI01	Planning authorities are never consistent.

Source: Author's Fieldwork, 2018

Table 9-10 presents a pattern that agrees with the fact that municipal planners' view on consistency is not entirely evident. 10% of municipal planners who 'strongly disagreed' with the existence of consistency in municipal planning affirm this contention. The argument of KI02 that political factors lead to inconsistency highlights the consequences of political pressure and interference in planning. The most persuasive highlight in the findings of previous studies on procedural justice, as quoted in this study, particularly in legal matters, is that the satisfaction of the public about an action or decision depends on the fairness of the process taken towards implementing the action or decision. The results in Table 9-9, to some degree, imply that some of the local authorities' planning decisions are questionable. Additionally, Table A22 of Appendix 4, statistically demonstrates that there is no association ($r = 0.06$, $p > 0.10$) between the category of a municipality where a planner works and the consistency on planning decisions, which indicates an untagged practice of consistency in local government. Therefore, no category of a municipality is better than the others on consistency, as the pattern of practice cuts across all municipalities.

9.4 IMPARTIALITY

Friedmann (2008) suggests that planners are the champions of public interest; however, in championing public interests in planning, authorities must act, free of biases and favouritism. Most of the study interviewees stated that a certain degree of bias or favouritism exists in the municipal decision-making process. Impartiality in planning requires planning authorities to have a lack of bias or favouritism. In practice, biases arise when preferential treatment

becomes evident in planning decision-making because of gender orientation, political affiliation, socio-economic status, race, and ethnicity. This stands in contrast to procedural justice. The scores of municipal planners in measuring their levels of agreement with the statement that measures the extent to which the municipality is not biased, or does not apply favouritism, in decision-making indicates a positive perception. Table 9-11 presents this positive perception, which is evident from the agreement of municipal planners' responses on the scale of somewhat agree to strongly agree, with a score of 62%. Likewise, the municipal planners are positive about fairness in municipal planning decision-making. The planners also scored their levels of agreement in response to the statement that suggests that municipalities are always fair in decision-making.

Table 9-11: Municipal impartiality in decision-making

Levels of Agreement	Biases Favouritism	or Percentage	Fairness	Percentage
Strongly disagree	6	8%	3	4%
Somewhat disagree	7	10%	7	10%
Neutral	14	20%	17	24%
Somewhat agree	19	27%	22	31%
Strongly agree	25	35%	22	31%
Total	71	100%	71	100%

Source: Author's Fieldwork, 2018

The results of Table 9-11 are congruent with the perception of planners in private practice, which suggests that there is a certain degree of bias in municipal decision-making. To illustrate this, the Grahamstown High Court Judgment (2017: 30-31) referred to a planning matter that recorded the processes followed in the planning decision-making to illustrate that these "are more easily likely to lead to indications of maladministration, bias, crooked conduct and even collusive activity." By contrast, in a study of procedural justice that measured the reactions of citizens to legal authorities, particularly courtrooms and police, Tyler (1988) revealed that only eleven percent of the respondents viewed the behaviour of legal authorities as being biased, based either on demographic characteristics or preferential treatment of one party over another. The fact that legal authorities are the last stop in settling disputes and contentious matters, might have contributed, in some capacity, to the percentage of people who are impartially ascertained in legal authorities. However, it is important to note that no amount of justification permits the lack of impartiality, in any given circumstance. The ability of planning authorities to act impartially requires full commitment

and understanding of the environmental justice principles in planning. Accordingly, these authorities, in dispensing the municipal planning function on decision-making, have a duty to comply with the rule of natural justice known as the *nemo iudex in causa sua*. The rule demands that any member of a planning authority (MPT or appeal authority) that has a personal or pecuniary (financial) interest in a planning matter must recuse themselves from participating in the decision process, particularly on the conflicted matter. Practically, the operational procedures of an MPT or appeal authority should detail a requirement for declaration of interests. In terms of Regulation 3(k) and Regulation 20 of SPLUMA, municipalities must adopt operational procedures for MPTs and appeal authorities respectively (RSA, 2013). As discussed in Chapter 2, bias exists if there is a suspicion of bias. The data analysis in Table A23 of Appendix 4 statistically confirms that there is a strong, significantly positive relationship ($r = 0.77$, at p-value of <0.001) between the municipal planners' agreement with the lack of bias in planning decision-making and the existence of fairness in municipal planning decision-making. Additionally, the same table indicates that an increase in the lack of bias in a municipality increases the level of fairness in decision-making ($r^2 = 0.59$ or 59%). By implication, an increase in the impartiality of authorities, increases fairness in the decision-making process.

9.5 OBJECTIVITY

Municipal objectivity in decision-making is fundamental in guaranteeing decision quality. According to Tyler (1988:105), "decision quality or accuracy means the ability of the procedure to effect solutions of objectively high quality." In practice, the realization of high-quality solutions is dependent on factual and objective information, coupled with ruling policies applied towards a solution. By implication, planning authorities have to maintain decision quality through the application of objectivity in decision-making. The application of objectivity calls for compliance with ruling policies and legislation, understanding of circumstances by investigating matters, and the application of relevant tools to evaluate the effects of a decision. Further, the merits of a planning matter should also play a role in decision-making. Section 22 of SPLUMA also provides for the fact that "subject to section 42, a Municipal Planning Tribunal or any other authority required or mandated to make a land development decision, may depart from a spatial development framework only if site-specific circumstances justify the departure from the provision of a municipal spatial development framework" (RSA, 2013: 33). Although SPLUMA allows for a deviation from a municipal SDF, it restricts the departure, based on the objective requirements stipulated in Section 42 of the Act. There is, however, a unanimous agreement among the study

interviewees that municipalities apply objectivity during planning decision-making. Likewise, Table 9-12 demonstrates that most of the municipal planners participating in the study are positive about the municipal use of facts and objectivity in planning decisions.

Table 9-12: Perception of respondents on municipal objectivity

Levels of Agreement	Frequency	Percentage
Strongly disagree	6	8%
Somewhat disagree	3	4%
Neutral	12	17%
Somewhat agree	22	31%
Strongly agree	28	39%
Total	71	100%

Source: Author's Fieldwork, 2018

The percentages of responses, on a scale of 'strongly disagree' (eight percent), 'somewhat disagree' (four percent) and 'neutral' (17%), confirm that some local authorities lack proper judgment in deciding planning matters. The results also explain the disregard of municipal planning policies, which can lead to the review of some municipal planning decisions by a court of law. For instance, in a matter of *Ivan Richards Stouff v Salvodana Properties, the Chairperson of Mpumalanga Development Tribunal and others* (case no: 46655/2012), the court found that the reasons of decision provided by the Tribunal were general and failed to deal with witness evidence or documentary evidence¹⁶. A planning tribunal in disposing of its responsibility of procedural fairness must apply its mind by considering all evidence presented to it. The judgment in the above case regarding reasons that are inadequate clearly shows that there is a need for capacity building to administrators of MPTs and appeal authorities, including authorised officials in municipalities, on capturing reasons for any planning decision. Both PAIA and PAJA make provisions for these reasons to be made available upon request. It may be practical for MPTs and appeal authorities to capture reasons for planning decisions in the minutes of their convened seating or meetings. The capturing of reasons in minutes creates a memory that is retrievable whenever an information officer in a municipality receives a request for such reasons. Reasons for a decision should not be thought of or prepared when requested. They should be readily available. By implication, during decision-making, there is a need to record all deliberated factors that favour a particular decision resulting in a matter declared as finalised. Table A25

¹⁶ The judgment in the matter of *Ivan Richards Stouff v Salvodana Properties, the Chairperson of Mpumalanga Development Tribunal and others* (case no: 46655/2012) is available from: <http://www.saflii.org/za/cases/ZAGPPHC/2014/552.html>.

in Appendix 4 shows that the criterion of objectivity holds a positive association ($r = 0.7$) with the criteria of consistency and lack of bias or favouritism as well as fairness and ethicality, especially as compared to the strong positive association that it has with the criterion of representation and its influence on decision-making. Likewise, Tyler (1988) argues that the association evident among the criteria circumvents trade-offs. By implication, a planning decision made through objectivity is only procedurally fair if:

- a) it is consistent with municipal planning policy, norms and standards, and general practice;
- b) it lacks elements of bias or favouritism;
- c) there has been fairness in the process;
- d) the decision-making process had no elements of dishonesty and corruption;
- e) it allows representation; and
- f) representation contributes to it.

9.6 CORRECTABILITY

Correctability is the opportunity given to any person aggrieved by, or not satisfied with, a decision of a planning authority. In the country, legal prescripts make provision for appeals against decisions. Previously, and prior the advent of SPLUMA, the legal framework allowed provincial government, through tribunals or Township Boards, to hear and decide on all appeals against a planning decision of a local authority. In the new planning dispensation, section 51 of SPLUMA makes provision for appeals and further indicates that the appeal authority is the executive authority of a municipality. The Act states that an “executive authority, in relation to a municipality means the executive committee or executive mayor of a municipality or, if a municipality does not have an executive committee or executive mayor, a committee of councillors appointed by a municipal council” (RSA, 2013). Moreover, section 62 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), also provides appeal processes for any community matter, other than matters regulated by SPLUMA (RSA, 2000b). In addition to these items of legislation, the Promotion of Administrative Justice Act (PAJA), 2000 (Act No 3 of 2000) makes provision for a court of law to review an administrative decision of a municipality (RSA, 2000a). However, the trigger to this process is similar to the application of the Promotion of Access to Information Act, 2000 that requires the exhaustion of internal appeal processes at a municipal level (RSA, 2000). These legislated appeal provisions fulfil the requirement of correctability.

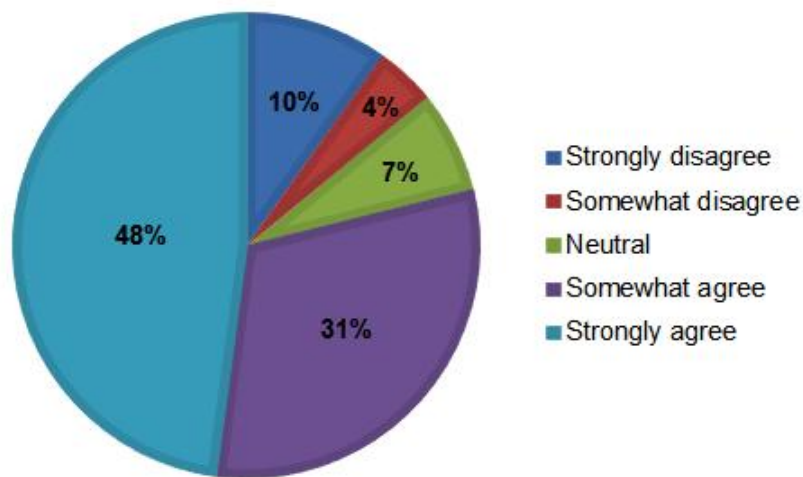
From a policy and legislative framework point of view, the country has a good system that caters for the correctability of planning decisions. Most of the interviewees are uncomfortable about the appeal processes that SPLUMA has introduced. KI03 argues that a municipality cannot be “a referee and a player” in planning matters, which derives from the fact that a municipality makes planning decisions, and its executive authority hears appeals against the municipal decisions. KI06 and KI02 are in agreement with the fact that correctability worked well during the days of Township Boards in the provincial government but a number of Constitutional Court judgments emphasized the separation of powers between the provincial and local spheres of government. These Constitutional Court judgments involve cases that include the *City of Johannesburg Metropolitan Municipality vs Gauteng Development Planning Tribunal and Others*, case number CCT89/09; *Minister of Local Government, Environmental affairs and Development planning, Western Cape vs The Habitat Council and Others*, case number CCT117/13; and *Hendrik Diederick Pieterse and Elizabeth Barindina Pieterse vs Lephalale Local Municipality and Others*, case number CCT184/16. In these cases, the Constitutional Court, in its judgments, confirmed the constitutional invalidity of Development Facilitation Act, 1995, and items of the provincial legislative framework (Town Planning and Townships Ordinance, 1986, and Land Use Planning Ordinance, 1985), which empowered the provincial government and its appeal structure with the authority to deal with municipal planning matters, now within the exclusive function of local government. Hence, KI05 is of the view that municipal appeal authorities will always support decisions of their municipal planning tribunals. A separate study in this area could validate or substantiate this assumption. Nevertheless, as a result, the independence of the appeal authority becomes questionable. On the other hand, KI02 highlights the preference of a neutral body as an appeal authority. Recently, an appellant challenged the attempts of the executive authority (made of councillors) of the Msukaligwa Local Municipality from hearing an appeal lodged against a council decision rejecting a mall development. The argument of the appellant, as the municipality described to the researcher while on duty, is that the council that decided on the matter comprises councillors some of which are members of the executive committee of the municipality that should hear the appeal. The appellant viewed such as a conflict of interest with the potential to result in the suspicion of bias. The applicant, therefore, sought a court judgment¹⁷, which ordered the municipality to authorise an outside body as provided for in Regulation 20 (b) of SPLUMA to be the appeal authority to hear the matter. Regulation 20 of SPLUMA provides options that municipalities can adopt on appeal authorities, which comprise “executive authority, body outside of the municipality, and a panel of officials”

¹⁷ The unpublished judgement relates to a matter held in the High Court of South Africa, Mpumalanga Division regarding *Stylestar Investments (Pty) Ltd v The Municipal Manager: Msukaligwa Local Municipality and Others* (Case no. 4391/2018), 19 January 2019.

(RSA, 2013a). This provision, if implemented, could perhaps guarantee the independence of an appeal authority. However, inadequate financial resources make it difficult for most municipalities to employ the services of an outside body. On 25 June 2019, the researcher participated in the training of the appointed outside body made of four members with legal, planning, and engineering knowledge, which is now known as the Msukaligwa Municipal Appeal Tribunal. In principle, an independent appeal structure is necessary to reduce bias in decision-making, as some municipal decisions leave much to be desired. The Msukaligwa Municipal Appeal Tribunal (MMAT) can only maintain its independence if there is no political interference to influence its decisions. Unfortunately, the MMAT depends on the municipality for resources (budget for operations and remuneration of members), which then questions the existence of independence. Nonetheless, the members of this tribunal have a duty to act with professionalism, impartiality, objectivity, and ethicality in the disposal of their function. Ellis (2002) in a study of the Republic of Ireland's appeal processes revealed that, in 1999, the independent Appeal Board dismissed 37% of appeals, reviewed 60% of municipal conditions on decisions, and upheld 3% of municipal decisions. The 60% result regarding reviewed decisions in the study indicates the level of irregularity that existed in municipal decisions.

In practice, Sheppard and Ritchie (2016) recommend a commission type of approach to appeal authorities, drawing from the experience of planning in Northern Ireland to promote the lack of bias or favouritism and independence in planning decisions. In South Africa, if the government wants to promote the independence of appeal authorities, a budget should be set aside to fund the establishment and operations of appeal tribunals as bodies that function outside an organizational structure of a municipality. However, a municipality should remain with the responsibility of appointing members of an appeal tribunal to ensure that the national or provincial spheres of government do not trump over the functions of local government. The members of this tribunal should exclude officials of a recruiting municipality but can be a combination of the people from the public and private sectors in various disciplines. This action of resourcing tribunals in local government can allow members of these tribunals to act without fear or favour and can guarantee the effectiveness of appeal tribunals. The national and provincial governments in providing resources can create systems that allow for direct resourcing of these structures without transferring funds to municipalities.

Figure 9-4: Existence of municipal appeal procedures (N=71)



Source: Own construction, 2018

Figure 9-4, populated with data from Table A24 in Appendix 4, illustrates the fact that most planners in the municipalities agree that there are procedures in place for appeals against planning decisions. However, the percentages of planners who perceive their municipalities as having no appeal procedures underscore the lack of understanding the new planning dispensation that SPLUMA has introduced. By implication, these findings indicate that there are municipalities that are unaware that the executive authority of a municipality (executive committee or mayor of a council) by default constitutes the appeal authority regarding appeal applications against planning decisions. Although these procedures mostly exist as provided for in legislation, fairness is achieved not only by governance, but also by representation, consistency, impartiality, objectivity, and ethicality in decision-making. Table A25 in Appendix 4 statistically demonstrates that there is a positive relationship between the existence of appeal procedures and other criteria of procedural justice. The data in the table indicates a weak relationship ($r = 0.4$) between correctability and influence of representation; moderate positive relationship ($r = 0.6$) between correctability and representation, consistency, fairness and objectivity; and strong relationship ($r = 0.7$) between correctability and objectivity. The statistical analysis on the relationship shows that planning decisions made without taking into account the facts and merits of an application can unavoidably result in appeal with a favourable prospect of success. Although the results indicate a moderate relationship between correctability and representation, consistency, fairness, and objectivity, any planning decision that fails the test of procedural justice criteria leads to appeals.

9.7 ETHICALITY

Ethicality in planning decision-making entails doing what is good in a right way. Things done in the right ways are things that maintain integrity; and things that do not cause dysfunction to a person or environmental conditions; and those things that preserves the value that exists in any person or environmental condition. This argument is consistent with Leopold (1949) view of what is right. That is to say planning decisions should be honest and truthful, comply with the law, be free of corruption, and give regards to people’s rights. In the practice of South Africa, the Local Government: Municipal Systems Act (MSA), 2000 (Act No. 32 of 2000), in its Schedules 1 and 2 makes provision for a code of conduct that municipal councils and staff, respectively, must not breach in the exercise of their responsibilities on behalf of a municipality (RSA, 2000b). Additionally, Section 18(3) of the Planning Profession Act, 2002 (Act No. 2002), provides a code of conduct that indicates the required behaviour of a registered planner (RSA, 2002). Most professionals in various disciplines likely to participate in tribunals account to their respective councils established by statute. These councils, such as the SACPLAN for planners, Engineering Council of South Africa for engineers, Legal Practice Councils for legal practitioners in various regions, and South African Geomatics Council for land surveyors, among others prescribe the ethical conduct expected from practicing and non-practicing members. KI06 emphasizes a code of conduct as being fundamental in guiding planning decision-making. By implication, a code of conduct exists to ensure that decision-makers or planning authorities conduct themselves ethically. Despite the existence of the code of conduct, KI05 stated that there is consistent political interference in decision-making and that the opening of the decision-making process to councillors, particularly in appeal authorities provides an opportunity for abuse. Table 7-16 in Chapter 7 confirms this argument, as it shows political interference as being the factor perceived to impede spatial planning implementation the most.

Table 9-13: Ethicality in planning decision-making (N=71)

Reflective Indicator	Percentage of study participants				
	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The municipality considers what is good and right (ethical) in decision-making %	34	32	20	7	7

Source: Author’s Fieldwork, 2018

Table 9-13 indicates that most of the planners (66%) positively perceive their municipalities with regards to doing what is good and right in decision-making, as indicated by an aggregate of responses on the scale of 'strongly agree' to 'somewhat agree.' Although there is a significant positive perception in this regard, some planners (34%) view their local authorities (34%) with a negative perception (aggregate of responses on the scale of neutral, somewhat disagree, and strongly disagree). Hence, some interviewees argue that corruption is an element that dominates the behaviour of municipalities, particularly councillors in planning decisions. In support of this assertion, Tyler (1988) citing other scholars, perceived educated persons as having greater regard for ethicality in the fairness of decision-making. In essence, the assumption that planners who are more educated and experienced will give greater regard to ethicality is relevant. On the contrary, the regression analysis presented in Table A26 of Appendix 4 shows that the experience and education level of participating planners had no influence on the planners' perceptions about the importance of ethicality in planning. The adjusted r^2 of the analysis shows a negative 1% chance that the two variables (experience and education) could influence ethicality. It is clear in the analysis given the p-value of 0.7 that there is no evidence that the experience and education of planning can influence ethicality. Capacity building on the codes of conduct, and ethics in general for municipal staff and councillors, is crucial in cultivating a culture of acting ethically during decision-making. It is evident that some municipal officials and councillors have never read the code of conduct that is enshrined in MSA. Reading the code of conduct in isolation is insufficient but reading it with an understanding and complying with its requirements could to a greater level become sufficient. The declaration of interest, as described in section 9.4 above, is also an essential element of acting ethically. In practice, an MPT or appeal authority should have a standard form for the declaration of personal or pecuniary (financial) interest. This form serves as an alternative proof of record regarding declared interests in the event there is damage to the audio recording. In the experience of the researcher, during the seating of MPT, all members declare their interest on record. The agenda of all MPT seating has a standing item for declaration of interest. The declaration of interest is a provision enshrined in the code of conduct for the MPT.

9.8 IMPORTANCE OF THE PROCEDURAL JUSTICE CRITERIA

The results of municipal planners' responses in Table 9-14 indicate that ethicality, decision accuracy, and correctability in planning decisions are the important criteria in procedural justice. The results are consonant with the findings of Tyler (1988) that revealed ethicality as being the most critical criterion for legal authorities.

Table 9-14: Importance of the procedural justice criteria (N=71)

No	Criteria	Percentage of study participants				
		Not important	Slightly important	Moderately important	Important	Very important
1	Representation and its influence on decision-making	1	3	15	37	41
2	Consistency	4	0	14	30	52
3	Impartiality (lack of bias)	4	3	18	25	49
4	Decision accuracy (based on facts and objectivity)	3	1	13	24	59
5	Correctability (allowing appeals on decisions)	6	3	7	28	56
6	Ethicality (doing what is good and right)	4	3	8	18	66

Source: Author's Fieldwork, 2018

Moreover, Table 9-14 indicates representation and its influence on decision-making as being the least 'very important' procedural justice criterion in planning decision-making, as compared with the other criteria. The results indicate that this criterion received 41% of municipal planners' responses on the Likert item of 'very important,' when compared to other criterion that received between 49% and 66% of responses on the same scale. By implication, and given the results of the study, the researcher argues that granting an opportunity to participate in, and allowing such representation to influence, a planning decision on its own would not determine fairness but acting ethically while considering facts and consistency with impartiality would contribute towards fairness. Quite notably, Section 195 of the Constitution, 1996, provides the basic values and principles governing public administration (RSA, 1996). These values and principles constitute an important mechanism, consonant with the criteria of procedural justice. In emphasizing the criteria of procedural justice, the Constitution in Section 195(a)(d)(e) states that in public administration:

"a) A high standard of professional ethics must be promoted and maintained;

- b) Efficient, economic and effective use of resources must be promoted;
- c) Public administration must be development-oriented;
- d) Services must be provided impartially, fairly, equitably, and without bias;
- e) People's needs must be responded to, and the public must be encouraged to participate in policy-making;
- f) Public administration must be accountable" (RSA, 1996).

Therefore, if the practice of local authorities represented these principles, there would be no or limited numbers of litigation against municipalities on planning decisions. In practice, the widening gap of municipal failure to be procedurally just is the cause of legal challenges against planning authorities.

9.9 CONCLUSION

In brief, Section 195 of the Constitution of the Republic of South Africa espouses procedural justice to promote accountability, transparency, and responsiveness in public administration. This chapter reveals the criteria of procedural justice in spatial planning that incorporate substantive justice. The criteria comprise representation, the influence of representation in decision-making, the influence of representation in decision-making, capacitating (empowerment) of public on spatial planning, consistency, impartiality, objectivity, correctability (appeals), and ethicality. It is apparent from this chapter that municipalities afford representation opportunities to the public during decision-making, on either spatial planning policy or land development processes. The chapter revealed that 42% of the planners perceive that their municipalities afford the public an opportunity to participate in spatial planning, either after a plan has been completed, but before council approval, or after council approval. By implication, the role of the public in plan-making thereby becomes marginalized and polarized by the completed output. Further, the results discussed in the chapter revealed that a limited number of planners perceive the public to be extremely involved in planning during participation, while 35% are satisfied with the public participation process in spatial planning. The levels of public involvement and satisfaction of planners imply the miscarrying of procedural justice in spatial planning within municipalities. The results call for the mobilization of the public to participate in spatial planning.

Furthermore, the discussion indicates that representation in planning processes does not influence decision-making. The finding shows that a marginal number of planners agree that municipalities consider inputs from the public or representations made during policy making

or land development processes. Similar to the distributive, recognition and capability approach dimensions of EJ, the results demonstrate that there is an absence of monitoring and evaluating the fairness of public participation processes in spatial planning. The findings conclude that the inadequate level of public involvement in planning emanates from the subtle existence or implementation of spatial planning awareness programmes. Furthermore, the results indicate the positive perception of municipal planners regarding consistency, impartiality, objectivity, and correctability in spatial planning processes and decision-making. Unfortunately, none of the responses on these criteria is above 50% on the Likert item of 'strongly agree.' In essence, although planners have a positive perception, planning authorities, and in particular municipalities in South Africa, should review procedures to improve fairness. The chapter indicates the importance of the criteria of ethicality, objectivity, and correctability as most pertinent, followed by the criteria of consistency, impartiality, and representation, including their influence on decision-making. The results, concerning the high regard of ethicality in planning processes and decision making, are coherent with the findings of Tyler (1988) regarding procedural justice in legal authorities. In conclusion, procedural justice without substantive justice is unachievable. Further, it is futile to reject the appealing need for spatial planning awareness programmes to improve public involvement in planning. Lastly, the application of these criteria, in isolation, can possibly result in spatial planning procedural injustice.

10. CHAPTER 10: SUMMARY AND RECOMMENDATIONS: THE CONSOLIDATION OF NEW KNOWLEDGE

The focus of this research is the attempt to respond to the primary research question of how spatial planning can be restructured to address EJ for improving the performance of spatial planning. The forgoing chapters successfully addressed the above question through the exploration of the three research sub-questions, as discussed in the sections below. The discussion to follow provides new knowledge regarding a spatial planning approach that incorporates environmental justice (EJ). Further, the debate identifies areas for improvement concerning the practice of municipal spatial planning in respect of EJ, priority factors perceived to impede or enhance spatial planning in achieving EJ, and guidelines for the implementation of the EJ planning approach.

10.1 RESEARCH SUB-QUESTION (A): NEW KNOWLEDGE

Research sub-question (a) asks what environmental justice means in the context of planning. The existing literature reveals that environmentalism contributed to the advent of EJ. In theory, environmentalism arose to confront the proliferation of environmental (natural) degradation and pollution (Milton, 1993; Guha and Martinez-Alier, 1997; Besthorn, 2002; Davies, 2009; Tsao, 2013; Anguelovski & Martinez-Alier, 2014) to name but a few. It is evident in the research that EJ first evolved to subdue environmental injustices, in particular in the USA, and thereafter extended to other countries like South Africa. Fredericks (2011:63) defines environmental injustices as the “disproportionate distribution of environmental benefits and harms among racial and socio-economic groups (distributional injustice), the limited ability of these groups to participate in decision making about such issues (participatory injustice), and the restoration and enrichment of relations between those involved in and affected by environmental injustice (restorative justice)”. Furthermore, the study demonstrated the fact that industrialization and urbanization contributed to the need for EJ. These two factors exacerbated the challenges of inequalities. It is apparent in the study that, over the years, EJ widened its boundaries to incorporate various dimensions. These dimensions include elements of distributive, recognition, procedural, and substantive justice, including the capability approach and just policy. However, the study points out that there is a lacuna in the literature that captures all six dimensions of EJ in a single study. Likewise, the existing definitions of the term ‘EJ’ in literature either partially, or subtly, make reference to the dimensions of EJ. In addressing this question, the study evaluated six

planning theories through criteria that encompass the aspects of EJ. These theories fall under the first- and second-generations of planning approaches. The former approach comprises the rational, incremental, and mixed scanning planning theories. The latter approach includes the advocacy, transactive, and communicative planning theories. The study showed that there is a lack of literature that reveals the adequacy of these theories concerning EJ.

10.1.1 ADEQUACY OF PLANNING THEORY CONCERNING EJ

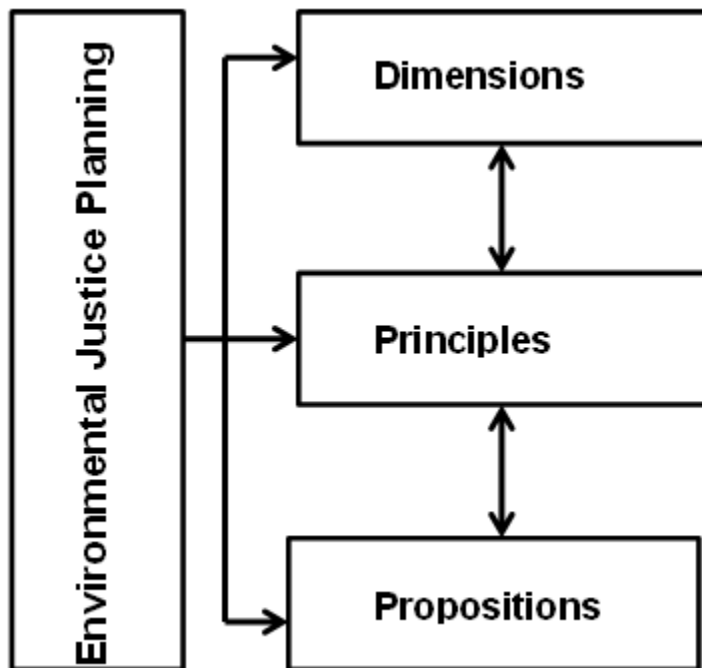
The evaluation of these planning theories reveal that all theories within the first-generation planning approach lack the incorporation of the dimensions of distributive, recognition, procedural, substantive, and capability approach, but gave limited consideration to the just policy dimension. By implication, these planning theories lack the opportunity to influence practice concerning the achievement of EJ. Nevertheless, the planning literature demonstrates that, in general, there is a relationship gap between planning theory and practice (Abukhater, 2009; Pissourios, 2013). In contrast, the study found the second-generation planning approach to exhibit better performance on the incorporation of EJ dimensions. The findings also reveal that the advocacy and transactive planning theories have limited integration of EJ. More importantly, the communicative planning theory appears with a full incorporation of four EJ dimensions. Despite this theory's utility, there is limited incorporation of the capability approach dimension, and a rejection of the just policy dimension. Therefore, the study reveals that planning theories have limited incorporation of EJ. This finding is consistent with the results in Chapter 6, which show that only six percent of the participating municipal planners are extremely familiar with the concept of EJ. As a result, the study introduces a comprehensive EJ planning approach as a third-generation planning approach.

10.1.2 NEW APPROACH TO SPATIAL PLANNING

This new approach intends to close the gap in existing planning theories concerning environmental justice. The approach does not subsume existing planning theories, but rather introduces principles and propositions that can guide the application of planning theory. In the literature, Roy (2011) and Pissourios (2013) confirm that there is no permanent replacement of planning theory, but rather an improvement of it. The approach defines EJ as the fair and equitable distribution of environmental resources, services and activities to everyone, regardless of social structure, through recognition and the capability approach,

thus providing equitable access to participation in appropriate procedures with substantive means towards achieving restorative processes and benefits. In the context of this approach, the term 'environment' means a system that includes components and functions of natural capital (e.g. water, wetlands, soil, air, and land) with its wildlife, and includes the socio-economic and cultural conditions of human beings.

Figure 10-1: Third generation planning approach



The introduction of EJ in planning seeks to guide spatial planning implementation towards addressing the contrarious inequalities in planning. Figure 10-1 indicates that the EJ approach in planning consists of dimensions, principles and propositions. The dimensions of EJ that includes distributive, recognition, procedural, and substantive justices; the capability approach and just policy provide the foundation for these principles and propositions. The principles of this approach are as follows:

- a) The just distribution of resources, activities and services in space, based on an audit of environmental justice that considers the need, compatibility, accountability, compensation, and context.
- b) Promote the participation of all members of the society through the adoption of governance platforms and processes.
- c) Promote and recognize diverse types of knowledge, both experiential and expert in nature, equally in planning and implementation processes.

- d) Consider the capability of the environment, state organizations and the general public that planning affects in achieving planning goals and outcomes.
- e) Support fair planning policies, strategies, programmes, and laws that promote the improvement of the quality of life for all.

The above knowledge will not only influence theory but can also shape the policy direction of planning authorities in the quest for the realization of EJ through spatial planning. The study reveals a positive relationship among these factors, and the fact that most planners view them with the potential to influence EJ. The approach also introduces propositions that contextualize EJ from a spatial planning perspective. These propositions include the following:

- a) Spatial planning as a just distributive action
- b) Spatial planning as a form of multi-stakeholder democratic planning
- c) Spatial planning as a form of contextual experience and learning
- d) Spatial planning as a vehicle for governance
- e) Spatial planning as an action for capability assessment
- f) Spatial planning as an environmental restorative approach.

The participating municipal planners agreed with these propositions, similar to the findings regarding their agreement with the EJ principles in planning. The results demonstrate that the proposition of spatial planning as a form of multi-stakeholder democratic planning, as a vehicle for governance and as a form of contextual experience and learning are those most agreed upon by planners, followed by the proposition of spatial planning as an environmental restorative approach, as a just distributive action and as an action for capability assessment. In addition, the findings reveal that the municipal planners' backgrounds (experience, qualification, familiarity with EJ) did not influence their agreement with these principles. The results of the study revealed that 55% of the participating planners agreed that spatial planning is likely to contribute towards the achievement of EJ, while 31% of the planners perceived spatial planning with an 'extreme likelihood' to assist in the achievement of EJ.

10.2 RESEARCH SUB-QUESTION (B): NEW KNOWLEDGE

The research sub-question (b) asks to what extent spatial planning in South Africa responds to environmental justice. The study reveals that the South African legal framework

incorporates extensive provisions that address the dimensions of EJ. These laws include the Constitution of South Africa, 1996; SPLUMA, 2013; the Local Government: MSA, 2000; PAIA, 2000; PAJA, 2000; and NEMA, 1998. Despite the existence of this legal framework, the existing literature reveals that spatial planning in South Africa exhibits failures in respect of urban form, mix uses, and policy implementation among others and also not explicitly addressing EJ. The National Planning Commission (2012) underscores the fact that South Africa remains with spatial fragmentation and injustices. It is, therefore, apparent that EJ, with its corresponding dimensions, must be promoted by spatial planning practice. In the existing literature, there is a lack of debate about the extent to which South African spatial planning address EJ. Furthermore, the study reveals the nature of spatial planning practice at the municipal level concerns EJ.

10.2.1 MUNICIPAL SPATIAL PLANNING PRACTICE CONCERNING EJ

The study found that the majority of municipal planners are unfamiliar with the concept of EJ. Moreover, the majority of the municipal planners who attempted to define EJ, denoted the term exclusively from the perspective of the distributive justice notion. The study, therefore, concludes that municipal planners have a narrow understanding of EJ. The discussion also revealed a negative perception among planners concerning their municipalities in the consideration of distributive and recognition justices in spatial planning policies. Undoubtedly, the problem of spatial injustices existing in South Africa, which the National Planning Commission (2012) articulates, derives from the failure of planning strategies to address EJ issues adequately. In addition, municipal planners seemed positive about the consideration of the dimensions mentioned above during planning processes. This finding shows that municipalities are aware of spatial disparities but choose to neglect them in policy statements. Further, the study revealed that 40% of municipal planners strongly agree that local authorities consider the required capabilities to improve quality of life and spatial transformation. This finding, once again, demonstrates that the spatial planning's failure in this regard to some extent emanates from the inability of municipalities to consider the capability necessary for spatial planning outcomes. The study contends that the assessment of the capability of a plan, municipality, environment, society and other sectors for achieving spatial planning outcomes is pivotal. Regarding just policy, the statistical results demonstrate that the category of a municipality presents no influence on the practice of a municipality concerning the monitoring and evaluation of the capability of a municipality to implement SPPs. The study shows that municipal planners perceive their municipalities to be unable to monitor and evaluate spatial planning performance on the EJ dimensions. It is evident in the

survey that 20% and 16% of municipal planners strongly agree that municipalities monitor and evaluate distributive and contextual cognitive effects in planning, respectively. Once again, in practice, without just policy that allows the monitoring and evaluation of spatial planning, the existence of spatial injustices will remain ingrained in the physical geographies of South Africa.

Furthermore, study introduces the criteria for the assessment of the procedural and substantive justice dimensions, borrowed and adapted from Tyler (1988). These criteria comprise representation in decision-making, influence of representation in decision-making, capacitating of the public on spatial planning, consistency, impartiality, objectivity, correctability, and ethicality. The study found that municipalities afford the public opportunities for representation during policy-making as well as decision-making but although participation is part of the planning process, meaningful public involvement is absent and municipal planners are dissatisfied with the level of participation. The research concludes that the inadequate level of public involvement in planning emanates from the absence of, or lack of implementation, of spatial planning awareness programmes. Moreover, representation in spatial planning that takes place after plan completion but before council approval, or after council approval in some municipalities still represents a challenge. The results show that 42% of the planners perceived that their municipalities afford the public an opportunity to participate in spatial planning, either after plan completion but before council approval, or after council approval. This finding shows that local government is far from winning the battle in achieving procedural justice, if there are planning authorities that continue to involve the public this late in the planning process. Further, the study reveals that most of the municipal planners perceive the representations that are made, during spatial planning policy making or development decision-making, as not being influential in the decision-making process. By implication, the rejection of public representation in decision-making presents public participation as a mere process of administration and compliance.

Regarding the criterion of capacitating the public on spatial planning, the study reveals that municipalities have the tools to do this, comprising newsletters, pamphlets, manuals, planning forums, and campaigns, among others. However, only eleven percent of the municipal planners confirmed that their municipalities frequently implement spatial planning awareness programmes with the public. This finding is a cause for concern and identifies a reason for the reduced participation of the general public in the spatial planning process. Moreover, the results indicated that the perception of municipal planners is more positive with regards to the criteria of objectivity, correctability, representation, consistency, ethicality,

and impartiality in spatial planning processes and decision-making. Unfortunately, none of the responses on these criteria is above 50% on the Likert item of 'strongly agree'. In essence, although municipal planners have a positive perception, the results imply that the spatial planning practice for these criteria remain weak. Regarding the criterion of objectivity, the study concludes that a planning decision made through objectivity is only procedurally fair if:

- a) it is consistent with municipal planning policy or by-law, norms and standards, and general practice;
- b) it lacks elements of bias or favouritism;
- c) there has been fairness in the process;
- d) the decision-making process had no elements of dishonesty and corruption;
- e) it allows representation; and
- f) representation contributes to it.

Lastly, the study found that municipal planners consider the criteria of ethicality, objectivity, and correctability as being the most critical criteria in planning decision-making, followed by the criteria of consistency, impartiality, and representation, including its influence on planning decisions. The results concerning the highest regard of ethicality in planning processes and decision-making are consistent with the findings of Tyler (1988) regarding procedural justice in legal authorities. It is therefore evident that ethics in planning processes and decision-making takes precedence, yet it is still interrelated with other criteria of procedural justice.

10.3 RESEARCH SUB-QUESTION (C): NEW KNOWLEDGE

The study, in the discussion of spatial planning implementation (SPI) literature, identified four categories of barriers to, and enablers of, the implementation of spatial planning. These categories comprise structural, administrative, political, and contextual aspects. Therefore, this research sub-question intends to reveal the factors perceived as enhancing or impeding the realization of implementation of spatial planning towards EJ. The study, in contributing to the knowledge, has discussed, in full, the forms of SPI that are not fully integrated into planning literature. These forms of SPI include the administrative, symbolic, political, intra-organizational, inter-organizational, collaborative, and experimental types.

10.3.1 SPATIAL PLANNING IMPLEMENTATION FORMS IN MUNICIPALITIES

First, the study revealed that most local municipalities in South Africa employ a combination of the bottom-up and top-down approaches in the implementation of spatial planning. This finding signals the real shift away from the authoritative or command approach in municipalities that excludes the public in planning decision-making processes. Regarding the SPI, the study, from the perceptions of municipal planners, shows that the majority of local authorities apply the administrative form in implementing spatial planning. By implication, planners in municipalities prioritize compliance, rather than planning outcomes. It is apparent from the findings that the least-employed forms of implementation, in their ranking of application, comprise the symbolic, collaborative, and experimental forms. Hence, the top four frequently implemented spatial planning forms, in their ranking, comprise the administrative, inter-organizational, intra-organizational, and political approaches. The fact that the collaborative style of SPI is the least applied type confirms the reason for poor municipal implementation of spatial planning because collaboration is the means with which to bargain with other sectors for the required support. Therefore, collaboration cannot be separated from either the inter-organizational or intra-organizational styles of implementation. The results in the research further demonstrated the ranking of the likelihood of each SPI form contributing towards EJ by municipal planners. The participating municipal planners ranked the possibility of these implementation forms contributing to EJ as firstly being administrative in nature, followed by the inter-organizational, collaborative, intra-organizational, political, experimental, and symbolic types of SPI. This ranking is consistent with the above argument concerning the collaborative form of implementation.

10.3.2 FACTORS THAT ENHANCE OR IMPEDE SPATIAL PLANNING TOWARDS EJ

The factors perceived to have the potential to enhance or impede spatial planning in achieving EJ fall within four categories, namely structural, administrative, political, and contextual, as presented in Table 10-1. The highest ranked factors that planners perceived to impede spatial planning towards EJ across the four groups include the lack of spatial planning prioritization, political pressure, inadequate tools of trade, and exclusion of context. In essence, the critical areas of spatial planning that demand prioritization on intervention are governance, politics in planning, bureaucracy, and recognition. These results demonstrate that, without the prioritization of spatial planning, all efforts toward changing spatial geographies are meaningless. Further, the perceived impeding factors ranked second, across all categories, comprise uncoordinated planning, political interference,

delays in implementation, and lack of public participation. The study concludes that proactive planning, which responds to these factors, can improve the realization of spatial planning outcomes.

Table 10-1: Classification of factors perceived to impede or enhance spatial planning towards EJ

Categories	Area of influence	Perceived Factors	
		Impediments	Enhancers
Structural	Policy	Failure to communicate spatial planning policies, absence of spatial planning policies at the disposal of officials, inconsistency in policy implementation and orientation of plans (process than outcomes).	Adoption of spatial planning implementation strategy
	Governance	Lack of leadership, lack of prioritization of spatial planning, ineffective collaboration, uncoordinated planning and organizational culture, poor organization support, and inter-organization disputes and conflicts.	Improved inter-organizational coordination and cooperation, improved collaboration, appropriate and improved management leadership, change in organizational culture, and a responsive organizational structure.
Political	Politic in planning	Political pressure and interference, poor political support and lack of leadership.	Appropriate and improved political leadership, capacity building for political leaders on spatial planning, political intervention, and resistance management.
Administration	Bureaucracy	Red tape, delays in implementation, and inadequate tools of trade.	Competent and skilful personnel and adequate financial resources.
	Effectiveness	Absence of plan monitoring and evaluation, and a lack of capacity building.	Plan monitoring and evaluation, continuous capacity building, adoption of spatial planning implementation strategy, and simultaneous plan formulation and implementation.
	Conduct of municipalities	Municipal practice, attitude, and culture.	Change in planning practice, attitude and culture.
	Policy	Failure to communicate spatial planning policies.	Adoption of simple to read spatial planning policies.
Contextual	Procedure	Lack of participation.	Public awareness and education, and improved public participation.
	Recognition	Exclusion of context issues.	Mainstreaming of contextual issues into planning.

On the other hand, the study revealed that the adoption of a SPI strategy, capacity building for political leaders on spatial planning, competent and skilful personnel, and public awareness and education are the highest ranked factors that planners perceived with the potential to enhance spatial planning in the achievement of EJ. Table 10-1 shows that the factor of capacity building influences politics in planning and that competent, and skilful personnel addresses the bureaucratic challenge of red-tape or delay in implementation. The aspect of public awareness and education was also found to contribute to improved procedures in respect of public participation. Governance, bureaucracy, and procedure are amongst the top priority areas that can respond to the perceived factors that impede spatial planning towards EJ. It is also apparent that the adoption of SDF in the case of South Africa is inadequate without an SPI strategy. Most municipalities have adopted SDF, but planning challenges remain intact. It is, therefore, apparent that a strategy for implementation is absent in municipalities. Moreover, the second-ranked factors perceived to enhance spatial

planning towards EJ comprise appropriate and improved management leadership, appropriate and improved political leadership, adequate financial resources, and improved public participation. The second ranking of these factors also confirms that governance, as a structural area, plays a critical role in planning. In this context, the study proposes the promotion of spatial planning implementation leadership (SPIL). The research borrowed this type of leadership from the “spatial planning leadership” concept that Neuman (2009:201) introduced in advocating for planning leadership through infrastructure. The SPIL involves planning implementation that empowers, capacitates, and influences the implementers, technocrats, political leaders, and the general public about spatial planning, its intention, and outcomes. This type of leadership, if implemented, can bridge the gap between inadequate participation in spatial planning processes and the lack of spatial planning prioritization. The SPIL has the potential to improve the satisfaction of municipal planners regarding the level of public participation in spatial planning policies. Undoubtedly, a capacitated ward councillor with a political will to promote spatial transformation can influence the general public to take part in community engagements about planning. The study revealed that ward consultation is the most acceptable mechanism to achieve public participation in municipalities. In addition, the need to empower the public, and politicians, cannot be exaggerated. Therefore, it can be said that spatial planning leadership affords a reciprocal knowledge exchange between experts (public and private sectors) and the public, among members of the public or between experts on spatial planning.

10.3.3 CONCEPTUALIZATION OF SPI STRATEGY

This study introduced a strategy to improve the implementation of spatial planning, known as the SPI strategy. The SPI strategy requires the recognition of spatial planning as a flexible project that is on-going, with clear, realistic, and achievable outcomes. The framework for the strategy is as follows:

- a) First, the strategy addresses the question of ‘why’ spatial planning is necessary. On this point, a thorough account of the injustices evident within a given area in respect of the distribution of resources, activities, and services would provide the basis for responding to the ‘why’ question.
- b) Second, the strategy responds to the question of ‘what’ influence spatial planning or a plan (i.e. SDF) will have in a given area. The strategy should explicitly, and without the use of jargon, define the expected outcomes from the plan, present its ability to improve quality of life of people, and transform spatial geographies through the

application of EJ principles. Moreover, the strategy highlights the criteria it adopts to ensure effective monitoring and evaluation of the SPI.

- c) Thirdly, the strategy responds to the question of 'how' spatial planning or plans intend to achieve their expected outcomes. In doing so, the strategy fully presents the projects identified for the achievement of each outcome and related objectives. Further, in addressing this question, the strategy cites the precepts and guidelines that will inform the SPI, including the required resources and responsible stakeholders or sectors.
- d) Lastly, the strategy addresses the question of 'when' the spatial plan intends to achieve its outcomes and related objectives. In this regard, the strategy requires the scheduling of all projects that a plan proposes for implementation intended to improve spatial fragmentation and injustices.

10.4 RECOMMENDATIONS FOR PRACTICE

10.4.1 EJ PLANNING IMPLEMENTATION GUIDELINES

This section discusses the guidelines which municipalities may adapt and adopt as a policy in the implementation of EJ in planning.

1.0 Application

These guidelines are applicable in:

- 1.1 Municipal, provincial and national planning initiatives and programmes.
- 1.2 Defining planning and policy objectives and strategies.
- 1.3 Processing of land development applications for a decision.
- 1.4 The implementation of spatial planning policies and plans.
- 1.5 Monitoring and evaluation of spatial planning performance.

2.0 Introduction

These guidelines are a responsive approach to enhance the achievement of the provisions espoused in the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013). The recent research on EJ and spatial planning revealed that EJ is not popular among municipal planners; hence, it is incorporated either explicitly or implicitly in the South

African legal framework. The focus area of these guidelines includes the process of plan making (i.e. spatial development frameworks and land use schemes), planning decision-making on policy and land development matters. These guidelines are intended to help municipal planners with regards to the manners in which EJ can be implemented in spatial planning. The guidelines extend to include other sectors and communities, by providing their assigned roles and responsibilities in the spatial planning and decision-making processes and also introduce a guide for the implementation of the EJ principles in the reshaping of the spatial planning paradigm. These principles incorporate all six dimensions of EJ, comprising the distributive, recognition, procedural, and substantive justices, including the capability approach and just policy, and support the endeavour to achieve environmental justice in South Africa.

3.0. The exposition of the EJ planning approach

The concept of EJ planning refers to the environment as a system that includes components and functions of natural capital (e.g. water, wetlands, soil, air, and land) with its wildlife, including the socio-economic and cultural conditions of human beings. More importantly, the space that planning addresses incorporates not only the physical environment but also the socio-economic environment. The socio-economic environment includes culture and customs, infrastructure for basic services, health, education and other amenities; and economic strengths and weaknesses. EJ planning refers to the fair and equitable distribution of environmental resources, services and activities to everyone, regardless of social structure, through recognition and the capability approach, thus providing equal access to participation in appropriate procedures, with substantive means towards achieving restorative processes and benefits. This approach seeks to guide spatial planning implementation towards addressing the contrarious inequalities in planning.

4.0 Contextualization of EJ planning guidelines:

4.1 Policy context

The National Development Plan (NDP): Vision 2030, developed by the National Planning Commission (2012), sets out the desired approach to address injustices that exist in planning across all sectors. The plan acknowledges the fragmented spatial pattern, which is unjust and indicative of the poor quality and location of public services, infrastructure, the unsustainability of resources, and corruption in the public sector. The NDP supports an approach that seeks to redress past injustices and

imbalances by promoting sustainability through investments and collaboration, and the participation of various sectors and communities. The principles of these guidelines discussed below demonstrate a reflection of the NDP and therefore constitute an approach towards achieving Vision 2030.

4.2 Legal context

4.2.1 The Constitution of the Republic South Africa, 1996

The Constitution of the Republic of South Africa is an overarching and supreme law that governs other statutes regarding planning and administration, among others. Section 2 of the Constitution sets out the Bill of Rights that constitutes the foundation of these guidelines. Section 24 states that:

- ✓ “Everyone has the right-(a) to an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-(i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

Further, Section 32 states that:

- ✓ “(1) Everyone has the right of access to-(a) any information held by the state; and (b) any information that is held by another person and that is required for the exercise or protection of any rights; (2) National legislation must be enacted to give effect to this right, and may provide for reasonable measures to alleviate the administrative and financial burden on the state.”

More related to Section 32 is Section 33 which provides that:

- ✓ “(1) Everyone has the right to administrative action that is lawful, reasonable and procedurally fair; (2) Everyone whose rights have been adversely affected by administrative action has the right to be given written reasons; (3) National legislation must be enacted to give effect to these rights, and must-(a) provide for the review of administrative action by a court or, where appropriate, an independent and impartial tribunal; (b) impose a duty on the state to give effect to the rights in subsections (1) and (2); and (c) promote an efficient administration.”

These three sections promote the realization of substantive and procedural justices in planning. Further, Chapter 3 of the Constitution promotes cooperative governance,

which underscores the inter-organizational approach to the implementation of spatial planning. Lastly, section 195 of the Constitution provides the “values and principles applicable to public administration”. The section states that:

- (1) “Public administration must be governed by the democratic values and principles enshrined in the Constitution, including the following principles:
 - (a) A high standard of professional ethics must be promoted and maintained.
 - (b) Efficient, economic and effective use of resources must be promoted.
 - (c) Public administration must be development-oriented.
 - (d) Services must be provided impartially, fairly, equitably and without bias.
 - (e) People’s needs must be responded to, and the public must be encouraged to participate in policy-making.
 - (f) Public administration must be accountable.
 - (g) Transparency must be fostered by providing the public with timely, accessible and accurate information.
 - (h) Good human-resource management and career-development practices, to maximise human potential, must be cultivated.
 - (i) Public administration must be broadly representative of the South African people, with employment and personnel management practices based on ability, objectivity, fairness, and the need to redress the imbalances of the past to achieve broad representation.” Further, subsection (2) provides that “the above principles apply to-(a) administration in every sphere of government.”

These values and principles support the procedural justice dimension of the EJ planning approach. Moreover, Section 154(1) states that “the national government and provincial governments, by legislative and other measures, must support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions.” By extension, this section provides the basis for the capability approach that seeks to evaluate the capability of municipalities in an attempt to identify areas of support and intervention. In this regard, provincial and national government have the responsibility to assess the capability of municipalities in order to implement appropriate support measures. Lastly, the Constitution, in Schedule 4, Part B, provides municipal planning as a function of local government. These guidelines aim at improving and strengthening municipal planning towards the realization of environmental justice.

4.2.2 Spatial Planning and Land Use Management, Act 2013 (Act No 16 of 2013)

This Act, section 7, provides the development principles that govern spatial planning and land use management such as “spatial justice, spatial sustainability, efficiency, spatial resilience, and good administration.” The principle of spatial justice addresses the distributive injustices that past planning practices have introduced in the geographies of South Africa. The principles of sustainability and efficiency promote the maintenance of resources, activities and services by recognizing the context and capabilities of institutions, communities and natural capital. The principle of spatial resilience promotes the just policy dimension of EJ, as it underscores the importance of plans that address planning effects. Further, Chapter 3 of the Act promotes intergovernmental relations among the three spheres of government in respect of spatial planning. The Act provides for the review and monitoring of plans (SDF and LUS) which is, in effect, the recognition of just policy. Hence, this guideline expands the application of this EJ dimension. Lastly, section 51 of Act supports the procedural justice criterion of correctability, as espoused in these guidelines, because of the presence of appeals concerning planning decisions.

4.2.3 Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000)

This Act is the basis for integrated development planning and incorporates the requirement for the preparation of spatial development frameworks (SDFs). Chapter 2 of the Act provides the rights and duties of municipal councils, municipal administrations, and local communities. This chapter is crucial, since spatial planning is the responsibility of local government. The chapter addresses the area of participation/procedures, capability and sustainability, and the fair treatment of communities with regards to service delivery. Section 46 of the Act states that municipalities “must incorporate in its annual performance report measures taken to improve performance.” Therefore, these guidelines can serve as a measure to improve municipal performance on spatial planning outcomes.

4.2.4 Promotion of Access to Information Act (PAIA), 2000 (Act No. 02 of 2000)

This Act promotes the procedural and substantive dimensions of EJ, as it relates to the access of information, when it resides in the custody of a public body, such as the municipality or a private body, such as a private company. Chapter 3 of the Act also

makes provision for gaining access to information, which is reflective of the provision of empowerment and is promoted by substantive justice.

4.2.5 Promotion of Administrative Justice Act, 2000 (Act No 3 of 2000)

This Act is not different to the PAIA, since it also makes provision for procedural justice. Section 5 of the Act allows any person affected by an administrative action of a municipality to request the reasons for such an action. Further, section 6 of the Act makes provision for the review of an administrative decision, such as a planning decision that a municipality might have taken. This provision promotes the correctability criterion of procedural justice, as espoused in these guidelines.

4.2.6 National Environmental Management Act, 1998 (Act No 107 of 1998)

This Act, supported by other Sectoral Environmental Management Acts and attendant Regulations, regulates the management of the environment. Section 2 of the Act provides principles for environmental management, which promote sustainability and the environment beyond nature. Therefore, this Act espouses all dimensions of EJ in its various provisions.

5.0 Principles of EJ planning

EJ planning comprises five principles that promote justice in planning. These principles have a close relationship with the dimensions of environmental justice because the dimensions of EJ provide the basis for these principles. Each of these principles align with the dimensions of EJ and comprehensively address the provision of the ruling legal framework. They comprise the following:

- 5.1 The just distribution of activities in space, based on an audit of environmental justice that considers the need, compatibility, accountability, compensation, and context. This principle views spatial planning as a just administrative action.
- 5.2 Promoting the participation of all members of the society through the adoption of governance platforms and processes. This principle supports spatial planning as a multi-stakeholder form of democratic planning and a vehicle for governance.
- 5.3 Promoting and recognizing diverse types knowledge (experiential and expert) equally in planning and implementation processes. This principle perceives spatial planning as a contextual experience and learning.

- 5.4 Considering the capability of the environment, state organizations and the general public that planning affects in achieving planning goals and outcomes. This principle promotes spatial planning as an action for capability assessment.
- 5.5 Supporting fair planning policies, strategies, programmes, and laws that promote the improvement of the quality of life for all. This principle supports an environmental restorative approach.

The application of these principles should be repetitive throughout the planning and implementation processes.

6.0 Guidelines for the implementation of EJ dimensions in spatial planning

These guidelines provide critical factors for consideration in ensuring the incorporation of the six dimensions of environmental justice in planning, decision-making and implementation.

6.1 Guidelines for distributive justice in spatial planning

The guidelines for distributive justice are about the fair distribution of resources, activities, and services in space. The guidelines below highlight the manner in which planning authorities could improve on distributive justice.

Table 10-2: Guidelines for distributive justice in spatial planning

Guideline	Actions for implementation
Distributive justice in spatial planning	<ul style="list-style-type: none"> ▪ Understand the population, its growth, and projection over a period of 10 years or more to address the requirements of current and future generation. ▪ Undertake an environmental scan with the intention of understanding the injustices regarding the location of resources, activities and services, the adequate provision of these resources, activities and services, the compatibility of activities, and sustainability of activities, resources and services. ▪ Understand the full context of a planning area regarding spatial planning patterns, trends, values, beliefs, culture, and competitive advantage. ▪ Overview of spatial planning activities that contradict the values, beliefs and culture of a planning area.

Guideline	Actions for implementation
	<ul style="list-style-type: none"> ▪ Account for areas oversupplied with activities and services and those that lack activities and services, including reasons thereof. There should be an explicit reflection of these areas with the oversupply of and inadequate activities and services. ▪ Identify areas where environmental management is promoted and those where environmental management is weak, including reasons thereof. ▪ Assess the effectiveness of land use management in all areas that planning affects, including the reasons for ineffectiveness. ▪ Assess the needs of communities in respect of activities, services and resources. Further, make a projection of the community needs applying appropriate standards over periods of 5 years, 10 years, 15 years and more. ▪ Determine priority areas for spatial planning intervention, given the identified imbalances in activities (land uses), resources (i.e., air, soil, water, plants, animals and man-made goods and objects i.e., infrastructure, furniture) and services (supply of water, electricity and sanitation, education, maintenance of infrastructure, enforcement etc.)

6.2 Guidelines for substantive justice in spatial planning

The guidelines for substantive justice aim to promote the fair provision of the governance tools that are required, and made available, in an attempt to capacitate the general public to participate in decision-making. In order to promote procedural justice, planning authorities have a duty to provide platforms and institutions that allow the public to be part of decision-making. The following items provide a clear guide on the application of the substantive justice dimension in spatial planning.

Table 10-3: Guidelines for substantive justice in spatial planning

Guideline	Actions for implementation
Substantive justice in spatial planning	<ul style="list-style-type: none"> ▪ Promote spatial planning implementation that empowers, capacitates, and influences the implementers, technocrats, political leaders, and the general public about spatial planning, its intention and outcomes.

Guideline	Actions for implementation
	<ul style="list-style-type: none"> ▪ Effectively use newsletters, pamphlets, manuals, planning forums, municipal outreach programmes and campaigns, among others, to empower and capacitate the public about spatial planning and its implementation tool of land use management. ▪ Implement spatial planning awareness programmes to educate the public and political heads or structures about the importance of spatial planning. ▪ Effectively mobilize ward committees and traditional councils to also be centres of information about spatial plans and land use schemes applicable in a municipality. ▪ Establish forums that promote participation in planning processes for both the public and private sectors. ▪ Consider the use of ward or sectoral meetings to debate and collaborate on spatial planning matters, such as policy making and implementation, including land development. ▪ Manage hearings by municipal planning tribunals and appeal authorities so as not to be platforms for legal battles, but rather for planning substance and merits. ▪ Provides measures that allow an interested party without a representative in a planning tribunal or appeal authority to state his or her case without intimidation. ▪ Support programmes that aim to provide the representation of the public in a municipal planning tribunal or appeal authority. ▪ Promote fairness in the access to the programmes and forum established and implemented to promote public participation in spatial planning, implementation, and decision-making processes.

6.3 Guidelines for procedural justice in spatial planning

The guidelines for procedural justice involve areas for consideration that can ensure representation and its influence on decision-making, consistency, impartiality (lack of biases), decision accuracy (facts and objectivity), correctability (allowing appeals on decisions), and ethicality (doing what is good and right) in planning. These guidelines apply not only to decision-making but also to planning and implementation. The

following guidelines summarise the responsibilities of planning authorities to promote procedural justice in spatial planning.

Table 10-4: Guidelines for procedural justice in spatial planning

Guideline	Actions for implementation
Procedural justice in spatial planning	<ul style="list-style-type: none"> ▪ Identify stakeholders and their interest in a community to which the planning relates. ▪ Promote fair, meaningful participation of all stakeholders in a society. ▪ Ensure that public participation happens at the inception of a spatial planning process. ▪ Promote inter-organizational and intra-organization approaches to spatial planning implementation that support collaborative means to engagement. ▪ Involve public participation during the implementation of spatial planning programmes and plans. ▪ Allow public representation in spatial planning policy and decision-making process. ▪ Consider public representations on spatial planning policy and land development matter prior to decision-making. ▪ Provide responses to parties or stakeholders who have made representations on how it has been considered in decision-making or spatial planning policy. ▪ Promote consistency in the preparation, implementation, and enforcement of spatial planning policy or decision-making. ▪ Avoid favouritism or biases in the distribution of activities, services, and resources; recognition of context, empowerment of stakeholders about spatial planning, selection of stakeholders to participate in spatial planning processes; and preparation, implementation, and enforcement of spatial planning policy or decision-making to guarantee impartiality. ▪ Facts and merits should inform spatial planning decision-making to promote objectivity, while being sensitive to socio-economic or amenity effects. ▪ Planners and planning authorities to uphold professional and work ethics to do what is good and right without being corrupt or

Guideline	Actions for implementation
	<p>corrupted.</p> <ul style="list-style-type: none"> ▪ Planners and planning authorities to act truthfully and honestly during planning, decision-making, implementation and enforcement. ▪ Planning authorities to inform members participating in a spatial planning policy or decision-making processes about the available appeal procedures to follow when aggrieved by a process or decision of a planning authority.

6.4 Guidelines for recognitive justice in spatial planning

The guidelines for recognition justice pertain to the fair consideration of all aspects of the environment in planning, decision-making and implementation. The subsections provide areas of consideration for the successful achievement of EJ in spatial planning

Table 10-5: Guidelines for recognitive justice in spatial planning

Guideline	Actions for implementation
Recognitive justice in spatial planning	<ul style="list-style-type: none"> ▪ Account for all rural and urban areas within the jurisdiction of a municipal planning area. ▪ Fair inclusion of all stakeholders, regardless of race, class, ethnicity, and culture in the spatial planning or decision-making processes. ▪ Complement technical knowledge with experiential (soft) knowledge about a planning area. ▪ Treat planning experts and non-expert equally in a spatial planning process or decision-making. ▪ Consider utility services, community or amenity facilities, residential, agricultural, industrial, business or commercial, government, transportation, sensitive natural environment, heritage, and other land uses during planning to promote integrated, sustainable towns. ▪ Comprehensively understand the socio-economic, cultural, and physical conditions of a planning area. ▪ Consider the risks that exist in the implementation of spatial

Guideline	Actions for implementation
	<p>planning policies through a risk assessment process.</p> <ul style="list-style-type: none"> ▪ Proactively plan for the critical factors perceived to hinder the implementation of spatial planning policy or decision that includes: spatial planning prioritization, political pressure, inadequate tools of trade, exclusion of context, uncoordinated planning, political interference, delays in implementation, and lack of public participation.

6.5 Guidelines for capability approach in spatial planning

The guidelines for the capability approach are related to the assessment of the abilities that institutions, programmes and an environment have, to influence sustainability and justice in planning. An understanding of these capabilities can assist in selecting the appropriate approaches for the implementation of plans. Therefore, the following guidelines provide areas for consideration regarding the capability approach.

Table 10-6: Guidelines for capability approach in spatial planning

Guideline	Actions for implementation
<p>Capability approach in spatial planning</p>	<ul style="list-style-type: none"> ▪ Undertake a capability assessment of: <ul style="list-style-type: none"> ○ a planning authority to ascertain the level of support required to guarantee the successful implementation of spatial planning policy and its general ability (adequacy of tools of trade) to implement. ○ the receiving community on its ability to sustain itself in the planning proposed for its area. ○ the natural environment on its ability to continue maintaining its function and resources in the midst of a proposed plan. ○ other sectors such as government and private to collaborate in spatial planning programmes and projects that they can implement. ▪ Understand the minimum level required for the sustainability of a community in a given planning area to ensure the provision of activities and services above the minimum standard. ▪ Assess the capability of spatial planning programmes, plans, and

Guideline	Actions for implementation
	policies: <ul style="list-style-type: none"> ○ to improve quality of life and spatial transformation. ○ to address sustainability.

6.6 Guidelines for just policy in spatial planning

The guidelines for just policy focus on how fair consideration can be given to policy effects during the planning, decision-making, and implementation. These guidelines also involve the monitoring and evaluation of all actions taken during the entire process of spatial planning. The following itemised factors can guide planning authorities on the criteria for the monitoring and evaluation of planning policy effects.

Table: 10-7: Guidelines for just policy in spatial planning

Guideline	Actions for implementation
Just policy in spatial planning	<ul style="list-style-type: none"> ▪ Monitor and evaluate: <ul style="list-style-type: none"> ○ the level of fairness in public participation during spatial planning policy process, land development, decision-making, and implementation. ○ the effectiveness of spatial planning awareness and education programmes. ○ whether the spatial planning process is inclusive of all stakeholders in a planning area. ○ the level of objectivity, impartiality, and consistency in spatial planning decision-making. ○ fairness in the distribution of resources, activities and services. ○ whether the effects emanating from the distribution of resources, activities and services respond to spatial disparities. ○ whether there is contextual recognition in spatial planning and implementation. ○ whether professional and work ethics guide spatial planning policy process and decision-making. ○ the municipal capabilities to implement spatial planning policies and plans.

Guideline	Actions for implementation
	<ul style="list-style-type: none"> ○ whether spatial planning policies have implementation strategies that show alignment with strategic objectives, and have champions, tasks, timelines and responsibilities. ▪ Consider the assignment of dedicated personnel to evaluate and monitor the performance of municipal spatial planning policies. ▪ Adopt measurable indicators and targets to successfully monitor and evaluate the municipal spatial planning performance. ▪ The monitoring and evaluation to take place throughout the planning and implementation process. ▪ Implement remedial actions for all adverse or unfavourable monitoring and evaluation results. ▪ Set indicators and targets for the areas proposed in for monitoring and evaluation.

10.4.2 IMPLEMENTATION OF EJ GUIDELINES IN SPATIAL PLANNING

The implementation of environmental justice’s guidelines in spatial planning occurs in a twofold manner. Firstly, by means of equity-oriented planning and secondly by means of fair planning decisions. The planning of a city, town, settlement or village results in outputs, which can take the form of either a plan or a policy that can guide development. In applying these guidelines during planning or policy formulation, equity-oriented planning is a priority. The implementation of a plan or policy requires fair planning decisions in order to guarantee justice for the environment, which is affected by the planning processes. Therefore, these areas of implementation effectively support the third generation approach to spatial planning, which also reflects EJ.

1. Equity-oriented planning

Spatial imbalances, segregation, and fragmentation remain ingrained in the spatial patterns of South Africa. The guidelines of EJ in spatial planning aim to strengthen the existing efforts toward spatial transformation. Equity-oriented planning requires not only the prioritization of the poor and disadvantaged communities but also the promotion of balance between the well-off and have-not in the distribution of resources, activities, and services. Table 10-2 highlights the actions that a planning authority or planner can implement to achieve distributive justice during planning or policy formulation. The realization of spatial

transformation depends solely on the prioritization of the most fragmented and disadvantaged communities. The environmental audit scan is vital for planning authorities to understand the extent of injustices in each planning area. The ward system of South Africa provides an opportunity for planners to assess the various injustices of each ward. The assessment per ward ultimately results in the ranking of wards based on severity and deprivation regarding resources, activities, and services. The prioritization of the most deprived and fragmented wards have the potential to redress the unchanging imbalances in the spatial patterns of South Africa. Planning that is not evidence-based, and area focused, tends to hinder the achievement of planned outcomes over a specific period, whether it be short, medium, or long-term.

During the development of a spatial plan or policy, procedural justice assists in increasing the chances of community confidence and acceptance regarding the intention of a plan or policy. Table 10-4 clarifies actions that are needed for fulfilling the fundamentals of procedural justice. Public involvement in this process should not occur at the end, or after plan or policy approval, but rather from the onset of planning until implementation. The equity-oriented planning approach demands the mobilization of communities to participate in a planning process, which does not focus solely on compliance and sending notices to the public without proper engagement and education. In principle, substantive justice allows for the empowerment of the public regarding planning matters. Table-10-3 itemizes guidelines for achieving substantive justice. The study reveals that ward consultation is preferable in planning. Therefore, the adoption of a spatial planning leadership program that promotes empowerment and knowledge sharing is an alternative to community mobilization. Education and awareness on planning matters and the need to transform the space are relevant to politicians and traditional leaders. In practice, these leaders may play a primary role in influencing community members to participate in any planning or project related initiative. Spatial planning that is equity-oriented allows for the empowerment of every stakeholder involved in planning. The most disadvantaged communities that are prioritized in planning expect companionship from a planning authority or planner to cultivate good relations and the reduction of resistance probability. Such companionship is attainable through community outreach programs (i.e., Imbizo), roadshows, and ad hoc consultations. This articulation is consistent with the argument of Özdemir and Tasan-Kok (2019:750) regarding the role of a “planner as a professional companion.”

The planning of fragmented, deprived, segregated, and disadvantaged area is incomplete without a full perspicacity of its context. This context is not recognized solely from an expert perspective but also from a non-expert point of view. Table 10-5 lists actions for realizing

recognitive justice in planning. The unpacking of context, through evidence-based means, subsequently leads to an understanding of the comparative and competitive advantages of an area. A society-oriented approach in the planning process improves the quality of planning information. Spatial planning that allows communities to own a plan formulation process empowers communities to decide on their areas concerning resources, services, and activities based on known challenges. In the praxis of planning, tested planning information through various means of analysis, such as land audits or research, assists in providing a planning authority with information on the capability of any area. Table 10-6 presents the capability assessment needed for any planning area because planning commonly fails when the capability of a planning area is unknown. For instance, planning a human settlement without upgrading the demand capacity for basic services infrastructure is an inescapable source of future community unrest. In addition to this, the successes and failures of a plan or policy prepared for a disadvantaged community toward environmental justice are knowable only through monitoring and evaluation. Shahab *et al.* (2019:7) propose the criteria for evaluating planning tools, such as plans or policies, should include “effectiveness, efficiency, equity, acceptability, and institutional arrangement.” Therefore, any planning authority or planner in the process of evaluating a plan or policy needs to focus on the following:

Table 10-8: Plan or policy evaluation criteria

Criteria	Description
Performance	<ul style="list-style-type: none"> ▪ Planning authority's use of a plan to inform planning decision-making. ▪ Compliance level with the plan during implementation. ▪ Compliance level of the plan with legislation on requirements, if applicable. ▪ Level of plan's responsiveness to community or area challenges.
Effectiveness	<ul style="list-style-type: none"> ▪ Plan's ability to achieve outcomes aligned to its objectives.
Efficiency	<ul style="list-style-type: none"> ▪ Degree of fair and beneficial resource allocation in the implementation of a plan ▪ Degree of bureaucratic nightmares in the policy or plan implementation. ▪ Level of implementation arrangements (actions, targeted area, link to objectives, cost, responsibility, and schedule)
Optimization	<ul style="list-style-type: none"> ▪ Use of existing resources and services in the implementation to achieve outcomes of a plan. ▪ Level of densification, infill, and integration strategies in the plan implementation.

Criteria	Description
Equity	<ul style="list-style-type: none"> ▪ Extent of areas' injustices highlighted in a plan. ▪ Ability of a plan to achieve balance between a deprived community and community with coordinated and sustainable resources, services, and activities. ▪ Prioritization of most critical areas for intervention (short, medium and long-term)
Confidence and acceptability	<ul style="list-style-type: none"> ▪ Level of community support of plan implementation. ▪ Degree of political and administrative support of plan implementation
Organizational arrangement	<ul style="list-style-type: none"> ▪ Capacity of planning authorities to implement a plan (execution, coordination, management, and monitoring) ▪ Level of intra-organizational coordination and cooperation on implementation. ▪ Degree of inter-organizational coordination, cooperation, integration, and alignment on implementation.

Source: Adopted and adapted from Shahab *et al.* (2019)

In evaluating a plan, and applying the above criteria, the rating is as follows: 1-poor, 2-fair, 3-good, 4-very good, and 5-excellent. The above table represents the criteria that can assist in evaluating any plan or policy, which is implemented by a planning authority. Table 10-7 shows other actions that guide the monitoring and evaluation of plan preparation processes.

2. Fair planning decision

Fair decision making promotes procedural justice in both the adoption and approval of spatial planning tools such as policies, guidelines, regulations, by-laws, and land use schemes and the approval or granting of permission to a development.

2.1 Adoption and approval of a spatial planning tool

Equity-oriented planning emphasizes the prioritization of disadvantaged areas in spatial planning. The above discussion on equity-oriented planning indicates the need for procedural, substantive, and recognitive justices, including the capability approach and just policy dimensions of EJ during the planning of an area or preparation of a plan or policy. The discussion omitted the explicit reflection of the approval processes of a planned area or

concluded policy or plan. The approval process of planning policy or plan requires appropriate procedures that espouse procedural justice. The involvement of the public in plan preparation should not only occur in the development stage but throughout the planning, approval, and implementation stages. Fair planning decisions in the preparation of spatial planning tools requires adequate facilitators of the planning process and a report of public participation, which details the steps that were taken throughout the planning process in dealing with public inputs. Where there are objections to a spatial planning policy in the planning process, people need to be referred to a committee that deals with such objections. During the publication of a draft document for a land use scheme, spatial development framework, and by-law, the steering committee has the responsibility of processing objections and finding solutions where merits exist. In addition, the processing of objections demand ethicality, impartiality, objectivity, and consistency from the committee. In some cases, an oral presentation may be necessary to gain insight on the disputed issues. Underprivileged and disadvantaged areas with segregated and fragmented spatial patterns must receive high recognition with regards to policy and alternatives or interventions must inform decisions. The respective committees need to act appropriately when deciding on a policy, without being biased. The adoption of spatial planning policies also has to be consistent with the strategic objectives of spatial planning in local authorities, the Constitution, and with the provisions of ruling procedures and planning law. The committee that processes representation or submitted concerns ought to understand that although the approach is equity-oriented, it does not intend to create inequalities.

The council of a municipality is responsible for the approval of any spatial planning policy and ought to ensure that the process provided all stakeholders with the opportunity to make inputs and that it fairly dealt with submitted concerns. A generic procedure for the approval of spatial planning policy in local government includes processing policy from the project steering committee to Municipal Management Committee to a relevant Portfolio Committee, then the Mayoral Committee, after which a report gets tabled before a municipal council for the approval of the policy. All these committees must pay attention to whether fairness informed the entire process in respect of public participation and whether the concerns that were raised by the public were addressed. The responsibility of the council is not only to vote and agree on policy but also to ensure that a spatial planning policy achieves spatial transformation, and that the public is likely to accept it.

2.2 Approval of or granting of permission to a development

The principles of natural justice underscore the importance of the “*audi alteram partem* (hear the other side) and *nemo iudex in causa sua* (no one should be a judge in his own case)” (Baxter, 1979: 608; Saraswat and Srivastava, 2019:26) as the common law rules in decision-making. In the practice of planning, members of the public rarely challenge or object to all land development applications and decisions made thereof even though these applications often fail to protect their interests and rights. In situations where there are objections in all land development applications within a specific area, there is a need to investigate the basis of such objections as it may be in bad faith as opposed to being based on the protection of community interests and rights. Fair planning decision-making requires all parties (i.e., residents) who are affected by the development to partake in a decision-making process. The participation of these parties is either through a written submission or oral representation, depending on the rules governing a planning authority (i.e., MPT, and appeal authority). Practically, a planning authority has to consider all submissions made against an application or decision. All submitted concerns that are factual, and with merit, qualify for recognition and consideration in decision-making. In essence, a planning authority or administrative functionary can invalidate any objection and concern found to be without merit. Important to note is that objectivity in a fair planning decision is only procedurally fair if:

- a) it is consistent with municipal planning policy, norms and standards, and general practice;
- b) it lacks elements of bias or favouritism;
- c) there has been fairness in the process;
- d) the decision-making process had no elements of dishonesty and corruption;
- e) it allows representation; and
- f) representation contributes to it.

The objective consideration of a matter also means considering ruling policies, environmental justice of a planning or development area, and the capability of the environment, society, and all institutions affected by the development. The decision-maker must ensure consistency in the application of procedures, treatment of matters and parties, policies, by-laws, and other laws. Planning authorities have a responsibility to treat members of a society with truthfulness and honesty and make decisions that are devoid of negative impact on the quality of their lives. Any member of a planning authority that has a conflict of interest on a development pending a decision must act ethically by excusing themselves from participation in the decision-making processes pertaining to a particular development.

This act of ethicality effectively reduces the chances of bias suspicion by any affected party. Any planning decision-making found with the suspicion of bias, if legally challenged, presents a potential for the invalidation of a decision-making process. Acting impartially in decision-making depends on the ethical conduct of a planning authority. The study revealed that planners perceive ethicality to take precedence over decision accuracy (objectivity), impartiality, correctability (appeal), consistency, representation, and its influence on decisions. Therefore, any member of a planning administrative functionary (i.e., MPTs and appeal authorities) that contravenes a code of conduct may be responsible for the public's dissatisfaction with a planning decision.

10.5 RECOMMENDATION FOR FUTURE RESEARCH

This study contributes to the existing body of knowledge on spatial planning and environmental justice. However, the research project will be incomplete without presenting recommendations for future research in an attempt to widen the knowledge and the application of the study's focus area. The study recommends the following guidelines for future research and focuses specifically on addressing the areas of research that can improve the study's proposed planning approach:

- a) The evaluation of distributive justice in spatial development frameworks and land use schemes.
- b) Critical investigation of the public perception about procedural justice in municipal spatial planning process and decision-making.
- c) Assessment of planning curricula on the incorporation of EJ dimensions.
- d) Action research on the implementation of the EJ guidelines.
- e) Investigation on the implementation of the just policy dimension of EJ in municipal spatial planning.
- f) Longitudinal assessment of EJ in municipal spatial planning.
- g) Investigate the application of a spatial planning implementation strategy in planning.
- h) Critical investigation of the suitability of municipal appeal authorities, as opposed to the decisions of municipal planning tribunals, to measure the level of agreement and disagreement.

10.6 CONCLUSION

Continuous research and improvement of theory remain important in developing knowledge that can enhance planning practice and theory application. The study has revealed that planning theories lack the full integration of environmental justice (EJ) in their forms. The new turn of EJ in planning, using the proposed principles and propositions, presents an opportunity to reshape spatial planning practice in the achievement of EJ. The findings of the study highlight key positive and negative municipal planning practices, as it relates to EJ. The identified positive practices include:

- Municipal combination of the bottom- and top-down (hybrid) implementation approaches in spatial planning,
- The consideration of distributive and recognitive justice during planning,
- The existing processes that allow public participation in planning,
- Legal frameworks that support the dimensions of EJ.

On the other hand, the study revealed the key negative municipal practice in respect of EJ as including:

- Compliance- or administrative-driven spatial planning implementation;
- Lack of spatial planning awareness programmes as part of substantive justice;
- Unfamiliarity of municipal planners with the concept of EJ;
- Inadequate incorporation of distributive and recognitive justice traits in planning policies;
- The failure to monitor and evaluate the effects of EJ in the implementation of planning policies;
- Lack of capacity to implement planning policies.

In the experience of the researcher, municipal planning in South Africa concentrates on sustainability with a salient level of participation, yet without a clear view of fairness. It is evident that if fairness or justice had directed planning in the country, the spatial fragmentation would have been addressed a long time ago. The study contributes to practice and theory by shaping planning with the introduction of EJ planning principles and propositions. Furthermore, the study contributes to the introduction of guidelines for the implementation of EJ in planning. These guidelines will assist planners as opposed to overburdening them in spatial planning and implementation. Lastly, the introduction of the spatial planning implementation strategy that the study has introduced can assist in bridging the gap in the poor implementation of plans.

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APPENDIX 1: QUESTIONNAIRE

PRIVATE AND CONFIDENTIALITY

Dear participant, this questionnaire is for academic purposes, no person is forced to answer the questionnaire and there are no penalties or benefits for either answering or not answering any question. The questionnaire is about environmental justice and spatial planning in the country, particularly local government. The information provided will be used to complete a report to fulfil the requirements of a PhD degree.

1. Contextual and Demographic Data

1.1	What is the type of your municipality?	<table border="1" style="width: 100%;"> <tbody> <tr> <td>Metropolitan</td> <td style="text-align: center;">1</td> </tr> <tr> <td>District</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Local</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>	Metropolitan	1	District	2	Local	3												
Metropolitan	1																			
District	2																			
Local	3																			
1.2	In which province is your municipality?	<table border="1" style="width: 100%;"> <tbody> <tr> <td>Mpumalanga</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Gauteng</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Eastern Cape</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Northern Cape</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Kwa-Zulu Natal</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Free State</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Limpopo</td> <td style="text-align: center;">7</td> </tr> <tr> <td>North West</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Western Cape</td> <td style="text-align: center;">9</td> </tr> </tbody> </table>	Mpumalanga	1	Gauteng	2	Eastern Cape	3	Northern Cape	4	Kwa-Zulu Natal	5	Free State	6	Limpopo	7	North West	8	Western Cape	9
Mpumalanga	1																			
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Kwa-Zulu Natal	5																			
Free State	6																			
Limpopo	7																			
North West	8																			
Western Cape	9																			
1.3	What South African Council for Planners' (SACPLAN) Registration do you have as a Planner?	<table border="1" style="width: 100%;"> <tbody> <tr> <td>Candidate Planner</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Technical Planner</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Professional Planner</td> <td style="text-align: center;">3</td> </tr> <tr> <td>None</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Candidate Planner	1	Technical Planner	2	Professional Planner	3	None	4										
Candidate Planner	1																			
Technical Planner	2																			
Professional Planner	3																			
None	4																			
1.4	How many years of experience do you have?	<table border="1" style="width: 100%;"> <tbody> <tr> <td>0-5years</td> <td style="text-align: center;">1</td> </tr> <tr> <td>6-10years</td> <td style="text-align: center;">2</td> </tr> <tr> <td>11-15years</td> <td style="text-align: center;">3</td> </tr> <tr> <td>15 years and above</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	0-5years	1	6-10years	2	11-15years	3	15 years and above	4										
0-5years	1																			
6-10years	2																			
11-15years	3																			
15 years and above	4																			
1.5	What qualification in planning do you have?	<table border="1" style="width: 100%;"> <tbody> <tr> <td>Certificate</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Diploma</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Bsc Degree</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Bachelor/Honors</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Masters</td> <td style="text-align: center;">5</td> </tr> <tr> <td>PhD</td> <td style="text-align: center;">6</td> </tr> <tr> <td>None</td> <td style="text-align: center;">7</td> </tr> </tbody> </table>	Certificate	1	Diploma	2	Bsc Degree	3	Bachelor/Honors	4	Masters	5	PhD	6	None	7				
Certificate	1																			
Diploma	2																			
Bsc Degree	3																			
Bachelor/Honors	4																			
Masters	5																			
PhD	6																			
None	7																			

2. Environmental Justice in Municipal Planning

2.1	What is your level of familiarity with the concept of environmental justice?	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%; text-align: center;">1</td><td style="width: 85%;">Not at all familiar</td><td style="width: 10%;"></td></tr> <tr><td style="text-align: center;">2</td><td>Slightly familiar</td><td></td></tr> <tr><td style="text-align: center;">3</td><td>Somewhat familiar</td><td></td></tr> <tr><td style="text-align: center;">4</td><td>Moderate familiar</td><td></td></tr> <tr><td style="text-align: center;">5</td><td>Extremely familiar</td><td></td></tr> </table>	1	Not at all familiar		2	Slightly familiar		3	Somewhat familiar		4	Moderate familiar		5	Extremely familiar	
1	Not at all familiar																
2	Slightly familiar																
3	Somewhat familiar																
4	Moderate familiar																
5	Extremely familiar																
2.2	What is your understanding of environmental justice?																
2.3	How is the public consulted during the preparation of spatial planning policies (Spatial development frameworks-SDFs and land use schemes)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 85%;">Selective consultation</td><td style="width: 15%; text-align: center;">1</td></tr> <tr><td>Sectoral consultation</td><td style="text-align: center;">2</td></tr> <tr><td>Mass community meeting</td><td style="text-align: center;">3</td></tr> <tr><td>Ward community meeting</td><td style="text-align: center;">4</td></tr> <tr><td>Other, specify</td><td style="text-align: center;">5</td></tr> </table>	Selective consultation	1	Sectoral consultation	2	Mass community meeting	3	Ward community meeting	4	Other, specify	5					
Selective consultation	1																
Sectoral consultation	2																
Mass community meeting	3																
Ward community meeting	4																
Other, specify	5																
2.4	In the planning process of spatial planning policies, what type of public participation does your municipality adopt?	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 85%;">Manipulative</td><td style="width: 15%; text-align: center;">1</td></tr> <tr><td>Inform public about decisions</td><td style="text-align: center;">2</td></tr> <tr><td>Respond to queries after decision</td><td style="text-align: center;">3</td></tr> <tr><td>Meaningful engagement</td><td style="text-align: center;">4</td></tr> <tr><td>Engage on initiative of public</td><td style="text-align: center;">5</td></tr> <tr><td>Other, specify</td><td style="text-align: center;">6</td></tr> </table>	Manipulative	1	Inform public about decisions	2	Respond to queries after decision	3	Meaningful engagement	4	Engage on initiative of public	5	Other, specify	6			
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Inform public about decisions	2																
Respond to queries after decision	3																
Meaningful engagement	4																
Engage on initiative of public	5																
Other, specify	6																
2.5	At what stage is the public involved in spatial policy or plan making?	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 85%;">At inception</td><td style="width: 15%; text-align: center;">1</td></tr> <tr><td>After plan completed, but before council approval</td><td style="text-align: center;">2</td></tr> <tr><td>After council approved plan</td><td style="text-align: center;">3</td></tr> <tr><td>At inception and After plan completed, but before council approval</td><td style="text-align: center;">4</td></tr> </table>	At inception	1	After plan completed, but before council approval	2	After council approved plan	3	At inception and After plan completed, but before council approval	4							
At inception	1																
After plan completed, but before council approval	2																
After council approved plan	3																
At inception and After plan completed, but before council approval	4																
2.6	What is the level of public involvement in spatial planning policy or plan making?	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%; text-align: center;">1</td><td style="width: 85%;">Not at all involved</td><td style="width: 10%;"></td></tr> <tr><td style="text-align: center;">2</td><td>Slightly involved</td><td></td></tr> <tr><td style="text-align: center;">3</td><td>Somewhat involved</td><td></td></tr> <tr><td style="text-align: center;">4</td><td>Moderate involved</td><td></td></tr> <tr><td style="text-align: center;">5</td><td>Extremely involved</td><td></td></tr> </table>	1	Not at all involved		2	Slightly involved		3	Somewhat involved		4	Moderate involved		5	Extremely involved	
1	Not at all involved																
2	Slightly involved																
3	Somewhat involved																
4	Moderate involved																
5	Extremely involved																

2.7	How satisfied are you with public participation process involved in spatial planning policy making?	<table border="1"> <tr><td>1</td><td>Very dissatisfied</td><td></td></tr> <tr><td>2</td><td>Moderately dissatisfied</td><td></td></tr> <tr><td>3</td><td>Slightly dissatisfied</td><td></td></tr> <tr><td>4</td><td>Neutral</td><td></td></tr> <tr><td>5</td><td>Slightly satisfied</td><td></td></tr> <tr><td>6</td><td>Moderately satisfied</td><td></td></tr> <tr><td>7</td><td>Very satisfied</td><td></td></tr> </table>					1	Very dissatisfied		2	Moderately dissatisfied		3	Slightly dissatisfied		4	Neutral		5	Slightly satisfied		6	Moderately satisfied		7	Very satisfied		
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6	Moderately satisfied																											
7	Very satisfied																											
2.8	Where does the public access information about spatial planning policies?	<table border="1"> <tr><td>Municipal offices</td><td>1</td></tr> <tr><td>Municipal website</td><td>2</td></tr> <tr><td>Ward councilors</td><td>3</td></tr> <tr><td>Libraries</td><td>4</td></tr> <tr><td>Other, specify</td><td>5</td></tr> <tr><td>Municipal office and website</td><td>6</td></tr> <tr><td>Office, ward councilor and libraries</td><td>7</td></tr> <tr><td>Office, website and other</td><td>8</td></tr> <tr><td>Office, website and ward councilor</td><td>9</td></tr> <tr><td>Office and ward councilor</td><td>10</td></tr> <tr><td>All</td><td>11</td></tr> </table>					Municipal offices	1	Municipal website	2	Ward councilors	3	Libraries	4	Other, specify	5	Municipal office and website	6	Office, ward councilor and libraries	7	Office, website and other	8	Office, website and ward councilor	9	Office and ward councilor	10	All	11
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2.9	Please indicate how much you agree with the following statements regarding procedural fairness during planning decision-making.																											
Code	Item	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Some what agree (4)	Strongly agree (5)																						
2.9a	The municipality provides opportunities to affected parties to present their case prior decision-making.																											
2.9b	The presentations of parties do influence decision-making.																											
2.9c	The municipality is consistent on its planning decisions (i.e. consider previous decisions on similar cases).																											
2.9d	The municipality is not bias or does not apply favoritism in decision-making																											
2.9e	The municipality is always fair in decision-making																											
2.9f	The municipality makes decisions based on facts and objectivity.																											
2.9g	The municipality has procedures for appeals of decision or unfair treatment during decision-making process.																											
2.9h	The municipality considers what is good and right (ethical)																											

		in decision-making																										
2.10	Please indicate the level of importance regarding procedural fairness during planning decision-making.																											
	Code	Item	Not important (1)	Slightly important (2)	Moderately important (3)	Important (4)	Very important (5)																					
	2.10a	Representation and its influence on decision-making.																										
	2.10b	Consistency																										
	2.10c	Impartiality (lack of bias)																										
	2.10d	Decision accuracy (based on facts and objectivity)																										
	2.10e	Correctability (allowing appeals on decisions)																										
	2.10f	Ethicality (doing what is good and right)																										
2.12	How often does the municipality implements programs on spatial planning awareness?1		<table border="1"> <tr><td>1</td><td>Never</td><td></td></tr> <tr><td>2</td><td>Rarely</td><td></td></tr> <tr><td>3</td><td>Occasionally</td><td></td></tr> <tr><td>4</td><td>Sometimes</td><td></td></tr> <tr><td>5</td><td>Frequently</td><td></td></tr> </table>					1	Never		2	Rarely		3	Occasionally		4	Sometimes		5	Frequently							
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2.13	What tools does the municipality use to capacitate public about spatial planning and its related plans?		<table border="1"> <tr><td>Newsletters</td><td>1</td></tr> <tr><td>Pamphlets</td><td>2</td></tr> <tr><td>Manuals</td><td>3</td></tr> <tr><td>Planning forums</td><td>4</td></tr> <tr><td>Campaigns</td><td>5</td></tr> <tr><td>None</td><td>6</td></tr> <tr><td>Other, specify</td><td>7</td></tr> </table>					Newsletters	1	Pamphlets	2	Manuals	3	Planning forums	4	Campaigns	5	None	6	Other, specify	7							
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2.14	How satisfied are you with the municipal spatial planning policies (i.e. SDF) in addressing fairness in distribution resources activities, and services in planning.		<table border="1"> <tr><td>1</td><td>Very dissatisfied</td><td></td></tr> <tr><td>2</td><td>Moderately dissatisfied</td><td></td></tr> <tr><td>3</td><td>Slightly dissatisfied</td><td></td></tr> <tr><td>4</td><td>Neutral</td><td></td></tr> <tr><td>5</td><td>Slightly satisfied</td><td></td></tr> <tr><td>6</td><td>Moderately satisfied</td><td></td></tr> <tr><td>7</td><td>Very satisfied</td><td></td></tr> </table>					1	Very dissatisfied		2	Moderately dissatisfied		3	Slightly dissatisfied		4	Neutral		5	Slightly satisfied		6	Moderately satisfied		7	Very satisfied	
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6	Moderately satisfied																											
7	Very satisfied																											
2.15	How satisfied are you with the municipal spatial planning policies (i.e. SDF) in the recognition of socio-economic, natural, cultural and other factors?		<table border="1"> <tr><td>1</td><td>Very dissatisfied</td><td></td></tr> <tr><td>2</td><td>Moderately dissatisfied</td><td></td></tr> <tr><td>3</td><td>Slightly dissatisfied</td><td></td></tr> <tr><td>4</td><td>Neutral</td><td></td></tr> <tr><td>5</td><td>Slightly satisfied</td><td></td></tr> <tr><td>6</td><td>Moderately satisfied</td><td></td></tr> <tr><td>7</td><td>Very satisfied</td><td></td></tr> </table>					1	Very dissatisfied		2	Moderately dissatisfied		3	Slightly dissatisfied		4	Neutral		5	Slightly satisfied		6	Moderately satisfied		7	Very satisfied	
1	Very dissatisfied																											
2	Moderately dissatisfied																											
3	Slightly dissatisfied																											
4	Neutral																											
5	Slightly satisfied																											
6	Moderately satisfied																											
7	Very satisfied																											
2.16	Please indicate how much you agree with the following statements regarding the distribution of resources activities, and services during planning.																											

Code	Item	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
2.16a	The municipality considers the demands and needs of resources activities, and services in planning.					
2.16b	The municipality takes into account the geographic and sociocultural context.					
2.16c	The municipality considers the capabilities required to improve the quality of life and spatial transformation.					
2.16d	The municipality considers sustainability factors in planning.					

3. Spatial Planning Implementation

3.1	What is the municipal approach to spatial planning?	Top-down	1
		Bottom-Up	2
		Both top-down and bottom-up	3
3.2	At what frequency does the municipality use the following spatial implementation types?		

Code	Implementation Types	Never (1)	Rarely (2)	Occasionally (3)	Sometimes (4)	Frequently (5)
3.2a	Symbolic (coalition oriented)					
3.2b	Political (mandate driven)					
3.2c	Administrative (compliance oriented)					
3.2d	Inter-organizational (internal and external sector coordination)					
3.2e	Intra-organizational (Internal coordination)					
3.2f	Collaborative (responsive, inclusive and integrative)					
3.2g	Experimental (contextual or site specific)					

3.3 What is the likelihood of each implementation type contributing to the achievement of environmental justice?

Code	Implementation Types	Extremely Unlikely (1)	Unlikely (2)	Neutral (3)	Likely (4)	Extremely Likely (5)
3.3a	Symbolic (coalition oriented)					
3.3b	Political (mandate driven)					
3.3c	Administrative (compliance oriented)					
3.3d	Inter-organizational (internal and external sector coordination)					
3.3e	Intra-organizational (Internal coordination)					
3.3f	Collaborative (responsive, inclusive and integrative)					
3.3g	Experimental (contextual or site					

		specific)					
3.4	How do you agree with the following factors being barriers to the implementation of spatial planning in achieving environmental justice?						
	Code	Barriers	Not a barrier (1)	Somewhat a barrier (2)	Moderate barrier (3)	Extreme barrier (4)	
	3.4a	Structural Barriers					
	3.4aa	Failure to communicate spatial planning policies					
	3.4ab	Uncoordinated planning					
	3.4ac	Absence of spatial planning policies at the disposal of officials					
	3.4ad	Inconsistence in policy implementation					
	3.4ae	Orientation of plans (process than outcomes)					
	3.4af	Lack of leadership					
	3.4ag	Organizational culture					
	3.4ah	Ineffective collaboration					
	3.4ai	Inter-organisation disputes and conflicts					
	3.4aj	Poor organizational support					
	3.4ak	Lack of prioritization of spatial planning					
	3.4b	Political Barriers					
	3.4ba	Pressure					
	3.4bb	Interference					
	3.4bc	Lack of leadership					
	3.4bd	Poor support					
	3.4c	Administrative Barriers					
	3.4ca	Red-tape					
	3.4cb	Delays in implementation					
	3.4cc	Inadequate tools of trade (qualified and skilled personnel and finance)					
	3.4cd	Planning practice, attitude and culture					
	3.4ce	Separation of plan formulation and plan implementation.					
	3.4cf	Unclear policy documents					
	3.4cg	Lack of capacity building					
	3.4ch	Absence of plan monitoring and evaluation					
	3.4ci	Absence of spatial planning policies					
	3.4d	Contextual Barriers					
	3.4da	Exclusion of context issues (i.e. socio-cultural, biophysical, economical)					
	3.4db	Lack of public participation					
	3.4dc	Exclusion of context issues (i.e. socio-cultural, biophysical, economical)					

3.6	What level of influence can the following factors contribute to the implementation of spatial planning to achieve environmental justice?					
Code	Enablers	Not at all influential (1)	Slightly influential (2)	Somewhat influential (3)	Very influential (4)	Extremely Influential (5)
3.6a	Structural Enablers					
3.6aa	Improved inter-organizational coordination and cooperation					
3.6ab	Improved collaboration					
3.6ac	Appropriate and improved management leadership					
3.6ad	Change in organizational culture					
3.6ae	Adoption of spatial planning implementation strategy					
3.6af	Responsive organisational structure					
3.6b	Political Enablers					
3.6ba	Appropriate and improved political leadership					
3.6bb	Capacity building to political leaders on spatial planning					
3.6bc	Political Intervention					
3.6bd	Resistance management					
3.6c	Administrative Enablers					
3.6ca	Change in planning practice, attitude and culture					
3.6cb	Continuous capacity building					
3.6cc	Simultaneous plan formulation and implementation					
3.6cd	Adoption of spatial planning implementation strategy					
3.6ce	Plan monitoring and evaluation					
3.6cf	Competent and skilful personnel					
3.6cg	Adequate financial resources					
3.6ch	Adoption of simple to read spatial planning policies					

	3.6d	Contextual Enablers					
	3.6da	Mainstreaming of contextual issues					
	3.6db	Public awareness and education					
	3.6dc	Improved public participation					
3.7	Please indicate how much you agree with the following statements regarding spatial planning evaluation and monitoring during planning and implementation.						
	Code	Implementation Types	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
	3.7a	The municipality evaluates and monitors the level of fairness in public participation during planning and implementation.					
	3.7b	The municipality evaluates and monitors fairness in the distribution of resources activities, and services.					
	3.7c	The municipality ensures that strategies and plans address inequalities in spatial planning.					
	3.7d	Spatial planning policies have implementation strategies that show alignment with strategic objectives and have champions, tasks, timelines and responsibilities.					
	3.7e	The municipality evaluates and monitors whether the effects of distribution responds to spatial disparities.					
	3.7f	The municipality evaluates and monitors whether there is contextual recognition in planning and implementation.					
	3.7g	The municipality evaluates and monitors					

		its capabilities to implement spatial planning policies and plans.						
	3.7h	The municipality has dedicated personnel to evaluate and monitor the performance of municipal spatial planning policies.						

4. Environmental Justice Turn in Planning

4.1	What is the likelihood of spatial planning assisting in the achievement of environmental justice (distributive justice, procedural justice, recognition justice, substantive justice, capability approach and just policy)?																
	<table border="1" style="margin-left: auto;"> <tr><td style="width: 20px;">1</td><td>Extremely unlikely</td><td style="width: 20px;"></td></tr> <tr><td>2</td><td>Unlikely</td><td></td></tr> <tr><td>3</td><td>Neutral</td><td></td></tr> <tr><td>4</td><td>Likely</td><td></td></tr> <tr><td>5</td><td>Extremely likely</td><td></td></tr> </table>	1	Extremely unlikely		2	Unlikely		3	Neutral		4	Likely		5	Extremely likely		
1	Extremely unlikely																
2	Unlikely																
3	Neutral																
4	Likely																
5	Extremely likely																

4.2	Please indicate how much you agree with the following statements regarding environmental						
	Code	Proposition	Strongly disagree (1)	Somewh at disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
	4.2a	Spatial planning is an approach for just or fair distributive action.					
	4.2b	Spatial planning is a multi-stakeholder democratic planning approach					
	4.2c	Spatial planning is a contextual experience and learning approach.					
	4.2d	Spatial planning is a vehicle for governance.					
	4.2e	Spatial planning is an action for capability assessment.					
	4.2f	Spatial planning is an environmental restorative approach.					
	justice in the context of planning.						

4.2 Please indicate your level of support regarding the proposed principles of environmental justice in the context of planning.

Code	Principles	Strongly oppose (1)	Somewh at oppose (2)	Neutral (3)	Somewh at support (4)	Strongly support (5)
4.3a	Just distribution of resources activities, and services in space based on the audit of environmental justice that considers the need, compatibility, accountability, compensation and context.					
4.3b	Promote the participation of all members of the society through the adoption of governance platforms and processes.					
4.3c	Promote and recognize diverse knowledge (experiential and expert) equally in planning and implementation processes.					
4.3d	Consider the capability of the environment, state organizations and the general public that planning affect to achieve planning goals and outcomes.					
4.3e	Support fair planning policies, strategies, programmes and laws that promote the improvement of the quality of life for all.					

APPENDIX 2: INTERVIEW SCHEDULE

COMPANY/DEPARTMENT	INVOLVEMENT	INTERVIEWEE	MONTH OF INTERVIEW
Anonymous	2x Planner- private consulting planner.	Anonymous	October 2017
Anonymous	4x Planner- private consulting planner.	Anonymous	November 2017
Anonymous	1x Planner- Planning expert in Australia with vast SA planning experience.	Anonymous	November 2017
Anonymous	1x Executive at SACPLAN	Anonymous	February 2018
Anonymous	1x Planner- planner in National Government, Pretoria.	Anonymous	March 2018

APPENDIX 3: INTERVIEW SEMI-STRUCTURED QUESTIONS

1. What is your understanding of environmental justice?
2. What is your view of environmental justice in the context of planning?
3. To what extent does South African spatial planning respond to environmental justice?
4. What do you think could be the barriers to and enablers of spatial planning implementation towards environmental justice?
5. What is your opinion regarding the environmental justice turn in planning?

APPENDIX 4: ANALYSIS TABLES

Table A1: Influence of respondents' background on familiarity with environmental justice

<i>Regression Statistics</i>	
Multiple R	0.310609083
R Square	0.096478003
Adjusted R Square	0.056021794
Standard Error	1.113336184
Observations	71

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	8.86782318	2.955941	2.384751	0.076922
Residual	67	83.0476698	1.239517		
Total	70	91.915493			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.559	0.633	4.040	0.000	1.295	3.823	1.295	3.823
SACPLAN registration	-0.209	0.152	-1.376	0.173	-0.512	0.094	-0.512	0.094
Experience	0.213	0.140	1.521	0.133	-0.066	0.492	-0.066	0.492
Qualification	0.225	0.119	1.890	0.063	-0.013	0.463	-0.013	0.463

Table A2: Correlation between planners' background and familiarity with environmental justice

No	Variables	1	1	3	4
1	SACPLAN registration	1.000			
2	Experience	0.236	1.000		
3	Qualification	0.021	0.046	1.000	
4	Planners' Familiarity with EJ	-	0.153	0.225	1.000

Table A3: Influence of planners' background on the agreement about EJ propositions in planning

Independent Variables	Planners' Agreement																	
	Proposition 1			Proposition 2			Proposition 3			Proposition 4			Proposition 5			Proposition 6		
	R	R ²	β	R	R ²	β	R	R ²	β	R	R ²	β	R	R ²	β	R	R ²	β
Experience	-.15		-.17	.08		.02	.07		.06	-0.05		-.07	-.03		-.06	-.03		-.04
Qualification	.08		.04	.04		-.01	-.09		-.10	-0.21		-.19	-.10		-.13	-.21		-.24
Familiarity with EJ	.16		.15	.26		.14	.06		.06	0.27		.22	.13		.16	.06		.12
Total R ²		.01			.02			-.02			.12			-.00			.01	

R2= adjusted square of the multiple correlation coefficient

R= Pearson correlation; β=regression coefficient, $p < 0.10^*$, $p < 0.05^{**}$, $p < 0.01^{***}$, $p < 0.001^{****}$

Table A4: Correlation between implementation types and structural barriers

No	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Symbolic	1,00																
2	Political	0,38	1,00															
3	Administrative	0,18	0,25	1,00														
4	Inter-organizational	0,23	0,23	0,43	1,00													
5	Intra-organizational	0,24	0,23	0,43	0,84	1,00												
6	Collaborative	0,25	0,33	0,39	0,64	0,68	1,00											
7	Experimental	0,41	0,25	0,42	0,48	0,49	0,42	1,00										
8	Failure to communicate spatial planning policies	0,06	0,06	0,11	-0,15	-0,12	0,06	0,02	1,00									
9	Uncoordinated planning	0,16	0,14	0,12	-0,05	-0,01	-0,09	0,08	0,47	1,00								
10	Absence of spatial planning policies at the disposal of officials	0,16	0,02	0,09	-0,08	-0,04	-0,03	0,23	0,50	0,72	1,00							
11	Inconsistence in policy implementation	0,05	0,09	0,10	-0,10	-0,10	-0,13	0,10	0,42	0,51	0,61	1,00						
12	Orientation of plans (process than outcomes)	0,04	0,04	0,15	-0,07	-0,09	-0,01	-0,07	0,38	0,54	0,52	0,60	1,00					
13	Lack of leadership	0,08	0,09	0,04	-0,12	-0,19	-0,15	0,12	0,45	0,39	0,55	0,50	0,58	1,00				
14	Organizational culture	0,03	0,08	0,09	-0,19	-0,18	-0,17	-0,01	0,33	0,48	0,49	0,53	0,59	0,50	1,00			
15	Ineffective collaboration	0,01	0,15	0,10	-0,06	-0,16	-0,09	0,05	0,30	0,47	0,47	0,35	0,52	0,56	0,65	1,00		
16	Inter-organisation disputes and conflicts	0,09	0,07	0,03	-0,13	-0,13	-0,11	0,13	0,24	0,39	0,45	0,47	0,62	0,52	0,32	0,61	1,00	
17	Poor organizational support	0,06	0,02	0,03	-0,16	-0,07	0,06	0,03	0,31	0,25	0,44	0,56	0,59	0,52	0,45	0,40	0,63	1,00
18	Lack of prioritization of spatial planning	0,10	0,10	0,11	-0,09	-0,04	0,00	0,00	0,34	0,50	0,56	0,54	0,55	0,50	0,49	0,42	0,52	0,69

Table A5: Correlation between implementation types and political barriers

No	Variables	1	2	3	4	5	6	7	8	9	10
1	Pressure	1,00									
2	Interference	0,65	1,00								
3	Lack of leadership	0,49	0,67	1,00							
4	Poor support	0,50	0,54	0,49	1,00						
5	Symbolic (coalition oriented)	0,24	0,01	0,09	0,21	1,00					
6	Political (mandate driven)	0,19	0,01	0,08	0,09	0,38	1,00				
7	Administrative (compliance oriented)	0,12	0,18	0,13	0,03	0,18	0,25	1,00			
8	Inter-organizational (internal and external sector coordination)	-0,13	0,00	-0,10	-0,15	0,23	0,23	0,43	1,00		
9	Intra-organizational (Internal coordination)	-0,09	0,01	-0,16	-0,14	0,24	0,23	0,43	0,84	1,00	
10	Collaborative (responsive, inclusive and integrative)	0,02	-0,03	0,07	0,01	0,25	0,33	0,39	0,64	0,68	1,00
11	Experimental (contextual or site specific)	0,07	0,00	0,06	0,06	0,41	0,25	0,42	0,48	0,49	0,42

Table A6: Correlation between political enablers and implementation types and approaches

No	Variables	1	2	3	4	5	6	7	8	9	10	11
1	Implementation approaches	1,000										
	Appropriate and improved political											
2	leadership	0,154	1,000									
	Capacity building to political											
3	leaders on spatial planning	0,116	0,651	1,000								
4	Political Intervention	0,176	0,491	0,669	1,000							
5	Resistance management	0,274	0,503	0,544	0,494	1,000						
6	Symbolic (coalition oriented)	-0,007	0,242	0,007	0,091	0,206	1,000					
7	Political (mandate driven)	-0,163	0,194	0,013	0,082	0,088	0,377	1,000				
8	Administrative	0,124	0,120	0,180	0,135	0,027	0,176	0,250	1,000			
9	Inter-organizational	0,095	-0,133	-0,001	-0,097	-0,150	0,232	0,235	0,429	1,000		
10	Intra-organizational	0,063	-0,085	0,006	-0,161	-0,138	0,242	0,235	0,430	0,842	1,000	
11	Collaborative	0,180	0,018	-0,030	0,068	0,006	0,251	0,326	0,391	0,640	0,685	1,000
12	Experimental	0,115	0,066	0,002	0,064	0,058	0,410	0,249	0,419	0,482	0,492	0,421

Table A7: Correlation among administration barriers

No	Variables	1	2	3	4	5	6	7	8
1	Red-tape	1,000							
2	Delays in implementation	0,669	1,000						
3	Inadequate tools of trade (qualified and skilled personnel and finance)	0,437	0,383	1,000					
4	Planning practice, attitude and culture	0,452	0,301	0,400	1,000				
5	Separation of plan formulation and plan implementation.	0,686	0,637	0,501	0,548	1,000			
6	Unclear policy documents	0,612	0,517	0,452	0,477	0,625	1,000		
7	Lack of capacity building	0,526	0,598	0,551	0,484	0,538	0,616	1,000	
8	Absence of plan monitoring and evaluation	0,531	0,660	0,602	0,370	0,610	0,526	0,611	1,000
9	Absence of spatial planning policies	0,592	0,576	0,544	0,465	0,678	0,615	0,589	0,743

Table A8: Correlation between administrative barriers and implementation types and approaches

No	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Implementation approaches	1,00														
2	Change in planning practice, attitude and culture	-0,07	1,00													
3	Continuous capacity building	-0,05	0,65	1,00												
4	Simultaneous plan formulation and implementation	-0,05	0,65	0,55	1,00											
5	Adoption of spatial planning implementation strategy	-0,11	0,52	0,44	0,64	1,00										
6	Plan monitoring and evaluation	-0,16	0,65	0,59	0,62	0,62	1,00									
7	Competent and skilful personnel	-0,25	0,38	0,34	0,36	0,28	0,58	1,00								
8	Adequate financial resources	-0,14	0,28	0,56	0,22	0,19	0,30	0,39	1,00							
9	Adoption of simple to read spatial planning policies	-0,09	0,51	0,61	0,51	0,47	0,51	0,49	0,50	1,00						
10	Symbolic (coalition oriented)	-0,01	0,06	0,04	0,19	0,07	0,11	-0,02	0,01	0,02	1,00					
11	Political (mandate driven)	-0,16	0,08	0,10	0,17	0,02	0,22	0,04	0,15	0,09	0,38	1,00				
12	Administrative	0,12	0,03	0,12	0,15	-0,05	0,06	0,06	0,13	0,15	0,18	0,25	1,00			
13	Inter-organizational	0,09	-0,08	-0,11	0,11	-0,14	-0,04	-0,07	-0,28	-0,09	0,23	0,23	0,43	1,00		
14	Intra-organizational	0,06	-0,04	-0,02	0,17	-0,06	-0,02	-0,01	-0,22	-0,08	0,24	0,23	0,43	0,84	1,00	
15	Collaborative	0,18	0,11	0,08	0,21	-0,11	0,01	-0,05	-0,11	0,01	0,25	0,33	0,39	0,64	0,68	1,00
16	Experimental	0,11	-0,07	-0,02	0,06	-0,01	0,07	-0,03	-0,19	-0,05	0,41	0,25	0,42	0,48	0,49	0,42

Table A9: regression analysis between administrative enablers and provinces where respondents works

<i>Regression Statistics</i>									
Multiple R	0,432235								
R Square	0,186827								
Adjusted R Square	0,081902								
Standard Error	2,416684								
Observations	71								
ANOVA		<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression		8	83,19333	10,39917	1,780569	0,098067			
Residual		62	362,1024	5,840362					
Total		70	445,2958						
<i>No</i>	<i>Variables</i>	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95,0%</i>	<i>Upper 95,0%</i>
	Intercept	6,908	2,019	3,422	0,001	2,873	10,943	2,873	10,943
1	Change in planning practice, attitude and culture	-0,795	0,425	-1,871	0,066	-1,644	0,054	-1,644	0,054
2	Continuous capacity building	0,033	0,436	0,075	0,941	-0,840	0,905	-0,840	0,905
3	Simultaneous plan formulation and implementation	1,195	0,428	2,793	0,007	0,340	2,051	0,340	2,051
4	Adoption of spatial planning implementation strategy	-0,567	0,313	-1,810	0,075	-1,192	0,059	-1,192	0,059
5	Plan monitoring and evaluation	0,377	0,526	0,717	0,476	-0,674	1,428	-0,674	1,428
6	Competent and skilful personnel	-0,372	0,552	-0,674	0,503	-1,476	0,731	-1,476	0,731
7	Adequate financial resources	0,141	0,368	0,383	0,703	-0,595	0,877	-0,595	0,877
8	Adoption of simple to read spatial planning policies	-0,639	0,472	-1,354	0,181	-1,583	0,305	-1,583	0,305

Table A10: Correlation between contextual barriers and implementation types and approaches

No	Variables	1	2	3	4	5	6	7	8	9
1	Implementation approaches	1,000								
2	Exclusion of context issues (i.e. socio-cultural, biophysical, economical)	0,000	1,000							
3	Lack of public participation	-0,064	0,743	1,000						
4	Symbolic (coalition oriented)	-0,007	-0,020	-0,090	1,000					
5	Political (mandate driven)	-0,163	0,000	-0,063	0,377	1,000				
6	Administrative (compliance oriented)	0,124	-0,010	0,170	0,176	0,250	1,000			
7	Inter-organizational (internal and external sector coordination)	0,095	-0,217	-0,211	0,232	0,235	0,429	1,000		
8	Intra-organizational (Internal coordination)	0,063	-0,181	-0,225	0,242	0,235	0,430	0,842	1,000	
9	Collaborative (responsive, inclusive and integrative)	0,180	-0,011	-0,047	0,251	0,326	0,391	0,640	0,685	1,000
10	Experimental (contextual or site specific)	0,115	-0,146	-0,146	0,410	0,249	0,419	0,482	0,492	0,421

Table A11: Relationship between the respondents' familiarity with EJ and satisfaction with distributive justice in SPP

No	Variables	1	2
1	Familiarity with EJ	1.000	
2	Satisfaction with distributive justice in SPP	0,137	1.00

Table A11: Regression analysis between satisfactions with recognitive justice in spatial planning polices and municipal recognition of context

<i>Regression Statistics</i>	
Multiple R	0,456619408
R Square	0,208501284
Adjusted R Square	0,197030288
Standard Error	1,541621377
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>Significance</i>	
				<i>F</i>	<i>F</i>
Regression	1	43,1979421	43,19794	18,17639	0,00
Residual	69	163,985157	2,376596		
Total	70	207,183099			

	<i>Coefficients</i>	<i>Standard</i>		<i>P-value</i>	<i>Lower</i>		<i>Upper</i>	
		<i>Error</i>	<i>t Stat</i>		<i>Lower 95%</i>	<i>Upper 95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	1,767344305	0,70955212	2,490789	0,015156	0,351827	3,18286205	0,351827	3,182862
Municipal recognition of socio-economic, natural, cultural and other factors in planning	0,703452727	0,16499892	4,263378	0,00	0,374289	1,032616574	0,374289	1,032617

Table A12: Two-tailed test for means of responses

Items	Consideration of needs and demands	Recognition of Context
Mean	3,788732	4,15493
Variance	1,654728	1,247082
Observations	71	71
Pearson Correlation	0,749073	
Hypothesized Mean Difference	0	
df	70	
t Stat	-3,5637	
P(T<=t) one-tail	0,000332	
t Critical one-tail	1,666914	
P(T<=t) two-tail	0,000664	
t Critical two-tail	1,994437	

Table A13: Regression analysis between the variable of sustainability factors and consideration of capabilities

<i>Regression Statistics</i>	
Multiple R	0,810051
R Square	0,656183
Adjusted R Square	0,6512
Standard Error	0,723277
Observations	71

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	68,89	68,89	131,6883	0,00
Residual	69	36,09592	0,523129		
Total	70	104,9859			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0,694085	0,301776	2,3	0,024478	0,092058	1,296111	0,092058	1,296111
Consideration of capabilities	0,83	0,072328	11,47555	0,00	0,68571	0,97429	0,68571	0,97429

Table A14: Influence of a category of a municipality to the monitoring and evaluation of capabilities

<i>Regression Statistics</i>	
Multiple R	0,077099
R Square	0,005944
Adjusted R Square	-0,00846
Standard Error	1,187529
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>Significance</i>	
				<i>F</i>	<i>F</i>
Regression	1	0,581871	0,581871	0,412609	0,522777
Residual	69	97,30545	1,410224		
Total	70	97,88732			

	<i>Coefficients</i>	<i>Standard</i>		<i>P-value</i>	<i>Lower 95%</i>	<i>Upper</i>	<i>Lower</i>	<i>Upper 95.0%</i>
		<i>Error</i>	<i>t Stat</i>			<i>95%</i>	<i>95.0%</i>	
Intercept	3,298059	0,583803	5,649268	0,00	2,133404	4,462714	2,133404	4,462714101
Category of a municipality	0,13817	0,215102	0,642346	0,522777	-0,29095	0,567287	-0,29095	0,567286944

Table A15: Correction between type of implementation and method of public participation

No	Variables	1	2	3	4	5	6	7	8	9	10	11	12
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1	Symbolic	1.000											
2	Political	0.377	1.000										
3	Administrative	0.176	0.250	1.000									
4	Inter-organizational	0.232	0.235	0.429	1.000								
5	Intra-organizational	0.242	0.235	0.430	0.842	1.000							
6	Collaborative	0.251	0.326	0.391	0.640	0.685	1.000						
7	Experimental	0.410	0.249	0.419	0.482	0.492	0.421	1.000					
8	Method of public publication	-0.012	-0.056	-0.038	0.188	0.081	0.071	0.141	1.000				
9	Type of public participation	0.161	0.102	0.147	0.245	0.328	0.159	0.274	0.033	1.000			
10	Stage of public involvement	0.232	0.070	-0.148	-0.202	-0.106	-0.181	0.065	-0.124	0.058	1.000		
11	Level of public involvement	0.125	-0.011	0.098	0.299	0.294	0.425	0.108	0.085	0.238	-0.292	1.000	
12	Satisfaction with PP in SPPP	0.034	-0.064	0.089	0.071	0.123	0.138	0.071	0.087	0.145	-0.274	0.492	1.000

Table A16: Satisfaction of planning with public participation process in municipal spatial planning policy making

Scales of Measure	Frequency	Percentage
Very dissatisfied	6	8%
Moderately dissatisfied	4	6%
Slightly dissatisfied	11	15%
Neutral	8	11%
Slightly satisfied	17	24%
Moderately satisfied	24	34%
Very satisfied	1	1%
Total	71	100%

Table A17: Regression analysis on the influence of collaboration implementation to the level of participation

<i>Regression Statistics</i>	
Multiple R	0.42542
R Square	0.180982
Adjusted R Square	0.169113
Standard Error	0.879419
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	11.7919	11.7919	15.24728	0.000217
Residual	69	53.36303	0.773377		
Total	70	65.15493			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.390568	0.324793	7.360287	0%	1.742624	3.038511	1.742624	3.038511
Collaborative	0.343829	0.088054	3.904776	0.000217	0.168167	0.519491	0.168167	0.519491

Table A18: Regression analysis on the effect of level of participation on satisfaction with the level of participation

<i>Regression Statistics</i>	
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Multiple R	0.491675
R Square	0.241744
Adjusted R Square	0.230755
Standard Error	1.501496
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	49.59505	49.59505	21.99834	0.00
Residual	69	155.5599	2.254491		
Total	70	205.1549			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.274968	0.691442	1.843925	0.069488	-0.10442	2.654357	-0.10442	2.654357
Level of involvement	0.87246	0.186016	4.690238	0.00	0.501368	1.243552	0.501368	1.243552

Table A19: The relationship between representation and its influence on decision-making

Regression Statistics

Multiple R	0.638939
R Square	0.408243
Adjusted R Square	0.399667
Standard Error	0.870265
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	36.0519	36.0519	47.60195	0.00

Residual	69	52.25796	0.757362
Total	70	88.30986	

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.981723	0.323735	6.121428	0.00	1.335889	2.627558	1.335889	2.627558
Representation in decision-making	0.578068	0.083785	6.899416	0.00	0.410921	0.745214	0.410921	0.745214

Table A20: Correlation between just policy variables

No	Variables	Mean	SD	Mode	1	2	3	4	5
1	Monitor and evaluate participation fairness	3.5	0.1	5	1.000				
2	Monitor and evaluate distribution of activities	3.7	0.1	4	0.588	1.000			
3	Monitor and evaluate distribution effects	3.4	0.1	4	0.485	0.665	1.000		
4	Monitor and evaluate contextual recognition	3.5	0.1	4	0.547	0.747	0.875	1.000	
5	Monitor and evaluate capabilities	3.6	0.1	4	0.592	0.722	0.738	0.769	1.000

Scale: Strongly disagree (1), somewhat disagree (2), neutral (3), somewhat agree (4) and strongly agree (5)

Table A21: Relationship between spatial planning awareness and agreement about representation in municipal planning

Regression Statistics

Multiple R	0.154966
R Square	0.024014
Adjusted R Square	0.00987
Standard Error	1.11764
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	2.120702	2.120702	1.697759	0.196913
Residual	69	86.18916	1.249118		
Total	70	88.30986			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3.698609	0.334406	11.06025	0.00	3.031488	4.365729	3.031488	4.365729
Frequency of implementing spatial planning awareness	0.140588	0.107897	1.302981	0.196913	-0.07466	0.355837	-0.07466	0.355837

Table A22: Association between a category of a municipality and municipal consistency with planning decisions

<i>Regression Statistics</i>	
Multiple R	0.060283

R Square	0.003634
Adjusted R Square	-0.01081
Standard Error	0.663414
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.11076	0.11076	0.25166	0.617505
Residual	69	30.36811	0.440118		
Total	70	30.47887			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.51999	0.240146	10.49357	6.17E-16	2.040912	2.999069	2.040912	2.999069
Municipal consistency on planning decision	0.030961	0.061716	0.501658	0.617505	-0.09216	0.154081	-0.09216	0.154081

Table A23: Influence of impartiality on fairness in planning decision-making

<i>Regression Statistics</i>	
Multiple R	0.776489
R Square	0.602935
Adjusted R Square	0.59718
Standard Error	0.717404
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	53.92447	53.92447	104.7751	0.00
Residual	69	35.51215	0.514669		
Total	70	89.43662			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.207607	0.26224	4.604969	0.00	0.684453	1.730762	0.684453	1.730762
Lack of bias or favouritism	0.685399	0.06696	10.23597	0.00	0.551818	0.81898	0.551818	0.81898

Table A24: Existence of municipal appeal procedures

Agreement levels	Frequency
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Strongly disagree	7
Somewhat disagree	3
Neutral	5
Somewhat agree	22
Strong agree	34
Total	71

Table A25: Correlation among procedural justice variables

No	Variables	Mean	SD	Mode	1	2	3	4	5	6	7	8
1	Representation	4	0.1	5	1.000							
2	Influence of representation	3.6	0.1	4	0.639	1.000						
3	Consistency	3.6	0.1	4	0.656	0.566	1.000					
4	Lack of bias or favouritism	3.7	0.1	5	0.746	0.574	0.766	1.000				
5	Fairness	3.7	0.1	4	0.650	0.518	0.710	0.776	1.000			
6	Objectivity	3.8	0.1	5	0.664	0.607	0.707	0.720	0.752	1.000		
7	Correctibility	4	0.1	5	0.686	0.493	0.646	0.715	0.666	0.661	1.000	
8	Ethicality	3.7	0.1	5	0.719	0.529	0.755	0.790	0.817	0.789	0.757	1.000

Scale: Strongly disagree (1), somewhat disagree (2), neutral (3), somewhat agree (4) and strongly agree (5)

Table A26: Influence of planners' experience and education on the importance of ethicality

<i>Regression Statistics</i>	
Multiple R	0.098122
R Square	0.009628
Adjusted R Square	-0.0195
Standard Error	1.110886
Observations	71

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	0.81579458	0.407897	0.330531	0.71969
Residual	68	83.9165998	1.234068		
Total	70	84.7323944			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	4.230127	0.53081338	7.969141	2.49E-11	3.170905	5.289348	3.170905	5.289348
Experience	-0.06638	0.13556391	-0.48968	0.625934	-0.3369	0.20413	-0.3369	0.20413
Education	0.079761	0.11885341	0.671088	0.504438	-0.15741	0.316929	-0.15741	0.316929

APPENDIX 5: ETHICAL APPROVAL



Faculty of Engineering, Built Environment and Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en
Inligtingtegnologie / Lefapha la Boetšenere,
Tikologo ya Kago le Theknološi ya Tshedimošo

Reference number: EBIT/72/2017

2 August 2017

Mr BC Ntiwane
Department of Town and Regional Planning
University of Pretoria
Pretoria
0028

Dear Mr Ntiwane,

FACULTY COMMITTEE FOR RESEARCH ETHICS AND INTEGRITY

Your recent application to the EBIT Research Ethics Committee refers.

Approval is granted for the application with reference number that appears above.

1. This means that the research project entitled "Reshaping spatial planning in an attempt to achieve environmental justice" has been approved as submitted. It is important to note what approval implies. This is expanded on in the points that follow.
2. This approval does not imply that the researcher, student or lecturer is relieved of any accountability in terms of the Code of Ethics for Scholarly Activities of the University of Pretoria, or the Policy and Procedures for Responsible Research of the University of Pretoria. These documents are available on the website of the EBIT Research Ethics Committee.
3. If action is taken beyond the approved application, approval is withdrawn automatically.
4. According to the regulations, any relevant problem arising from the study or research methodology as well as any amendments or changes, must be brought to the attention of the EBIT Research Ethics Office.
5. The Committee must be notified on completion of the project.

The Committee wishes you every success with the research project.

Prof JJ Hanekom

Chair: Faculty Committee for Research Ethics and Integrity
FACULTY OF ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY