

Participatory development of an extension approach and policy for Limpopo Province, South Africa

by

ELLIOT MAHLENGULE ZWANE

Submitted in partial fulfilment of part of the requirements for the degree of Doctor in Agrarian Extension

in the

Department of Agricultural Economics, Extension and Rural
Development
Faculty of Natural and Agricultural Sciences
University of Pretoria
PRETORIA

July 2009



ACKNOWLEDGEMENT

The changes in the Government policies that promoted people centred development such as Transforming the Public Service, has been the driving force for the writer to conduct this study hoping to contribute in the debate for developing an extension system, which will be sustainable. Undertaking a study of this nature would not have been possible without the contributions of the District officials and many individuals too many to mention by names. The guidance of my Promoter, Prof. G.H. Düvel, throughout all phases of this study is gratefully acknowledged.

A special debt of gratitude is extended to my family for putting up with many inconveniences throughout the period of study. I also thank Mrs J. Coertse for spending many hours in typing the draft and my son Clement who typed part of the final manuscript.



Abstract

The near collapse of extension services in Limpopo Department of Agriculture (LDA) particularly evident in its failure to respond to the needs of the majority of small-scale farmers, presents a major problem from an agricultural and rural development point of view. This calls for an urgent and holistic intervention, in terms of an appropriate extension approach and policy, and prompted this research focusing on the search and development of an appropriate extension approach and corresponding policy for the LDA.

For such a policy to be acceptable at the operational level, the emphasis has been on maximum involvement and participation of extension personnel. A total of 324 front line extension workers and managers, representing a 40 percent sample, were involved in group interviews in which their opinions were captured in semi structured questionnaires after exposure to nominal group and Delphi techniques.

From the research no particular extension model emerged, but rather a series of principles, which, depending on a specific situation, could be combined and implemented to different degrees. Respondents' opinions regarding these principles and their dimensions formed the basis of recommendations for a policy framework.

These recommendations, based on informed opinions of respondents, include a need-based but priority focused approach relying on a compromise between felt and unfelt needs rather than only the felt needs of community members. For the implementation of participatory development that will ultimately allow for community empowerment and ownership, institutional linkage structures are recommended that provide for effective coordination and integrated operational activities, and having primarily a commodity focus. A strong knowledge support system, having as target audience front-line extension workers rather than farmers, is important in view of the large percentage of under-qualified extension staff. A national (or provincial) monitoring and evaluation programme is seen as an issue of high priority, with a stronger emphasis on monitoring using behaviour determinants (forces of change) as main criteria, but covering also the full range of in- and output criteria in the evaluation



process, which if used together with a purposeful and programmed approach, can go a long way in improving current and future extension in Limpopo.

TABLE OF CONTENTS

	OWLEDGEMENTI		
ABSTRACTII			
TABLE OF CONTENTSIV			
LIST O	LIST OF TABLESIX		
LIST O	F FIGURESXII		
CHAPT	ER 11		
INTRO	DUCTION1		
CHAPT	ER 24		
THE RE	ESEACH PROBLEM4		
СНАРТ	ER 36		
THEOR	RETICAL EXPOSITION OF EXTENSION SYSTEMS6		
3.1	INTRODUCTION6		
3.2	DEFINITION OF AN APPROACH/SYSTEM/MODEL7		
3.3	TYPES OF EXTENSION APPROACHES/SYSTEMS7		
3.4	TOP DOWN DELIVERY SYSTEMS8		
3.4.1	Conventional approaches9		
3.4.2	University based extension9		
3.4.3	National commodity panels system9		
3.4.4	Technology innovation process10		
3.4.5	Training and Visit system10		
3.4.6	Problem solving approach11		
3.5	PARTICIPATORY ACQUISITION SYSTEMS13		
3.5.1	Farming systems research and development13		
3.5.2	Farmer fields schools (FFS)15		
3.5.3	Agricultural Knowledge and Information System (AKIS)16		
3.6	CONTRACT EXTENSION SYSTEM17		
3.6.1	Commodity development		
3.7	RURAL DEVELOPMENT EXTENSION APPROACHES 18		
3.7.1	Community extension rural development systems		
3.7.2	Rural animation		
3.7.3	Integrated Rural Development Programme19		

3.8	EXTENSION APPROACH INITIATIVES PRECEDING THE	
	STUDY	20
3.8.1	The German partnership (GTZ)	20
3.8.1.1	Evaluations procedure of based pilot	20
3.8.1.2	Findings from BASED	21
3.8.2	The Dutch Government partnership	22
3.8.2.1	Target area	22
3.8.2.2	Business plan for pilot land reform	23
3.8.2.3	Appointment of consultants	24
3.8.2.4	Findings of the provincial pilot projects	24
3.9	CONCLUSIONS	26
CHAPT	TER 4	28
RESEA	RCH METHODOLOGY	28
4.1	INTRODUCTION	28
4.2	DEVELOPING THE RESEARCH INSTRUMENT	28
4.3	SAMPLING PROCEDURE AND SIZE	29
4.3.1	Interviewing procedure	30
CHAPT	ER 5	32
CURRE	ENT SITUATION OF EXTENSION IN LIMPOPO	32
5.1	INTRODUCTION	32
5.2	BACKGROUND OF THE PROVINCE	32
5.2.1	Present ranks of agricultural technicians and operational areas	33
5.2.2	Age and work experience	35
5.2.3	Gender distribution	37
5.2.4	Qualifications of agricultural technicians	39
5.2.5	Marital status	42
5.2.6	Merit assessment	42
5.3	EXTENSION PROGRAMMES	44
5.3.1	Typical projects focus in the districts	47
5.3.2	Developmental constraints for farmers	49
5.4	PRINCIPLES OF POLICY AND ITS IMPLICATION IN	
	AGRICULTURAL DEVELOPMENT	49
5.4.1	Introduction	49
5.4.2	What is a policy?	50

5.4.3	Principles of policy formulation in extension	51
5.4.4	Implication for the policy in Limpopo	53
5.5	ORGANIZATIONAL CHALLENGES	55
5.6	CONCLUSION AND RECOMMENDATIONS	56
CHAPT	TER 6	58
EXTEN	ISION PERFORMANCE AND EFFICIENCY	58
6.1	INTRODUCTION	58
6.2	THE CONCEPT OF EXTENSION	58
6.3	AUDIENCE FOCUS	59
6.4	EXTENSION EFFICIENCY	62
6.5	COMPETENCY	65
6.6	MANAGER'S KNOWLEDGE OF EXTENSION	70
6.7	CONCLUSION	71
CHAPT	TER 7	73
NEEDS	BASED DEVELOPMENT	73
7.1	INTRODUCTION	73
7.2	THE IMPORTANCE OF NEEDS ASSESSMENT	74
7.3	THE PURPOSE OF NEEDS ASSESSMENT	76
7.4	THE IMPORTANCE OF ASSESSMENT OF NEEDS BY MEANS	oF
	PARTICIPATORY RURAL APPRAISAL (PRA) BY THE	
	COMMUNITY	77
7.5	INTERVAL FOR NEEDS ASSESSMENT BY THE COMMUNIT	Y 78
7.6	IDENTIFYING THE PRIORITY DEVELOPMENT FOCUS	79
7.7	PROGRAMME CONTENT	80
7.8	CONCLUSION	82
INSTIT	TUTIONAL LINKAGES, STRUCTURES AND COMMUNITY	
PARTI	CIPATION IN EXTENSION	83
CHAPT	TER 8	84
INSTIT	TUTIONAL LINKAGES, STRUCTURES AND COMMMUNITY	
PARTI	CIPATION IN EXTENSION	84
8.1	INTRODUCTION	84
8.2	PURPOSE OF PARTICIPATION	84
8.3	ALTERNATIVE GOALS OF PARTICIPATION	86
8.4	PARTICIPATION IN PRACTICE	89

8.5	INSTITUTIONAL STRUCTURES AND LINKAGES	91
8.6	CONCLUSIONS AND RECOMMENDATIONS	94
CHAPT	TER 9	96
PURPO	SEFUL OR PROGRAMMED EXTENSION	96
9.1	INTRODUCTION	96
9.2	ACCEPTABILITY OF A PURPOSEFUL APPROACH	96
9.2.1	Advantages of programmed extension	97
9.3	SOME PRACTICAL ASPECTS OF THE IMPLEMENTAT	ION OF
	PROGRAMMED EXTENSION	99
9.3.1	Programme interference	99
9.3.2	Programme ownership	102
9.3.3	Time spent on programmed extension	103
9.3.4	Accountability	105
9.4	CONCLUSIONS AND RECOMMENDATIONS	106
CHAPT	TER 10	108
MONIT	TORING, EVALUATION AND ACCOUNTABILITY	108
10.1	INTRODUCTION	108
10.2	THE PERCEIVED IMPORTANCE OF EVALUATION	108
10.3	CURRENT EVALUATION ACTIVITIES	111
10.4	EVALUATION CRITERIA AND PROCEDURES	114
CHAPT	FER 11	122
PRIVA	TISATION AND OUTSOURCING	122
11.1	INTRODUCTION	122
11.2	THE RELEVANCY AND IMPORTANCE OF	•••••
	PRIVATISATION IN LIMPOPO	122
11.2.1	Extension efficiency	125
11.2.2	Opinions on privatization	126
11.3	BENEFITS OF PRIVATISATION	129
11.4	OUTSOURCING AND CO-FINANCING	131
11.5	OUTSOURCING TO BENEFICIARIES	133
11.6	CONCLUSIONS AND RECOMMENDATIONS	135
CHAPT	ΓER 12	137
KNOW	LEDGE AND RESOURCE SUPPORT	137
12.1	INTRODUCTION	137

PERCEIVED IMPORTANCE OF KNOWLEDGE SUPPORT 138
SOURCES OF KNOWLEDGE SUPPORT139
TYPES OF KNOWLEDGE140
DEGREE OF SUFFICIENCY OF EXTENSION RESOURCES141
THE USE OF SUBJECT MATTER SPECIALISTS (SMS)142
CONCLUSIONS AND RECOMMENDATIONS144
The need for knowledge support144
Sources of knowledge support144
ER 13148
USIONS AND RECOMMENDATIONS148
INTRODUCTION148
CURRENT EXTENSION SITUATION148
RECOMMENDATIONS
ENCES157
DIX A DICUSSION DOCUMENT RELATING TO
INCIPLES OF AN EXTENSION APPROACH173
DIX B ASSESSMENT QUESTIONNAIRE OF EXTENSION
) IN BASED LIMPOPO PROVINCE DEPARTMENT OF
ULTURE
NDIX C FINDINGS OF THE PROVINCIAL
CTS IN LIMPOPO
֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜



LIST OF TABLES

Table 3. 1:	Extension approaches and systems and their
	relationship to farmers8
Table 3. 2:	Distribution of the sample in Pilot areas of BASED21
Table 3. 3:	List of 8 land reform projects in Limpopo Province233
Table 4. 1:	The sample size and sample percentage of extension
	personnel involved in group interviews22
Table 5. 1:	The number of extension personnel per rank in the
	different districts of Limpopo province and the
	number of personnel being part of the
	provincial sample35
Table 5. 2:	Age of respondents36
Table 5. 3	Number of years in service as agricultural technicians37
Table 5. 4:	Gender distribution of the provincial sample38
Table 5. 5:	Number of years spent in junior and senior
	secondary school39
Table 5. 6:	Frequency distribution of agricultural technicians
	according to their extension function and their highest
	tertiary qualification (N=108240
Table 5. 7:	The mean percentage time spent by frontline
	extension workers in the various districts on
	different activities45
Table 5. 8:	The mean percentage time spent on different
	audience categories by respondents in the different
	districts of Limpopo Province (N=1199)48
Table 6. 1:	The current understanding of the concept of
	extension as indicated on a 15-point scale continuum
	extending from pro-active educational (scale point = 1)
	to re-active advice giving (scale point = 15)59
Table 6. 2:	The mean percentage time spent on different
	audience categories by respondents in the different
	provinces of South Africa (N=1199)61



Table 6. 3:	An estimation of the extension efficiency of the
	Department of Agriculture and NGO's by
	respondents in the different districts and expressed
	as a return on R100 invested62
Table 6. 4:	Distribution of frontline extension workers according
	to districts and the highest qualification in agriculture66
Table 6. 5:	The mean knowledge assessment of frontline extension
	workers by themselves as well as by extension
	managers using a 10-point semantic scale68
Table 7. 1:	The importance of assessment of needs by means
	of PRA by the community based on three identified
	criteria77
Table 7. 2:	Intervals for needs assessment by the community
	expressed as a weighted mean percentage78
Table 8. 1:	The importance assessment of different purposes
	of participation (expressed as a mean scale point)
	by respondents in the different districts of
	Limpopo Province85
Table 8. 2:	The mean assessment of different alternatives
	of participation expressed as mean rank position
	by respondents in Limpopo90
Table 8. 3:	The distribution of respondents according to their
	opinions regarding the necessity of institutional
	linkage structures for a partnership interaction
	between agent and community92
Table 9. 1:	The mean assessment (10-point scale) of some
	advantages of programmed or purposeful
	extension by extensionists in the different
	districts of Limpopo Province98
Table 9. 2:	The percentage distribution of extensionists in
	Limpopo Province according to their assessment
	rating of the problem of programme interference99
Table 10. 1:	The importance assessment of different solutions
	to improving extension efficiency based on rank



	order positions and expressed as mean weighted
	percentage110
Table 10. 2:	The percentage respondents performing the
	various evaluation activities in the different
	districts of Limpopo Province113
Table 10. 3:	Respondent's assessment of the importance
	of different evaluation criteria expressed as
	mean percentage114
Table 10. 4:	The percentage respondents supporting
	evaluation or progress reports to various
	institutions at the different time frequencies117
Table 11. 1:	Respondents' assessment of the mean percentage
	efficiency increase that is essential over the short
	and long-term to avoid privatisation in the
	different provinces
Table 11. 2:	The mean relevancy assessment by respondents
	of different circumstances in the different districts
	of Limpopo, based on a 10- point scale128
Table 11. 3:	Respondents' perception (expressed as a mean
	scale point assessment) of the validity of different
	aspects claimed to be benefits of privatisation130
Table 12. 1:	The perceived knowledge support provided by
	different sources and expressed as mean scale point139
Table 12. 2:	The assessed sufficiency of extension resources as
	perceived by extension staff expressed as mean
	scale point (15-point scale)142
Table 12. 3:	The importance assessment by respondents of
	the different functions to be performed by the
	SMS (Düvel, 2002)143



LIST OF FIGURES

Figure 5. 1:	Districts in the Limpopo Province33
Figure 5. 2:	The distribution of frontline extension
	personnel according to their "promotionability"43
Figure 5. 3:	Pillars of PEA46
Figure 6. 1:	Percentage distribution of respondents according
	to their focus on small or large-scale farmers60
Figure 6. 2:	The assessment by frontline extension workers
	and extension managers of the efficiency of
	extension in different situations and expressed
	as the return per R100 invested in extension
Figure 6. 3:	The perceived under-performance of extension
	workers expressed as a mean percentage65
Figure 6. 4:	Percentage distribution of extensionists
	according to their own competence assessment
	and assessments by supervisors and managers66
Figure 6. 5: 7	The mean competence of frontline extensionists
	as assessed by themselves and by their
	managers/ supervisors in different qualification
	categories of extension67
Figure 6. 6:	The perceived mean current and required level
	of knowledge of agricultural technicians in
	different fields69
Figure 6. 7:	The mean assessment of managers' knowledge
	of extension based on a 10-point semantic scale70
Figure 7. 1:	The importance of needs assessments in extension
	as perceived by extensionists in the different
	districts based on a 10-point scale and expressed
	as mean percentage74
Figure 7. 2:	The importance rating of different purposes
	of need assessments by extension staff
	(expressed as percentage scale points)76

Figure 7. 3: 7	The appropriateness of different types of
	need assessments in the identification of
	development priorities as expressed in
	mean weighted percentages80
Figure 7. 4: 7	The importance rank order (expressed as
	weighted percentages) of alternatives to
	identify the focus or content of development81
Figure 8. 1:	The rank order of different uses of participation
rigure o. 1.	by respondents in the Districts and expressed as
	mean weighted percentage87
Figure 8 2. 7	The relative importance (expressed as a weighted
11gure 0. 2. 1	percentage) of agricultural and human development
	as goals or as means to a goal as perceived by
	respondents in different provinces (Düvel, 2002)88
Figure 8 3. T	The percentage distribution of respondents according
1190100.0.1	to their support for different alternatives regarding
	the number or level of linkage structures (CDC)
	in Limpopo92
Figure 8. 4: 7	The percentage distribution of respondents according
g	to their support for different alternatives regarding
	the number or level of linkage structures (Düvel, 2002)93
Figure 9. 1:	The preferences expressed by extension staff in the
8	different districts in Limpopo Province regarding
	programmed versus non-programmed extension97
Figure 9. 2:	Respondents' mean assessments of different solutions
J	to the problem of interference in terms of the
	degree of their current implementation and
	their appropriateness as solutions101
Figure 9. 3:	The acceptability of different alternatives of
-	ownership expressed by rank order positions103
Figure 9. 4:	The average current and recommended time
	(mean days per week) spent on programmed



	extension according to respondents in the
	district of Limpopo104
Figure 9. 5:	Percentage distributions of respondents in
	different management categories according to
	their preference of program committees being
	self-accountable or accountable to their
	communities (Düvel, 2002)105
Figure 10. 1:	Respondents' level of agreement with the view
	that monitoring and evaluation is one of the best
	instruments to improve extension109
Figure 10. 2:	Percentage distributions of extension workers
	according to their implementation of different
	evaluation activities112
Figure 10. 3:	Respondents' mean assessment of evaluation
	criteria in terms of their importance, their
	implementation efficiency and their use
	frequency (Düvel, 2002)115
Figure 10. 4:	Respondents' preference regarding a minimum
	or maximum of objectives in extension programmes116
Figure 10. 5:	The rank order of beneficiaries according to the
	recommended priority access to evaluation
	results (Düvel, 2002)118
Figure 11. 1:	The mean efficiency assessments of the department
	of agriculture's extension service in different situations
	expressed as an output per R100 input123
Figure 11. 2:	A comparative efficiency assessment by respondents
	of the extension of government and non-government
	organizations in different farming situations125
Figure 11. 3:	Percentage distributions of respondents
	according to their agreement with privatization
	under different circumstances127
Figure 11. 4:	Assessments of the acceptability of privatization
	(expressed as a mean percentage scale point) by
	respondents in the different Districts131

Figure 11. 5:	Assessments by respondents in the different
	provinces of the acceptability of in-sourcing of
	management/expertise, outsourcing of personnel and
	outsourcing of total service, expressed as mean
	percentage scale points
Figure 11. 6:	The acceptability of different variations of
	community owned extension as assessed by
	respondents in the different Districts of Limpopo
	Province and expressed as mean percentage
	scale points
Figure 12. 1:	Mean rank order positions (expressed as
	weighted percentage) of different138
Figure 12. 2:	Respondents' opinion of the level of
	knowledge support in different areas and
	expressed as mean percentage141