

**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

ACKNOWLEDGEMENT	I
ABSTRACT.....	II
TABLE OF CONTENTS	IV
LIST OF TABLES	IX
LIST OF FIGURES	XII
CHAPTER 1.....	1
INTRODUCTION.....	1
CHAPTER 2.....	4
THE RESEACH PROBLEM	4
CHAPTER 3.....	6
THEORETICAL EXPOSITION OF EXTENSION SYSTEMS.....	6
3.1 INTRODUCTION.....	6
3.2 DEFINITION OF AN APPROACH/SYSTEM/MODEL.....	7
3.3 TYPES OF EXTENSION APPROACHES/SYSTEMS.....	7
3.4 TOP DOWN DELIVERY SYSTEMS.....	8
3.4.1 Conventional approaches	9
3.4.2 University based extension	9
3.4.3 National commodity panels system.....	9
3.4.4 Technology innovation process	10
3.4.5 Training and Visit system.....	10
3.4.6 Problem solving approach.....	11
3.5 PARTICIPATORY ACQUISITION SYSTEMS	13
3.5.1 Farming systems research and development.....	13
3.5.2 Farmer fields schools (FFS).....	15
3.5.3 Agricultural Knowledge and Information System (AKIS)	16
3.6 CONTRACT EXTENSION SYSTEM.....	17
3.6.1 Commodity development.....	18
3.7 RURAL DEVELOPMENT EXTENSION APPROACHES	18
3.7.1 Community extension rural development systems.....	18
3.7.2 Rural animation.....	19
3.7.3 Integrated Rural Development Programme	19



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

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
	CHAPTER 6.....	58
	EXTENSION 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
	CHAPTER 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 COMMUNITY	78
7.6	IDENTIFYING THE PRIORITY DEVELOPMENT FOCUS	79
7.7	PROGRAMME CONTENT.....	80
7.8	CONCLUSION.....	82
	INSTITUTIONAL LINKAGES, STRUCTURES AND COMMUNITY PARTICIPATION IN EXTENSION.....	83
	CHAPTER 8.....	84
	INSTITUTIONAL LINKAGES, STRUCTURES AND COMMUNITY PARTICIPATION 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
	CHAPTER 9	96
	PURPOSEFUL 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 IMPLEMENTATION 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
	CHAPTER 10	108
	MONITORING, 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
	CHAPTER 11	122
	PRIVATISATION 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
	CHAPTER 12	137
	KNOWLEDGE AND RESOURCE SUPPORT	137
12.1	INTRODUCTION	137



12.2	PERCEIVED IMPORTANCE OF KNOWLEDGE SUPPORT	138
12.3	SOURCES OF KNOWLEDGE SUPPORT.....	139
12.4	TYPES OF KNOWLEDGE	140
12.5	DEGREE OF SUFFICIENCY OF EXTENSION RESOURCES.....	141
12.6	THE USE OF SUBJECT MATTER SPECIALISTS (SMS).....	142
12.7	CONCLUSIONS AND RECOMMENDATIONS	144
12.7.1	The need for knowledge support.....	144
12.7.2	Sources of knowledge support.....	144
	CHAPTER 13	148
	CONCLUSIONS AND RECOMMENDATIONS.....	148
13.1	INTRODUCTION	148
13.2	CURRENT EXTENSION SITUATION	148
13.3	RECOMMENDATIONS	150
	REFERENCES.....	157
	APPENDIX A DICUSSION DOCUMENT RELATING TO	
	THE PRINCIPLES OF AN EXTENSION APPROACH.....	173
	APPENDIX B ASSESSMENT QUESTIONNAIRE OF EXTENSION	
	IN (PEA) IN BASED LIMPOPO PROVINCE DEPARTMENT OF.....	
	AGRICULTURE.....	207
	APPENDIX C FINDINGS OF THE PROVINCIAL.....	
	PROJECTS IN LIMPOPO.....	218

LIST OF TABLES

Table 3. 1:	Extension approaches and systems and their relationship to farmers	8
Table 3. 2:	Distribution of the sample in Pilot areas of BASED.....	21
Table 3. 3:	List of 8 land reform projects in Limpopo Province	233
Table 4. 1:	The sample size and sample percentage of extension personnel involved in group interviews.....	22
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 sample.	35
Table 5. 2:	Age of respondents.....	36
Table 5. 3	Number of years in service as agricultural technicians.....	37
Table 5. 4:	Gender distribution of the provincial sample	38
Table 5. 5:	Number of years spent in junior and senior secondary school.....	39
Table 5. 6:	Frequency distribution of agricultural technicians according to their extension function and their highest tertiary qualification (N=1082	40
Table 5. 7:	The mean percentage time spent by frontline extension workers in the various districts on different activities.....	45
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 invested.....	62
Table 6. 4:	Distribution of frontline extension workers according to districts and the highest qualification in agriculture	66
Table 6. 5:	The mean knowledge assessment of frontline extension workers by themselves as well as by extension managers using a 10-point semantic scale	68
Table 7. 1:	The importance of assessment of needs by means of PRA by the community based on three identified criteria.....	77
Table 7. 2:	Intervals for needs assessment by the community expressed as a weighted mean percentage.....	78
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 Province.....	85
Table 8. 2:	The mean assessment of different alternatives of participation expressed as mean rank position by respondents in Limpopo.....	90
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 community	92
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 Province.....	98
Table 9. 2:	The percentage distribution of extensionists in Limpopo Province according to their assessment rating of the problem of programme interference.....	99
Table 10. 1:	The importance assessment of different solutions to improving extension efficiency based on rank	

	order positions and expressed as mean weighted percentage.....	110
Table 10. 2:	The percentage respondents performing the various evaluation activities in the different districts of Limpopo Province.....	113
Table 10. 3:	Respondent’s assessment of the importance of different evaluation criteria expressed as mean percentage.....	114
Table 10. 4:	The percentage respondents supporting evaluation or progress reports to various institutions at the different time frequencies.....	117
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	124
Table 11. 2:	The mean relevancy assessment by respondents of different circumstances in the different districts of Limpopo, based on a 10- point scale	128
Table 11. 3:	Respondents’ perception (expressed as a mean scale point assessment) of the validity of different aspects claimed to be benefits of privatisation	130
Table 12. 1:	The perceived knowledge support provided by different sources and expressed as mean scale point.....	139
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 Province.....	33
Figure 5. 2:	The distribution of frontline extension personnel according to their “promotionability”.....	43
Figure 5. 3:	Pillars of PEA	46
Figure 6. 1:	Percentage distribution of respondents according to their focus on small or large-scale farmers	60
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.....	64
Figure 6. 3:	The perceived under-performance of extension workers expressed as a mean percentage	65
Figure 6. 4:	Percentage distribution of extensionists according to their own competence assessment and assessments by supervisors and managers.....	66
Figure 6. 5:	The mean competence of frontline extensionists as assessed by themselves and by their managers/ supervisors in different qualification categories of extension	67
Figure 6. 6:	The perceived mean current and required level of knowledge of agricultural technicians in different fields.....	69
Figure 6. 7:	The mean assessment of managers’ knowledge of extension based on a 10-point semantic scale.....	70
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 percentage	74
Figure 7. 2:	The importance rating of different purposes of need assessments by extension staff (expressed as percentage scale points)	76

Figure 7. 3: The appropriateness of different types of need assessments in the identification of development priorities as expressed in mean weighted percentages..... 80

Figure 7. 4: The importance rank order (expressed as weighted percentages) of alternatives to identify the focus or content of development..... 81

Figure 8. 1: The rank order of different uses of participation by respondents in the Districts and expressed as mean weighted percentage 87

Figure 8. 2: The relative importance (expressed as a weighted 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: The percentage distribution of respondents according to their support for different alternatives regarding the number or level of linkage structures (CDC) in Limpopo..... 92

Figure 8. 4: The percentage distribution of respondents according 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 different districts in Limpopo Province regarding programmed versus non-programmed extension..... 97

Figure 9. 2: Respondents’ mean assessments of different solutions to the problem of interference in terms of the degree of their current implementation and their appropriateness as solutions 101

Figure 9. 3: The acceptability of different alternatives of ownership expressed by rank order positions 103

Figure 9. 4: The average current and recommended time (mean days per week) spent on programmed

	extension according to respondents in the district of Limpopo	104
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 extension.....	109
Figure 10. 2:	Percentage distributions of extension workers according to their implementation of different evaluation activities.....	112
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 programmes	116
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 input	123
Figure 11. 2:	A comparative efficiency assessment by respondents of the extension of government and non-government organizations in different farming situations	125
Figure 11. 3:	Percentage distributions of respondents according to their agreement with privatization under different circumstances	127
Figure 11. 4:	Assessments of the acceptability of privatization (expressed as a mean percentage scale point) by respondents in the different Districts.....	131

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 132

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 134

Figure 12. 1: Mean rank order positions (expressed as weighted percentage) of different 138

Figure 12. 2: Respondents’ opinion of the level of knowledge support in different areas and expressed as mean percentage 141

CHAPTER 1

INTRODUCTION

Extension in South Africa finds itself at a crossroads situation, which has been brought about by a multitude of factors. According to Duvel (2002:i) the extension services have been blamed for failing to deliver effectively. Their credibility has been questioned and lacking competence has led to a waning confidence and commitment on the part of the extension workers. Where successes have been achieved, there has usually been an absence of tangible evidence due to a lack of accountability and systematic and regular evaluation (Duvel, 2002:i).

This has been exacerbated by changes within the country as well as changes in the international extension environment, which have led to additional constraints and challenges demanding a reconsideration and adaptation of the extension approach. The political transformation in 1994 led to a democratisation and restructuring of the extension service and also gave birth to the Limpopo Province which is mainly rural, consisting of five districts engaged in both commercial and subsistence farming.

This study forms part of the bigger study commissioned by the National Department of Agriculture to Duvel, to investigate extension approach in South Africa based on the following specific objectives :

- To exploit the large reservoir of experience, knowledge and viewpoints found in the country.
- To receive critical feedback regarding the different projects implemented in the various provinces designed to seek appropriate alternatives for Extension.
- To discuss the lessons learnt or to be learnt from these projects as well as from any other successes recorded or experienced by the Provinces.
- To become exposed to other alternatives reported to be successful abroad or in the country, with the purpose of widening the perspectives of delegates.
- To gauge the perceptions of delegates regarding the acceptability of different systems and/or specific principles (Duvel 2002).

Duvel's study took 18 months from 2000 until 2002 and it involved the provincial extension managers from all nine provinces of South Africa. The expressed need for an extension approach in South Africa was an indication all was not well within the extension delivery, of which Limpopo was not an exception. Extension in Limpopo had begun to shift from a commercial farmer focused strategy to one having small scale and subsistence farming as main target group. This shift was signalling the need for developing an appropriate extension approach.

The search for an appropriate extension approach in Limpopo, began in 1995 and in 1998 in which two initiatives were carried out. The first initiative involved a partnership between the Limpopo Department of Agriculture and the German Government through the German Technical Cooperation (GTZ). The name of the project was called Broadening of Agricultural Services and Extension delivery (BASED), whereas the second one was a partnership between Limpopo Department of Agriculture, National Department of Agriculture and the Dutch Government.

The National Department of Agriculture appointed Duvel in 2000 to undertake the national study to develop an appropriate extension approach for South Africa.

This current study was motivated by these two initiatives as well as the transformational agenda of the democratic government.

Whereas Düvel's study had a national and holistic focus, this study was was focused on the Limpopo province allowing for a more in depth investigation, particularly in regard to the variables responsible for the identified variation in perceptions and opinions. The linkage and mutual complementation of the two studies was ensured by the researcher being actively involved in the monitoring and implementation of the two pilot studies namely; BASED and the land reform projects, and also representing the Limpopo province in the national project committee responsible for the planning of the national project.

Objectives of the study

The specific objectives of the study are the following:

- To identify guidelines of an appropriate extension approach from (a) literature overview and (b) from donor funded project initiative designed and adopted in the department for this purpose.

- To describe briefly and analyze the current extension performance in the Limpopo Department of Agriculture (LDA) to confirm the need for the introduction of a more appropriate extension approach.

- To evaluate and assess the acceptability of various alternatives within the main identified principles namely :-
 - _ Needs based priority approaches,
 - _ Institutional linkages, structures and community participation,
 - _ Purposeful or programmed extension,
 - _ Monitoring, evaluation and accountability
 - _ Privatization and outsourcing
 - _ Knowledge and resource support

- To make recommendations based on the findings of the study for a more appropriate extension policy and approach.

The report is organised into 13 chapters. Chapter 1 is an introduction. Chapter 2 outlines the problem of the study. Chapter 3 presents the theoretical background and Chapter 4 reports on the research methodology. Chapter 5 presents the current extension and chapter 6 to 12 discusses the findings of the study. Chapter 13 discusses recommendations relating to the different principles of extension.

CHAPTER 2

THE RESEACH PROBLEM

Research produces solutions but extension doesn't get farmers to adopt them. For a long time, the maxim has been "try harder"! Innovations must be pushed to the field with more effectiveness. The extension side of organizations must be strengthened, unified, and simplified through more "order and command", coupled with "supervision and sanction", so that the effectiveness of extension is increased. It is hoped that through such measures adoption rates will increase, thus, making projects more successful (Ehret, 1997:3).

Three types of agriculture systems are identified and grouped in terms of agro-climatic and socio-economic characteristics summarises the challenge for agricultural based institutions. The first two types of agriculture systems namely the high-input, high yielding production systems and the high capacity area of the tropics both face problems of over production and surpluses, whereas the third type of agriculture consist of the poorest and most vulnerable, these are the rural households with few resources beyond the labour of their own families.

"They work in areas with low and uncertain rainfall, little irrigation, steep slopes, poor roads and many other limitations. Yields are low and uncertain, land, forest and other resources rapidly being degraded" (Von Osten, Ewell & Merrill-Sands, 1989:69-70). Extension systems are faced with addressing the technological requirements of small-scale farmers that are consistent with their farming systems. Technological innovations are seldom aimed at the resource -poor farmers, on the other hand they depend on the use of costly inputs, which favours large commercial farmers. An observation is that newly generated technology may not always be relevant to the needs of poor farmers.

Researchers have found that extension systems still evolve around top-down supply driven extension approaches which do not adequately address the socio-economic situation of resource-poor small holder producers or their requirements (Kessaba,

1989 and Chambers, 1983). Appropriate extension approaches are expected to address these challenges. However, this harder push on extension has not produced the expected results. Several questions are not sufficiently addressed:

Can top-down oriented systems with their present practices and orientation identify problems of farm families of the resource-poor agriculture? Is research able to develop solutions, which fit the situations of this “third type of agriculture”?

Which extension approach is appropriate to which situation in Limpopo? Large scale or commercial farmers operate at different levels and do not experience similar challenges when compared to small-scale farmers. Based on the problematic area cited above, the following is the central problem namely:

“The Department of Agriculture (LDA) does not respond sufficiently to the developmental constraints and opportunities of the majority of small-scale farmers in the former homelands of Limpopo Province. The reason for this state of affairs could be ignorance or lack of understanding regarding the appropriate extension approach. This focuses the study on a search for an extension approach appropriate for the Province of Limpopo”.

CHAPTER 3

THEORETICAL EXPOSITION OF EXTENSION SYSTEMS

3.1 INTRODUCTION

Research has shown that there is no extension system or approach that is appropriate for all situations, however there are organisations that prefer to propagate specific approaches in the world (Düvel, 2002:78). This might be seen as the cause of the problem because one may think this is the right thing. While this is seen as a problem on the other hand agricultural extension and research is worldwide one of the main factors contributing towards successful agricultural development (Jordaan, 2004:49). Based upon the above mentioned statement, agricultural development initiatives need to be guided by well designed policies that are implemented systematically.

During the past 10 years agricultural extension in South Africa has undergone a drastic change from a dualistic service (separate services of the commercial and small-scale farmers) to a single amalgamated service, now focusing almost completely on previously disadvantaged small-scale farmers. The request by the National Department to have an extension model developed created an expression that there was no appropriate one to service the entrant farmers as a result of new land reform policies (Düvel, 2004:1).

The question to be asked, is there an agricultural extension model which can be transferred from one country to the other? Very obvious differences occur regarding the understanding of what constitutes a model or an approach, how it can be pursued, compared and applied to achieved its objective. For example (Bolinger, Reinhard & Zellweger, 1994:11) believe that there is no such thing as one overall best approach to extension. The purpose of this chapter is therefore to review different dominating approaches and to derive lessons for Limpopo.

3.2 DEFINITION OF AN APPROACH/SYSTEM/MODEL

Some confusion arises when talking about different approaches to rural extension, because the description and the name of each approach emphasize different aspects. According to (Bolinger, Reinhard & Zellwer, 1994:11) approaches lack a clear common structure and make it impossible to compare them. Different authors use different words to explain the concept (approach/system/model), for example, Rivera (1989:93) calls it a “system”, Worth (2002) refers to it as an “approach”, while still others refer to it as a “model” (Düvel, 2004:1; Röling, 1985, Botha, 1992 and Swanson, 1984:6).

The meaning of an “approach” again differs. According to Hagmann and Shultz (2000), an approach is explained as a way in which different guiding principles are applied in a specific situation to fulfil different purposes and/or target specific development beneficiaries, whereas Bolinger, *et al* (1994:11), see an approach as consisting of a series of procedures for planning, organizing and managing the extension institution as well as for implementing practical extension work by staff with technical and methodical qualification and using the necessary and appropriately adapted means. The author will use these concept of ”approach, model, or system” interchangeably to denote the same meaning.

3.3 TYPES OF EXTENSION APPROACHES/SYSTEMS

In order to identify or develop an appropriate extension system, the logical point of departure is to take cognizance of already existing extension systems. Numerous systems are quoted in the literature (Oxenham & Chambers, 1978; Orivel, 1981; Pickering, 1987; Ray, 1985; Weidemann, 1987; Röling 1985(a); Röling, 1988 and Axinn, 1988). However, there is no straight forward statement which clearly outlines the universal acceptable typologies of “how many extension approaches” are present. One finds that the typologies tend to be contradictory and confusing to some extent.

The typology developed by Rivera (1989:113) summarized in Table 3.1. gives a more or less representative picture, although one of the shortcomings is that it has left out other models. For example: the Advisory model, Agricultural Knowledge and

Information System (AKIS) (Röling, 1995:3), the Problem Approach, Basic Needs and Integrated Rural Development and the Farmer Field School (FFS).

The following approaches are discussed: Top down delivery approaches, participatory systems, Contract farming and Rural development approaches.

3.4 TOP DOWN DELIVERY SYSTEMS

Table 3.1 identifies systems namely: conventional approaches, Training and Visit (T&V), University organised, commodity, and technical innovation systems.

Table 3.1: Extension approaches and systems and their relationship to farmers

System approaches	Type of system	Relationship to farmers
I Top down delivery services	Conventional T&V system University organised Technical innovation <i>Advisory</i> ¹ Problem solving approach ² Technology Innovation process ³ National Commodity Panel System ⁴	Take it or leave it
II Participatory Acquisition System	Farm information dissemination (Taiwan) Farming Systems Research and Development (FSR/D) <i>Farmer fields school (FFS)</i> ⁵	Take it or demand different packages or programmes
III Contract farming systems	Commodity development and production Commodity focussed AKIS ⁶	Take it or else
IV Rural development extension approaches	Community development Extension Cum-extension Rural animation Integrated rural development programmes Basic needs and Integrated Rural Development ⁷ (IRD)	Take it or turn away

Source: Rivera 1989 (originally developed by Dr Joao Barbosa of the World Bank)

- ¹ Added by author
- ² Added by author
- ³ Added by author
- ⁴ Added by author
- ⁵ Added by author
- ⁶ Added by author
- ⁷ Added by author

These are not the only systems; other systems that can mostly be classified under the top down.

3.4.1 Conventional approaches

Conventional approaches offer a broad categorisation that covers many general extension systems. Conventional agricultural extension systems are characterised by the fact they tend to be strongly hierarchical. The professional extensionists look upward for directives rather than downward for approval. Lastly there are few effective means for managing and supervising the middle and upper level staff members (Boone, 1987).

3.4.2 University based extension

The most comprehensive example of university linked example is the cooperative extension service. The linkages are historically legislated and organizationally ingrained. The primary goal of this approach is to conduct educational programmes in selected subject matter in selected subject matter areas to help clientele solve problems in a way that is socially desirable and personally satisfying. There are challenges faced by developing areas which make it difficult to implement (Swanson & Claar, 1984:11).

University based extension is tailor-made for high income countries, with a move observed in countries like India, Kenya, Philippines and Nigeria (Norman, Manghezi & Paradza, 1994:112). It is argued that the implementation of this approach in South Africa would be difficult to accomplish without legislation (Bembridge, 1993:34). Alternatively it might need creativity.

3.4.3 National commodity panels system

Arnon (1989:782) identified the National Commodity Panels System. This system consists of a research sub-system, a dissemination sub-system and a user sub-system. Although the model shows a joint decision making framework, the research is seen as having the sole role of producing technology while extension is seen as the delivery of

research result to farmers. This model is not generally accepted by the sub-systems concerned (Arnon, 1989:782).

3.4.4 Technology innovation process

Another system which is seen as an improvement of the original Transfer of Technology (TOT⁸) is defined as the Technology Innovation Process (McDermott, 1987: 95). This model distinguishes the required sequences of functions in terms of steps or stages, which must be performed. For example the steps are: research, technology generation, technology adaptation, technology integration, technology dissemination and technology diffusion and adoption.

A close look at the steps shows that it assumes to be a linear paradigm in which research priorities are decided by scientists in research stations where technology is developed as well as adapted and integrated before it is handed over to extension to be transferred to farmers for adoption purposes. Although the model advocates that research-extension-farmer co-operation should begin at the planning stage, it is not always clear as to who does what within the stages. This model also advocates the use of a committee to link up the role players but the nature of the model remains top down.

3.4.5 Training and Visit system(T&V)

There is a debate whether the T&V is a system or a management tool. Rivera (1989) classified it under the category of top down delivery (see Table 3.1). Others (Hagmann & Shultz, 2000) feel that T&V⁹ per se is neither a concept nor an extension

⁸ *Linear “Transfer of Technology“ concept/model: „The normal basic paradigm of agricultural research and extension in which priorities are decided by scientists and funding bodies, and new technology is developed on research stations and in laboratories and then handed over to extension to be transferred to farmers“(R. Chambers).*

⁹ *Hagmann and Shultz explained it as an extension management system based on the Western philosophies of industrialized agriculture and market economy. T&V core concept of extension is that in order to increase crop production findings from on-station research have to be passed on “farmers” in the form of technical messages. Outcome of the email Discussions on Clarification of the Terms: Concept Approach etc. (Hagmann and Shultz, 2000).*

approach. Train and Visit is usually applied to ministry based agricultural extension. The main goal is to equip extensionists with the ability to fill the information gap to the degree necessary to help farmers achieve the maximum in terms of crop outputs and profits through an intensive training programme on a fortnightly schedule.

A close analysis shows that the T&V system takes a classic top-down approach to extension. It is based on the institution based and is teaching centred. This concept stresses two aspects namely research must produce innovations out of which messages are formulated and extension has to deliver these messages to farm families so that they can be adopted. The T& V system was found to be a costly failure in most of the African countries in which it was promoted and tried and not sustainable financially (Hagmann & Shultz, 2000:1).

3.4.6 Problem solving approach

The steps involved in systematic problem-solving are not fundamentally different to the stages of systematically planned extension work and belong to the basic functions of management. The procedure always begins with an analysis of the given situation and ends with the evaluation of results (Albrecht, 1989:70). The problem solving approach also seems to be prescriptive in the sense that once the problems have been identified the agricultural technician would develop alternative solutions and draw programmes to implement it without the involvement of the affected people.

A close link exists between the problem-solving cycle and the cycles of Participatory Action Research. Based on this understanding, certain other philosophies and approaches to extension, such as teaching no longer fit, since this implies a partner with predetermined solutions. Freire (1970) calls this the “banking approach” since it is assumed that solutions can be stored and retrieved like money that can be deposited in a bank and withdrawn at any time when needed.

Modern mass communication (e.g. books, brochures, newspapers, radio) does not address acute individual problems of extension clients. Advertising (or persuasion) is not primarily client-oriented. While it is aimed mainly at the well-being of extension partners, it also benefits the advertisers. Compulsion has no place in the above

understanding of extension since there is no freedom to take decisions and personal responsibility is lacking (Albrecht, 1989:34-35). The researcher argues that there are two sides of the top down delivery systems. It is hailed superior on the one side and criticised on the other. The challenge is to find a middle ground.

The conventional transfer of technology (TOT) is often criticized (Röling, 1995 and Ehret, 1997) without considering the breakthrough it has brought about during the mid- 1960 when research was successful in the generating of high yielding wheat and rice varieties. This was the era known as the “green revolution”. It was generally accepted for the first time following the success of the TOT system that research was the principal source of new technology and that extension heavily depended on national research to generate the technology which it would extend to farmers (Kaimowitz, 1990:102).

One of the mistakes observed (Oram, 1985:102) was the assumption that research could be short circuited by importing technology and transferring it directly to extension services. The characteristic of the TOT systems that make them to be criticized is because they suggests a linear, one way process, all starting with the research and ending on the farm as an adopted technology. When the technology is not adopted by farmers, blame is apportioned to extension that is thought to be lazy in diffusing the technology.

Studies show that one of the problems with the conceptualization of diffusion research has been the assumption that social systems are homogeneous (Röling, 1988:28 and Röling & Ashcroft, 1973), whereas in practice they differ in terms of access to resources, opportunities, and production objectives. A number of factors, which determine such a rate, were documented in the past (Murton, 1965) and they include relative advantage, compatibility, complexity, divisibility and communicability (Rogers, 1983:70).

The top down systems are inadequate to resolve the problems of resource poor farmers. They focus on a “prescriptive package” approach to often pre-determined farmer needs aimed mainly at increasing farm production without taking the risk environment and social problems encountered by resource-poor, subsistence farmers

into account. It is not surprising that South African researchers found that the most preferred model for extension was the Technology Centred Approach /TOT (Bembridge, 1993, Botha, Steven & Steyn, 1999 and Düvel, 2001). It was concluded that the production capability for feeding the nation rests within the commercial sector which can afford to implement TOT approaches.

The adoption of a food security policy such as a sustainable livelihood for the country as a whole will mean that the most appropriate extension system for the small scale farmers would be the one that empowers the small scale farmers, based on people and not only focusing on the technology. Furthermore it should focus on unlocking the powers that are present in the farming and community systems namely, human assets, social assets, natural assets and the honouring of livelihood strategies (Moyo & Hagmann, 2000).

The critical analysis of the top down systems have been documented elsewhere (Chambers,1993, Kline and Rosenberg,1986,;Röling,1988 and 1994; Long & Van der Ploeg,1989). It is useful to indicate that there are five dimensions that are useful in understanding the systems namely the nature of innovation taking into account the whole farm, the assumed nature of learning about innovation by farmers, the assumed nature of extension and the conducive policy framework (Röling ,1985:2-3). These dimensions should assist when checklisting performance of systems.

People tend to be entrenched in stereotype thinking of one approach such as the transfer of technology model (TOT) because of its nature of coherence as a whole and never think of any other alternatives to it (Röling, 1985:3). There are situations where elements of the top down systems apply but it is by no means a system that can usefully inform all extension practice

3.5 PARTICIPATORY ACQUISITION SYSTEMS

3.5.1 Farming systems research and development

Farming systems research forms part of the participatory systems as reflected in Table 2.1. Sometimes the systems are confused with methods, for example participatory

rural appraisal, (PRA) (Hagmann & Shultz, 2000) and Participatory Action Research (PAR).¹⁰ Farming System Research is designed to test “appropriate” agricultural technology with client populations and has been widely adopted whereas the results of intended outcomes have only made marginal headway (Chambers & Jiggins, 1986).

Various names have been given to this type of agricultural system such as Farming System Development (FSD) (FAO, 1990:1) and On Farm Research (Ewell, 1990:190, Arnon, 1989:344. Some have called it Farming System Research and Extension (FSR-E) (Schmick, Poats & Spring, 1988), Participatory Research (PR) Ashby, 1987:25), New Farming Systems Development (NFSD) (Spedding, 1988:36), Farming System Perspective (FSP), Adaptive research planning team (ARPT) and On-farm Client Oriented Research (OFCOR) (Ewell, 1990).

Farming systems research approaches have distinct advantages over other top down systems. The top down approaches often did not address the constraints and development potentials of the farm household systems in development planning and implementation. Farming systems tend to perform essential functions such as:

- The identification of problems at the producer level;
- Generation of innovation;
- Validation under farmer's conditions;
- Dissemination;
- Utilization, and
- Evaluation (Anon, 1989:781).

These functions are executed within the top down framework. Most of the abovementioned methods were developed to correct the challenges generated by the top down systems. One observes that the deeper meaning of participation was not fully explored and the basic questions addressing the reasons for failure were never asked.

¹⁰ *PAR is an ongoing process of merging theory with action and action with theory. The overall process is broken into several cycles, each comprised of four parts namely planning, implementation, observation and evaluation*

It seems researchers avoided to ask the relevant question and instead asked the wrong question namely: “How can the top down systems be improved?” This has led to the identification of the unsustainable methods to make top down systems work. Von der Osten, Ewell & Meril-Sands, (1989:83-84) recommended that research, farmers and extension will be linked through contract, consultative, collaborative and collegiate participation.

Donor supported systems tend to view these systems as the solution for small- scale farmers (Ehret, 1997). Due to the associated limitation however it cannot be accepted as the panacea for all farming settings. Some of the identified limitations are that every farm is a unique system with its own family situation and particular likes and dislikes, changes of climate and marketing conditions are unpredictable, short term benefits and yield sustaining measures are often conflicting , it is difficult to set up interdisciplinary teams and that farmers are tired of answering more and more questions they want to see results and specialists have a limited understanding of the whole complex of problems (Bolinger, 1994:16).

3.5.2 Farmer fields schools (FFS)

The concept of farmer field school was first applied in South and South East Asia and has shown potential to succeed among small scale farmers (Owen and Simpson, 2002). FFS is described as a future approach that agencies could be using to mainstream extension practice and can be used to build participatory practices into extension programmes (Simpson, 2001, Potius, 2000 and Rola, 2001). A close analysis of FFS reveals the following:

FFS is capable of being responsive to local needs over a wide range of conditions with a wide range of crops. It is able to combine an effective blend of participatory and experiential learning activities. Graduates from FFS have gained confidence and are willing to communicate viable technology to others in their immediate vicinity and beyond and are contributing towards social development. Some of the challenges of FFS relate to the focus and relevancy not necessarily being any greater than a more traditional delivery oriented programme.

The low levels of farmers self –awareness and actualization in terms of their real and possible roles in knowledge generation may be closely linked to the educational levels and training of field agents. There is also a fear that FFS may develop an “elite” bias favouring those who are literate and the perception that the content is based on “western” science.

3.5.3 Agricultural Knowledge and Information System (AKIS)

An agricultural system which is not included in the typology is called AKIS¹¹. An agricultural knowledge system is seen as an alternative system to TOT. The system was discussed by a number of authors who gave different interpretations (Röling, 1988:179, Brokensha, 1980, Richards, 1985, Nagel, 1980, Engel, 1989:3 and Kaimowitz, 1990:1). It is a system in which agricultural information is generated, transferred, consolidated, received and fed back in such a manner that these processes function synergically to underpin knowledge utilisation by agricultural producers (Röling, 1988:33).

The difference between Information and knowledge systems is that information is an attribute of the mind. It cannot be transferred. It is the outcome of lifelong information processing, storage and retrieval going on in the neurophysiological system. Knowledge on the other hand can be shared and accumulated in social groups (Röling, 1988:186). The author does not see it as an alternative because of its character. It would be a system within another system. It demonstrates the relationship between the main role players and stakeholders in the extension mix and highlights the need for institutionally strengthening the relationship among the contributors to the extension process. Whether it is a desirable thing or not to improve rather than to question the premise of the triad of the subsystems, AKIS is believed to provide a firm foundation on which to create a new understanding of extension (Worth, 2002:476).

¹¹ *It is defined as A set of agricultural organization and or persons and the links and interactions between them engaged in such processes as the generation, transformation, transmission, storage, retrieval, integration, diffusion and utilization of knowledge and information with the purpose of working synergic ally to support decision making, problem solving and innovation in a given country's agriculture or domain thereof (Kaimowitz, 1990:1).*

It is further submitted that unless it becomes neutral without specifically singling out research institutions as the sole originators of information and knowledge, AKIS is probably biased to top down, the argument being that indigenous knowledge is also generated by illiterate people. In a sense AKIS aims at improving interconnection between models such as farming system research and technology processes.

3.6 CONTRACT EXTENSION SYSTEM

The contract extension system can be explained by using two terms namely “contracting-in” and “contracting-out”. The first term refers to public sector extensionists providing services in contractual arrangements with private sector entities who provide at least partial funding, whereas contracting-out refers to the public sector contracting out the extension advisory services to the private sector (Crowder, 2001: 113). Mozambique and Uganda are some of the countries where this system is functioning although its sustainability is questioned. Extensionists workers are contract employees who are supported by projects funded by donors.

Contract approaches could be categorized as part of private sector extension. Umali-Deininger (1996:4) suggested that the private sector system can further be divided into two systems namely the profit sector systems and the non-profit sector. The private for profit systems include cooperatives, trade organizations, distributors, input manufacturers such as machineries, hybrid seeds, livestock, veterinary supplies, pharmaceuticals and agricultural information, agro-marketing, processing firms and farmer group operated enterprises.

The private for profit systems charge for the services they render to their clients. Private consultants for example are used by large scale farmers. Since they are highly trained subject matter specialist, they provide specialized technical and managerial services such as in Commodity development and production. It is observed that they provide significant service by helping farmers to move from a subsistence level to more commercialized farming through the use of purchased technologies. In counties such as Chile and Columbia an innovative system has been adopted which has implemented the use of a voucher system by farmers (Kraft, 1997).

The challenge of these systems is that resource poor farmers cannot afford some of the services provided by the private sector. On the other hand there are advantages from farmer controlled extension systems. They hire extension technicians thereby reducing the budgetary load of the government (Norman, Mollel, Mangheni & Paradza, 1994:114). The other category of the private non- profit system institutions such as NGOs, Universities, commodity boards and Non- commercial associations. In recent years NGOs have become active in agricultural extension, in most countries, but usually within projects with limited scope and scale in the context of overall national delivery needs (Ehret, 1997).

3.6.1 Commodity development

This approach is generally organized through parastatal organizations or private sector firms. The basic characteristic of the commodity based extension is that the production system is vertically integrated from input supply to the technology adoption and marketing of the product (Norman, *et al*, 1994:113). Commodity approach usually concentrates on a single one cash crop (Bembridge, 1993:34).

The main advantage of the commodity approach lies in the high returns on crops while the disadvantage of this approach is that extension content is limited to technical and administrative or commercial aspects of the particular commodity. Farmers tend to depend on commodity organizations for advice, inputs and the sale of their crops.

3.7 RURAL DEVELOPMENT EXTENSION APPROACHES

3.7.1 Community extension rural development systems

The fourth type of the extension system (according to Table 3.1) includes systems that are based on rural animation and integrated rural development programmes. Rural development systems are seen as broader than agricultural extension and are recommended for consideration when improving agricultural extension systems. In some instances they involve their clients in planning, implementing, and evaluation of

programmes (Swanson (1984:7). However in practice, depending on the organization that implements it, Rural Development Systems may become top down in nature.

3.7.2 Rural animation

The concept of the “rural animation approach” is associated with francophone Africa countries such as Senegal, Ivory Coast and Madagascar. This approach involves participatory rural development with specialists working directly with small farmers to develop, test and demonstrate improved agricultural technology (Kesseba, 1989:96). The extension agent operating under this concept is responsible for creating awareness. It is believed that the approach would offer an answer to the authoritarian and often repressive nature of intervention by Colonialists Governments. In a dialectical way it increases the competency of rural villages to express their needs so as to be liberated from the colonial dependence (Nagel, 1997:17).

“Animation rurale” relies largely on a number of voluntary collaborators called “animateurs or village animators”. The collaborator is responsible for organizing and stimulating an activity in a village. This requires special training. The village animators are taught how to organize and diagnosis in participation with the village and its population, and to prepare plans on the basis of a joint diagnosis (Schmidt, Etienne & Hurlimann, 1997). In reviewing the animation rurale (AR) as a philosophy of extension, it is reported that the objectives of AR were difficult to operationalize as and to sustain impact because of internal and external factors (Sulzer & Payer, 1990:34).

3.7.3 Integrated Rural Development Programme

According to Swanson (1984:7) the integrated rural development approach traces its roots to the community development efforts particularly in South Asia. It is assumed that integrated rural development is participatory in nature. It adopts methodologies such as participatory rural appraisal (PRA), participatory technology development (PTD), participatory learning and action (PLA) and participatory integrated development approach (PIDA) (Ehret, 1997).

Rural development systems are also seen as broader than agricultural extension and are recommended for consideration when improving agricultural extension systems. In some instances they involve their clients in planning, implementing, and evaluation of programmes (Swanson, 1984:7). Rural Development Systems may become top down in nature depending on the organization that implements it.

3.8 EXTENSION APPROACH INITIATIVES PRECEDING THE STUDY

Two initiatives were carried out in Limpopo namely; the partnership with the German and the Dutch governments. The outcomes of both initiatives are discussed separately.

3.8.1 The German partnership (GTZ)

The Department of Agriculture applied for donor funding from the German government in order to re-orientate the extension service of Limpopo. Short-term assistance was granted through the German Technical Cooperation (GTZ) and a consultant was appointed to do preparatory work by creating vision for participatory approaches. The process culminated with the inception of a three-year renewable assistance operated under the name of Broadening Agricultural Services and Extension Delivery (BASED). BASED formally commenced its activities in 1998 and came to an end at the end of December 2006.

3.8.1.1 Evaluations procedure of based pilot

The purpose of the evaluation was to assess the impact of BASED in the pilot sites since its introduction in 1998 in the Department of Agriculture. Both qualitative and quantitative strategies were used to gather information for the study from both the extension workers and the programme beneficiaries (i.e the farmers). The questionnaire is attached as annexure B and C.

The researcher gathered the information on two separate occasions. In the first occasion, a coded questionnaire was used to collect the responses from the extensionists including those who participated as well as those who did not participate in the pilot areas. The questionnaire was administered in English and questions were

thoroughly explained to avoid misunderstanding. Each questionnaire took almost 40 minutes to complete. On the second occasion, six workshops were organised in pilot sites to assess the impact of BASED in relation to service delivery at the community level. BASED identified 6 pilot areas (i.e. 3 per participating district). However due to time constraints, only two sites were visited namely Mbahela in Vembe and Spitzkop in Capricorn. The size of BASED samples is shown in Table 3.2.

Table 3.2: Distribution of the sample in Pilot areas of BASED

District	Pilot areas	Farmers	Extensionists
Vembe	Hagondo, Mbahela, Tshikonelo	195	35
Capricorn	Ga-Mogano, Ga-Thaba, Spitzkop	140	44
Total		335	79

The researcher together with the BASED manager and members of the BASED steering team identified procedures to guide the process of assessment. A daily programme was drawn and following the necessary protocol, groups were identified and given topics to discuss the impact of BASED such as changes at the community level, issues that were not tackled by BASED, their perceptions on the BASED programme, their achievements (with evidence), their problems and their vision.

Issues that seemed to be complicated were clarified. Feedback was offered to the broader community and neighbouring communities. The important issues arising from the group presentation were visualized on cards and then synthesized in plenary.

3.8.1.2 Findings from BASED

The findings are summarised as follows;

- The Department has developed a manual for the reorientation of extension and research personnel involved in Participatory Extension (PEA) and Participatory development Approaches (PDA).
- The BASED approach is in the process of being instutionalized within the Department of Agriculture.

- BASED has given birth of a Non Government Organization (NGO) called NovAfrica, which functions independent of the Department of Agriculture and has become the custodian of the philosophy of participatory extension approaches. NovAfrica is involved in the training of extensionists and is in the process of facilitating the accreditation of the PEA course to be in line with the requirements of the South African qualification authority.
- BASED encouraged innovations among farmers as seen in the development of a maize variety used for seed purposes with the approval from South African National Seed Organization (SANSOR), zero grazing of goats, the adoption of a ripper planter the establishment of an umbrella organisation and the strengthening of the certain aspects of soil moisture conservation and soil fertility improvement. All the above mentioned achievements signalled changes in the way farmers approached their farming in the pilot sites and giving credit BASED initiatives.

3.8.2 The Dutch Government partnership

The National Department of Agriculture facilitated the process of identification of projects that would be piloted in order to draw lessons for the development of an alternative extension approach for the Limpopo Province. A frame work was developed to guide the process which consisted of four steps namely the identification of the target pilot area, developing a business plan for the target pilot project, the appointment of a consultant to produce a desk top study based on the target project and finally to implement the findings of the desk top study and to generate lesson learnt for future extension delivery.

3.8.2.1 Target area

The Department identified land reform as the target area for the pilot. The reason for this choice was to respond to two strategic objectives namely to promote the success of the land reform program through appropriate farmer support services and to assess and respond to the development constraints of land reform beneficiaries on state land.

Eight land reform projects were identified focusing on livestock, crops or both livestock and crops. They are indicated in Table 3.3.

Table 3.3: List of 8 land reform projects in Limpopo Province

Name of project		Name of District	Mem-ber-ship	Type of enterprise	Type of project Ownership	Number of ha
1.	Nwanedi farmers	Vhembe	103	Crops	Lease ¹² agreement	1300
2.	Steilloop	Waterberg	10	Livestock farmers	Lease agreement	15 725
3.	Matshehla	Capricorn	66	Crop	Lease agreement	396
4.	Strydpoort	Capricorn	6	Livestock	Lease agreement	8 451
5.	Lwalalemetse	Capricorn	126	Livestock & Crops	SLAG ¹³	1 562
6.	Ikageng	Capricorn	102	Crops	SLAG	418
7.	Laboheme	Bohlabela	383	Crops	SLAG	425
8.	Makgofe	Capricorn	37	Broiler & Crops	SLAG	151
Total			833			28 428

3.8.2.2 Business plan for pilot land reform

The development of the business plan was coordinated by the sub directorate of Extension and Training, and the Chief directorate of Agriculture Regional Services.

The business plan developed five outputs of the projects namely:

- Developing the profile of land reform clients;
- Identifying capacity building needs and programs for the beneficiaries and extension staff supporting those farmers;
- Developing an appropriate extension program with implementation plan for land reform;
- Developing extension management information system for the projects; and
- Establishing linkages with relevant support service providers.

¹² This is state land offered to farmers with an option to buy should it be found to be free from land claims. If it is claimed the lesser is notified and the lease terminated.

¹³ The acronym SLAG refers to Settlement for Land Acquisition Grant, being a grant obtained from the Department of Land Affairs. The communities were grouping themselves and each member was granted R16 000. 00. Resources were pooled to purchase the land. A Trust or Community Property Associations (CPA) was the legal entity used to transfer the land to the new owners.

The business plan was submitted to the National Department of Agriculture outlining the budgetary requirements. The National Department of Agriculture granted Limpopo Department of Agriculture (LDA) an amount of R1.5 million. The duration of the project was 12 calendar months.

3.8.2.3 Appointment of consultants

Two consultants were identified to perform certain tasks. The first consultant was mandated to produce a desktop study about land reform practices tapping on experiences outside and within South Africa. The consultant was guided by terms of reference developed for this purpose. The task culminated with a set of recommendations of the study.

The Department of Agriculture of Limpopo (LDA) developed criteria, and terms of reference for the selection of the second consultant, Development Focus of South Africa (DFSA) who received the bid to implement the recommendations of the first consultancy in four selected pilot projects namely Makgofe, Nwanedi, Strydpoort and Steilloop. The LDA monitored the activities of DFSA and reported on a monthly basis.

3.8.2.4 Findings of the provincial pilot projects

The detailed finding of the implementing agent is attached as “Annexure C” The lessons learnt are as follows:

- The implementing agent DFSA provided technical training as identified during the need assessment. They outsourced where they did not have expertise. Both farmers and extensionists were exposed to practical training. Although not sufficient extensionists visited institutions such as Irene, the livestock branch of the Agricultural Research council as well as Hygrotech field trial plots.
- Farmers were prepared to adopt the team work approach especially where they worked as groups as in the SLAG projects. Those who came from leased projects

such as the Steilloop were prepared to collaborate with external agents. They collaborated with ARC and SAVet. The latter offered to provide services on condition that farmers sign contract to buy all livestock remedies from them.

- Extensionists were re-oriented prior to the implementation of the training to farmers. This gesture helped to prepare the local extensionists for the after care when the implementing agent (DFSA) exited the pilot project. The local extensionists developed more confidence and their interaction with farmers improved making it easier during farmer training. It also improved mentorship and monitoring. The chances that the project would be more sustainable were also improved.
- Fundraising skills were imparted to the farmers capacitating them to identify and to access and identify sources of funding for their projects. Farmers complained that financial agents were far from them. Experience has shown however that as long as farmers are organized financial institutions come to the farmers providing they have potential to do good business with them.
- The performance of extensionists in land reform was not satisfactory. Consequently the performance of all extensionists linked to land reform projects ought to be monitored on a monthly basis by the district management.
- Farmers who were new to farming required more time to be introduced into farming. The relevant management training was provided during training sessions.
- Land reform projects did not have any explicit short, medium and long term development plans, and their business plans were considered not to be realistic.
- Farmers tended to show a dependency upon the Department. Farmer institutions were found to be weak in varying degrees. Some projects were well constituted (Steilloop – Rebone Farmers Association,) but without the enforcement capability of a constitution. Others did not even have working committees (Ikageng) or any constitution to guide them in their daily activities (Lwalametse).

- All SLAG projects faced the challenge of dealing with Trustees or ‘intruders during harvest time’ who approved not to understand that they had to offer their labour in producing whatever income is accumulated by the project before sharing profits (e.g. Makgofe). Many Trustees came to share the profit in Makgofe without re-investing a percentage of profit into the project resulting in the collapse of the project(until it was saved by a donation from the Department of Health and Social Welfare).

3.9 CONCLUSIONS

Having discussed the four broad categories of extension systems namely top down, participatory, contract farming and rural development one can conclude that: there are different ways of organising extension. According to Baxter (1989:154) a basic consideration to be considered is the national policy framework within which such systems operate.

Extension systems are organized within a particular environment for a particular predetermined objective. There is no “one size fit all” extension system. The commodity approach can serve as an illustrative example. Areas differ in terms of agro-ecological zones, size of farms, farming systems and regional characteristics. It is imperative that extension develops a program which is specific to the needs of each group. It is quite feasible to have different systems operating side by side in a particular region /district.

It is important to consider the aspect of sustainability when developing extension systems. Out of the four criteria (namely situation specificity, financial sustainability, system flexibility and system wide participation) promoted by the World Bank, financial sustainability was placed in the fore front. Extension systems should demonstrate the sustainability in both financial (profit) and good conservation practises (World Bank, 1990). This can be achieved in various ways such as developing capital resources in the form of donor commitment, fee based cost recovery and the creation of endowment funds. (For example the T & V System collapsed when external financial support was withdrawn).

Extension depends on the willingness of both the implementing agents and the clients who should have a positive attitude in conceptualization and the execution of extension programmes. The success of the green revolution is a classic example showing that other forms of approaches such as top down can yield positive results when well managed. This also applies to commercial farming (with a consideration to the question of sustainability).

Based on the above findings, it can be concluded that there are a variety of approaches that depend on a number of factors hence the study to offer more clarity in terms of approaches within Limpopo.

The BASED pilot projects showed positive impacts from the participatory extension approaches. Participants could substantiate their cases through realistic evidence. In the case of the Dutch partnership, the practice in land reform did not have a basis for alternative extension approach because the participants were still heavily dependent upon the department.

The situation was compromised by the government programme that encouraged grants such as the Comprehensive Agricultural Support programme (CASP). This offering seemed to be in conflict with the principles of alternative extension which promotes self reliance in the case of BASED. Land reform participants from leased and SLAG projects were preoccupied by challenges they faced and had to spend time trying to sort out the institutional arrangements of their projects rather than devoting their energies to developing new ways for providing and offering extension.

The situation called for decisive leadership both from the farmer associations and from the Department. Efforts were made by the LDA to resolve the matter through the introduction of the policy of De-registration of absentee members in the projects.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The quality of research data depends on the quality of the information obtained from the respondents. This study coincided with a bigger study which was commissioned by the National Department of agriculture investigating a more efficient Extension Model for South Africa. A National Project Manager¹⁴ was appointed following the completion of several donor funded projects of which the details have already been reported in the previous chapter. Participation was the key issue in the development and execution of the research instrument.

4.2 DEVELOPING THE RESEARCH INSTRUMENT

The key issue guiding the investigation was the participatory condition, implying the intensive involvement of role players i.e. the extension managers as well as frontline extension workers. The initial involvement was in the form of a national workshop to which every one of the nine provinces was invited to send a delegation of about 10 representatives. Other role players invited were NGO's, farmer organizations, research institutions and tertiary education institutions.

The workshop, in general, was conducted in such a way as to facilitate the gathering of ideas, viewpoints, opinions, suggestions, etc., but also to allow a selection of the more valuable and founded viewpoints. The methods used within the group sessions involved nominal group techniques to ensure that no potential contributions were overlooked or overruled. This was invariably followed by Delphi procedures to facilitate interaction and the possibility for participants to associate themselves with viewpoints they believed to be the well founded.

The consensus opinion emerged from the workshop that no rigid model, irrespective of its nature, is acceptable because the situations between and even within Provinces

¹⁴ *Prof Düvel from the University of Pretoria was appointed in 2002.*

vary too much. However, the workshop did come up with a list of what, according to the majority opinion, was regarded as the most important principles. These principles were further refined and supplemented in a series of follow-up meetings of Provincial Programme Managers, who then, under the leadership of the National Programme Manager (Prof. G. H Düvel) proceeded to conceptualise these principles, and in that process identified the various alternatives within each of these principles. This process culminated in the preparation of a discussion documents (see Appendix A) that served as a basis for providing feedback to the extension fraternity and for receiving, in group sessions, an indication of their viewpoints and preferences.

Group sessions were held throughout the Limpopo Province, usually at regional or district level. In most cases they were preceded by discussions with the provincial management to win their understanding and support. The prospect of ultimately obtaining a report on the provincial or local situation, and thus receiving a valuable management tool, led to widespread involvement of extension staff in the interaction and feed-back process.

4.3 SAMPLING PROCEDURE AND SIZE

The degree, to which the extension workers within the province were involved, is indicated in Table 4.1.

Table 4.1: The sample size and sample percentage of extension personnel involved in group interviews

District	Total extension personnel	Respondents	%	Sample %
Sekhukhune	107	63	58.87	19.4
Mopani	133	36	27.06	11.1
Vembe	235	43	18.29	13.3
Bohlabela	97	57	58.76	17.6
Capricorn	169	110	65.08	34.0
Waterberg	59	15	25.42	4.6
Total	800	324	40.50	100

Out of 800 extension personnel¹⁵ in Limpopo 324 were involved in the group discussions constituting 40.50 percent. Waterberg had the lowest number of respondents, although when considering the existing size of the extension personnel at the time of the study (25.42 percent) it can be regarded as acceptable. Capricorn was best represented with 65.08 percent.

4.3.1 Interviewing procedure

Interviews were arranged at various centres within the Limpopo Province namely Mokopane (Waterberg District), Polokwane (Capricorn District), Thulamashashi (Bohlabela District), Madzhivhandila college (Vhembe District) Lebowakgomo (Sekhukhune) and Giyani (Mopani District). A copy of the discussion document was handed out to every participant for completion. Respondents were expected to give their views and preferences after explanation and background information provided by the facilitator and comments and contributions by other participants.

In order to gather informed opinions, participants were provided with the necessary background reasoning, explanations of the pros and cons and the implications of many of the alternatives within the principles. An interaction and exchange of viewpoints between the participants was promoted. Group interaction had to be restricted at times as, the group sessions took anything from six to eight hours or even longer. Before ultimately indicating their final viewpoint on the discussion document, it was emphasized that there were no right or wrong answers. This was done to encourage honest opinions and thus reliable information.

The provincial representative accompanied the National Program Manager who facilitated the group sessions during the group interview sessions, which took place from September until the middle of November 2002. Special care was taken during the group interview sessions to ensure that respondents understood the issues and

¹⁵ *The extension personnel refers to the work force doing mainly field work- specializing in crop production, animal production, animal health officials, resource utilization, agricultural extension, it also include professional officers known as subject matter specialists. The category does not include all support.*

knew how to fill in the information. A data projector was used to demonstrate how to complete the questionnaire in order to minimise mistakes by respondents.

There was no selection or sampling of the extension personnel attending the group interviews. The extension officers were invited through the chief directorate of Farmer Support at Head office, and it was open to everyone to voluntarily attend the interviews. The dates were carefully selected with the cooperation of the District managers to ensure that they would not conflict with district events.

CHAPTER 5

CURRENT SITUATION OF EXTENSION IN LIMPOPO

5.1 INTRODUCTION

The purpose of the chapter is to introduce the reader to the agricultural technicians of the province in order to get a better understanding of extension delivery. The chapter draws experience from two programmes of the Department of Agriculture, namely the Limpopo Agricultural Development Programme (LADEP) and the Broadening Agricultural Services and Extension Delivery (BASED). Both programmes are relevant because they gave substance to the baseline of extension (Manstrat, 2002) and the impact of BASED in two districts (Zwane, 2001).

5.2 BACKGROUND OF THE PROVINCE

There are two distinct farming patterns in the province. One pattern is characterized by large-scale commercial agriculture with freehold land tenure while the other is characterized by small-scale and subsistence agriculture. It is estimated that the province has a total area of 13,8 million hectares with 7,8 per cent of the total area being under dry land cropping, 1.0 per cent is under irrigation and 77, 4 per cent is natural grazing (Department of Agriculture, 1995:1). The major products that contribute to the economy are beef, maize and vegetables.

According to research (Nesmvuni, 2002:23) animal products contribute 51 percent, horticulture 31 percent, field crops 17 percent, and forestry and others 1 percent. Agricultural production in many parts of Limpopo Province is greatly limited by the abuse and deterioration of natural resources, resulting in soil erosion, declining soil fertility, veld deterioration and the depletion of water resources (Bembridge, 1988:22 and RDP, 1995:6). In one of the districts namely the Schonoord area, soil erosion is particularly serious and is being addressed by the Department of Agriculture with the assistance from a donor organization namely the Japanese International Agency for

Cooperation (JICA). The six districts of the Province are indicated in the districts orientation map, Figure 5.1.

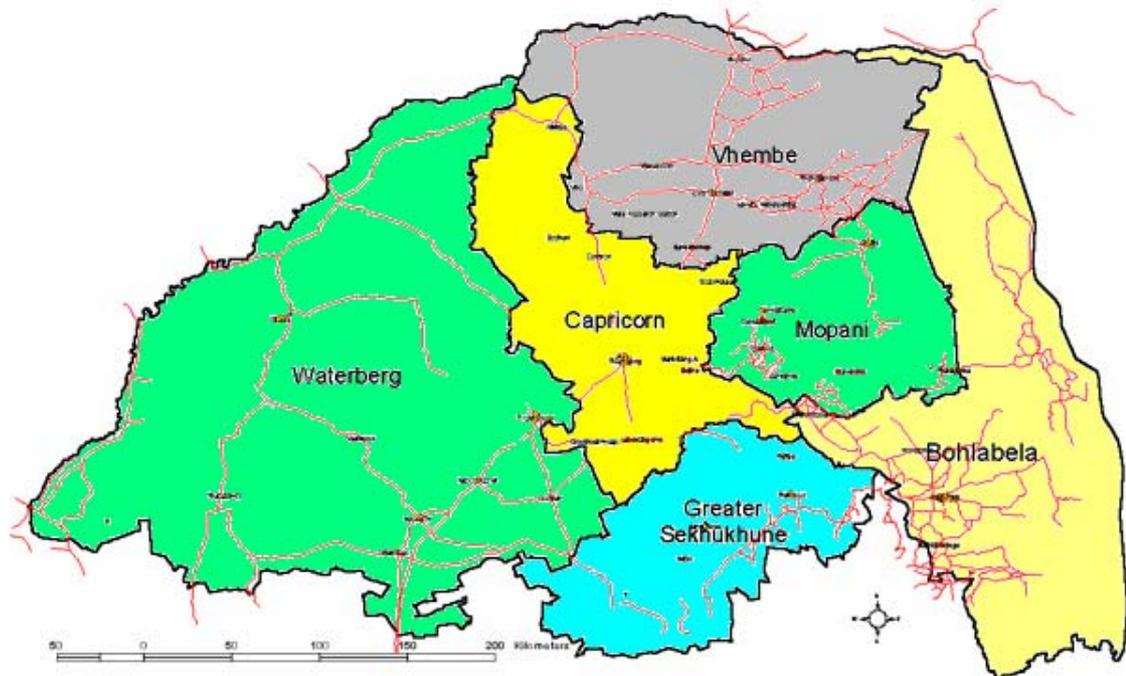


Figure 5. 1: Districts in the Limpopo Province

5.2.1 Present ranks of agricultural technicians and operational areas

The Limpopo province has 859 extension personnel who 520 of which are categorized as agricultural technicians /extension workers, 188 as animal health technicians, 92 as development technicians/Land and infrastructure, 9 as animal production technicians, 13 as state veterinarians and agricultural scientists specializing in different fields namely (5) horticulturalists, agronomy and /crop scientists (18), animal scientists (4), economists (6), soil scientists (4). The agricultural technicians play an important role in the chain of development by linking farmers with sources of knowledge.

Agricultural technicians are allocated wards to service the communities and farmers in rural areas in terms of their agricultural requirements. A ward includes a number of villages with more or less the same agro ecological characteristics especially where dry land farming is practiced. The extension to farmer ratio was never stable. Some

scholars recommended the extension to farmer ratio of 1:1000 families but this is selectively realized while it is probably too wide.

Farm families diversify their farming enterprises in order to spread the risk of crop failure which makes it even more difficult to service such a huge number of households. The ideal /workable extension to farmer ratio is influenced by the type of farming, the types of farmers and the sensitivity of the natural resources of the area. Zwane (1988) found that the highest number of successful farmers who would be serviced by a “committed to work” extension worker /agricultural technician was between 300 and 500. In the case of irrigation schemes the norm used by the then “Department of Bantu Administration” in the betterment areas of the RSA was 1:40 (Lilley, 1978).

The Department of agriculture identified areas and built housing and office accommodation for its officials in close proximity of the villages. The numbers of agricultural technicians were few in the past two decades and were deployed in areas far from their home villages and were using bicycle as means of transport. However with the improvement of modes of transport to motor vehicles more qualified agricultural technicians were hired by the Department of agriculture and the trend has been that many have requested transfers to work either in their home villages or in the neighbouring villages.

Most of the extension workers have the rank of agricultural technician. When the official is promoted he becomes a senior agricultural technician. Further promotion earns him the rank of chief agricultural technician, a principal agricultural technician or a control technician. The agricultural technician’s present ranks are by definition not professionals.

The South African Society for Agricultural Extension (SASAE)’s Strategic Initiative Sub-committee (2002:1), identified the present ranks within the Department of Agriculture in South Africa as one of the major constraint because it does not really provide for a career path for professional agricultural technicians. Table 5.1 gives the situation at the time of survey.

Table 5.1: The number of extension personnel per rank in the different districts of the Limpopo province and the number of personnel being part of the provincial sample

Districts of Limpopo	Directors	Dep. Directors	Asst. Directors	Scientist Smr.	Scientist	Princ.ipal State	Veterinarians	Chief Agric. Technician	supervising other	Smr. Agric. Technician	Agric. Techn.	Learner Techn.	Total
Sekhukhune	1	1	3	8	2	88	18	6	-	-	-	127	
Mopani	1	1	5	6	-	95	21	4	-	-	-	132	
Vembe	1	1	6	5	2	194	11	-	-	-	-	220	
Bohlabela	1	1	4	7	2	45	25	15	-	-	-	99	
Capricorn	1	1	8	7	4	127	25	15	-	-	-	188	
Waterberg	1	1	4	3	3	41	4	4	-	-	-	61	
Total	6	6	30	36	13	590	104	44	-	-	-	829	

The general picture of agricultural technicians in Limpopo is not satisfactory. The vast majority of agricultural technicians (590) are at the rank of chief agricultural technician. The reason for this situation is that for the past 10 years there were no newly appointed agricultural technicians at an entry level. In addition to this that the number of specialists such as scientists and state veterinarians are inadequate, probably due to the lack of an appropriate extension strategy to address the situation.

Lastly, there is a crisis of supervision of agricultural technicians. The reason for this is that many of the agricultural technicians are now supervised by colleagues of the same rank. In the long run this will affect the moral of the extension workers. Provision needs to be made to recruit new agricultural technicians who should take over from those who will exit the government service either through death or retirement.

5.2.2 Age and work experience

Bembridge, Steyn and Williams (1983:84) found that extension officers who were less than 30 years of age were relatively inexperienced. According to research conducted in the Sekhukhune district, Manstrat (2002) found that the majority of the extension technicians were within the age bracket of 36 to 50, years. In another survey conducted within the pilot areas of BASED, the dominating age group was between 41 and 50 years and this constituted 40.5 percent of the total. The different age groups are reflected in a recent provincial sample in Table 5.2.

Table 5. 2: Age of respondents of a sample of extension personnel in Limpopo

No. of years	Frequency	Percent
<30 years	5	1.5
30-39 years	132	40.8
40-49 years	117	36.1
50-59years	51	15.7
>60 years	6	1.9
Missing	13	4.0
Total	324	100.0

Based on the overall age distribution the agricultural technicians have a greater chance to influence service delivery in the Department. The majority of agricultural technicians (40.8 percent) are in the age bracket that is still energetic. It is an age which drives individuals to achieve more in life. One should however not shy away of the fact that HIV /AIDS is also affecting the health and consequently the productivity of its victims. There is no evidence of its effect in Limpopo as yet (Last 2004:18).

Table further indicates that only 15, 7 percent of the personnel would retire within the next 10 years. The Department should therefore make timeous arrangements to replace these personnel.

Age plays an important role in extension work. Bembridge's *et al* (1983) finds that effectiveness in extension is related to age because of the associated experience. It is assumed that the younger the agricultural technician the lesser his/her experience. Five years of experience is considered as inexperienced since the first two years of the

agricultural technician's time in a new place is taken up acquainting him/herself with the working environment.

Work experience gathered over many years may be lost when officials retire. The writer recommends the introduction of programmes such as mentorship that will ensure that experience is not lost. The different years of experience are shown in Table 5.3.

Table 5.3 Number of years in service as agricultural technicians

Number of years	Frequency	Percent
>5 years	5	1.5
5-10 years	22	6.8
11-15 years	110	34.1
16-20 years	91	28.2
21-25 years	40	12.4
>25 years	45	13.9
Missing value	10	3.1
Total	324	100.0

The extension service of Limpopo has well experienced personnel who know what should be done in their area of work. Although 34.1 percent of the respondents fall within the 11 to 15 years experience group. Experience alone is meaningless unless it yields positive tangible evidence of achievements.

5.2.3 Gender distribution

Van Den Ban and Hawkins,(1990:270-271) found that considerable attention had in recent years been focussed on the large proportion of agricultural work done by women, whereas only a small proportion of agricultural technicians in fact are women. The same view is expressed by Swanson, *et al.*, (1983:16) who acknowledge that a significant proportion of small farmers and farm workers in the Third World are women who make a major contribution to world food production while seldom

benefiting from agricultural extension services. Table 5.4 presents the picture within the Limpopo sampling area.

Table 5. 4: Gender distribution of the provincial sample

Gender	Frequency	Percentage
Male	257	79.3
Female	59	18.2
Missing value	8	2.5
Total	324	100.0

The overall situation of Limpopo reflects a biased picture concerning gender distribution only 18.2 percent being women. In two separate surveys of BASED and the Limpopo Agricultural and Rural Development Programme (LADEP) similar shortcomings were identified. These surveys showed that as many as 77.0 percent of the BASED samples were male while males also dominated the LADEP sample (Manstrat, 2002).

The gender imbalance of technicians within the Department of Agriculture can make it difficult to reach important target groups. If more change in women farmer's behaviour is to be achieved more female agricultural technicians are required. A justified question is whether the large percentage of male technicians is effective in reaching out to women farmers who, according to Progress Report (1995) constitute 80 percent in the province.

It is often said that cultural norms are barriers to female participation in projects initiated by males but there is no concrete evidence to prove this point, it is the writer's view that there is a need to investigate the role culture plays as a barrier to participation in development. Based on these findings, it is recommended that the deployment of a relatively small proportion of women agricultural technicians in the Department of Agriculture need to be reconsidered to ensure that agricultural extension does not by-pass the women farmers.

5.2.4 Qualifications of agricultural technicians

The basic training of an agricultural technician according to Schwas and Allo (1982:3) must include technical knowledge, a sound knowledge of people and rural communities as well as agricultural processes and skills to communicate effectively. Most of the agricultural technicians in the BASED sample had enjoyed twelve years of formal education while the majority of the agricultural technicians from the main sample had diploma qualifications of less than twelve years. These are older extension workers who have a standard 8 plus diploma. The findings are presented in Table 5.5.

Table 5. 5: Number of years spent in junior and senior secondary school

Number of years	Frequency	Percentage
Std 8	33	10.2
Std 9	22	6.8
Std 10	261	80.6
Missing value	8	2.4
Total	324	100.0

The picture that emerges from the table is that agricultural technicians in Limpopo have not spent the sufficient number of years in formal education. According to Table 5.5 10.2 percent of technicians have standard 8 and diploma qualification. It would appear that these agricultural technicians do not have ambitions to further their level of education. One negative aspect that becomes evident as a consequence is that, if they are in supervisory positions they do not serve as role models for their subordinates to aspire for more in life. There is a significant potential of agricultural technicians who should enrol for higher qualifications

In a survey of agricultural technician's knowledge (Bembridge *et al*, 1983:94) finds that their knowledge of applied technology was insufficient and that few agricultural technicians could be considered to have sufficient subject matter and extension knowledge to be able to perform their tasks effectively. The existing knowledge, skills and experience of agricultural technicians in the Department of Agriculture of the

Limpopo Province was analyzed and was found wanting (Manstrat, 2002). A more detailed qualification record is presented as Table 5.6

Table 5. 6: Frequency distribution of agricultural technicians according to their extension function and their highest tertiary qualification (N=295)

Function	Certificate or Diploma		Advanced Dipl. B-Tech or B-degree		BSc, Hons. BSc(Hons)		Masters, MSc, PhD	
	N	%	N	%	N	%	N	%
Agricultural. Technicians	4	100						
Extension Workers	139	87.4	19	11.9	1	0.6		
Extension workers and Supervisors	60	89.6	6	9			1	1.5
Supervisors and Managers	24	85.7	2	7.1	2	7.1		
Support Services	9	50	5	27.8	4	22.2		
Other	12	63.2	4	21.1	2	10.5	1	5.3
Total¹⁶	248	84.0	36	12.2	9	3.1	2	0.7

The impression gained from the data of Table 5.6 is that agricultural technicians possess the minimum entry qualifications required for the job. The majority of 248 (84,0 percent) agricultural technicians are in possession of a certificate or a diploma in agriculture. The number of agricultural technicians trained at more scientifically or post graduate level, which is, BSc, Masters and PhD qualification are few(3.8percent).

This situation presents a constraint when building a team of subject matter specialists and competent agricultural technicians. The Department of Agriculture faces the challenge to train a cadre of agricultural technicians at post graduate level. As it is the question concerning the status of agricultural technician's practical knowledge remains unanswered.

¹⁶ Not all 324 respondents participated (i.e. 29 are unaccounted)

The Department has identified the need for developing its human resources. Bursaries have been advertised to attract scarce resources in the fields of entomology, wine making, veterinary and agricultural engineering and ordinary agricultural technicians. The Member of the Executive Council (MEC) for the Department of Agriculture has initiated mentorship programmes with private farming partners dealing with poultry and crops to re-train agricultural technicians. During the 2002/2003 budget speech he announced 70 scholarships for agricultural technicians.

Unfortunately only a small number of agricultural technicians utilized the opportunity due to logistical problems. Ten officials were sent to Mike's Chicken Farm where they received training in broiler production for 9 weeks. Six agricultural technicians were sent to Buhle Farmers Academy, for vegetable production training for a period of 10 months. Four agricultural technicians attended courses in rural development and cooperatives in Japan. According to Schwass and Allo (1982:9) the educational requirements of agricultural technicians is not finite, being a continuing process which should last for the duration of their careers. It is important that regular training courses be organized, to provide agricultural technicians with up-to-date information and to offer them the opportunity to discuss mutual problems.

There are no wide spread structured programmes for in-service training in the Department of Agriculture. Some form of in-service training takes place in the districts targeting agricultural technicians participating in the donor supported programmes. These programmes include a donor ship from Finland, the GTZ and the local Progress Milling Community Development Programme.

During May 2004, 26 agricultural technicians visited two international research institutes namely the International Center for Research Institute for Semi-Arid and Tropical areas (ICRISAT) and Centre for Maize (CMMYT) in Zimbabwe and the Institute Centre for Research on Agro-forest (ICRAF) in Zambia. A middle management training programme developed by the Management Support Group (MSG) sponsored by the Department of International Affairs (DFID) is targeting middle managers. The support from the office of the MEC is appreciated in this regard.

5.2.5 Marital status

The marital status of agricultural technicians has no influence in the effectiveness of extension (Bembridge, *et al*, 1993:86). Of the respondents in the BASED pilot districts 75, 9 percent of the respondents were married (Considering the farming fraternity Rossouw (1989) found that married farmers tended to keep more goats and cattle than unmarried farmers).

The difference between agricultural technicians and farmers might be insignificant because responsibility tends follow similar patterns irrespective of whether one is a farmer or an agricultural technician. The writer observed that married agricultural technicians in the Department of Agriculture tended to show higher levels of commitment than their unmarried counterparts.

5.2.6 Merit assessment

Düvel (2002: 22) noted that formal not an assurance of competence or of an extension success. Should this be the case then the fault should possibly be sought in the process of assessments and not so much in the principle. Officials are irrespective of their of their functions using the same assessment instrument. A scholar of Bembridge, *et al* (1983:246) suggests a profoma to specifically evaluate the agricultural technicians. Unfortunately the proposal was not implemented.

The suggested profoma has practical aspects to be noted when evaluating and is specifically targeted at agricultural technicians as the nature of their work differs from other civil servants. It includes aspects such as technical competence, extension competence, human relations, knowledge of communities, area land use plan, farmer's records, office management, extension programme work plan, and organization of extension work programmes, leadership characteristics and innovativeness.

According to Düvel (2002) however the merit assessment for the Department of Agriculture in the Limpopo Province was assessed to be satisfactory. The situation of Limpopo is presented in Figure 5.2.

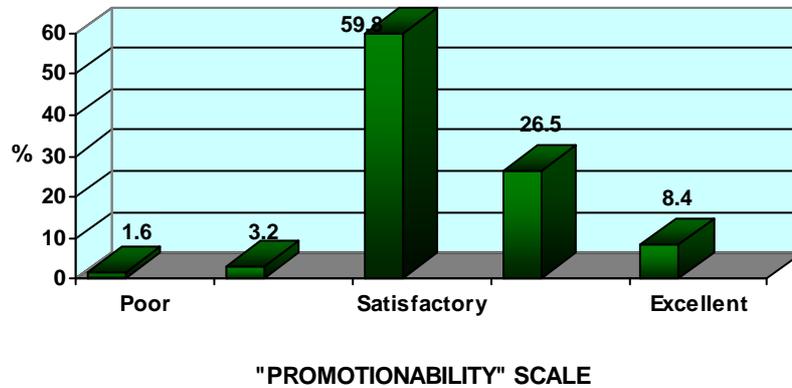


Figure 5. 2: The distribution of frontline extension personnel according to their “promotionability” (N=1199)

The picture that emerges from Figure 5.2 is that the level of promotion ability of agricultural technicians is satisfactory in the Department of Agriculture of Limpopo. The majority of respondents rated 59.8 percent were rated as satisfactory. The scale used is the customary one which denotes the different categories as follows namely Poor (1), not satisfactory (2), Satisfactory (3) Exceptionally good (4), and Excellent (5). The figures need to be challenged, however as it is suspected that supervisors tended to award good marks to their subordinates because of the bias inherent in the approach of the previous merit system.

Some supervisors used to see the system as another way of scooping government money without being honest with themselves in their assessment. This happened in “central merits marking sessions” where supervisors would award marks without any supporting evidence of achievement. In such cases the central merit assessment marking committee would send the report back to supervisors to re-work it and to attach supporting documents.

The performance management system was introduced to the Province in the 1st of April 2002. All categories of workers signed performance agreements with their

supervisors. Civil servants with a post grading below level 13 were expected to sign memoranda of understanding while those above grade 12 were expected to sign performance agreements. The difference between the two performance instruments (performance agreements and memoranda of understanding) is minimal. For instance the performance agreement is expected to include the four perspectives of service delivery (learning and innovation, finance and organizational processes) whereas the memorandum of understanding excludes the four perspectives with the exception of service delivery.

A close review of the practice of the new performance management system suggests that it builds team work because of its consultative processes between the supervisors and the supervisees. It remedies poor performance because it is developmental rather than punitive and it discourages rewards to non- performers which in the past was difficult to achieve. The policy for assessing performance before 2001 rewarded high performers, moving into either second or third salary notches, the evaluation not being objective because it was stained by the supervisor's relationship with his or her subordinate.

It is recommended that a comprehensive training programme aimed at equipping supervisors should be rolled- out to influence the change of mindset of the supervisors.

5.3 EXTENSION PROGRAMMES

According to Van Den Ban and Hawkins, (1990), the main aim of an extension programme is seen as the initiation of change. However many extension services do not work with systematically planned extension programme because they spent most of their time reacting to farmers problems on an ad hoc basis. The emphasis of the Department of Agriculture is to encourage all extension technicians to implement its strategic plan, which prioritises Agriculture and Rural Development Corporation (ARDC) projects, Land reform, Poverty alleviation, Livestock Production and Animal Health, and Human Resource Development. The data of Table 5.7 renders some insight into the practical day to day tasks performed by technicians in implementing the official strategic plan.

Table 5. 7: The mean percentage time spent by frontline extension workers in the various districts on different activities

Activities	Sekhukhune	Mopani	Vhembe	Bohlabela	Capricorn	Waterberg	Total
Registered Projects	17.7	13.1	21.9	19.3	12.8	17.8	16.7
Other proactive extension.	16.0	14.6	13.7	15.9	13.1	13.0	14.5
Reactive extension	13.3	15.2	12.6	12.0	12.2	13.7	12.8
Regulatory work	11.8	14.8	13.0	9.6	13.0	12.9	12.3
Administration	9.8	11.1	10.5	8.7	8.8	12.7	9.6
Management	10.4	42.1	10.6	11.3	9.3	8.1	14.3
Training and Self-develop.	10.1	13.8	11.4	12.7	9.0	9.3	10.9
Representing Dept.	7.8	10.8	9.0	11.5	8.7	8.5	9.3
Other	8.8	15.1	3.7	8.5	8.6	16	9.2
Total							

The emerging picture from Table 5.7 is that agricultural technicians spent most of their time on registered projects, the leading district being Vembe followed closely by Waterberg. Registered projects include focused ones such as poverty alleviation, fish production, milk production, egg production and bee keeping. The least favoured activities are the unspecified ones and having to represent the Department, followed by administrative activities.

Agricultural technicians are expected to use Participatory Rural Appraisal (PRA) or Participatory Extension Approaches (PEA)/ Participatory Development Approaches (PDA). The different pillars of PEA are presented in Figure 5.3.

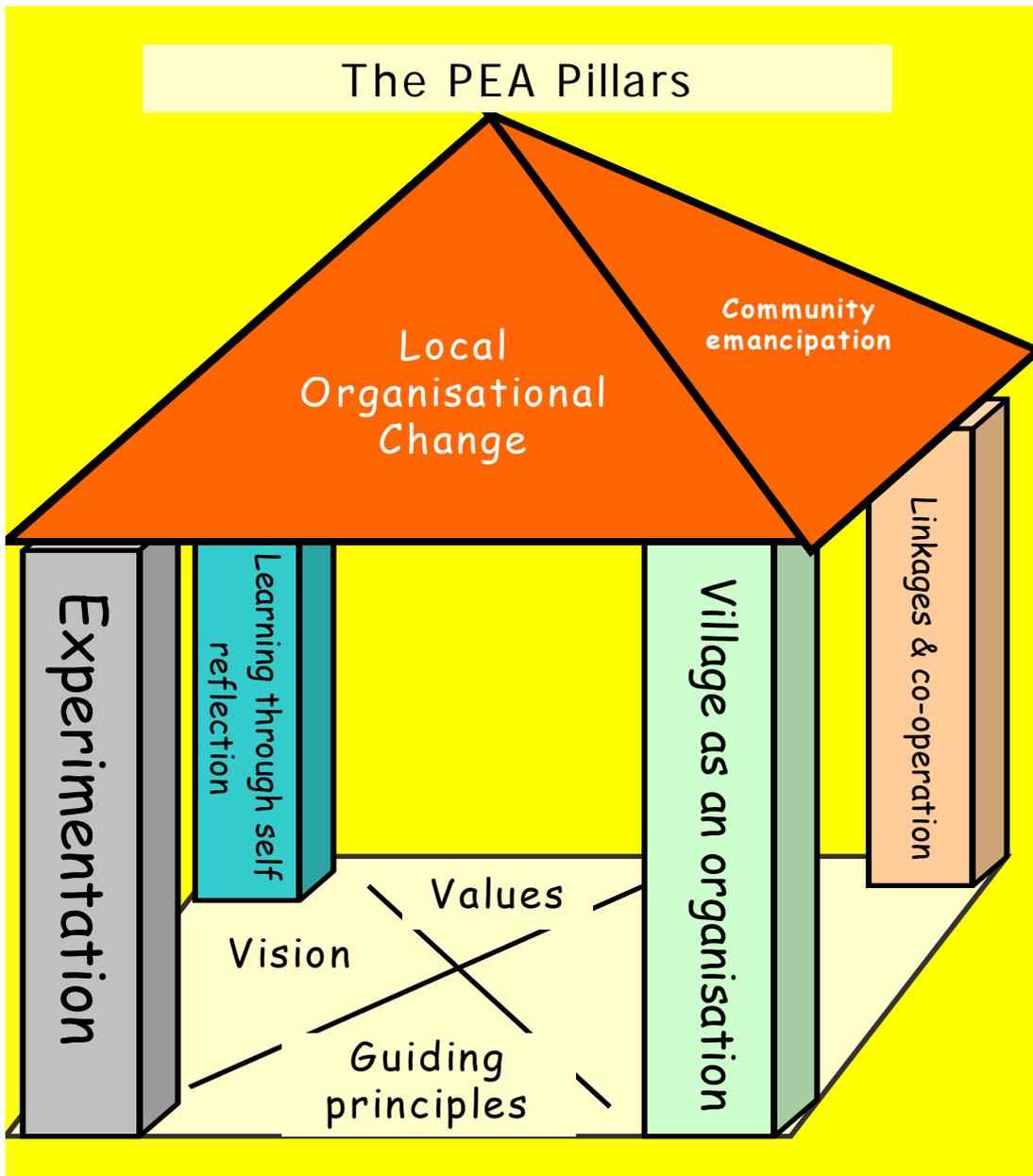


Figure 5. 3: Pillars of Participatory Extension Approaches (PEA)

The graphic presentation is an attempt to the meaning of the pillars of PEA. The emerging picture shows a poor understanding of the implementation of PEA. The majority 54,5 percent of the agricultural technicians in the two pilot districts of Vembe and Capricorn lacked the critical knowledge of PEA while more than 30 percent had no idea at all about the pillars of PEA. Sixteen of the respondents failed to respond.

Some of the lessons developed by BASED include the following:

- The PEA is one of the approaches that can be adapted to be used by non agricultural partners such as local government structures,
- Small and medium enterprise bodies can use PEA to equip their clients for development.
- The acronym of PEA can be changed from PEA to Participatory Development Approach (PDA) transcending the boundary of extension. One community of Ga-Mogano has for example used the concept of PDA to mobilize the whole village to lobby for electricity which it was scheduled for 15 years ahead of time.
- The methods of social mobilization have proved that it can be done concurrently with other forms of mobilization such as experimenting and developing local organizational development.
- Using the village approach is more user- friendly because development is channelled and it is managed without any confusion of who does what and under whose supervision.

5.3.1 Typical projects focus in the districts

Agriculture is practiced over a wide variety of farming systems in the province, but the size of production systems differ per district. The time spent by agricultural technicians on different audience categories is presented in Table 5.8.

Table 5. 8: The mean percentage time spent on different audience categories by respondents in the different districts of Limpopo Province

Provinces	Large scale commercial	Small scale commercial	Subsistence farmers	New farmers (LRAD)	Urban agriculture	Schools	Farm labourers
Sekhukhune	13.3	21.6	27.9	15.2	9.4	11.8	10.4
Mopani	11.6	18.7	31.9	14.0	11.3	14.3	13.6
Vembe	19.0	21.1	35.4	18.0	12.1	10.8	10.2
Bohlabela	11.1	26.3	28.9	15.5	6.7	9.4	11.0
Capricorn	13.4	19.8	23.9	15.7	10.8	10.2	10.6
Waterberg	10.5	19.3	27.9	18.6	11.2	11.5	8.2
Total	13.3	21.4	28.2	15.8	10.1	11.0	10.8

The impression gained from Table 5.8 is that agricultural technicians spent most of their time on subsistence farmers, the highest rating out of the 7 categories being **28.2** percent. The reason for the focus on subsistence farmers is because the majority of farmers are subsistence engaged in some of the projects that cannot be described as profitable. Participants mostly diversify on a small scale or on a subsistence basis. Since subsistence farming depend mainly on good rains, it means that when rains fail, the farmers have to rely on other sources of livelihoods such as pension remittances and income exported by family members and relatives from rich provinces such as Gauteng.

The second most favoured category is small scale commercial. The reason for this focus is because some districts have different sizes of irrigation schemes with farmers who have ambitions to produce for the local or the national markets.

Agricultural technicians will need to consider allocating time to such activities where an impact can easily be recognized. This should be in line with the new Departmental focus areas of value chain analysis, commodity approach, project approach and the municipal focus.

5.3.2 Developmental constraints for farmers

Manstrat (2002) identified a number of non-agricultural constraints and resource requirements that have a direct or indirect influence on the economic viability and subsequent sustainability of agricultural projects in the Province. These constraints include road infrastructure, access to markets and water and electricity charges.

5.4 PRINCIPLES OF POLICY AND ITS IMPLICATION IN AGRICULTURAL DEVELOPMENT

5.4.1 Introduction

The problems of establishing or maintaining an effective agricultural extension service can be traced back to the lack of a realistic policy or an unstable framework for charting the mission of an extension system (Contado 1997:107). The principal objectives of extension throughout the world do not differ and this is attested by many authors. It is recognized as the improvement of the well being of the farming communities, with the emphasis on poverty alleviation, increased farm income, self reliance and projects or programme ownership (Adams, 1982:4; CAADP 2006; Contado, 1997:107, Hayward, 1989 and Weaving, 1975).

The main aim of agricultural development is to have an improvement in the livelihoods of rural people and to see positive on-going change in their situation. The focus is on people and on getting these same people involved in their own development, enhancing their problem-solving capacity and building self-reliance. Extensionists have to facilitate the process “doing development *with* people and not for them. In order for the organization to achieve this, it is expected that strategies and programmes should be designed within an appropriate policy environment which support this process, building self-reliance and not creating dependency (Ehret, 1997).

It is therefore opportune to focus on what policy is the principles of policy formulation and the implications of policy in agricultural development. There are different ways to look at policy. According to Willieboat (2007:53) there are different kinds of policies.

5.4.2 What is a policy?

There is no simple answer to this question. It is for this reason that many people claim to have little or no understanding of policy. From a practical point of view, a policy can be described as a set of rules that give direction, a working tool or a guideline (F.C. Business Consulting, 2007:51). In other words a policy is a broad concept that embodies several different dimensions. The challenge is to articulate the meaning of this term in a comprehensive and comprehensive way. There are two broad categories of policies namely substantive and administrative.

The substantive kind of policy includes legislation and practices. Examples of substantive policies are income security, employment initiative and social exclusion. The second kind of policy focuses upon administrative procedures. These involve (among others) the collection of statistical information and the evaluation of complex issues.

Substantive and administrative policy can be further classified as vertical or horizontal policy. The former refers to policy that is developed within the organization that has the responsibility for its implementation. Horizontal policy making is developed by two or more organizations each of which have the ability or mandate to deal with a dimension of a given situation.

It is noted that governments are focusing their efforts upon horizontal policy-making in recognition of the fact that many of the objectives they seek to achieve are complex and relate to the mandates of two or more departments, jurisdictions or non-governmental organizations. Areas of common interest include for example climate change (Smith 2003) as cited by Willieboat (2007:53).

Policy can also be categorized as reactive or proactive. Reactive policy emerges in response to a concern or crisis that must be addressed such as health emergencies or environmental disasters. Proactive policies by contrast are introduced and pursued through deliberate choice. What is common to both is that they need to be based on tested principles.

Experience in developing policies in general one has to follow a number of steps. Willieboat (2007:53) identified the following steps namely defining the issue or problem, gathering the necessary information on the issue, appointing a committee in charge of the development process, discussing and debating at the management level, holding the first reading, publishing the draft for public comments, making revisions, holding the second reading, adopting the policy, distributing the policy to the public, policy evaluation and revision or modification.

5.4.3 Principles of policy formulation in extension

There is no standard formula to be used in formulating agricultural extension policies. Formulating and enacting a sound comprehensive and useful extension policy is a difficult undertaking (Contado, 1997:107). However a policy should be specific to a situation and the fact that public policy should seek to achieve a desired goal that is considered to be in the best interest of all members of society. This view has been expressed by some authors (Hayward, 1989, Willieboet, 2007:54).

When examining extension practices for effectiveness, Lawrence and Lorsch (1967) cited by Hayward (1989:139) suggest six differentiation dimensions of organizations; namely goal orientation, time, interpersonal issues and structure. Goal orientation should be seen as the first principle and there is reasonable agreement with other authors concerning this point (Contado, 1997). An attempt is made to identify what should be covered in formulating extension policy (Contado, 1997:111) and these are discussed hereunder.

- **Goal orientation or extension mission**

Goal orientation looks at the particular objectives of an extension system. Clarity of goals is fundamental in designing effective systems while one observes that the policy makers, budget directors and extension planners rarely start by establishing goals. On the contrary to this observation it is accepted that that most governments do have master plans for extension with detailed goals of extension but they do not have a strategy for their agricultural sector as a whole (Ameur, 1994:10).

- **Extension approach and functions**

Policy should address the question of which extension system should be used. Most extension systems in developing countries give primary attention to technology transfer. Following the adoption of Participatory Extension Approaches (PEA) in Limpopo, which is a multi-prong, a single extension approach may not suffice to service its clients (Contado1997).

- **Subject matter coverage of extension**

Broadly speaking, the subject matter of extension is implied in the mission statement and even in the title of the extension service. The extent to which subject matter specialists would be deployed should be clearly defined.

- **Geographical coverage**

Geographical coverage can be an important policy issue because of both political and cost implications. Extension personnel will tend to be more responsible to those levels of government that provide extension funding. Some economists believe that agricultural extension should be concentrated to those agricultural areas that are well endowed in terms of both human and natural resources.

- **Clientele or target beneficiaries**

A common criticism of extension services in developing countries is their neglect of the vast number of small-scale farmers in favour of fewer numbers of large farmers. This is a policy issue because of its implication within the mission and goals of extension. The inclusion of women and rural youth is generally recognized in terms of their numbers and contribution to farming.

- **Organizational issues**

The extension organization embodies different aspects of an extension system and it provides the management framework for the extension service. This is a policy issue because it affects the scope, magnitude and structure of the extension system (Contado, 1997).

- **Extension staffing issues**

Policy should address the question of the type of qualifications and the number of staff required as well as the ratio of field extension personnel to the number of farmers, households, or other target group, and how they should be deployed (Contado, 1997).

- **Extension funding**

The most difficult and challenging policy issue facing extension today is to secure a stable source of funding. Studies carried out in developing countries indicate that the returns to extension expenditures are high. Policy makers should examine this issue carefully in deciding what level of public funding is necessary to support extension in relation to the needs of farmers in the country (Contado, 1997).

- **Stability**

A good extension policy should promote extension system stability, yet allow sufficient flexibility to reflect the dynamic nature of the agricultural sector. Extension should not be rigid but rather be responsive to all major groups of farm people and sufficiently inclusive to all public, private and Non-Governmental organizations to contribute fully to the developmental goals (Swanson, 1990).

5.4.4 Implication for the policy in Limpopo

Sustained agricultural growth is crucial for the reduction of hunger and poverty across in South Africa and the Continent of Africa (in line with Millennium Development Goals). The African Union's New Partnerships for African Development (AU-NEPAD) has issued a Comprehensive African Agriculture Development Programme (CAADP) which describes African leaders' collective vision for how this can be achieved. The nonexistence of an extension policy might work negatively towards the ambitious goal sets at 6% growth per annum for the sector. The fact that the African countries including RSA should honour the millennium goals, suggest that appropriate extension policies should be developed.

People or farmers should be assisted through appropriate policy instrument to change their attitude for positive alignment and not just expect government to come and do everything for them. Although there are times when agricultural development initiatives such as projects and programmes are designed from the top these can preferably be characterized as relief rather than development. The Skills Development Act of 1997 should incorporate information to the extension policy.

Rural people have problems to be overcome and opportunities for improvement have to be created learning to do things differently and making a change for the better. According to Hayward (1989:139) there can be no one system of extension suited to all conditions. The variation in agro-ecological condition, socio-ecological environments and administrative structures is such that one system cannot be expected to suit all conditions.

Following this line of argument one can therefore conclude that policies too can not be formulated to suit all situations. To be successful, policies must be formulated to fit a particular situation. Policy formulation knowledge can be drawn from economic and management sciences and be applied to the science of extension.

One of the challenges faced by the Limpopo Department of agriculture is that no policy has been developed for extension per se while many policies have been developed on issues such as the Rehabilitation of Small Scale Irrigation Schemes (RESIS), the mechanization revolving credit scheme (MERECAS), Agri-BEE, Internet and use of 3-G, HIV /Aids policy and others (Department of Agriculture, 2007).

Since Limpopo has adopted the commodity approach, the value chain mapping and analysis should be part of the extension policy using the support package which includes business planning, access to credit, farm visits & farming advice/extension. One should however also consider the incorporation of the following critical factors for success for interventions namely management support, training in extension, production management, technical aspects, quality production, marketing, business planning and financial management.

Since there is no single way of organizing extension (Hayward, 1989 and Duvel, 2002) it can be concluded that extension policy should remain flexible and dynamic. The next section addresses the extension initiatives that were done prior to the national extension survey.

5.5 ORGANIZATIONAL CHALLENGES

Manstrat (2002) found that a number of non-agricultural constraints and resource requirements exist that have either a direct or indirect influence on the ability of agricultural technicians to provide an effective and efficient service to farmers in the Province. The most important constraints experienced by agricultural technicians include the lack of transport (this constraint having a direct influence on their ability to reach farmers on a regular basis as well as during important events such as farmers days and training events) and little or no access to sources of agricultural information especially those who operate in the remote areas of the province.

The recent changes in the Departmental organogram (in July 2006), where extension has been shifted from head office and the district to the municipality of agriculture is not a favoured option. Most extensionists feel neglected and are demoralized by this approach. Their perceived lack of linkage with the leadership is to some extent interpreted as a reason for concern. Other challenges relate to the accessibility of agricultural information.

Although most agricultural technicians are aware of the large amount of information available on the internet, they do not have access to internet facilities causing constraints not only in terms of access to information, but also in terms of communication (i.e. e-mail). There are a number of other Government Departments in the province (and the Districts) involved in the provision or funding for agricultural development (such as Social Development under its Poverty Alleviation Scheme).

These Departments initiated poorly planned projects in the Districts and agricultural technicians have found it extremely difficult to rectify consequential problems.

The Integrated Development Programmes (IDPs) are not well coordinated and some departments do not attend the centrally coordinated meetings of IDPs.

5.6 CONCLUSION AND RECOMMENDATIONS

The outstanding findings of this chapter among others include the following:

- Agricultural extension is often criticized for lack of quick results where it operates. This may manifest itself by failure of agricultural programmes. There are underlying causes of failure. A study has shown that lack of efficient government services to provide necessary support is partly to blame (Van den Ban and Hawkins, 1990:250). Other reasons may include the way in which extension institutions are organized and managed.

Based on the above mentioned findings the following policy guidelines are suggested:

- The supporting institutions that train agricultural technicians should be both farmer centred and be responding to the professional needs of the agricultural technicians. Refresher courses for agricultural technicians offered by the Farmer Centre for Excellence, formerly known as the Colleges of Agriculture should be encouraged in the Department.

This should help to bridge the gap of the serious lack of knowledge and skills that exist amongst the agricultural technicians in terms of economic factors (farm planning, financial planning, economic viability and marketing). Leadership in extension should be encouraged by appointing personnel qualified in agricultural extension.

- The diverse farming system of agriculture in the province presents a challenge to the extension technicians in terms of the transfer of knowledge and skills. Systematic and specialized training is recommended.
- Large numbers of people are involved in projects that should provide higher cash turnovers over the short term (hydroponics, community gardens and poultry), but

these projects can hardly be described as profitable, mostly due to the number of people that have to earn an income from these smaller projects. It is suggested that norms based on profitability be developed for each type of project.

- The environment for extension is not favourable. It keeps on changing and leadership needs to keep an eye on it. Agricultural technicians are expected to perform functions from widely diverse agricultural systems and therefore they need support in terms of equipment and facilities.
- The Department of agriculture in Limpopo has adopted PEA as one of its interventions to respond to the needs of small scale farmers. PEA operates under a programme called Broadening Agricultural Services and Extension Delivery (BASED). A system to mainstream the PEA should be adopted which should assist agricultural technicians to adapt to its practices. PEA should be monitored through a reporting format designed for this purpose.
- One of the challenges identified is market access. Agricultural technicians are expected to assist the farmers to produce while markets are absent. It is suggested that partnerships be developed with institutions that have strong links with markets (such as Progress Milling).

CHAPTER 6

EXTENSION PERFORMANCE AND EFFICIENCY

6.1 INTRODUCTION

Extension services in developing countries are concerned with delivering appropriate extension services. Locally the agricultural extension service is the main instrument used by the Department of Agriculture to achieve its goals. Public extension services in particular, face a number of challenges such as ensuring that agricultural technicians offer efficient and effective services to their clients. If extension systems are to meet the accountability expectations it is important that their performance is such that it justifies the investment of public funds in extension. For this reason their performance is important and forms the focus of this chapter. The search for more appropriate or effective approaches is only meaningful against the background of the current efficiency situation.

6.2 THE CONCEPT OF EXTENSION

Extension is a term which is open to a variety of interpretations and this is evidenced by a number of scholars who attempted to define the concept (Röling, 1988:36; Oakley and Garforth, 1985:21; Swanson and Claar, 1984; Bembridge, 1990:11; Van den Ban and Hawkins, 1990:13; Williams, 1968:8; Rivera, 1989:94). This leads to the conclusion that there is no single definition which is universally accepted or which is applicable to all situations (Oakley and Garforth, 1985:9). A likely reason for the widespread opinion is that extension is influenced by culture, values, beliefs and practices.

Respondents were asked to make an assessment on a scale representing on the one extreme (1) extension as a form of education being primarily pro-active in nature and focusing on future problems that clients might encounter, and on the other extreme (15) an understanding of extension that is of an advice-giving nature, responsive to

the clients' current problems and consequently of a reactive nature of the type of extension practised in their areas. The responses are presented in Table 6.1.

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)

Districts	Mean lowest scale point	Mean highest scale point
Sekhukhune	3.61	10.40
Mopani	4.46	10.46
Vembe	4.21	11.58
Bohlabela	4.02	9.31
Capricorn	4.47	10.47
Waterberg	5.07	10.07
Total	4.30	10.38

The overall impression gained in the above Table 6.1 is that there is no support for the unidimensional understanding of the concept within the continuum. It means that the rating does not settle for a fully pro-active education or re-active advice. When comparing the districts regarding high and low mean, the differences are limited. As far as the educational dimension is concerned, Waterberg and Sekhukhune represent an extreme situation.

The possible reason for Waterberg's influence for the understanding of the concept is the commercial exposure of some agricultural technicians. One expects that in the two pilot districts, namely Capricorn and Vhembe, the concept of extension would be inclined to be more education because of the nature of extension approach they promote within the BASED programme. Unfortunately this was not the case.

6.3 AUDIENCE FOCUS

According to the White Paper of Agriculture (1995:4) a farmer, irrespective of his/her race, gender or scale of production, is a land user who engages productively in

agriculture, either on a full-time or on a part time basis and regardless of whether agriculture forms the principal source of income or not. The new political dispensation in the country has led to an increased focus on the subsistence and small-scale farmers. The respondents were asked to indicate their current emphasis or focus from three alternatives namely primarily small-scale farmers, primarily large-scale farmers and equally large and small-scale farmers. Their responses are summarised in Figure 6.1.

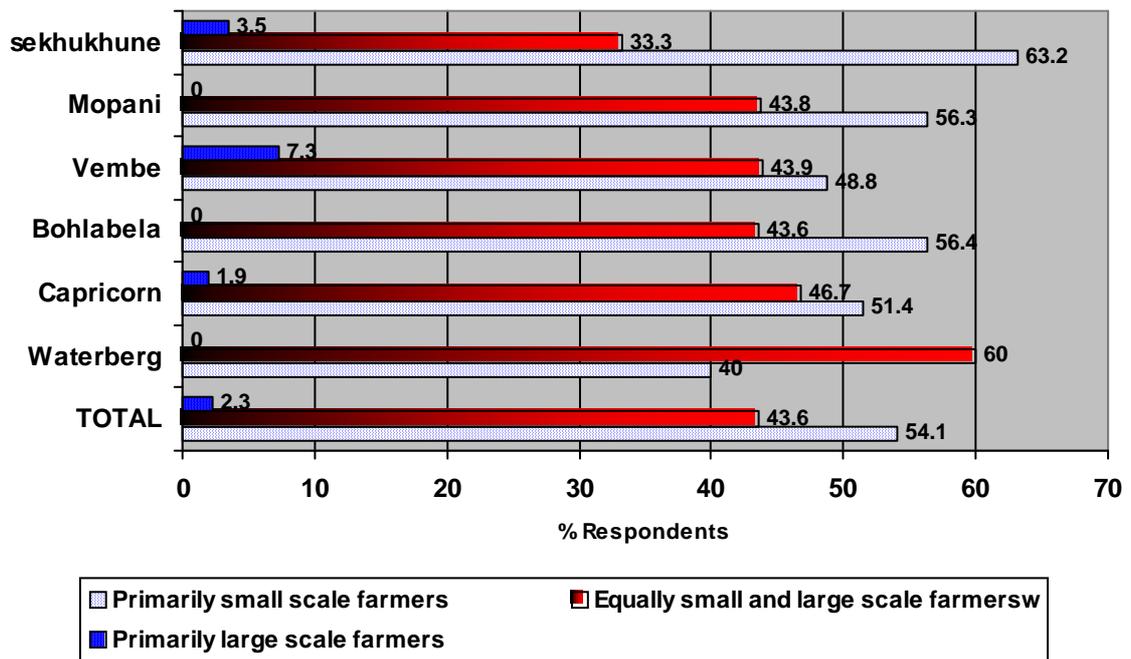


Figure 6. 1: Percentage distribution of respondents according to their focus on small or large-scale farmers

The picture that emerges from Figure 6.1 shows that the emphasis of the Limpopo Province is currently on small- scale farming. For example, five districts out of six focus primarily on small-scale farmers. The sixth district namely, Waterberg, focuses equally on small and large scale farmers. The reason could be attributed to the dominance of commercial farming in that district with relatively small pockets of communal land, such as the former “Mokerong district of Lebowa”

Another possible explanation for the equally small and large scale farmers’ focus could be a misunderstanding among agricultural technicians of the term “commercial” farming. The term might have been interpreted to mean the emerging farmers because

Waterberg is one of the districts that were first piloted with the leasing of state land to 11 livestock farmers in 1997. It can be concluded that if the definition of a farmer in Limpopo means anyone who tills the land or keeps few chickens or heads of livestock, the implications would constitute an enormous challenge for policy and service delivery.

In a follow-up question aimed at gaining more insight into the audience focus the Agricultural technicians were asked to indicate the time spent on different types of clients. Table 6.2 gives a detailed overview of the responses.

Table 6. 2: The mean percentage time spent on different audience categories by respondents in the different provinces of South Africa (N=1199)

Provinces	Large scale commercial	Small scale commercial	Subsistence farmers	New farmers (LRAD)	Urban agriculture	Schools	Farm labourers
Sekhukhune	13.3	21.6	27.9	15.2	9.4	11.8	10.4
Mopani	11.6	18.7	31.9	14.0	11.3	14.3	13.6
Vembe	19.0	21.1	35.4	18.0	12.1	10.8	10.2
Bohlabela	11.1	26.3	28.9	15.5	6.7	9.4	11.0
Capricorn	13.4	19.8	23.9	15.7	10.8	10.2	10.6
Waterberg	10.5	19.3	27.9	18.6	11.2	11.5	8.2
Total	13.3	21.4	28.2	15.8	10.1	11.0	10.8

The overall focus of the agricultural technicians is on the small scale farmers. The majority of respondents spent 65.4 percent of their time on small scale commercial, subsistence and LRAD beneficiaries. The accuracy of the data would be questioned as the level of training of farm labourers is the level of responsibility of the employers is not above reproach.

As far as urban agriculture is concerned, the writer has no knowledge of any place in Limpopo where urban agriculture is practised. In Waterberg district the Department of

Agriculture promotes school garden competitions which started four years ago, but cannot be regarded as urban agriculture.

6.4 EXTENSION EFFICIENCY

The most meaningful criterion of performance or success is the input-output ratio because it provides an indication as to whether the investment in extension is worthwhile. An acceptable return and an estimated average over many different countries are, according to Düvel (2002:15) R130 for every R100 invested. Agricultural technicians were asked to assess the extension efficiency expressed as a return on R100 invested. The response is summarised in Table 6.3.

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 invested

Institution/Client Group	Sekhukhune	Mopani	Vembe	Behlabela	Capricorn	Waterberg	Total
Dept. of Agriculture:							
Own area	63	109	91	90	75	57	80
Own Province	81	125	106	97	77	46	89
S.A. – Small scale subsistence	51	119	92	80	66	49	74
S.A. – Small scale commercial	45	112	97	79	64	47	72
S.A. – Large scale commercial	39	140	111	87	73	56	81
NGO's:							
Small scale subsistence	46	108	71	70	52	61	63
Small scale commercial	40	121	76	74	53	55	65
Large scale commercial	35	138	87	87	61	54	73

The picture that emerges reflects an inefficient performance of the Department of Agriculture in terms of investment. For example the efficiency of extension in the

districts is judged well below a return of R130 for every R100 invested in extension with an exception of large scale commercial farming in Mopani. Extension efficiency by the NGO's is perceived to be even lower. One of the possible reasons for the poor performance could be lack of reliable data because of the absence of empirical data. Assessments were based on subjective estimates and are consequently not likely to be very accurate.

There are significant differences reflected by the districts, for example Sekhukhune is rated low because it is dominated by small- scale farmers. Limpopo has an estimation of 59 000 small scale and 15 000 commercial farmers. (in Limpopo Progress Report, 1995). The Mopani district is perceived to being efficient at R140 return per R100 invested. This however applies only to commercial farmers because it is seen as the food basket of the Limpopo Province, contributing 18 percent of the total horticultural products produced in the Republic of South Africa (Landbou Ontwikkelings program, 1991:15).

Agricultural technicians tend to rate their own Province higher when compared to the rating of their own area. There is also a discrepancy between the rating of large and small-scale farmers. There is a general agreement that extension efficiency is highest in the large-scale commercial situation, followed by the small- scale commercial or emerging situation with the lowest efficiency found in the subsistence small-scale farmer situation.

The perception of the agricultural technicians differs when compared with that of their supervisors. The findings are presented in Figure 6.2.

Agricultural technicians show a higher rating with regard to efficiency in extension. Figure 6.2 confirms the highest rating by the agricultural technicians when compared to the assessments by the managers and supervisors. For example agricultural technicians rated themselves 89 on own province whilst the supervisor's lowest assessment is 5.2. The likely reason for the difference is that agricultural technicians tend to overrate themselves whilst the supervisors seem to be more conservative in their rating. The question is whether they are realistic or not. Another possibility for the difference in the rating of the agricultural technicians and the supervisors could be

the influence of the supervisor’s experience. Based on the findings one must realize that there may be big loss of investments in extension.

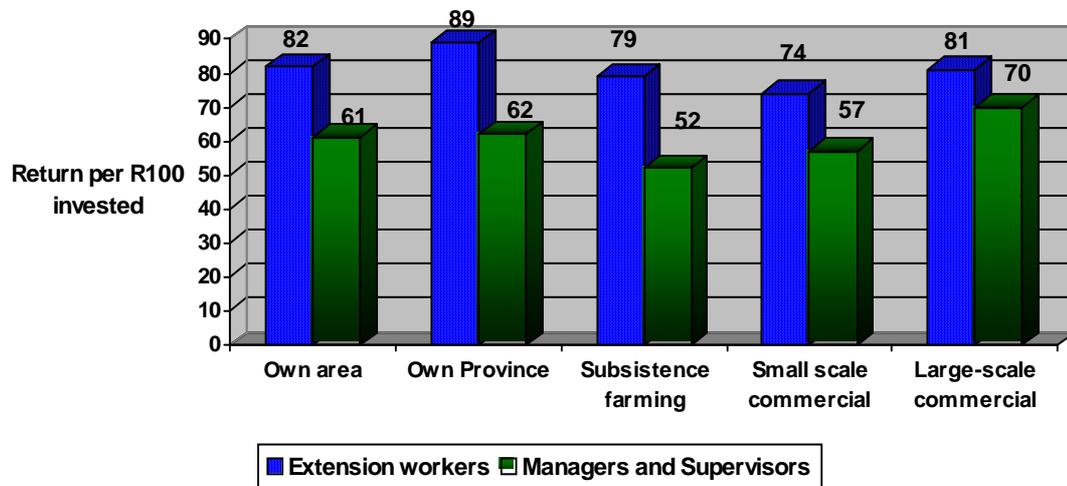


Figure 6. 2: The assessment by frontline extension workers and extension managers of the efficiency of extension in different situations and expressed as the return per R100 invested in extension

Another criteria used to assess the efficiency of extension delivery was their underperformance due to the absence of critical resources namely transport and finances. A more reliable indicator of the perceived efficiency of the extension delivery is suggested to be between the productivity level of 75 and 100 percent (Düvel, 2002:17). Respondents were requested to judge themselves in the absence of critical resources. An overview of their findings is presented in Figure 6.3.

The overall impression is that agricultural technicians seem to operate at half of their capacity. The likely reasons are lack of commitment, incompetence, and demoralised agricultural extension staff and to a lesser extent the lack of sufficient transport. The findings in Table 6.3 show a mean of 59 percent with the exception of the Waterberg district. The question is why Waterberg is exceptional while the other districts are not. The possible reason could be that the senior manager might not be aware of the challenges of his performance and consequently influenced his subordinates that nothing is wrong.

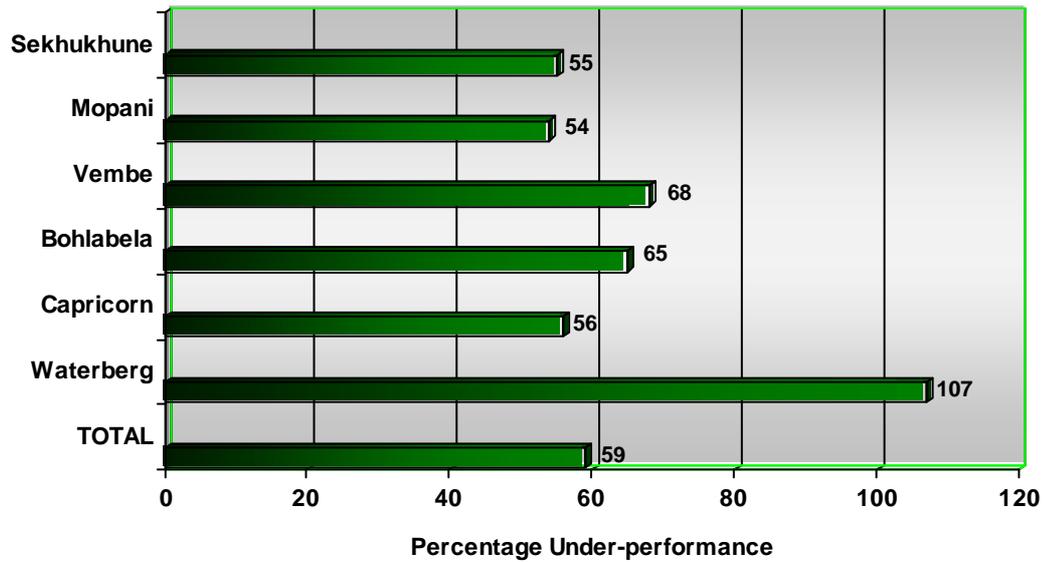


Figure 6. 3: The perceived under-performance of extension workers expressed as a mean percentage

6.5 COMPETENCY

Before the extension officer is allowed to do his /her job, it is agreed that he/she should have confidence and be competent to do the job. Agricultural technicians are often lacking in practical ability as a result of poor training (Adam, 1982:2). An indication of competency is qualification. The effectiveness and efficiency of extension is a direct function of the competency of the extension staff (Düvel, 2002:19). The findings are analysed in Table 6.4.

The qualification of agricultural technicians is very low. For example the large majority of agricultural technicians (84.4 percent) only have a certificate or diploma. There are few professional technicians (15.6 %) at the levels of BSc, BSc. Hons, MSc, Masters and none at PhD. A justified question is how the qualification can be improved or upgraded.

Table 6. 4: Distribution of frontline extension workers according to districts and the highest qualification in agriculture

Qualification	Certificate or Diploma		Adv. Dipl. B-Tech or B-degree		BSc, and BSc(Hons)		Masters, MSc, PhD		Total	
	N	%	N	%	n	%	n	%	N	%
Sekhukhune	55	87.3	7	11.1	1	1.6			63	100
Mopani	31	91.2	2	5.9	1	2.9			34	100
Vembe	32	78.11	7	17.1	1	2.4	1	2.4	41	100
Bohlabela	48	82.8	9	15.5	1	1.7			58	100
Capricorn	89	85.5	11	10.6	3	2.9	1	1.0	104	100
Waterberg	11	73.4	2	13.3	2	13.3			15	100
Total	266	84.4	38	12.1	9	2.9	2	0.6	315	100

Respondents were asked to assess themselves using a semantic 10-point competency scale. Their response is presented in Figure 6.4.

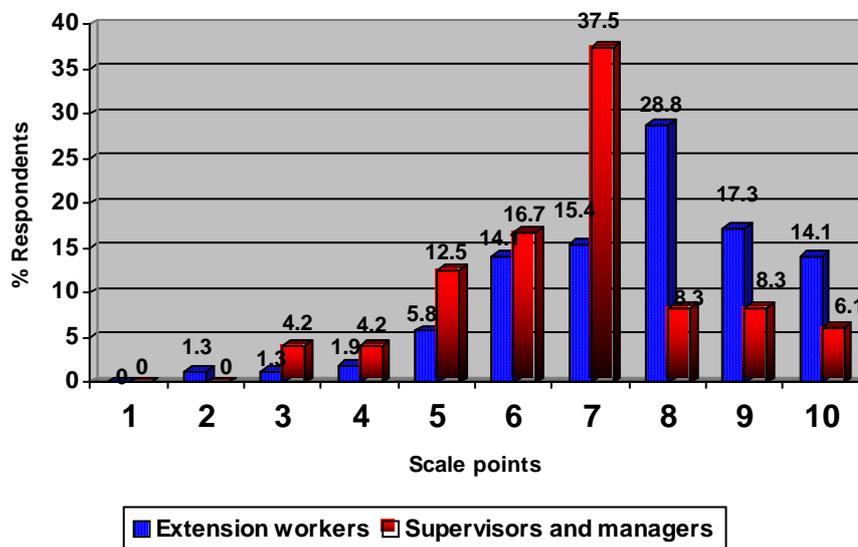


Figure 6. 4: Percentage distribution of extensionists according to their own competence assessment¹⁷ and assessments by supervisors and managers

¹⁷ A 10 point competence scale was used with 1=very incompetent and 10= highly competent

The comparison of competency assessments by the agricultural technicians and the supervisors shows clear differences. For example 60 percent of the agricultural technicians assessed themselves above 8 while supervisors perceived 37.7 percent within this category. On the other extreme, agricultural technicians assessed themselves 9 percentage points lower than the assessment by the supervisors and managers. The difference illustrates the likelihood that agricultural technicians tend to overrate their competency while managers and supervisors who know them are inclined not to overrate them.

The perceived competency of agricultural technicians was assessed by themselves and by their supervisors according to a competency scale based on the qualification categories. The findings are reported in Figure 6.5.

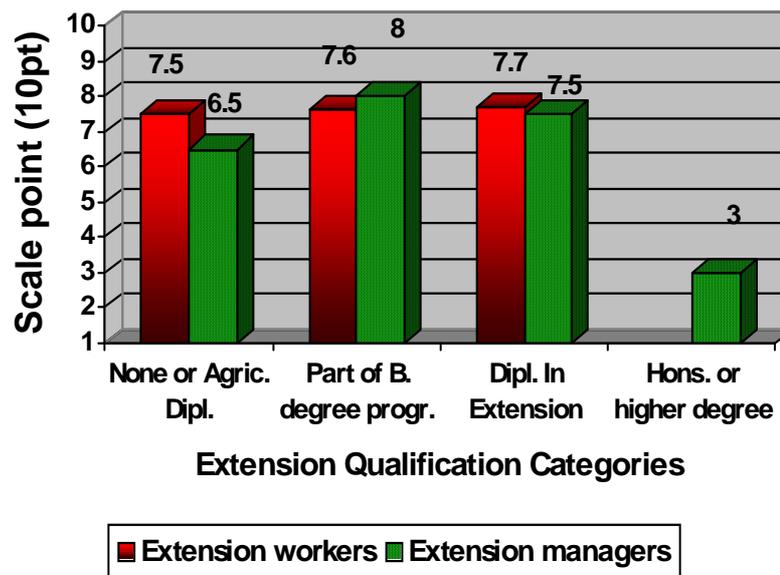


Figure 6. 5: The mean competence of frontline extensionists as assessed by themselves and by their managers/ supervisors in different qualification categories of extension

There is no clear tendency regarding the difference in the ratings of the extension qualification categories except in the higher qualification category, where extension managers are extremely critical of the competency of agricultural technicians. This implies that extension managers only become critical and thus more realistic above a

certain extension qualification threshold. This would suggest that managers should have at least an honours or similar qualification.

Another level of competency is the knowledge of the agricultural technicians. According to Van den Ban and Hawkins (1990:37) an extension worker wishing to give sound advice to farmers must understand not only the extension process but must also have adequate technical knowledge of the discipline in which he gives advice. For example he must have a thorough knowledge of animal husbandry if he is to be a livestock extension worker.

Table 6.5 presents the findings of extension workers as they assessed their knowledge in various fields using a 10-point scale (with “10” at the most favourable assessments).

Table 6. 5: The mean knowledge assessment of frontline extension workers by themselves as well as by extension managers using a 10-point semantic scale

Knowledge (Assessor)	Sekukhune	Mopani	Vembe	Bohlabela	Capricorn	Waterberg	Total
1. Agric. Knowledge							
(a) Agricultural technicians' assessment	7.4	6.3	7.4	7.3	7.1	7.9	7.2
(b) Managers' assessment	6.0	7.0	6.0	7.3	8.3	6.3	7.2
2. Extension Knowledge							
(a) Agricultural technicians' assessment	7.6	6.2	7.2	7.0	7.2	8.3	7.3
(b) Managers' assessment	6.2	8.0	6.0	7.0	8.3	7.0	7.3
3. Economic Knowledge							
(a) Agricultural technicians' assessment	6.4	5.3	5.7	5.6	6.1	5.0	6.0
(b) Managers' assessment	5.8	5.0	6.0	6.0	7.5	4.3	6.1
4. Managerial Knowledge							
(a) Agricultural technicians' assessment	6.2	7.0	6.2	6.3	7.0	6.7	6.9
(b) Managers' assessment	6.6	6.0	8.0	6.7	7.7	7.0	7.1
5. Marketing knowledge							
(a) Agricultural technicians' assessment	5.9	5.0	5.8	5.6	8.1	4.7	6.6
(b) Managers' assessment	5.6	4.0	6.0	5.7	7.3	5.7	6.1

There are differences in the current knowledge levels of agricultural extensionists but no clear tendencies in areas of knowledge between the agricultural technicians and the

supervisors. Manager’s assessments in Capricorn are higher compared with the assessment of the agricultural technicians. The question to be asked is why it is so. Another tendency is that in the economic and marketing knowledge, the manager’s assessment is higher than that of the agricultural technicians. The difference could be the result of agricultural technicians who might have exposure to farmers on a daily basis and face challenges regarding the application of their knowledge. The assessments by the agricultural technicians seem to be accurate whereas the extension managers responded with higher assessments because they are less aware of the challenges faced by the agricultural technicians.

The agricultural technicians and the managers were requested to assess both the current and the required minimum level of knowledge (expressed as a scale point with “10” as the most favourable) that is essential in order to perform their extension task effectively or with confidence. The response is expressed in Figure 6.6.

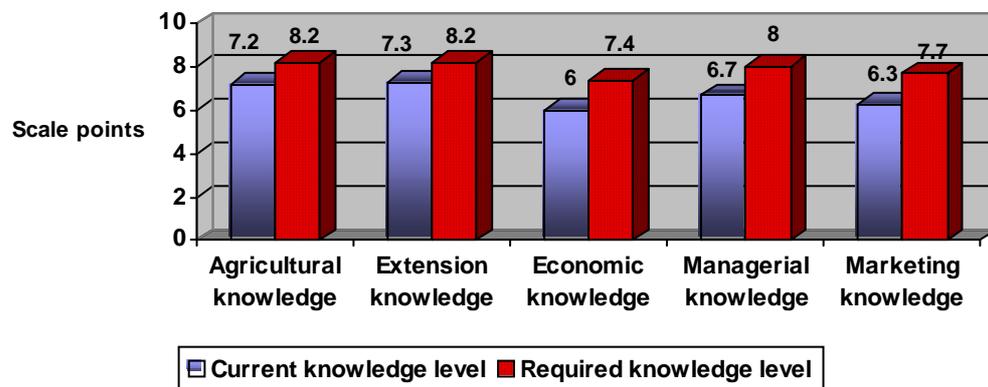


Figure 6. 6: The perceived mean current and required level of knowledge of agricultural technicians in different fields

There is a clear need for more knowledge in the different fields. For example the current knowledge level ranges from a scale point of 6 to 7.3, whereas the scale point of required knowledge starts at 7.4 to 8.2. This applies to managerial and marketing knowledge. The latter is due to the fact that emerging field that managers are not trained while knowledge becomes more important. Farmers are concerned about knowing how to combine specific knowledge of enterprises that will fetch higher

price in the market, therefore an agricultural technician who possesses the ability to influence profitability would be most helpful in Limpopo.

6.6 MANAGER’S KNOWLEDGE OF EXTENSION

Effective management of extension is hardly possible without a good knowledge and understanding of extension management principles. The extension manager’s knowledge of extension was assessed and the findings are summarised in Figure 6.7.

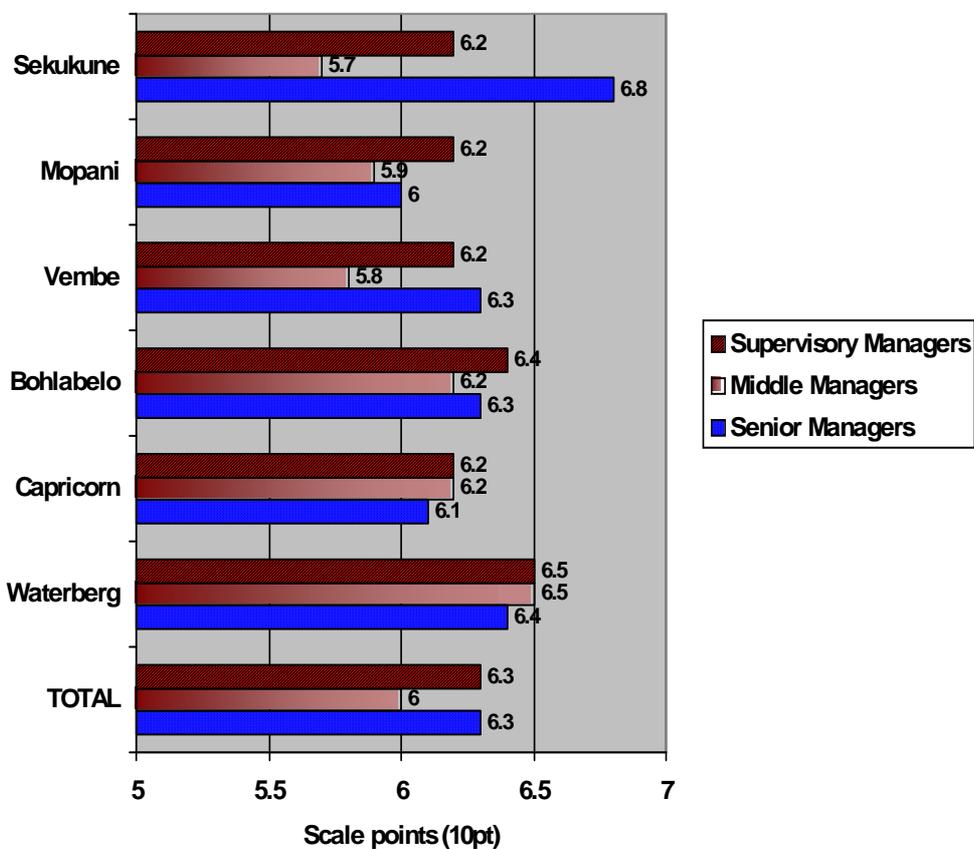


Figure 6. 7: The mean assessment of managers’ knowledge of extension based on a 10-point semantic scale(with ‘10’ as the lowest favourable assessment)

The mean level of extension knowledge is perceived as not high. For example, the extension knowledge of senior managers is on average 10 with an exception of Sekhukhune district where it is perceived by respondents to be lower than that of the supervisory managers. The possible reason for the exceptionally high assessment of

the acting senior manager in Sekhukhune district is that at the time of the survey the acting senior manager had received his B.Tech Degree and the agricultural technicians might have been convinced that the senior manager is knowledgeable in extension.

Middle managers tend to be assessed lower with an exception of Capricorn and Waterberg. The probable reason being that supervisors have close contact with respondents while middle managers do not have such contact. The perception of the agricultural technicians expressed in the table is confusing as it does not correspond with the real qualifications of the senior managers of the various districts.

6.7 CONCLUSION

The outstanding finding presented in this chapter is the poor performance of extension which is caused by a number of factors identified in the text. Against the background of these findings, the following policy guidelines are proposed:

Extension performance

Extension performance is dependent on the way the concept is interpreted and understood by agricultural technicians. But nevertheless the pre-requisite for good performance in extension is the ability to mobilise resources to achieve the objectives of the organization. The biggest challenge is to deliver on the mandate of the Department of Agriculture; which has an implication on the budget allocation to extension. There is no single view on whether extension is pro-active or reactive. In view of this situation it is recommended that extension should be proactive to allow proper planning and execution of the development programmes.

Audience focus

Development is a difficult venture especially when politicians demand quick results because extension is funded from public funds. The main focus of extension is on small scale and subsistence farmers, while the definition of a farmer is wide open to include even non- bonafide farmers. In view of the definition, the Department should consider revising the definition to include those who have demonstrated interest in farming for the sake of proper coverage within the resource constraints

Extension efficiency

The assessment of extension efficiency in Limpopo, based on the resources invested, suggests that on average 81 percent by the technicians and 60 percent by the supervisors achieve ratings below the international standard of R130 per R100 invested.

The investment in technicians on both small scale and large-scale farmers is probably running at a loss. It is suggested that the Department should take serious steps to ensure that there is sufficient return from investment. This would be achieved through strong supervision and creating awareness among the extensionists on economic principles.

Competency

The credibility of the extension workers for both the supervisee and the managers is not satisfactory. Agricultural technicians perceive themselves as having more credibility when compared to their supervisors whom they feel do not have sufficient knowledge in extension. It is recommended that managers should at least have an honours degree in extension before being recommended for the post of manager or senior manager.

CHAPTER 7

NEEDS BASED DEVELOPMENT

7.1 INTRODUCTION

Needs assessment entails a systematic collection of information at a particular point in time. It involves a number of techniques. For example (McCaslin and Tabezinda, 1997:39) identify four categories namely individual, group, secondary sources and rapid rural appraisal techniques. Needs assessments are carried out before programme activities begin in order to assess the situation. The practice of needs assessment has shifted from top- down approaches towards a stronger focus on a client “putting people first” philosophy (Chambers, Pacey & Thrupp, 1990). Participatory approaches have contributed to a general awareness of the key role of needs and also to a wide spread and often critical use of participatory rural appraisal (PRA) and other techniques or methods (Düvel, 2002:97).

For extension to succeed in its mission of improving the quality of life of its clientele, extension professionals must understand and respond promptly to their client’s short term and long term needs and problems (Mwangi & Rutatora, 2002:30). The concept of needs has numerous interpretations. For example it includes drives, aspirations, motives, incentives, goals, objectives and problems (Düvel, 1982). McCaslin and Tabezinda (1997:39) make a distinction between needs, wants and interests. They refer to needs as something considered necessary or required to accomplish a purpose. Wants on the other hand are considered desirable or useful, but not essential. Interests indicate an individual’s concern or curiosity about something.

The nature of human behaviour and the consequent tendency to organize actions and behaviour to satisfy needs is fundamental to human existence. Based on the different interpretations indicated in the above paragraph, it is possible to confuse needs, wants and interests. Lack of needs assessments may lead to misunderstanding of clients’ needs priorities (and genuine response to technical advice) and may cause programme failure. The purpose of this chapter is to analyze views regarding issues related to

needs based development and to propose some policy guidelines or to identify the areas where such policy guidelines are required.

7.2 THE IMPORTANCE OF NEEDS ASSESSMENT

The importance of needs assessment is widely recognized (Baker, 1987, Boyle 1981 and Goulet, 1968). Needs assessments make contributions. Witkin (1984) identifies three functions namely setting priorities, making decisions and the allocation of resources. The importance of needs is not supported by all people. Some hold the different views that needs assessments are expensive to carry out and must be avoided to save time and money (Brackhaus and Scholl, 2002). According to Mwangi and Rutatore (2002:30) the process of needs assessment is both objective, value laden and involves the collection and analysis of data from many viewpoints.

Respondents were asked to assess the importance of needs assessment in extension in a scale from 1-10 with '10' as the most favourable assessments. Figure 7.1, summarizes their viewpoints.

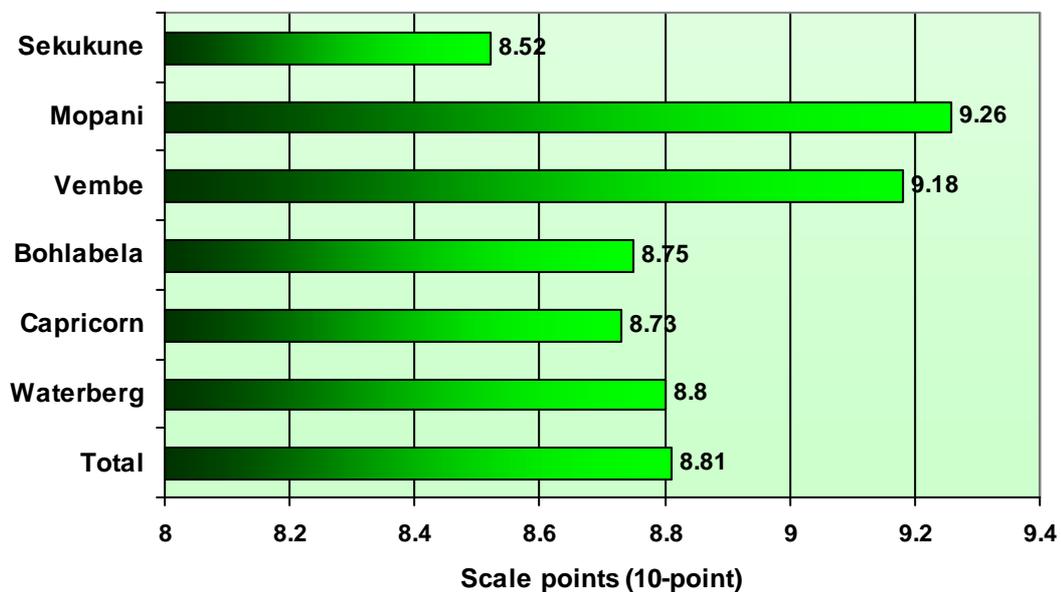


Figure 7. 1: The importance of needs assessments in extension as perceived by extensionists in the different districts based on a 10-point scale and expressed as a mean percentage

The picture that emerges from Figure 7.1 shows the importance of needs assessment in the eyes of extension staff. There are notable differences among the districts. Two districts namely Mopani and Vembe show outstanding assessments whilst Sekhukhune shows a lower performance assessment compared with the other districts. The reason for this variation in the case of Vhembe might be the influence of the BASED¹⁸ programme which encourage needs assessments through different methods or codes such as “The Road to Progress¹⁹”, the “Bus Code”, GRAAP and the “Knotty Problem”

In the case of Mopani, one can attribute the influence on community development approach implemented in the late 1980’s in the Mopani district. One hundred and forty five (145) community development projects were initiated although most of these projects have not been functioning. One would expect to see the Broadening Agricultural Services and Extension Delivery (BASED) programme to have had an influence in the other pilot district namely Capricorn. Unfortunately the finding does not reflect this. On the other hand Sekhukhune shows a performance lower than the rest. One would however not view this assessment as negative or cause for concern because the mean scale is still above 8.5 which can be viewed as most acceptable.

¹⁸ *Broadening Agricultural Services and Extension Delivery (BASED) is a project being implemented by the Department of Agriculture. It is supported by the German Technical Cooperation (GTZ). It started in 1998 with two districts as pilot namely Vembe and Capricorn. BASED seeks to test and implement Participatory Extension Approaches (PEA)/Participatory Development Approaches (PDA) so that lessons could be shared with other provinces.*

Broadening Agricultural Services and Extension Delivery (BASED) does not target its clients in the traditional way. It is inclusive. Its point of entry is a village. Although it works with both interest and farmer groups but its main goal is to empower all the groups under one umbrella organization.

¹⁹ *Road to progress is one of the Participatory Extension Approach (PEA) uses needs assessment methods The method opens by asking the respondents things that they enjoy in the village and are proud of. The participants are guided to identify those things through the process of homogeneity of the groups, using symbols to present the findings. There is practical voting on the most three items and the process culminates with the development of an extension programme. The other techniques such as GRAAP, Bus Code and Knot problem reinforce self reliance in dealing with the needs once they have been identified.*

7.3 THE PURPOSE OF NEEDS ASSESSMENT

There is no single purpose of needs assessment. This is evidenced by the many scholars who identified and documented some of the purposes (Düvel, 1994, Baker 1987, Van den Ban and Hawkins, 1990). Some of the purposes of needs assessment include allowing for effective behaviour intervention (Düvel, 2002:99), providing information to justify budgets, grants and increase people’s awareness of community planning and support for public funding (Baker, 1987), elimination of misperception of community needs (Kreitner, 1989), helping extension professionals to set program priorities (Kneubush, 1987), enabling extension to solve the right problems (Dunn, 1981) and the establishment of a two-way communication process (Utzingers & Williams, 1984).

Respondents were given four possible purposes of needs assessment and asked to rank the main purpose in order of importance. The findings are reflected in Figure 7.2.

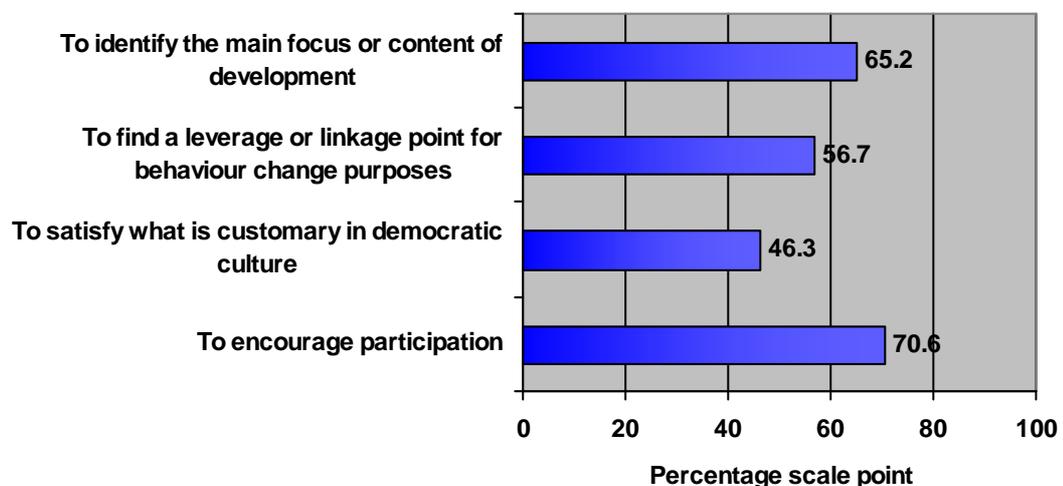


Figure 7. 2: The importance rating of different purposes of need assessments by extension staff (expressed as percentage scale points)

The general impression of the findings is that the different purposes of needs assessments are uniquely rated with some differences. Out of the four purposes, respondents “rank to encourage participation” with 70.6 percent in the first place. The reason for this ranking is not surprising because the shift of paradigm from top down

to participatory development is perceived as a positive move towards sustainability of extension programmes. One expects to see the thirdly rated purpose namely leverage or linkage(counts) being first or second because behaviour change is the key towards success in extension. Van Den Ban and Hawkins, (1990:2) emphasize the importance of technical knowledge in changing farmers behaviour from negative to positive. In other words the effectiveness of an extension programme can be assessed in terms of the manifested changes in behaviour and practices that occur among the programme’s targeted learners.

7.4 THE IMPORTANCE OF ASSESSMENT OF NEEDS BY MEANS OF PARTICIPATORY RURAL APPRAISAL (PRA) BY THE COMMUNITY

Swanson and Claar, (1984:112) agree that needs assessment is an important step in the programme planning process. One of the techniques used in their assessment of needs is termed Participatory Rural Appraisal (PRA) and it serves as an alternative system of learning and action. According to Pretty and Vodouhe (1997:47) PRA is an approach that represents a significant departure from standard practice.

Respondents were asked to rate the importance of needs assessment by the whole community using the Participatory Rural Appraisal as “ essential”, “useful” and “not essential”. The results are summarized in Table 7.1.

Table 7.1: The importance of assessment of needs by means of PRA by the community

Importance of assessment of needs	Percentage
Essential	49
Useful	46
Not essential	4
Missing	1
Total	100

Strong opinion is expressed in favour of support that PRA playing an important role in assessing the needs of communities. 95 Percent of respondents perceive needs assessment by way of PRA approach as usefulness or essential. One should not overlook the fact that PRA has its disadvantages such as limited consensus, the creation of expectations that cannot be met and the tendency of some cliques and individuals to dominate the process (Düvel, 2002:100). It is noteworthy however to indicate that PRA has some advantages over the conventional systems of data gathering which include promotion of innovation, ownership by clients and its nature of interactiveness (Pretty *et al*, 1997). The reason why 5 percent of the respondents do not see the necessity of PRA in needs assessment by the community might be the lack of knowledge of how PRA works. It is proposed that Agricultural technicians should be trained in needs assessment techniques such as the PRA in order to appreciate the contributions which it brings in extension.

7.5 INTERVAL FOR NEEDS ASSESSMENT BY THE COMMUNITY

Since the people’s needs, problems interests and priorities are continually changing, extension staff should make needs assessment their integral part of their daily activities and should keep proper records for future reference (Mwangi and Rutatore, 2002:36).

Respondents were asked to rank the appropriate frequency of assessments. The findings are shown in Table 7.2.

Table 7. 2: Intervals for needs assessment by the community expressed as a weighted mean percentage

Interval of needs assessment by the community	Percentage
Before the beginning of a programme	56
Continuous	19
Once a year	17
Once in 3 years	5
Not at all	3
Total	100

There appears to be a realization by the respondents that needs assessments should be done frequently. 56 Percent of respondents expressed the view that it should be done before the beginning of the programme. This makes sense because it helps to ensure that the development programme addresses the real needs of the target clients. It also serves to establish a baseline which becomes useful at a later stage of programme evaluation.

The fact that about 44 percent of the respondents seem to be indecisive could be an indication of the lack of clear understanding on the usefulness of needs assessment. In view of this knowledge gap, it is proposed that the Department of Agriculture conduct refresher courses on aspects of needs assessment.

7.6 IDENTIFYING THE PRIORITY DEVELOPMENT FOCUS

The identification of priority focus involves the participation of clients. According to Pretty and Vodouhe (1997: 48), participation is a continuum ranging from passive, where people are asked or dragged into operations of no interest to them or where they are involved merely by being told what is to happen, to self-mobilization, where people take initiative independent of external institutions.

As far as the use of need assessments for the purpose of identifying the priority development focus is concerned, respondents were asked as to the most appropriate way of finding the priority focus through needs assessment. They were requested to place the alternative types of needs assessments in rank order of acceptability or importance. The findings are summarized in Figure 7.3.

The general impression is that the importance of appropriate types of assessment tends to be based on what is expressed by farmers rather than any other group in the village. For example the majority of respondents, namely 61.7 percent, regarded the community's assessment of the most important agricultural need as the most appropriate way of identifying the priority focus. The assumption is that the community has an objective perception of the overall situation (which need not be the case). In determining community needs, the writer observed that it was at times very

difficult for a community to reach consensus on what should be the priority because different groups of people (for example men, women, youth and royal or tribal councils) have different priorities in the community.

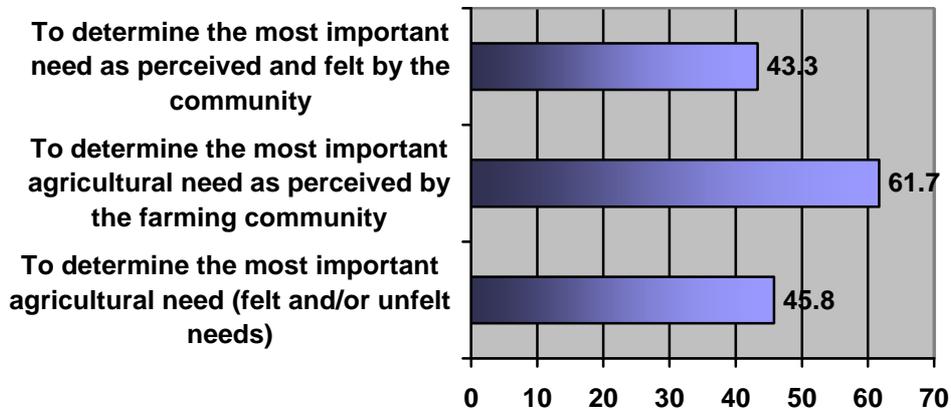


Figure 7. 3: The appropriateness of different types of need assessments in the identification of development priorities as expressed in mean weighted percentages

The respondents' second rank (with a mean weighted percentage of 45.8 percent) indicated their preference that agricultural needs be a combining assessment of felt and unfelt needs. Respondents rank third the alternative type of needs assessment which is to determine the most important need as perceived and felt by the community. The significantly lower support for this option namely 43.4 percent (for the alternative type of needs to determine the most important need as perceived and felt by the community) may be attributed to the fact that the identified needs are often of a non-agricultural nature and thus tend to detract from the main focus of agricultural development (which is the responsibility and the duty of the Department of Agriculture).

7.7 PROGRAMME CONTENT

According to Campbell and Barker (1997:67), the issue of developing appropriate content is critical to the extension process. The performance of an extension programme depends on the appropriateness of its message. Respondents were given five alternatives addressing content of programme to indicate which one's they would support most. The findings are reported in Figure 7.4.

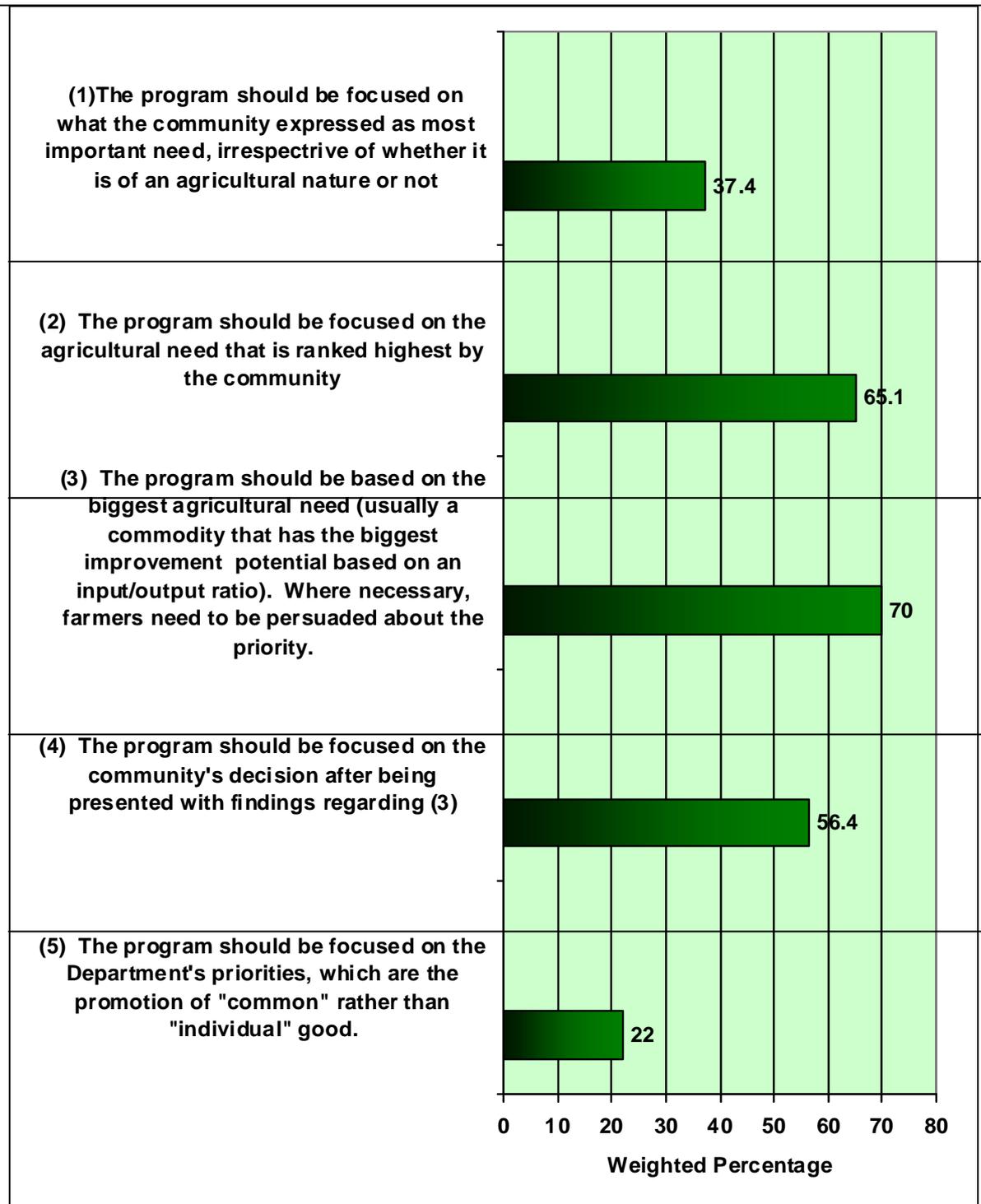


Figure 7. 4: The importance rank order (expressed as weighted percentages) of alternatives to identify the focus or content of development

The general impression is that the most favoured programme content is the one that puts the farming community at the centre. For example the majority of respondents (70 percent) indicated that the most supported programme content is the one that is

based on the biggest agricultural need (usually a commodity that has the biggest improvement potential calculated on an input/output ratio). This alternative makes sense although it is assumed that farmers will take accountability for the way in which the content will be administered for their benefit.

The second most supported programme content (65.1 percent) is the one that focuses on the agricultural need that is ranked highest by the community. This second most supported programme content is appreciated because the approach of the Department should move from the stereotype of “thinking for” to “listening to the farmers” when dealing with community’ needs.

The third most supported program content (56.4 percent) is the one that should focus on the community's decision after being presented with findings regarding the biggest agricultural need. This makes sense because it centres on the community being empowered to make a decision on issues that are important to them.

The fourth supported programme content is the one that should focus on what the community express as the most important need, irrespective of whether it is of an agricultural nature or not. This is not of great significance for the agricultural technician while it does make sense to the community.

The less supported programme content (22 percent) is the one that should focus on the Department's priorities, which basically addresses the promotion of "common" rather than "individual" good. The possible reason for this low support of the programme content is that agricultural technician’s perception is changing. They no longer view the Department as the “big brother” doing everything for the farmers. They see the farmer’s priorities as of more importance as the Department’s priority. The Department of Agriculture should strike a balance between the achievement of its objectives and those of its clients. In other words it should not spend financial resources on the achievement of its own internal objectives at the expense of its valued external clients.

7.8 CONCLUSIONS

The following statements are considered appropriate.

- The importance and purpose of needs assessments is highlighted.
- The Department of Agriculture embraces an extension and development approach that is need-based and thus relies on need assessments for the purpose of

Identifying community needs and thus identifying development priorities. This approach becomes relevant in view of budgetary constraints. However the priority focus that should be strongly supported is the one that agrees on the determination of the most important agricultural need as perceived by the farming community.

- Finding linkages for effective behaviour intervention and change are discussed.
- Methods of promoting participation and involvement of communities in the development process are analysed.

Interval of needs assessment

The assessment interval should take place at the beginning of the programme. This makes sense because it helps to benchmark the projects, the information is essential for monitoring and evaluation at a later stage.

Programme content

As far as the programme content is concerned, the most supported alternative should be based on the biggest agricultural needs as perceived by the community. The least supported option is an approach based on Departmental priorities which would not necessarily be in line with the spirit of “Batho Pele or People First” principles for service delivery as farmer’s needs would be marginalized. The next chapter deal with Institutional linkages, structures and community participation in extension.

CHAPTER 8

INSTITUTIONAL LINKAGES, STRUCTURES AND COMMUNITY PARTICIPATION IN EXTENSION

8.1 INTRODUCTION

The paradigm shift of the last decade or so towards more participatory approaches in extension and rural development has re-enforced the original philosophy of extension which seeks “to help people to help themselves”(Düvel, 2002:104). Different scholars (Düvel, 1991; Crompton, 1984:116; Oakley and Garforth, 1985:7; Bunch, 1990:55 and Schmidt, undated) are in agreement regarding the necessity of participation in development. Examples of such participation are the involvement of beneficiaries in extension in order to include their ideas in the programme planning process, such as the clients’ participation in the diagnosis and analysis of problems so as to promote the sustainability of extension programmes.

Very obvious differences occur regarding the purpose, the nature (or degree) of participation pursued as well as the means to achieve the programme objectives. The purpose of this chapter is to analyze the views regarding these issues and to propose some policy guidelines or alternatively to identify the areas where such policy guidelines are required.

8.2 PURPOSE OF PARTICIPATION

Opinions vary regarding the importance and the purpose of participation in development. One opinion argues that there are potential risks and costs in greater people’s participation such as delaying project start-up by negotiations, increases in staff required to support participation, the possibility that the people consulted might oppose the project and over-involvement of less experienced people (Oakley, 1991:14). The alternative opinion suggests a number of reasons why governments might gain through the promotion of participation. Uphoff (1986), for example, suggests that participation helps to obtain more accurate and representative

information about the needs, priorities and capabilities of local people. This information enables the government to have a more reliable feedback on the impact of its programmes. The mobilization of local resources to augment or even to substitute central government resources becomes possible through participation.

Respondents were asked to assess different purposes of participation by indicating their importance on a 10 point scale varying from unimportant (“ 1”) to extremely important (“10”). Their assessments are summarized in Table 8.1

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 Province

District	To allow for more effective extension or development	To allow for more sustainable community development	To provide for what is a value or customary in local cultures	To provide for democracy as entrenched in the country's constitution	To allow for the unfolding or implementation of the principle of help towards self-help
Sekhukhune	6.5	7.6	5.3	5.9	7.6
Mopani	8.4	9.2	7.1	7.1	8.2
Vembe	8.1	8.4	6.1	6.2	7.8
Bohlabela	7.1	8.1	5.8	6.2	7.3
Capricorn	7.3	7.6	6.2	6.8	7.9
Waterberg	7.3	7.5	5.3	4.9	8.1
Total	7.3	8.0	6.0	6.4	7.8

All the purposes of participation are regarded as important. The option addressing sustainable development is clearly regarded as the most important with a mean score of 8.0 out of a possible 10.0. This could be argued in view of the collapse of many projects in Limpopo including vegetable, poultry and rabbit production and farmers cooperatives. The negative experience led to renewed commitment by policy makers to address the issue sustainability and declaring it the theme of the 1990's. A further

reason for the perceived importance of sustainability is that donor agencies require their funded projects to be sustainable. The implementation of the principle of “help towards self-help” is ranked second (mean scale point of 7.8), followed by more effective extension or development (7.3). The latter was indicated as the second most important reason in the Mopani and Vembe Districts where a more pragmatic outlook appears to prevail. Considerations like “providing for what is a value or customary in local cultures and the provision for democracy as entrenched in the country’s constitution” are obviously less important, but should never –the less be overlooked.

Sustainability is, no doubt, a major challenge. Solutions do not rest with agricultural science and technology alone. Socio-economic and cultural dynamics of the small-scale farmers are also of decisive importance. In view of this, more research is required to understand the constraints under which poor farmers operate. Such research could further guide the formulation of appropriate strategies, which can have a favourable impact on sustainable agricultural development.

8.3 ALTERNATIVE GOALS OF PARTICIPATION

From the literature it would appear that there is never a single goal of participation. Oakley (1991:43- 55) suggests that one of the goals of participation is to empower the project participants or beneficiaries to assume greater responsibility in the affairs of the project.

Agricultural technicians were requested to place in rank order of acceptability three alternative goals of participation namely (1) participation as ultimate goal, (2) participation as a goal and as a means and (3) participation as means only. The choices of the respondents are summarized in Figure 8.1.

The picture that emerges from these findings shows that participation is held in high regard both as normative goal and as a means for improved extension. The different uses of participation are regarded as important, but participation as normative goal is clearly regarded as the most important purpose with a weighted percentage of 61.6. This is primarily because of the influence of districts of Mopani, Bohlabela and Capricorn, where participation as ultimate goal has very strong support. The likely

reason for this influence is the exposure of the respondents to the BASED programme that was introduced in the districts placing much emphasis on community participation.

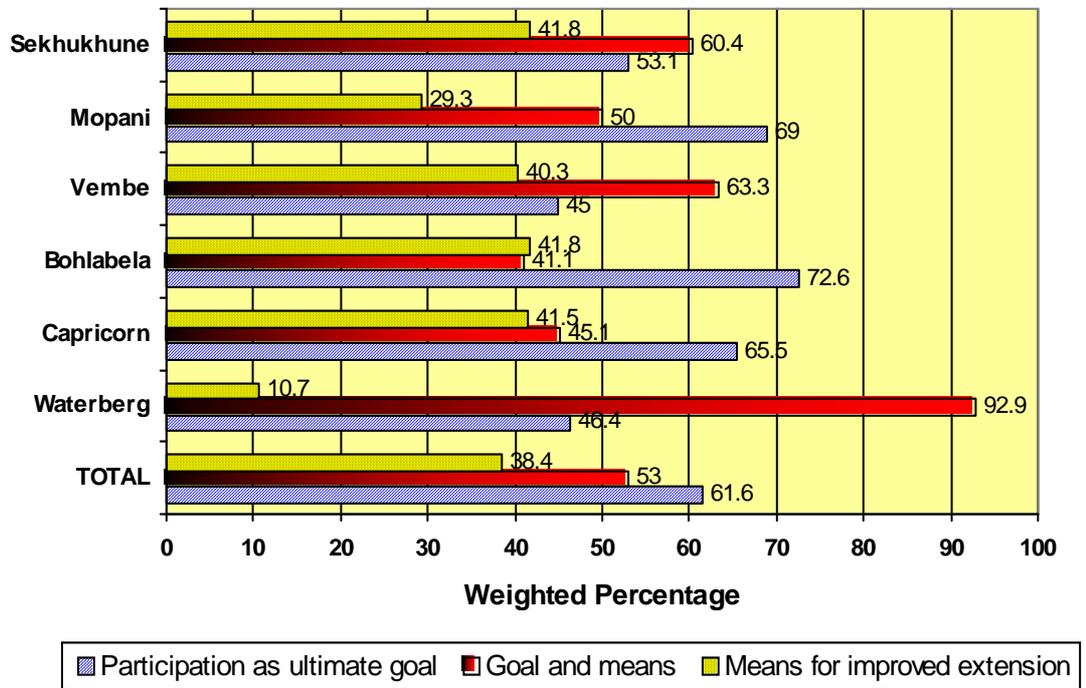


Figure 8. 1: The rank order of different uses of participation by respondents in the Districts expressed as mean weighted percentage

The purpose of participation as a means for improved extension gets the lowest rating. Based on the National Extension Study (Düvel 2002), participation as normative goal appears to be relatively more important in Limpopo than in other Provinces. A possible reason for this is the emphasis that has been placed on the BASED programme in Limpopo. However, this is somewhat contradicted by the fact that pilot districts where the BASED programme has been launched, are more reserved regarding participation as normative goal. This finding could reflect a form of disillusionment with the programme or in the way it was implemented.

The participatory motive is in a way also reflected in the ultimate goal pursued by extension namely human or agricultural development. In a national survey, Düvel

(2002) investigated extensionists' preferences regarding these alternatives. The findings are reflected in Figure 8.2.

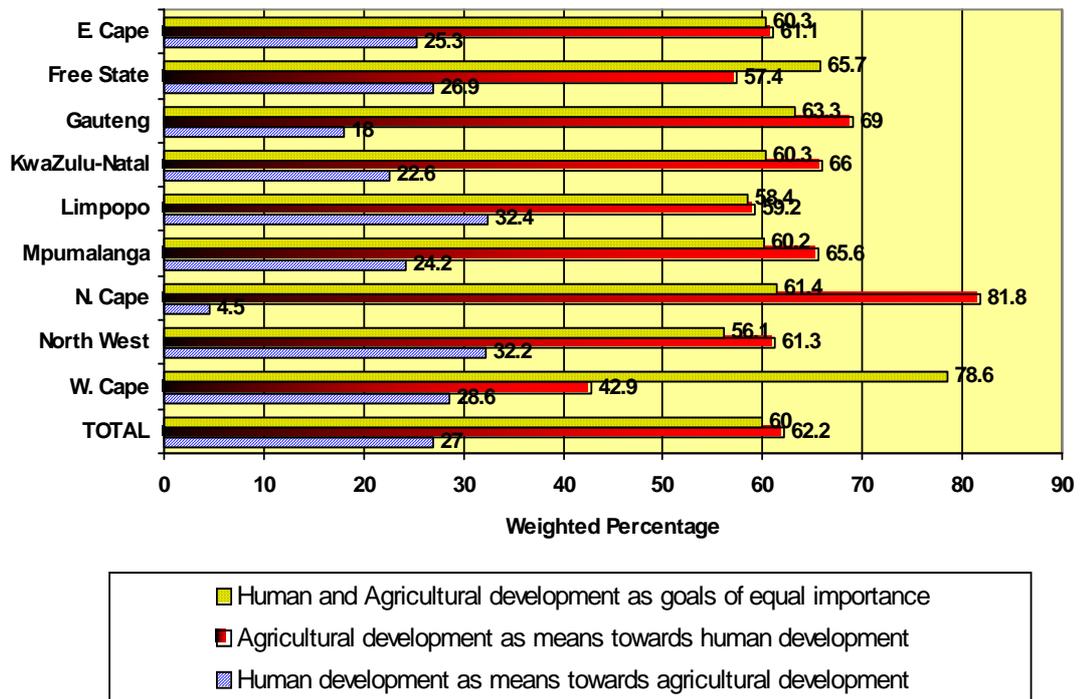


Figure 8. 2: The relative importance (expressed as a weighted percentage) of agricultural and human development as goals or as means to a goal as perceived by respondents in different provinces (Düvel, 2002)

In all cases the importance of human development is very evident although the emphasis by Provinces differs. Two Provinces namely the Northern Cape and the Western Cape show some extremes. The Northern Cape's emphasis was on agricultural development as means towards development with a weighted percentage of 81.8 whilst the Western Cape's emphasis was on human and agricultural development as goals of equal importance with a 78.6 weighted percent.

The rest of the Provinces do not show much difference between the two goals namely human and agricultural development as goal of equal importance to agricultural development, and agricultural development as goal of human development. In the case of Limpopo both goals have rated almost the same, i.e. 58.4 and 59.2 percent respectively. However, whether these preferences are realistic and practical is

questionable and it seems as if the implications of these alternatives were not appreciated.

It is doubtful whether all respondents really understood the implications of the alternatives. It can be argued that if the emphasis was on human development as the main goal, such a change in focus would require a name change to give expression to this primary objective. This could side track the agricultural focus of the Department of Agriculture. In view of the implication, a policy directive which suggests human development as a means toward agricultural development is proposed for the Limpopo Province Department of Agriculture (LPDA).

8.4 PARTICIPATION IN PRACTICE

Ewang and Mtshali (2000:162-164) point out that participation can be understood to vary from minimal/passive participation to full participation or self-mobilization. It is believed that rural people are more prepared to participate when they feel the need to do so (Oakley 1991:37).

To establish the degree or level of participation most acceptable to the respondents, they were confronted with a list of different alternatives and asked to place them in rank order of acceptability. The findings are summarized in Table 8.2.

The picture that emerges from Table 8.2 is that the most favoured approach is equal responsibility of development i.e. sharing of responsibility between the service provider and the community. For example the majority of respondents, namely 39.7 percent, agreed that the community in partnership with the development agent should initiate, plan, finance, coordinate and implement the development programme. This majority viewpoint is apparently supportive of development being a true partnership between the service provider and the community.

Table 8.2: The mean assessment of different alternatives of participation expressed as mean rank positions by respondents in Limpopo

Different alternatives	Rating in percentage%
The community coordinates, owns and finances the development process	5.2
The community coordinates, owns, finances, and implements the development process and in the process involves one or more development agents	17.7
The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development program or project	39.7
The community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organizations.	24.5
Development remains the responsibility of the development organization and is done in a way it deems fit and is not accountable to the clients	12.9
Total	100.0

The reason for not supporting a more community owned and dominating process can probably be attributed to doubts or a hesitancy regarding the community's capability to take the development leadership and full responsibility. This sentiment appears to have wide support which is evident from the fact that the support for bigger service provider responsibility is 37.4 as opposed to 22.9 for bigger community responsibility. The likely reason for this choice is that it empowers the community in the designing and management of the development programme.

The second most favoured approach is rated 24.5 percent. In this case the community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of the development agent or organizations. This finds expression in many areas of Limpopo where development initiatives are currently "supply driven" by development agencies mainly by the department and the communities do not have much say, they are simply mobilized by extension to take advantage of the programmes.

The Department is currently implementing five types of food security programme which include a cage with 36 layers for egg production, a pregnant dairy heifer for milk production, a portable fish pond, a 200 l- drum of water fitted with irrigation pipes for backyard homestead gardens and the rehabilitation of small- holder irrigation schemes (RESIS). These epitomise in a way the supply driven nature of many current programmes. An ideal situation for participation would be to involve the communities through their representative organizations in the conceptualization stage as well as in the implementation of programmes.

It is the writer's observation that true partnership between the community and service provider tend to be difficult to achieve in practice because project participants do not always enjoy sharing of responsibilities in terms of financing and maintenance unless they are prodded and persuaded by an extension worker.

8.5 INSTITUTIONAL STRUCTURES AND LINKAGES

One of the purposes of a partnership between extension and farmers is to identify needs and agree on the development priorities (Düvel, 2002:110). For this and other purposes there has to be consultation or interaction for this to take place in an appropriate and representative manner. It has to be structured, which requires formal institutional structure and linkages. One of the strategies of BASED projects in Limpopo is to build or strengthen local organizations which in a way could be taken as a preparation process for partnership in development.

The respondents were asked to indicate their opinions regarding the importance of institutional structures. Table 8.3 presents the findings. There is general agreement that there is a necessity for an institutional structure. Only 2.5 percent of the respondents regard linkage structures as unnecessary, while 89.3 believe them to be useful or essential.

Appropriate institutional structures to serve the purpose of participatory development ultimately aimed at empowering the community and allowing it to take ownership of the development process is bound to vary with the situation (Düvel, 2002:111). In order to establish the number of linkages structures or the level at which they should be established, agricultural technicians were given three different alternatives to

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 community

Opinion about necessity of linkage structure	N	%
Unnecessary	8	2.5
Undecided/Neutral	29	9.2
Useful	179	56.6
Essential	100	31.7
Total	316	100.0

choose the most acceptable in their situations. The findings are summarized in Figure 8.3.

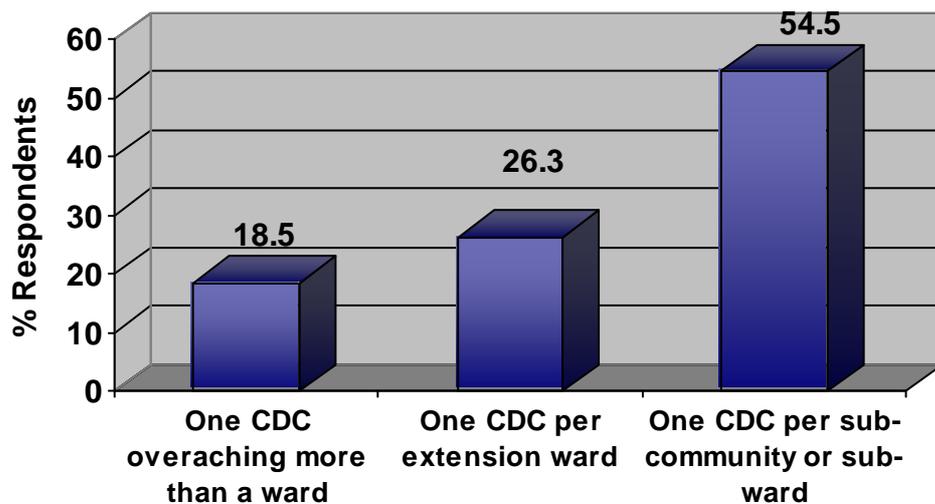


Figure 8. 3: The percentage distribution of respondents according to their support for different alternatives regarding the number or level of linkage structures (CDC’s) in Limpopo

The most acceptable of linkage structure is one central development council (CDC) per sub ward or village level. The majority of respondents (54.5 percent) recommended one CDC per sub ward or village. When comparing the figures with the national survey (Düvel, 2002), as reflected in Figure 8.4, the results are somewhat

different although the tendency is the same, namely a bigger support for a linkage system at sub-community or sub-ward level.

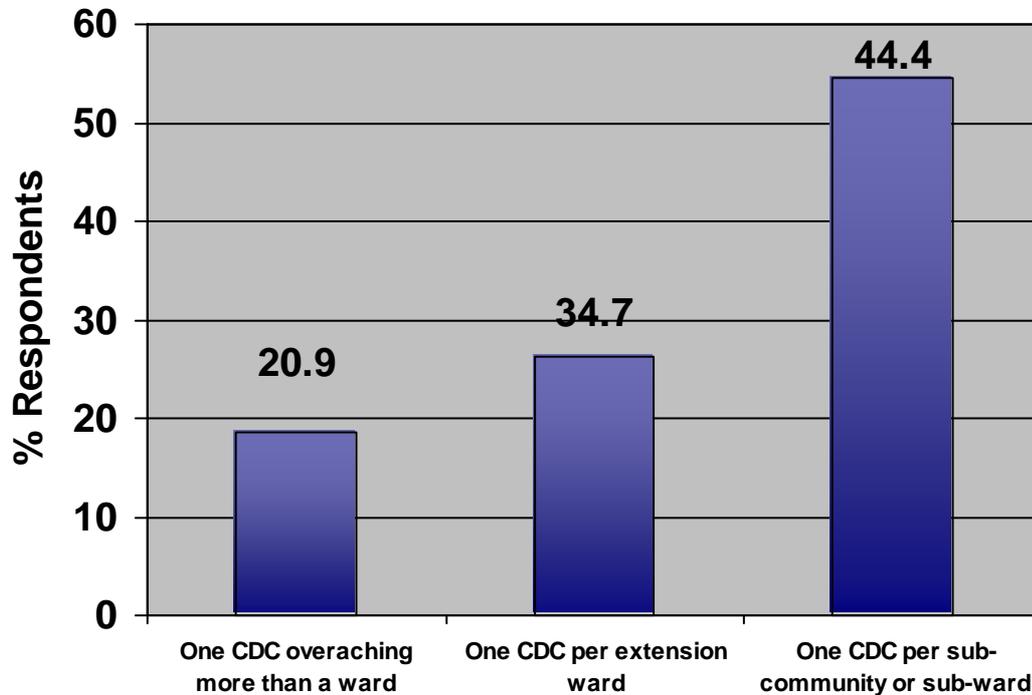


Figure 8. 4: The percentage distribution of respondents according to their support for different alternatives regarding the number or level of linkage structures (Düvel, 2002)

The difference (National V/s Limpopo) between the first alternative is insignificant (2.5 percent), while on the second alternative is less than 10 percent (8.4 %) and the difference in the third alternative is 10.1 percent. The differences can be attributed to the widely promoted BASED programme which suggests or implies linkage structures at village or sub- community level.

Another school of thought, of which Düvel (2002) is a staunch supporter suggests linkage structures at ward level. His criticism against a linkage structure only at village or sub-community level is that it does not provide for a functioning partnership between the service providers and the total community served, because it effectively implies that the extension worker will be working with and responsible to as many linkage structures as there are sub-communities or villages.

For effective interaction and partnership, a further linkage structure at ward level is therefore necessary. The introduction of local government with the lowest tier being the local municipality which usually encompasses several wards (extension service areas), increases the support for a linkage structure at a higher level (i.e above ward structure).

8.6 CONCLUSIONS AND RECOMMENDATIONS

The outstanding finding of this chapter is the widespread support for the inclusion of the human factor in development. This finds expression in the unreserved support for participation and especially its purposes and goal, namely that participation is primarily seen as an ultimate goal of development, more so than the means to an end. This is also reflected in the majority of respondents being in favour of human development as the ultimate goal of the Department of Agriculture. However, there are indications that much of this support is mere lip service, as is evident from the practical implementation recommendations, which often are in direct contradiction with the supported principles.

Using these findings as a basis of departure it is suggested as (policy guidelines) the principle of participation be fully embraced, not only as a means to improve extension delivery but also for the purposes of increased sustainability, and community empowerment, self-dependence and self-sufficiency in agreement with the principle of “ help towards self help”.

This very widely formulated and in many respects optimistic proposal should be seen as long term unfolding guidelines. It is accepted that the degree to which participation can be implemented will vary from situation to situation, and that this will largely depend on the community’s maturity and willingness to become more involved, even to the level of taking ownership of the development process. It does imply that under certain circumstances a less participatory approach could be the most appropriate.

Human development should be pursued as means towards agricultural development, which should remain the ultimate and major goal. Although the opposite, namely

agricultural development as a means to human development, is preferred by the majority of respondents, it seems that the implications of the latter alternative are not fully understood. These include a likely side-tracking of the agricultural focus, an obligatory main evaluation focus on human development issues rather than agricultural development and an overlap with other non-agricultural ministries to the degree that change of name could become appropriate.

The proposed pursuit of human development as means will not decrease its importance, but policy makers will have to decide whether it will be the only permitted means. Current indications are, for example, that directive projects promoting innovation packages are the most effective from an agricultural production point of view (Terblanché & Düvel, 2004).

Public extension services should promote, facilitate and help maintain effective linkage structures within the service areas. These should provide for one effective coordinating body per service area to serve as representative mouthpiece of the local community and taking ownership of the development process with operational project or program committees linked and responsible to the coordinating body and linkages of the coordinating body with the local municipality to ensure integrated and coordinated development

The coordinating or umbrella organizations now functional under the BASED project at sub-community or village level are a positive development, but need to be supplemented with linkage structures at higher levels. Participation (although the ultimate goal is full ownership and self-determination and responsibility) should be implemented in a situation-specific and situation appropriate manner.

This recommendation is based on the experience that many communities still lack the need and skills to take full responsibility and consequently need to be guided into a process that will ultimately lead to full participation, ownership and full responsibility.

CHAPTER 9

PURPOSEFUL OR PROGRAMMED EXTENSION

9.1 INTRODUCTION

Programme planning plays a role in initiating change (Van den Ban and Hawkins, 1994:179). The failure of development projects and extension activities can frequently be attributed to a lack of systematic planning in extension. As a methodology, extension programme development has, according to Murton (1965), Gregory (1989) and Lilley (1978), often been enforced in a top-down manner and has not always been implemented in a participatory manner as suggested by Düvel (1992).

9.2 ACCEPTABILITY OF A PURPOSEFUL APPROACH

The acceptability of the purposeful approach was tested by requesting respondents to respond to a choice of alternatives having the programmed and non-programmed approaches as extreme scale continuums. The outcome is presented in Figure 9.1.

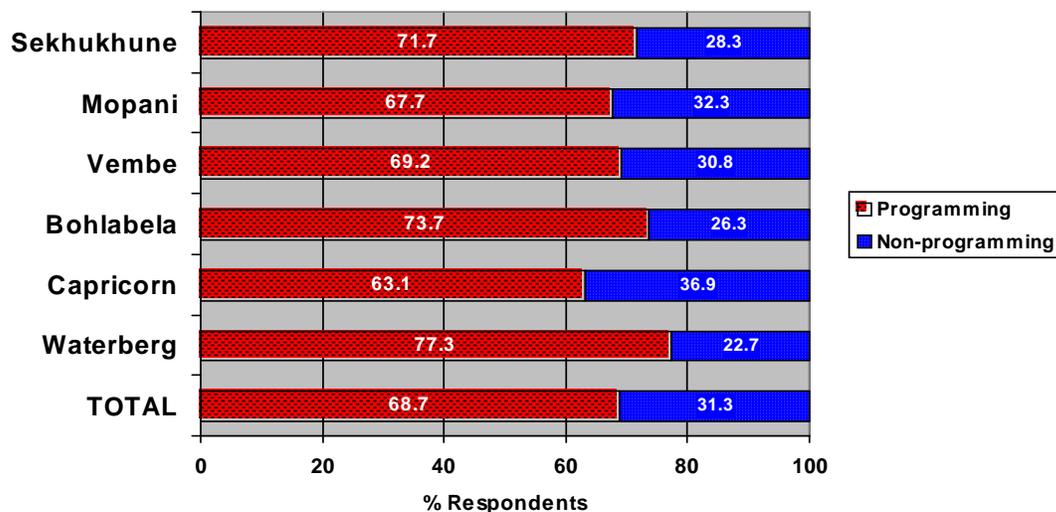


Figure 9. 1: The preferences expressed by extension staff in the different districts in Limpopo Province regarding programmed versus non-programmed extension

The picture that emerges from the findings shows that programmed extension is supported in Limpopo as illustrated in the finding that all the districts reflect a percentage above 60 in favour of programmed extension. Waterberg displays a slightly higher percentage than the rest while Capricorn shows a slightly lower estimate in support for programmed extension. The possible reason for Waterberg's higher figure could be linked to the established extension practises in that district which have concentrated on study groups and programmed extension in the past. As far as Capricorn district is concerned, the possible reason could be the reluctance of the extensionists to embrace changes in extension because of the "supply driven" nature of development projects within the Department as opposed to the "demand led approach" which was familiar to them.

9.2.1 Advantages of programmed extension

A purposeful or programmed approach is supported by some authors (Cristovao, Koehnen and Portela, 1997:56 and Düvel, 2002: 120) because of its advantages that it promotes. Some of the most important advantages are its provision for the implementation of the "help towards self-help" principle and ownership, for the improvement of the effectiveness and efficiency of extension and its inclusion of monitoring, evaluation and accountability initiatives. The viewpoints of respondents are summarised in Table 9.1.

The picture that emerges from these findings shows that programmed extension, in general, is held in high regard by all. Mopani seems to be holding strong views regarding the advantage of higher effectiveness and efficiency, while Sekhukhune seems to be least convinced about this advantage. Similar patterns emerge regarding the provision for ownership and self-determination, in the sense that Sekhukhune is least convinced as reflected in the relatively low rating of 7.08.

The least variation occurs in terms of the advantage that programmed extension has regarding monitoring and evaluation. Sekhukhune District again has the lowest rating (7.24) on the first two advantages while it is not strong on the last advantage.

Table 9. 1: The mean assessment (10-point scale with 10 as the most desirable) of some advantages of programmed or purposeful extension by extensionists in the different districts of Limpopo Province

District	Mean Assessment of Advantages of Programmed Extension		
	Higher efficiency and effectiveness	Allows ownership and self-determination	Allows monitoring, evaluation and accountability
Sekhukhune	7.00	7.08	7.24
Mopani	8.91	8.32	7.68
Vembe	7.3	8.0	8.02
Bohlabela	7.18	8.18	7.51
Capricorn	7.59	8.1	7.64
Waterberg	7.73	8.4	7.47
Total	7.51	7.95	7.59

It is surprising to see this kind of response because unlike other districts, all the extensionists of Sekhukhune are from the background of undeveloped farming with no commercial farming orientation. The possible reason for this performance of Sekhukhune would possibly can be traced from the fact that extensionists from Sekhukhune have not internalized the new approach of participatory extension (PEA) because at the time of the research Sekhukhune was not yet participating within Broadening of Agricultural Service and Extension Delivery (BASED) programme. The nature of BASED is such that it also promotes a positive mindset amongst extensionists.

Vhembe is strong on the monitoring, evaluation and accountability and average on the other advantages. The likely reason could be primarily because of the BASED programme which provides a monitoring mechanism in the form of mid-season evaluation and the provision of feedback to the entire community (where BASED operates). This might have generated a positive attitude towards the realization of the importance of these advantages in general terms.

The Bohlabela district is very strong on the second advantage after Mopani, while Capricorn, Waterberg and Sekhukhune do not have strong views. The reason why Bohlabela and Mopani perform better is because the previous extension practice of Gazankulu homeland promoted programmed extension. The influence of BASED programme is also evident (as BASED programmes are to some extent similar to programmed extension). (Participating farmers developed effective innovation programmes on crops and livestock and assume ownership in conservation measures of soil fertility and water conservation programmes).

9.3 SOME PRACTICAL ASPECTS OF THE IMPLEMENTATION OF PROGRAMMED EXTENSION

9.3.1 Programme interference

A common problem facing frontline extension workers in the implementation of extension programmes is that they cannot adhere to their program and activity plans because of frequent interference in the form of unscheduled responsibilities enforced on them at very short notice (Düvel, 2002:12).

The seriousness of this problem can be concluded from Table 9.2 in which the respondents' assessments are summarised.

Table 9. 2: The percentage distribution of extensionists in Limpopo Province according to their assessment rating of the problem of programme interference



Type of problem	Percentage
No opinion	1.3
No problem	11.1
Somewhat of a problem	21.6
Is a problem	40.8
Is a serious problem	25.2
Total	100

There is general agreement that indeed there is a problem working program interference. The perceptions differ somewhat however in terms of the seriousness of this problem. 87.6 percent of all the respondents perceived programme interference as a problem of better or greater magnitude with 25.2 percent regarding it as a serious problem. The variation between districts is mainly in terms of the seriousness of the problem. It appears that districts that are nearer to head office such as Capricorn and Sekhukhune experience the most serious programme interferences.

The attributing reason is that both are situated with 50 km of the head office (Polokwane). Extension officers are (amongst others) tasked by head office to perform functions that are not planned such as representing head office in community functions planned by head office. The interference and its implications are serious.

Against the background of the seriousness of the interference problem, some solutions were tested regarding their current application and their appropriateness as a solution. The findings are summarized in Figure 9.2.

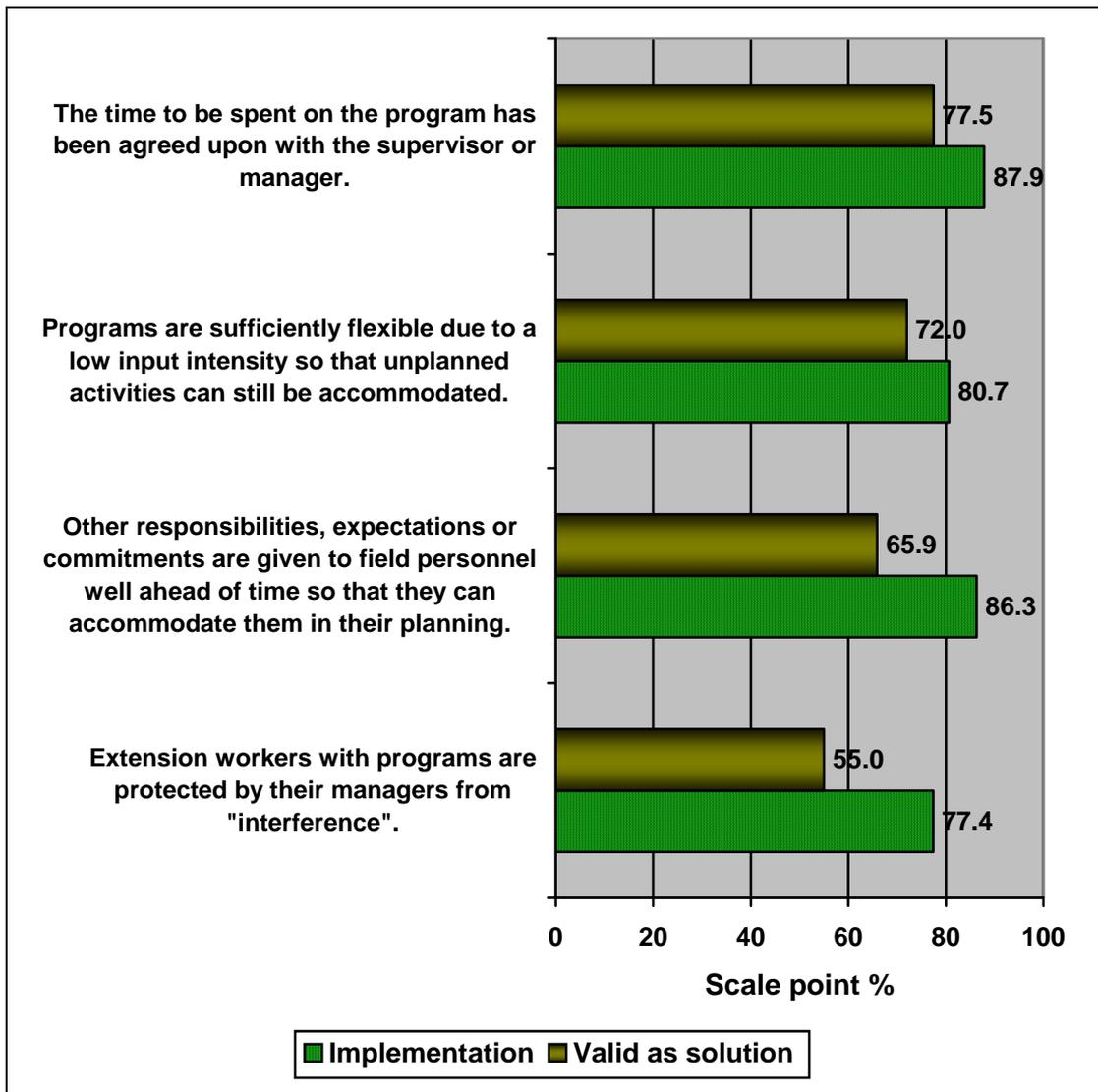


Figure 9. 2: Respondents’ mean assessments of different solutions to the problem of interference in terms of the degree of their current implementation and their appropriateness as solutions

The general implementation of the various solutions is judged to be reasonably high. The suggested solution of prior agreement with the supervisor or manager regarding an appropriate time division is rated as 75.7 percent followed by a 69.5 percent rating for assigning tasks to field staff well ahead of time so that they can be accommodated in their planning. However, the fact that, in spite of these measures, the interference is still judged to be a serious problem (Table 9.1) could be an indication that the measures are not implemented effectively or that additional measures are required.

Better advanced planning and improved coordination at all levels, namely head office, district office or sub-district, could significantly contribute towards possible solutions.

9.3.2 Programme ownership

According to Cristovao, *et al*, (1997:61), experience shows that project success and long term sustainable results require people-centered approaches. This is also true in programme planning. Düvel (2002:123) observes that an acceptable principle, especially for participatory development, is for programmes to be owned or co-owned by the community. Opinions regarding the degree of ownership by the community or by the extension worker were tested by requesting respondents to place the various alternatives in rank-order of preference. The findings are shown in Figure 9.3.

The co- ownership of programmes, i.e. the equal sharing of responsibility between service providers and the community is regarded as the most favoured alternative (by 52 percent of all respondents). 39.7 percent of respondents are still in favour of complete ownership and responsibility by the service provider, namely the Department of Agriculture.

Only a small minority (8 percent) really associate themselves with the idea of the community taking over complete ownership and responsibility. This may be an indication that the latter is still seen as an impractical ideal or only a long-term goal, especially if the current levels of education and development of many of the rural communities are considered. In view of these findings it seems that community involvement and ownership should be introduced gradually and adapted to the prevailing and specific community circumstances.

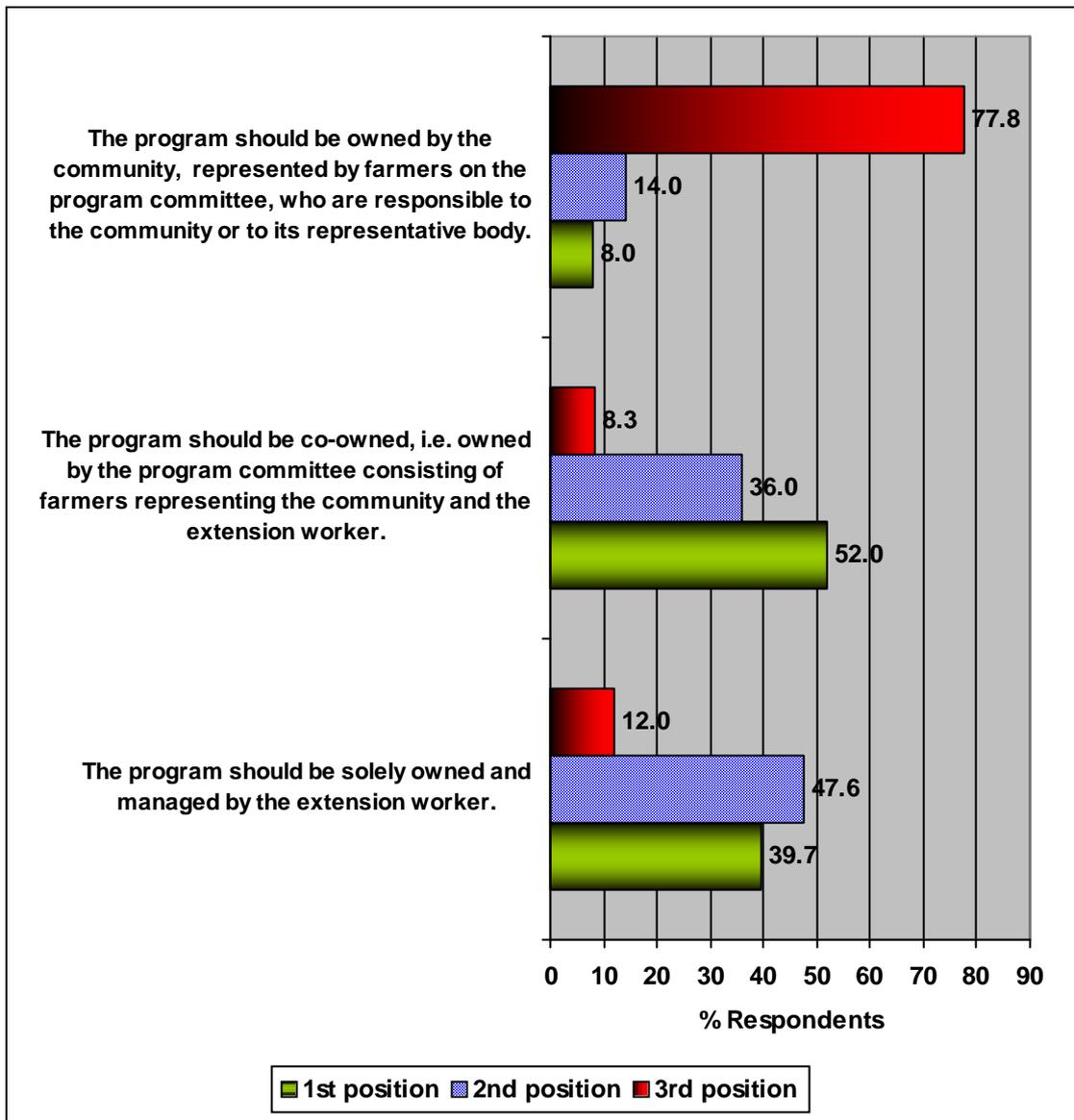


Figure 9.3: The acceptability of different alternatives of ownership expressed by rank order positions

9.3.3 Time spent on programmed extension

According to Van den Ban and Hawkins (1990:199), many extension services do not work with systematically planned extension programmes, but spend most of their time reacting to farmers’ requests. Respondents were asked to indicate the time that frontline agricultural technicians should spend on purposeful or programmed extension. The time currently spent and proposed to be spent by agricultural technicians on purposeful or programme extension is shown in Figure 9.4.

The overall picture is that an average of 2.5 days is spent on programmed extension but that this time should be extended to 3.4 days. This represents strong evidence in support of the programmed approach. The recommendation that the time spent on programmed extension be increased by a day does create the impression that the personnel have the capacity to do so. The significant increase in time spent on programmed extension could also be an indication of the general dissatisfaction with the current level of operation, which frequently implies the mere scheduling of technical tasks rather than programmed extension in the form of purposeful behavioural change as end-objective.

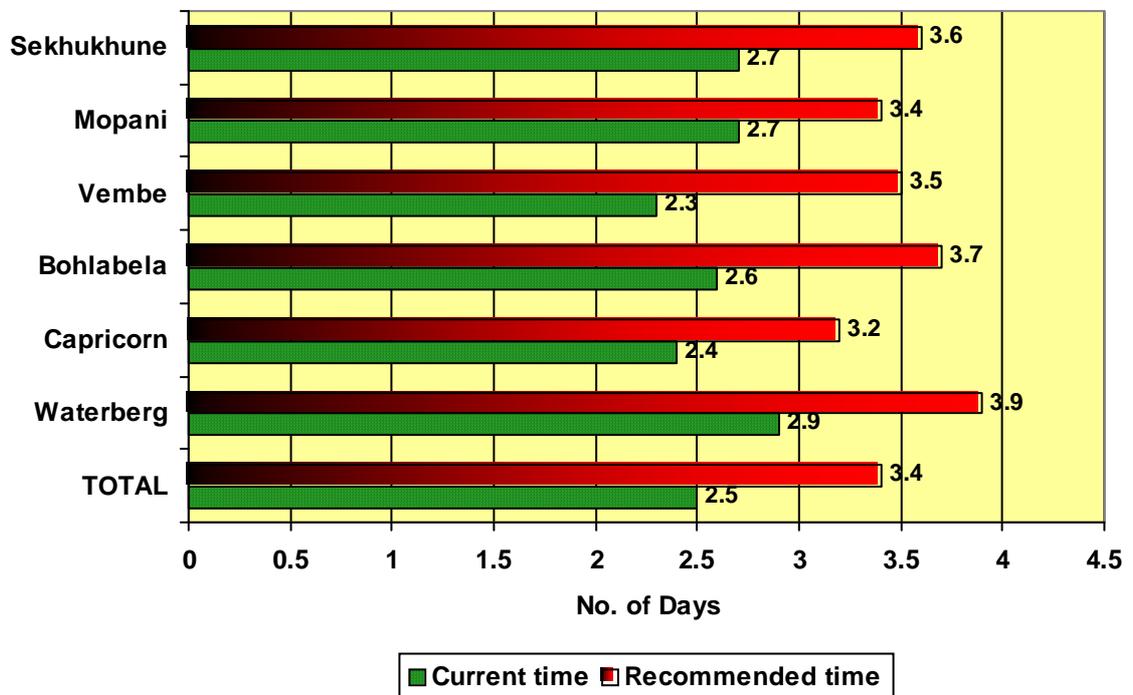


Figure 9. 4: The average current and recommended time (mean days per week) spent on programmed extension according to respondents in the district of Limpopo

There are no significant differences between the districts regarding the current time spent by agricultural technicians in purposeful activities. Time spent varies from 2.3 days (Vhembe) to 2.9 days (Waterberg) per week, which represents about half of the available time. It is noteworthy that the districts spending relatively more time on programmed extension, did not propose less but correspondingly even more time for

that purpose, which appears to support the general feeling of discontent with the current situation.

9.3.4 Accountability

The involvement of communities as members of program committees has often led to the opinion that this form of self-accountability replaces the necessity for further accountability towards the community, since the community is represented by the programme committee. In contrast to this perception is the viewpoint that the programme committee is not representative of the total community and thus cannot stand in for it regarding accountability. Accountability should rather be towards the more overarching community coordinating structures like the Local or District municipalities (Düvel, 2002:127). Opinions regarding these in a sense opposing viewpoints are reflected in Figure 9.5.

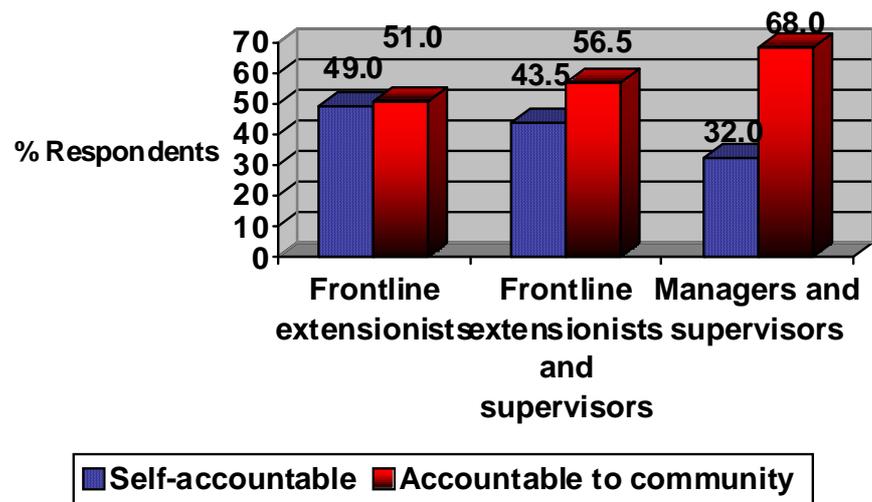


Figure 9. 5: Percentage distributions of respondents in different management categories according to their preference of program committees being self-accountable or accountable to their communities (Düvel, 2002)

The picture that emerges from the results shows that the majority of respondents are perceive self-accountability through the programme committee less favourably and that this viewpoint is progressively with less popular higher levels of management. Among frontline extension personnel there is an almost equal support for both

alternatives while the support for “wider community accountability” increases to 56.6 percent among the supervisors and to 68 percent among the managers.

9.4 CONCLUSIONS AND RECOMMENDATIONS

The outstanding finding presented in this chapter is the widespread support for purposeful or programmed extension, which can be attributed to respondents’ awareness of the advantages of programmed extension, particularly those relating to increased effectiveness and efficiency and the provision of a framework for community involvement and participation allowing for the principle of helping the community to help itself. Against the background of these findings, the following policy guidelines are proposed:

- Programmed extension should, in view of its unquestionable advantages, (especially those relating to improved efficiency and effectiveness, its provision for promoting ownership and helping communities towards self-help and its precondition for proper extension evaluation and accountability) be accepted as policy by the Department of Agriculture. At least half of the frontline extension workers’ time should be spent on purposeful or programmed extension. Management should be supportive of programmed extension by emphasising its value as an aid to improved extension delivery rather than as a control mechanism.
- It should provide guidelines accepting co-responsibility regarding decisions relating to the appropriate time division between programmed and non-programmed activities by advanced planning of activities so that these can be included in the development of work calendars and not cause discontinuity or derailment, by encouraging a certain degree of flexibility within the programmes, by providing the necessary skills, through training for the effective implementation of programmed extension. Extension programmes should be owned or co-owned by the communities and implemented in a situation appropriate manner and in a way that pursues maximum participation, ownership and self-determination.

- It is proposed that the Department should encourage communities to have full ownership of programmes. This should however be done in stages, depending on the level of empowerment and the amount of money involved. Where huge sum of money is involved, there should be a gradual shift of responsibility community leadership with a full takeover once the leadership has been capacitated to run such programmes.

But where no money is involved the community should be allowed to run the programme right from the beginning. Accountability of extension programmes should be entrusted to the target community (local coordinating body), community coordinating structures (local and/or district municipalities) as well as management structures within the Department of Agriculture.

CHAPTER 10

MONITORING, EVALUATION AND ACCOUNTABILITY

10.1 INTRODUCTION

Extension evaluation is accepted as a tool for improving current and future extension (Van Den Ban and Hawkins, 1990:230). The survival and funding of extension, according to Düvel (2002:54) depends on proper accountability. Because of the nature of monitoring and evaluation, the process requires that information be gathered and analyzed as systematically and objectively as possible (Van Den Ban & Hawkins, 1990:230). Evaluation is defined as a continuous and systematic process of assessing value or potential value.

The process includes the development of criteria from the concerns of the relevant audience for the evaluation, the collecting of data relating to the criteria and the provision of information that adequately addresses the concerns (Seepersand & Henderson, 1984:184). Monitoring on the other hand is a specialized dynamic, semiautonomous and institutionalized management resource which helps in the implementation of programmes (Misra, 1997:150).

10.2 THE PERCEIVED IMPORTANCE OF EVALUATION

Monitoring and Evaluation (M&E) is either weak or conducted on an ad hoc basis in some organizations (Oakley & Garforth, 1985:13 and Misra, 1997:151). This negates the positive role which it can potentially play in improving the present and future activities such as planning, programming, decision-making and programme implementation to achieve extension policy goals more effectively. Accountability has become the major issue worldwide, according to (Düvel, 2002:154) and is the means of justifying public and other extension funding. The perception of the respondents about the importance of monitoring and evaluation is reflected in Figure 10.1.

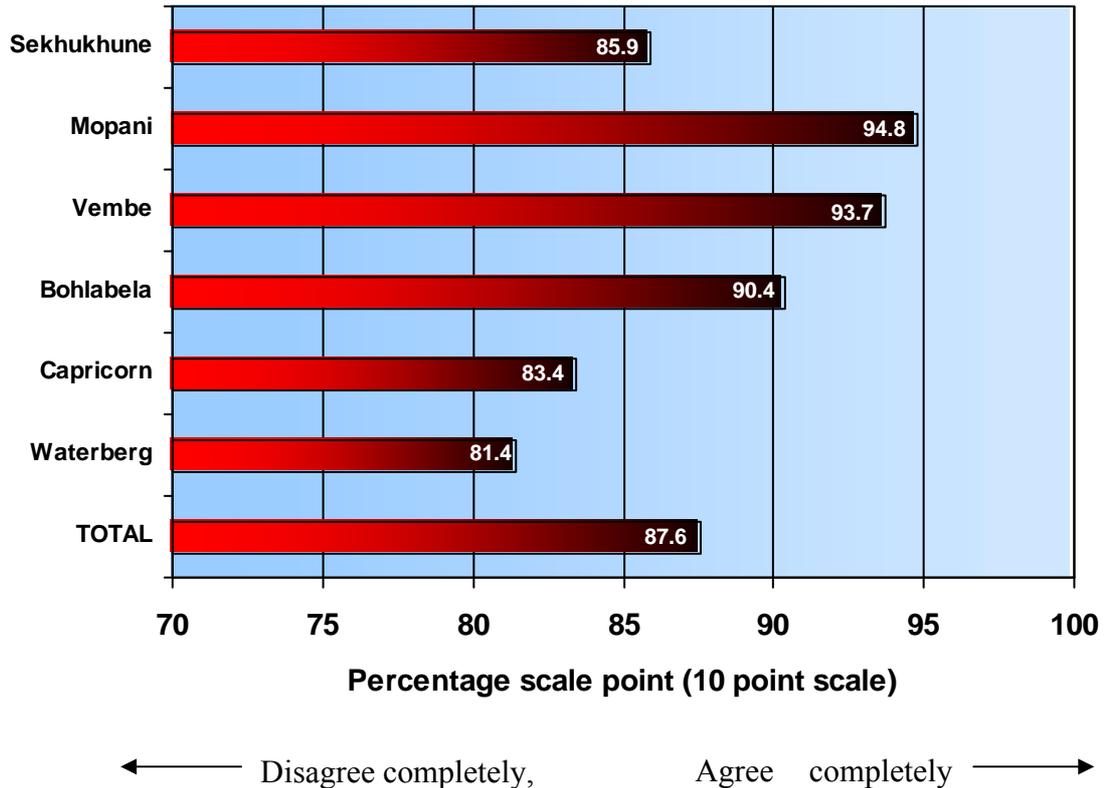


Figure 10. 1: Respondents’ level of agreement with the view that monitoring and evaluation is one of the best instruments to improve extension

The overall picture is that the extension workers of Limpopo understand the importance of M&E. All districts show an average assessment of above 80 percent. The Waterberg district reports the lowest rating as compared with the other districts. The reason for the low rating could not be established.

The Mopani district has the highest rating, namely 94.8 percent. This could be attributed to the influence of the general extension system practiced in the former homeland of Gazankulu in which M&E was well supported in all its 6 former districts of which Mopani covers three. For example all extensionists were expected to conduct an evaluation of their extension programmes before embarking on a new one and there was a subject matter specialist hired to oversee agricultural extension in that homeland.

A further indication of the perceived importance of more accountability through effective monitoring and evaluation is given by respondents’ rank order of solutions

to the improvement of the effectiveness of extension. The findings are presented in Table 10.1.

Table 10. 1: The importance assessment of different solutions to improving extension efficiency based on rank order positions and expressed as mean weighted percentages

Province	Weighted Mean (%)						
	Im- proved Mana- gement	More Account- ability	Better and more training	More Financial resources	Better Staff selection	Better Extension Approach	More Commit ment
Sekukune	74.5	73.4	76.8	71.4	51.2	77.0	51.1
Mopani	72.0	63.0	89.3	60.1	64.6	57.1	60.6
Vembe	79.1	63.3	75.4	69.3	47.3	67.5	65.8
Bohlabela	77.9	63.1	83.7	64.1	59.3	72.0	55.6
Capricorn	75.3	70.3	88.2	68.0	45.1	73.7	59.0
Waterberg	63.1	54.9	85.7	67.0	57.1	69.2	71.4
Total	75.0	67.3	83.0	67.2	52.0	71.0	58.2

The picture that emerges from Table 10.1 shows a poor support for M&E as a possible solution to improve extension. Accountability is perceived not to be particularly important to mobilise more financial resources where it is rated the fourth (with a mean of 67.3). The option of “better and more training” is ranked first with a mean of 83.0 as a solution to improving extension efficiency. These findings suggest that extensionists are not considering monitoring and evaluation as that important in their work. The attributing factor for the low rating of monitoring and accountability could be the perception held by extensionists that extension is in any event not well organized at head office and it is void of good leadership.

There are no compelling directives that are communicated to the districts emphasizing the importance and necessary implementation of evaluation as part of programmed extension. The BASED programme identified the challenge of non-implementation of

M&E in the Department and suggested that the Management Support Group (MSG²⁰) should assist with the development of a format for M&E. Unfortunately the format had not been implemented in the Department when the MSG programme terminated.

10.3 CURRENT EVALUATION ACTIVITIES

Monitoring and evaluation should be conducted regularly during programme implementation (Seepersad and Henderson, 1984:184). According to Düvel, (2002:55) evaluation can vary from casual everyday assessment as a form of subjective reflection to rigorous scientific studies, from being purely ‘summatory’ in nature to evaluations that also focus on monitoring or on formative evaluations, from being focused only on input assessments to evaluations that are primarily output focused.

An impression of the current evaluation was obtained by asking respondents what they did to evaluate their extension work. They were requested to indicate their evaluation activities by identifying them on a list of alternatives that was provided. The summary of findings is presented in Figure 10.2.

The general picture presented by Figure 10.2 is not impressive when taking into account the suggestion by (Seepersad & Henderson, 1984:184) that monitoring and evaluation should be conducted regularly. All reported activities that were supposed to be done show less than 50 percent implementation. 48 Percent of respondents involved in the survey indicated that they regularly complete and return monthly or quarterly reports. If all those that did not answer the particular question are excluded, the percentage increases to about 77 percent which is highly questionable.

These figures are inaccurate and do not reflect the real situation as the extensionists in Limpopo (since 1999) no longer submit what one would call “the general statistical

²⁰ *The Management Support Group was one of the Donor funded Programmes (DFID) that was operational from 1999 to 2001. The objective of the programme was to strengthen the management ability of the Department through the identification of gaps, suggesting solutions to overcome them. One programme that resulted from this was the development of a middle management training programme.*

report²¹ “The only report submitted is an ad hoc based on the priority of the areas of the strategic plan of the district.

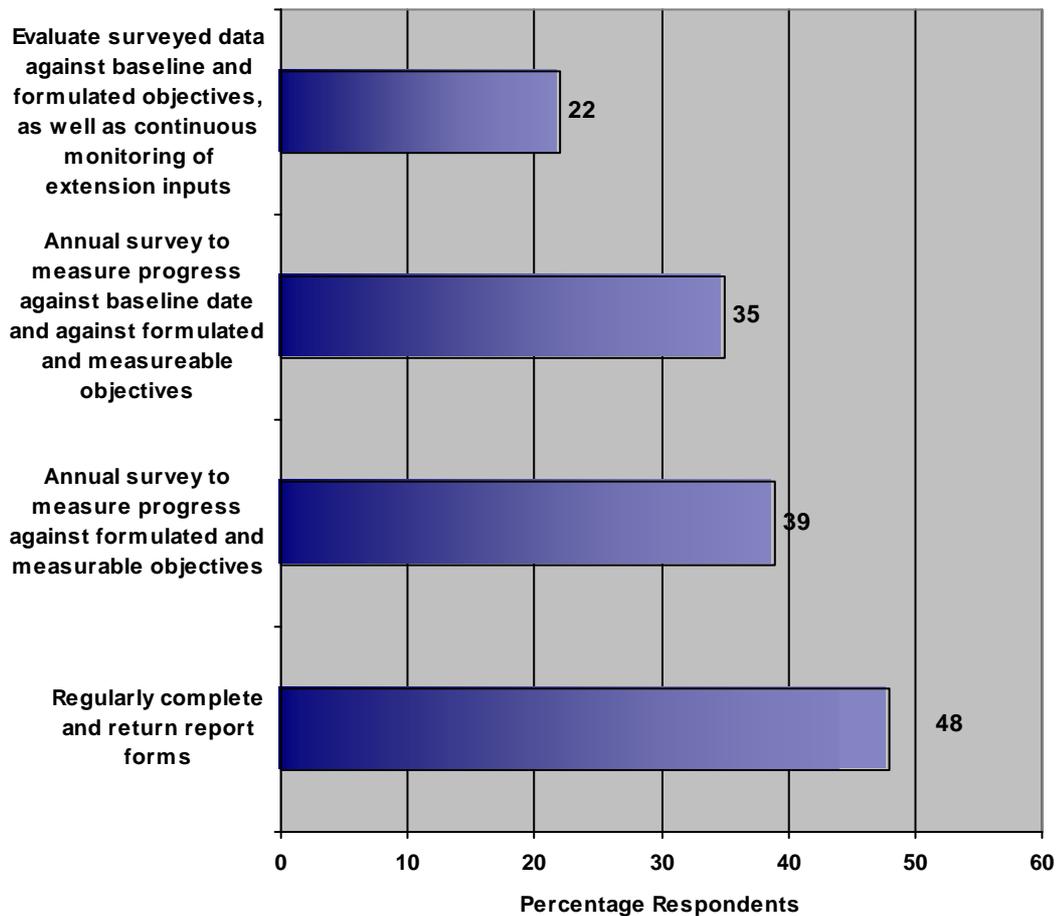


Figure 10. 2: Percentage distributions of extension workers according to their implementation of different evaluation activities

Strategic areas include micro-enterprise projects, poverty alleviation, restructuring of government assets, land reform, rural development funding, youth in agriculture, livestock and animal production and the restructuring of smallholder irrigation schemes (RESIS).

²¹ *By general statistical report , the writer refers to the formal and general agricultural statistics used to be gathered through an approved official form showed the current achievements of extension activities that were mainly input oriented rather than output based. The form used to collect (on a purely quantitative basis) the performed extension activities such as the number of lectures, meetings attended, farm visits, short courses presented, etc*

Respondents basing their evaluations on annual surveys and measurable objectives are as low as 39 percent. Even this figure appears inflated as the majority of the extensionists no longer compile the general extension statistics. Where evaluation reports are submitted they appear to relate to input or infrastructure focused projects involving a very small percentage of the total target communities. Table 10.2 offers more information on various evaluation activities. The statistics are somewhat confusing as they add up to more than 100 percent the reason being that they are in a way cumulative and need to be considered in their interpretation.

Table 10.2: The percentage respondents performing the various evaluation activities in the different districts of Limpopo Province

Evaluation activities	Sekhukhune	Mopani	Vembe	Bohlabela	Capricorn	Waterberg
Annual survey to measure progress against formulated and measurable objectives	59	33	67	64	56	40
Annual survey to measure progress against baseline data and formulated and measurable objectives	44	14	61	57	53	27
Annual survey to measure progress against baseline data and against formulated and measurable objectives and monitoring of impact of extension inputs	60	39	56	60	52	33

The overall picture shows the diversity of performance when different criteria are used. As the number of criteria grows progressively more evidence appears about extension's accomplishments. Two districts namely Mopani and Waterberg show a performance of below 50 percent (in all criteria). On the other hand however, four districts show a performance of above 50 percent with Vhembe leading in the first criteria with 67 percent. The influence of this performance is not very clear as evaluation is not done in all the districts after head office temporarily suspended extension at head office in 2000. The results may suggest that agricultural technicians believe that evaluation ought to be done.

10.4 EVALUATION CRITERIA AND PROCEDURES

Effective monitoring and evaluation is only possible or meaningful against identified and formulated objectives and using appropriate criteria (Düvel, 2002). The question frequently asked is what should be evaluated? There are different levels and criteria that can be used such as farmers' participation, farmers' opinions, change in knowledge, behavioural changes, outcomes and consequences for society and target groups. Bennet (1982) as cited by Van den Ban and Hawkins (1990:235). Respondent's assessments are summarized in Table 10.3

Table 10.3: Respondent's assessments of the importance of different evaluation criteria expressed as mean percentages

Province	Mean Percentage						
	Input resources	Activities	Farmers' opinions	Behaviour determinants	Practice adoption	Change in efficiency	Impact
Sekukune	87.8	90.6	57.2	77.2	77.2	82.2	67.8
Mopani	86.9	85.9	51.5	76.8	67.7	79.8	61.6
Vembe	93.3	95.0	57.0	78.6	76.9	84.6	71.8
Bohlabela	91.1	96.4	63.7	78.2	84.2	86.7	74.4
Capricorn	87.4	92.3	69.0	76.4	79.4	83.0	72.9
Waterberg	88.9	100.0	44.4	60.0	71.1	86.7	71.1
Total	89.0	92.7	61.0	76.4	77.8	83.6	70.7

The picture that emerges from Table 10.3 is one of reasonable variations between the perceived importances of the different evaluation criteria. Activities (92.7 percent) and input resources (89.0 percent) are perceived in all districts as the most important criteria, followed by changes in efficiency. It is noteworthy that farmers' opinions are regarded to be the least important. This applies particularly in the Waterberg district, which is also much more reserved regarding the importance of behaviour determinants. The latter criteria, namely the behaviour determinants, are well appreciated in most districts, which do imply that monitoring, which can be based on these criteria, could be introduced without too much resistance.

In order to understand the importance of different criteria, a comparison is made with the national extension survey (Düvel, 2002:156) with regard to the efficiency and the frequency with which they are used in implementation. The responses regarding the importance and current use of the different criteria are summarized in Figure 10.3.

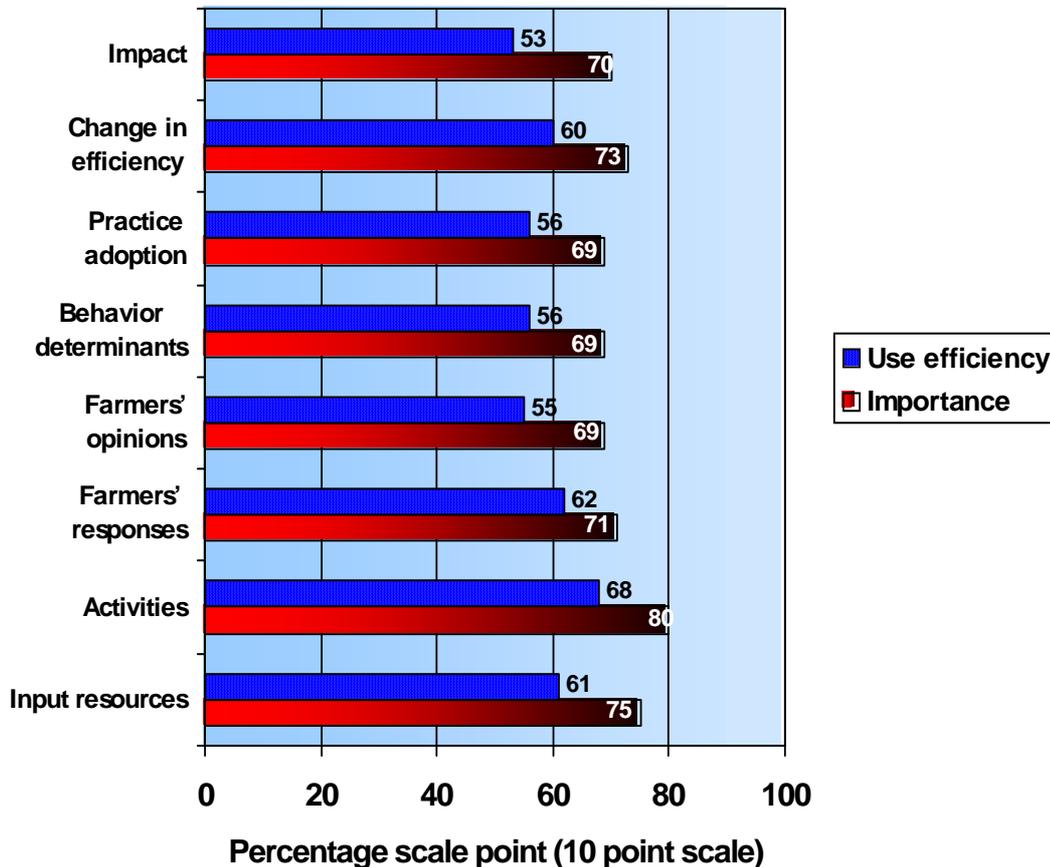


Figure 10. 3: Respondents’ mean assessment of evaluation criteria in terms of their importance, their implementation efficiency and their use frequency (Düvel, 2002)

The findings relating to the whole of South Africa are very similar to those of the Limpopo Province, particularly as far as the importance of input resources and activities as evaluation criteria are concerned. Extension personnel in Limpopo have less confidence in an evaluation by farmers (a mean importance assessment of 61 percent as opposed to the national mean of 71 percent), but in general attribute more value to most of the criteria.

Not quite independent of the choice or preference of criteria, is the number of criteria to be used. The extreme positions could be a preference for one or two criteria or a preference for a multitude or as many criteria as possible. Viewpoints differ as to what is the most appropriate. Supporters of a minimum of criteria or objectives emphasize the need for simplicity and prevention of confusion. For the other school of thought (emphasizing a maximum of criteria and objectives) the main consideration is to gather as much evidence as possible, which is dependent on the number of objectives and criteria. Respondents' choices between these alternatives are summarized in Figure 10.4.

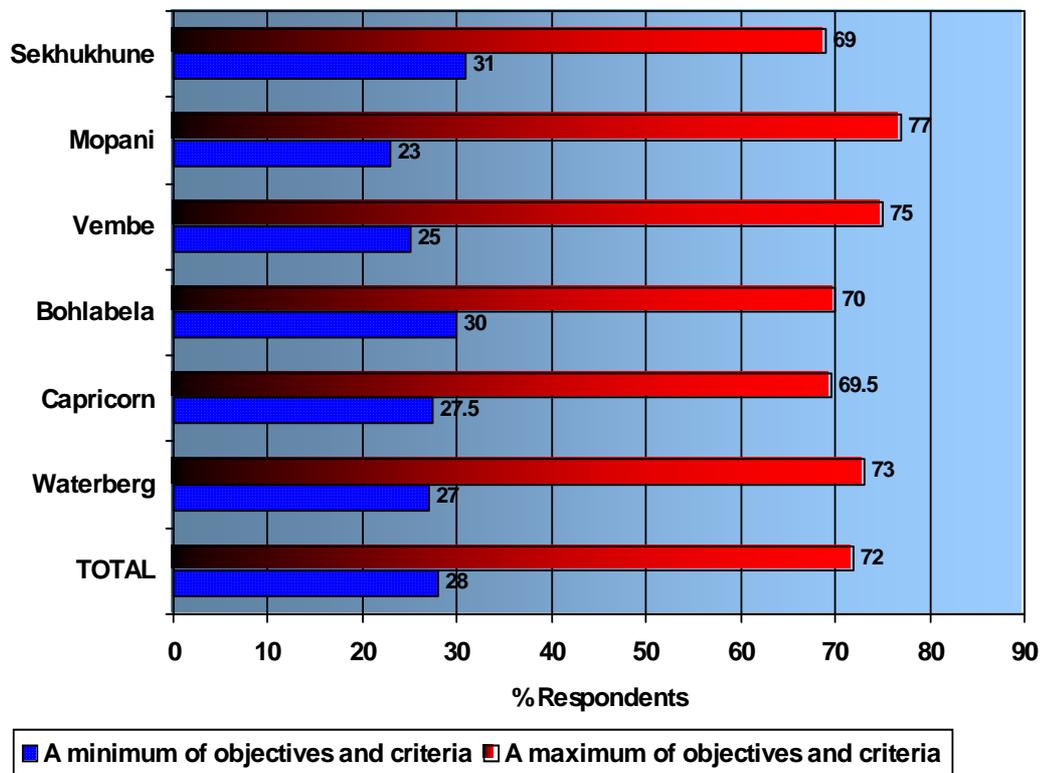


Figure 10. 4: Respondents' preference regarding a minimum or maximum of objectives in extension programmes

The findings in Figure 10.4 reflect a positive appreciation of the maximum objectives and criteria. For example the majority of extension staff, namely 72 percent, seem to understand and recommend the importance of having a multitude of objectives and evaluation criteria, so as to come up with maximum evidence regarding extension successes or achievements and thus to justify the investment in extension. Between

the districts there is little variation, except that in Mopani and Vhembe districts the support for a multitude of criteria is slightly more than for the other districts. The importance of evaluation or accountability does bring up the question as to how much time the Department of Agriculture or its officers can afford to spend on evaluation. The respondents' reaction is shown in Table 10.4.

Table 10.4: The percentage respondents supporting evaluation or progress reports to various institutions at the different time frequencies

Institutions accountable to	Monthly		Annually		On completion of project	
	n	%	n	%	N	%
Program committee	222	80.7	149	69.0	164	77.4
Extension management	220	83.0	169	76.1	141	67.5
Local council	129	52.2	128	57.4	103	48.8
Local farmer forum	193	73.9	150	69.1	130	64.7
District Municipality	134	54.5	134	61.2	124	59.3
District farmer forum	119	49.0	134	59.0	119	55.9

The picture that emerges is that the preferred institutions for supporting evaluation reports are well articulated. For example 83 percent of the respondents indicated that the accountable institution should be extension management. The local council is also favoured. This makes sense because extension takes place in a geo-physical area.

There is little support for the viewpoint of regular and short term reporting to certain institutions that are more directly involved (and less frequent reporting to others).

Düvel (2002) highlight rank order as prioritized per different users of the evaluation reports in his national extension survey. The responses are summarized in Figure 10.5.

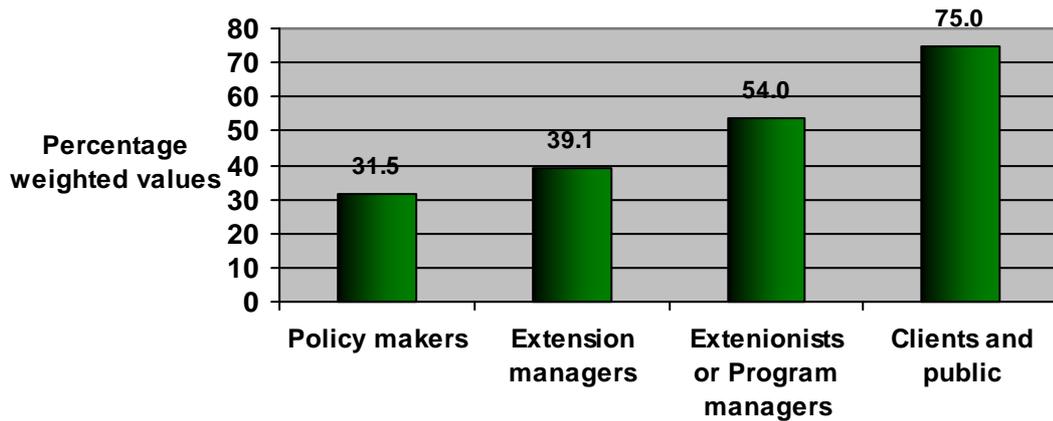


Figure 10. 5: The rank order of beneficiaries according to the recommended priority access to evaluation results (Düvel, 2002)

From the findings in Figure 10.5 a very clear differentiation emerges regarding the various beneficiaries. Evaluation is perceived to be primarily for purpose of public accountability, with a mean percentage rank order of 75.0. This is in contradiction with who are normally seen to be the most important beneficiaries of the evaluation results, namely policy makers and management (who received assessments of only 31.6 and 39.1 percent respectively).

This does not necessarily imply that evaluation results are unimportant for policy makers and managers, they are after all essential for proper policy formulation and management of extension, but merely that the use of evaluation results for public accountability and for improving the process or delivery of extension is perceived to be more important. Placing more emphasis on the use of extension results for the latter two purposes, has implications for the selection of evaluation criteria.

This means, for example, a bigger emphasis on monitoring thereby attributing more importance to behaviour determinants. In all cases it is important to ensure the submission of reliable results and for this purpose extension personnel have to be convinced about the usefulness and the necessity of reliable evaluation results.

10.5 CONCLUSION AND RECOMMENDATIONS

The outstanding finding of this chapter is the widespread support for the perceived importance of monitoring, evaluation and accountability in the Department. This is also reflected in the majority of respondents being in favour of monitoring and evaluation because of its potential of resolving problems and improving the efficiency of extension.

Against the background of these findings the following policy guidelines (taking note of suggestion made in the national extension survey Düvel, 2002) are proposed and should receive serious consideration namely

- Introduction of a national monitoring and evaluation programme, which should be compulsory for all sections and all extension staff members.
- As a public organization the Department of Agriculture is authorized to spend public funds and consequently must be accountable for all expenditures, not only in terms of whether and how the budget is spent (inputs), but also in terms of acceptable objectives and cost/benefits or input/output ratios. The information obtained from proper monitoring and evaluation is essential for improving current and future extension and provides essential information for policy makers, managers of extension and officials involved in the process and programs of extension.
- The number of objectives and criteria should be as many as possible in order to provide for as much evidence as possible. This is essential if extension is to survive stringent accountability processes, especially in a time that is characterized by international trends to downsize public extension. Not all criteria are equally rigorous. The higher the criteria in the hierarchy,(i.e. beyond the input criteria) the less rigorous they are and the more difficult it is to prove that their outcome is actually related to the extension input or program, but the more popular and sought after they are with the politicians.

- Programme objectives should be chosen and formulated to focus on or include the full spectrum of criteria ranging from resource and activity inputs to clients' responses and opinions, behaviour determinants, behaviour change (practice adoption), outcome or efficiency aspects and, where possible, the impact in terms of job creation, increase in living standard, etc.
- Due attention needs to be given to criteria related to behaviour change since they allow for true monitoring and are the best and most direct reflection of the extensionists' achievements. Behaviour determinants (viz. needs, perceptions and knowledge) are the actual focus of extension and their positive change is a precondition for behaviour change (practice adoption) and the consequent change in efficiency and the resulting financial and other outcomes. Behaviour determinants are the focus of every encounter and thus lend themselves to monitoring after every extension delivery. In this way extension can continuously (on a monthly basis) come up with evaluation evidence.
- There is a clear difference between the program objectives and those of the extensionist or program manager, particularly in the phase of program development, i.e. until the delivery begins. For this reason activity objectives should be formulated and form the basis of the extensionist's monthly work program or work calendar. Their evaluation, although of an input nature, can form the basis of performance management. The use of evaluation results could be for public accountability.
- Accountability should be as multi-focused as possible and should be directed to, (amongst others) the following: accountability and Senior extension managers. Here the focus is on reports or evaluation information essential for improved decision making for management and policy formulation purposes. Output and impact criteria are particularly important in this regard and relate to evaluation results at the completion or termination of programs (projects).

Program managers and supervisors

Here the emphasis is on monitoring criteria ultimately aimed at monitoring progress and improving the process of extension. Also to be considered, especially where the standard of extension is low and in need of significant guidance and control, are regular (monthly) submissions of planned and performed activities (objectives), which can also be used for performance management and assessment purposes.

Client communities

Accountability of an extension officer and his development program(s) within the community that he/she serves makes a lot of sense. However, for this to be meaningful and not biased, either in favour of or against the officer, it is important that this accountability be to the institution or organization representing the community or the one appointed by them. On a monthly basis the ward extensionist should report about the progress of the program while a copy should also be forwarded to the linkage body or central development body. Ultimately the content of these reports should be available to the district municipality where future coordination of development is to take place.

Local community institutions

Once the decentralization of local government has been fully implemented and funding is being channelled to district municipalities (for distribution or coordination) such local institutions will also have to be accountable for the funds received by them. They are, after all, not the sole stake holders. However, since the farmers as beneficiaries are not the only stakeholders of public funds, ways need to be found for them to also account for the aid received. Such a process may revolutionize development aid.

CHAPTER 11

PRIVATISATION AND OUTSOURCING

11.1 INTRODUCTION

Privatisation means different things to different people. According to Düvel (2002:161), privatisation implies full transfer of ownership from government to a private entity, with that entity meeting all costs and receiving all profits. In most cases governments have not privatised their extension services in this sense. Some of the reasons for privatisation include budgetary cut backs and the general pressure to reduce state spending.

Extension is faced with challenges such as lack of competence in certain specialized fields by extensionists, and this suggests that alternative ways of providing and funding the extension services need to be investigated. This chapter focuses on privatization, its relevancy and the benefits associated with it. It also discusses its implication for the Limpopo Province in case it is adopted as an alternative strategy of extension delivery.

11.2 THE RELEVANCY AND IMPORTANCE OF PRIVATISATION IN LIMPOPO

Affordability and efficiency of delivery are the main considerations that independently of each other can compel the Department of Agriculture to privatize its extension service. No matter how efficient the service is, if it can no longer be afforded i.e. if funds are not available, it will have to be partially or fully privatized (Düvel, 2002:160).

Respondents were requested to judge the efficiency of the Department of Agriculture’s extension in Limpopo compared to an assumed average international efficiency of 130 percent, i.e. a R130 return per R100 invested in extension. The responses are presented in Figure 11.1.

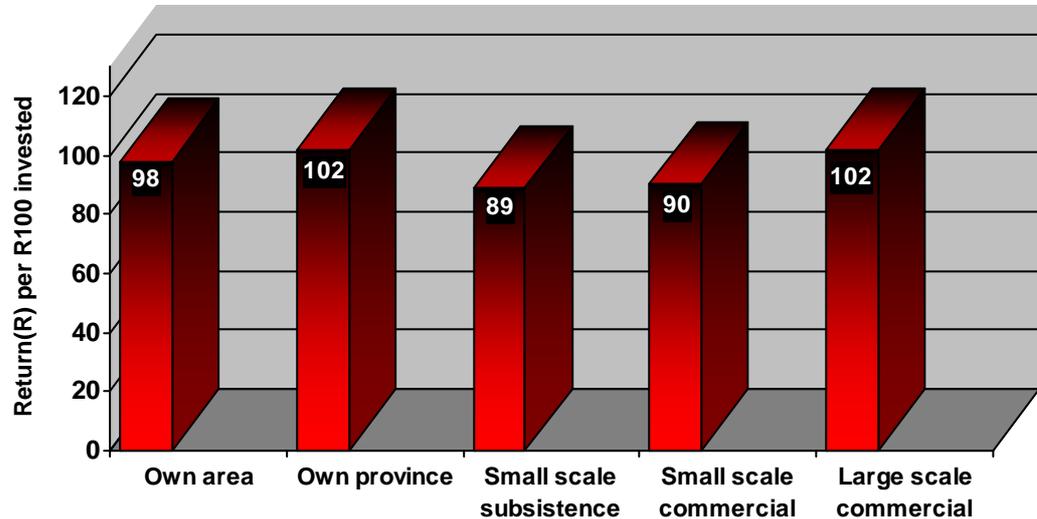


Figure 11. 1: The mean efficiency assessments of the department of agriculture’s extension service in different situations expressed as an output per R100 input

The perception of the respondents as reflected in Figure 11.1 suggest that the efficiency of extension, measured in terms of an input/output ratio, falls well below international standards, which is assumed to be an input/output ratio of 100/130. There is a perceived increase in extension efficiency from small-scale subsistence, to small scale commercial and to large-scale commercial farming, but the difference is marginal (i.e between 10 and 20 percent).

These figures are mere judgements and are not based on empirical data, but the fact that the efficiency in the own area was rated lower than that of the rest of the province, does give an indication of a certain degree of rationalism, albeit a form of frustration with the current situation. Further evidence of the low efficiency of the public extension service is provided in Table 11.1, which reflects respondents’ response to a question as to how much more efficient the extension service would have to become over the short and long term in order to escape the “ threat” of privatisation.

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

Districts	Required mean % increase in efficiency	
	Short term	Long term
Sekhukhune	120.10	113.36
Mopani	140.26	139.10
Vembe	142.64	137.07
Bohlabela	128.43	122.66
Capricorn	123.49	136.74
Waterberg	166.07	146.07
Total (Limpopo)	131.04	131.42
Total (South Africa)	134.21	139.00

The average opinion in Limpopo is that the efficiency will have to increase by about 31 percent over the short and long term, which is very similar to the mean applicable to the whole of South Africa. However the differences between the districts in Limpopo are very significant and vary by up to 40 percent. The biggest concern is in Waterberg District where it is believed that the efficiency of extension delivery needs to improve by about 46 percent. This concern can be interpreted as reflecting a certain need and thus representing a precondition for change.

To some degree qualification appears to play a role in the sense that respondents with a degree or advanced diploma (in extension) tend to be more critical of the current extension performance, while the district variation could be an indication of the critical influence of management. In view of a performance assessed by several categories of respondents to have to improve by 40 to 60 percent, the question of privatisation is justified. However, it is unlikely to be a general solution. Scholars like Botha & Stilwell even warn that privatisation of extension services in South Africa may not be a good option.

11.2.1 Extension efficiency

Privatisation of extension is a justifiable and even essential option if private or non-government services are more effective and efficient of if, due to budgetary cut-backs or other priorities, no longer affordable. Several authors like Ehret (1997:227), Gregoire (1995:63) and Brown (1990:6) maintain that Non-Government Organisations (NGOs) have enjoyed considerable success over the past decades, especially in the 1980s.

NGO's see themselves mainly in contrast to governments and their institutional partners on the premise that they are not bureaucratic, not rigid, not directive and not stultifying of local initiatives. Ehret (1997:226) citing Brown (1990: 5) maintains that NGOs like to see themselves being associated with issues like reaching out for the poor, participation, process versus outcome, contrast with the public sector, people-centred development, flexibility and experimentation, institution-building and cost effectiveness,

Respondents were asked to assess the efficiency of the Department of Agriculture and the NGO's. A comparison of efficiency between government and non-government organizations is summarized in Figure 11.2.

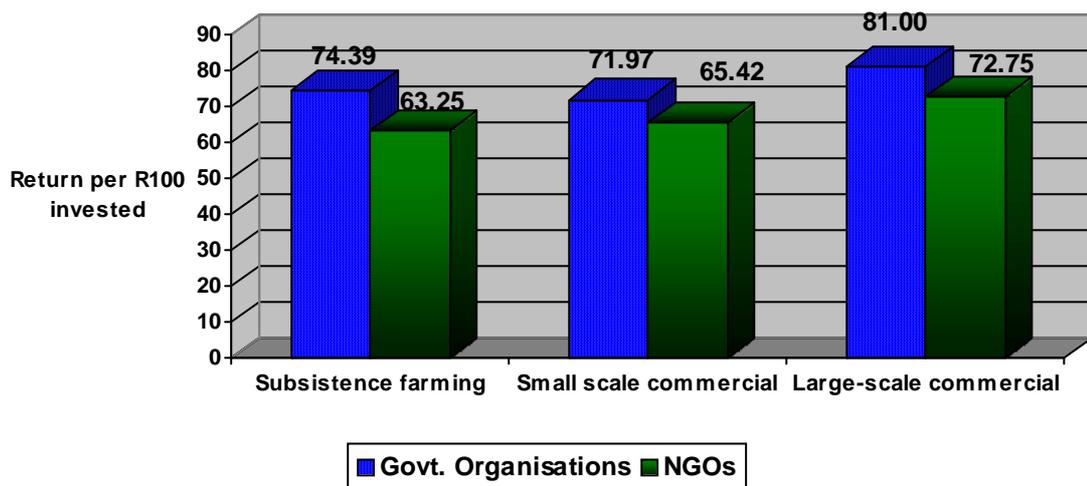


Figure 11. 2: A comparative efficiency assessment by respondents of the extension of government and non-government organizations in different farming situations

The findings in Figure 11.2 show that the efficiency of NGOs is assessed to be lower in all categories of farming (than the state) with the biggest difference occurring in the small-scale subsistence situation. On average the efficiency of NGOs is assessed to be 11.7 percent lower than that of the public service (Department of Agriculture). This discrepancy is appreciable, but significantly less than the 17.3 made by a countrywide assessment (Düvel, 2002:161).

The reason for this difference lies primarily in the tremendous variations among the districts in Limpopo. In half of the districts the efficiency of NGOs is assessed to be higher than that of the Department of Agriculture and can be attributed to the positive impact of the activities of the GTZ and the BASED programme focused on small communities. The main differences, however, stem from the drastic differences in levels of efficiency.

In Sekhukhune District the return per R100 invested in extension was assessed to be R45 and R43 for the Government service (Department of Agriculture) and NGOs respectively, while the assessments in Bohlabela were R123 and R122 respectively for the two types of services. Because of possible bias on the side of the respondents, this need not necessarily correspond with reality.

11.2.2 Opinions on privatization

According to Kidd, Lamers, Ficarreli and Hoffmann (1998:3) experiences related to privatization in the world vary from a complete withdrawal of state interventions, to a commercialization, and cost recovery approach. In some instances it also means an increased involvement of the public services in income generating activities, which include the sale of seeds, surplus land and produce as well as the sale of publications and other materials. There are, therefore, alternatives within privatization which could be pursued.

Respondents were asked to indicate whether they agreed with the privatization of extension services in the Department of Agriculture. Figure 11.3 summarizes

respondents' opinions regarding their agreement with privatization under various circumstances.

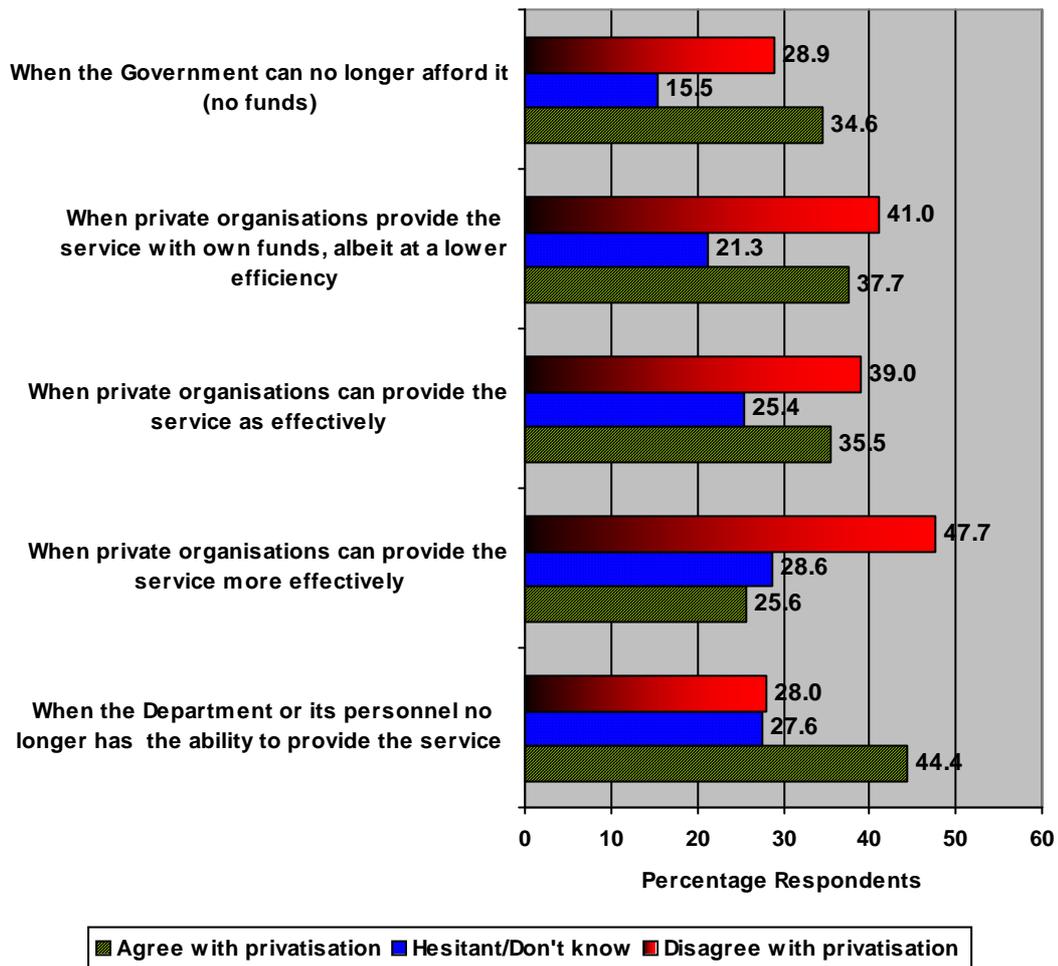


Figure 11. 3: Percentage distributions of respondents according to their agreement with privatization under different circumstances

The general opinion is that there is overwhelming resistance against privatisation. Only in circumstances where the Department of Agriculture or its personnel no longer have the ability to provide the service, do the majority (44.4 percent) agree to privatisation. Even where private organisations can provide the service more effectively, only 25.6 percent of the respondents were in favour of privatisation. Even non-affordability is not accepted by the majority (namely more than 70 percent) as a sufficient argument in favour of privatisation. This leads to the conclusion that privatisation is an emotional issue that does not even allow a rational debate and behind it possibly the fear of not meeting the challenge or unemployment.

The findings in Fig 11.3 relate to respondents' perception about the appropriateness of privatisation in certain hypothetical situations. Respondents were also asked to what degree the various circumstances do in fact apply in their situation. Table 11.2 summarizes the results.

Table 11. 2: The mean relevancy assessment by respondents of different circumstances in the different districts of Limpopo, based on a 10-point scale**

District	The DOA* or its personnel no longer have the competence or ability to provide the service	Private organisations can provide the service more effectively (better input-output ratio)	Private organizations can provide service as effectively	Private organisations provide the service with own funds, albeit at a lower efficiency	Government can no longer afford it (no funds)
Sekhukhune	4.90	5.44	5.34	4.74	5.38
Mopani	5.31	6.39	5.71	5.51	5.17
Vembe	4.08	3.63	4.11	4.06	4.26
Bohlabela	4.09	4.07	4.53	4.38	5.10
Capricorn	4.83	4.87	4.99	5.11	4.85
Waterberg	4.27	4.36	4.23	4.85	5.79
Total	4.65	4.84	4.92	4.81	5.02

** 10 -Point scale with 1 = irrelevant and 10 = highly relevant

* Department of Agriculture

The relatively low assessments in the large majority of cases less than half on a 10-point scale indicate that the circumstances that normally justify privatisation are not perceived to really apply to the respondents' districts. These findings are further evidence of the lacking of support for privatisation in the Limpopo Province. This is not an isolated case. According to Düvel (2002) similar perceptions apply to the rest of South Africa.

11.3 BENEFITS OF PRIVATISATION

Many scholars (Rivera and Carry 1997:205; Umali, 1996; Kidd, Lamers, Hoffman, Ficarelli, 1998:8 and Düvel, 2002: 168) report that privatization has positive impacts on extension delivery, and more specifically in regard to accountability (usually expressed in client orientation and satisfaction) improved efficiency, cost-effectiveness, and reduced public sector costs. Some countries in the world, have commercialized government owned extension systems, (for example Venezuela, Netherland and New Zealand) or by introducing user charges and cost recovery strategies (for example Chile, Venezuela and Colombia) (Kraft, 1997). The primary reason for the commercialisation of extension is the improvement of efficiency in delivery and unaffordability due to budgetary cut-backs.

The Dutch extension service experienced a number of problems before commercialization. Tacken (1996:2) lists the following:

- High costs and low impact of extension programmes;
- Increasing staff numbers, whereas the number of farmers was declining;
- Growing conflicts between farmer's interests and policy goals such as raising production versus environmental problems and high cost of subsidies;
- Loss of some qualified staff (many of whom started working as consultants);
- Service was not needs driven i.e. advice was general not problem –oriented;
- Policy goals were given priority over farmer goals;
- No financial incentives to reward good performance; and
- Lack of job satisfaction.

According to Tacken (1996:2) the situation has changed with commercialization and benefits like increased efficiency, increased quality and client orientation, increased job satisfaction, more interaction between client and advisor, more effective and needs-driven extension. Respondents were requested to respond to a list of benefits claimed to be associated with privatisation and to assess their validity. Their views are summarized in Table 11.3.

Table 11.3: Respondents’ perception (expressed as a mean scale point assessment) of the validity of different aspects claimed to be benefits of privatisation

Benefits of Privatization	Mean Scale point
1) Greater operational efficiency and cost effectiveness	5.6
2) Greater accountability of extensionists to perform and produce results.	6.7
3) Contractor (government) can demand a service standard from the agent that government cannot deliver by itself.	5.4
4) Contractor (government) can specify clients to be served (small, poor and marginal farmers).	5.3
5) Reduces permanent staff requirements and allows redeployment of resources to higher-priority or sensitive areas.	4.5
6) Enhances extension impact by accessing providers with special skills or comparative advantages in providing specific services.	6.0
7) Creates partnerships and working relationships with other providers.	6.2
8) Enhances flexibility and credibility in responding to special needs of diverse clientele.	5.5
9) Is useful for testing innovative and higher risk “new” systems.	5.4
10) Increases provider accountability.	6.2

The overall impression gained from the respondents’ viewpoint summarised in Table 11.3, is that even the undeniable benefits are not strongly supported. Perhaps the strongest agreement is the greater accountability of extensionists and the pressure to perform and produce results (mean assessment of 6.7 scale points). The agreement, however, does not yet reflect enthusiasm and support. In fact, the mean acceptability assessments are very low supported by the data of Figure 11.4

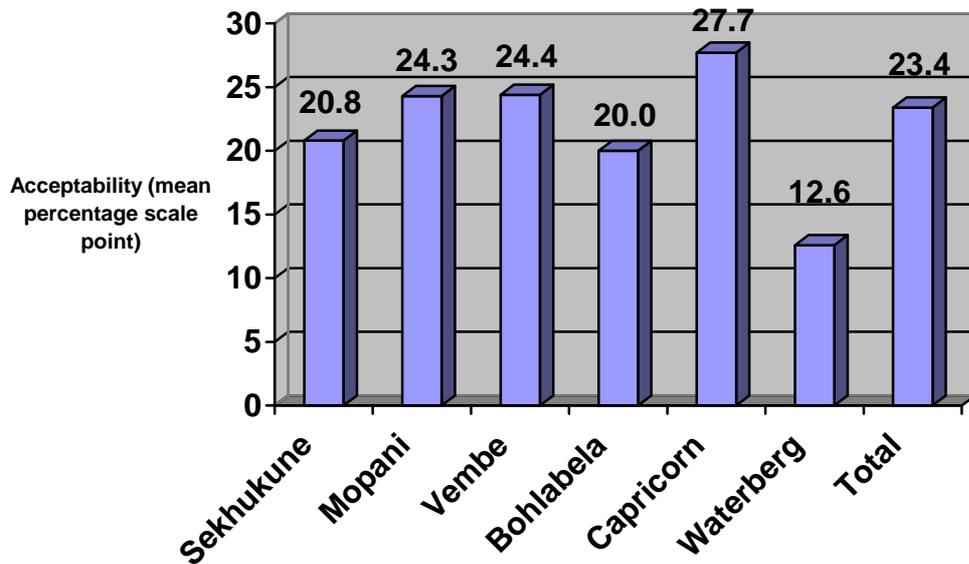


Figure 11. 4: Assessments of the acceptability of privatization (expressed as a mean percentage scale point)²² by respondents in the different Districts

The overall impression of the findings in Figure 11.4 is that there is an extremely low assessment of the acceptability of privatisation in the Limpopo Province. Admittedly, there are differences between the districts, varying from a percentage scale point assessment of 12.6 in Waterberg to 27.7 in Capricorn.

The possible reason for this low assessment could be related to a fear or insecurity of employment by the extensionists. Düvel (2002:167) finds that the lack of support or the opposition to privatisation is not necessarily an issue of ignorance, because higher qualified respondents (measured in terms of total years of formal education) appeared to be more opposed to privatisation. The most outspoken category of extensionists are the younger and lower ranks as opposed to the managers.

11.4 OUTSOURCING AND CO-FINANCING

²² *Acceptability was assessed using a scale with 1 = absolutely unacceptable and 10 = highly acceptable.*

According to Stillwell & Botha (1997:7) a complete privatization of agricultural extension services is often not feasible. Düvel (2002) observes that an alternative solution to the problems of fiscal sustainability and poor client orientation is the integration of the private sector into extension systems. This can take the form of sub-contracting (out-sourcing) or co-financing.

These are forms of institutional pluralism and can result in a complementation, but require of the central government to adjust to a position of reduced direct control over either programming or staffing. This can imply one or more of the following namely unlinking public funding from public delivery, changes in governance and investing more broadly in the whole agricultural knowledge and information system (Düvel, 2002).

Respondents were asked to compare the acceptability of three alternatives namely in-sourcing of management /knowledge, outsourcing of personnel and outsourcing of total service. The findings are summarized in Figure 11.5.

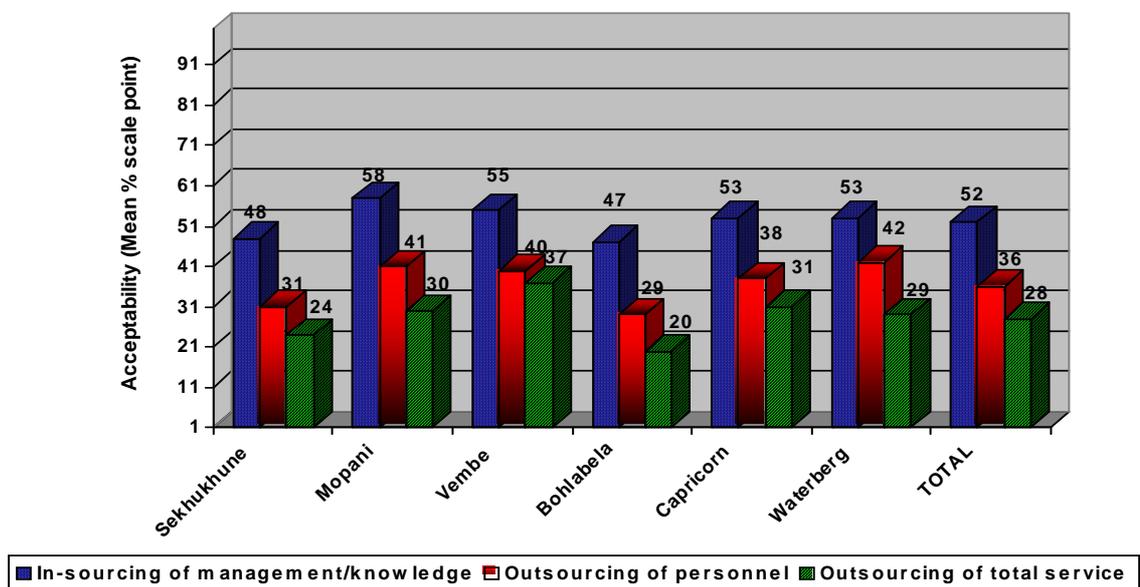


Figure 11. 5: Assessments by respondents in the different provinces of the acceptability of in-sourcing of management/expertise, outsourcing of personnel and outsourcing of total service, expressed as mean percentage scale points

The general picture of Figure 11.5 is that there is a very significant difference in the outcome of the three alternatives. The in-sourcing of management or expertise is the most favoured form of all the alternatives tested. This applies without exception to all the districts. The possible reason is the reasoning that this alternative does not threaten the job security of the respondents in the sense that it strengthens the organisation and its potential sustainability.

The other two alternatives are not supported. The outsourcing of personnel varies from 29 to 42 mean percentages, while the outsourcing of total services falls below 38 percent in all districts. Both these alternatives have the potential of creating redundancy among respondents. This view is consistent with previous findings which clearly demonstrated the resistance to privatization.

11.5 OUTSOURCING TO BENEFICIARIES

Farmer Associations in many parts of the world have taken on the responsibility for providing agricultural extension services to their members. The extension services offered by these associations cover a wide range of commodity specific topics. Such countries include Zimbabwe (crocodile producers), Bolivia (Integrated Farmers Cooperative), India (Operation Food: Dairy), Thailand (Eastern Poultry Raisers Group), Uganda (Vegetable cooperative) and Turkey (Umali, 1996).

A specific form of outsourcing to beneficiaries, implies that the ownership of extension is transferred to the communities or clients, which is often seen as one of the ultimate goals of development (i.e. help towards self-help) but not only as far as individuals are concerned, but within the context of the total community. This alternative can vary from ownership restricted to a section of the total client community or to the total client community (Düvel, 2002:171).

Respondents were asked to indicate their preferences regarding alternative outsourcing beneficiaries such as the local community organization, Local municipality, and District Municipality and district municipality officials. The views are summarized in Figure 11.6.

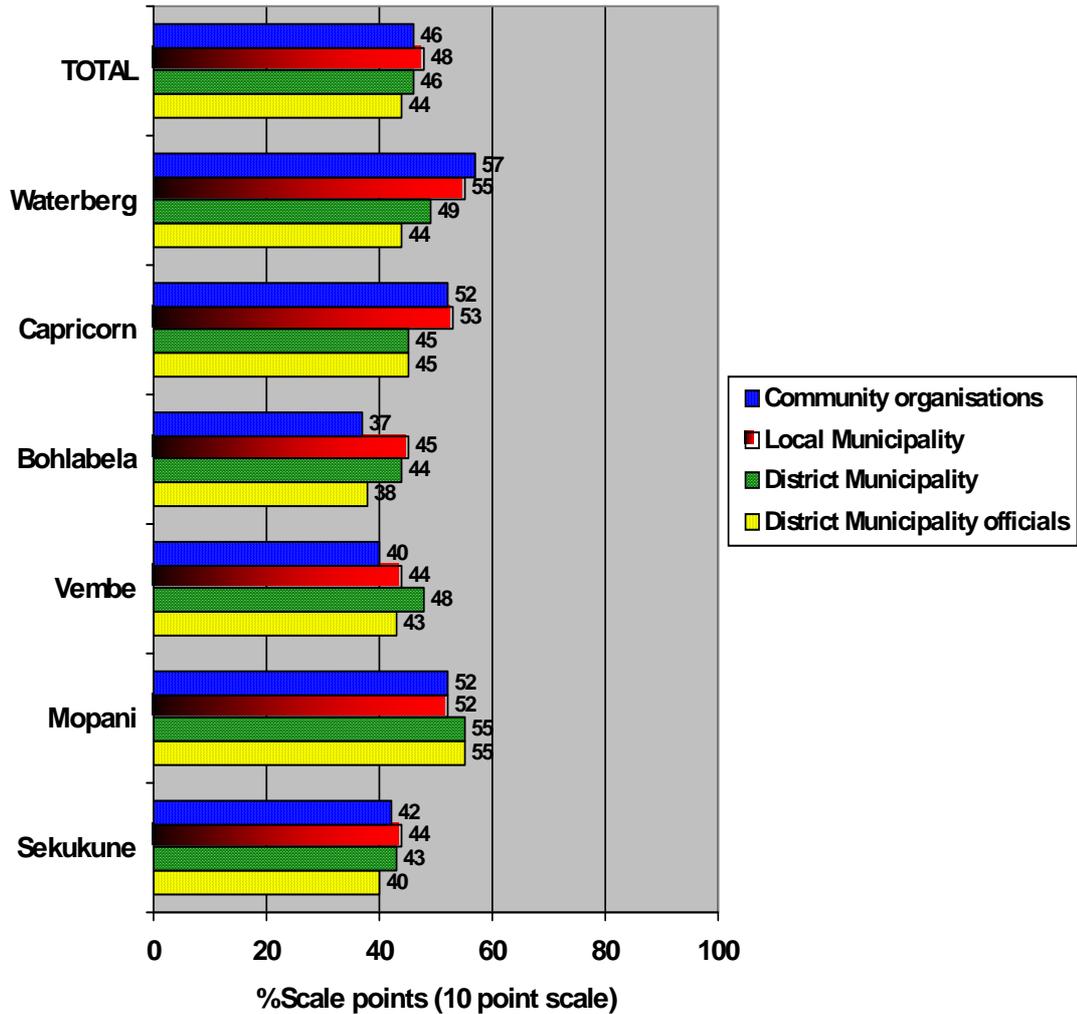


Figure 11. 6: The acceptability of different variations of community owned extension as assessed by respondents in the different Districts of Limpopo Province and expressed as mean percentage scale points

These findings do not reveal that the outsourcing to communities is, in general, not very popular, nor is there a clear preference regarding any of the alternatives. This could reflect confusion among the respondents regarding the principles involved, but could also be attributed to a resistance based on a general lack of confidence in communities since the beneficiaries are not believed to be ready to be empowered.

The varying choices could therefore be attributed to different judgements of competence of the alternative community structures. This could also be the explanation why what would normally have been judged as the worst scenario,

namely that officials of Local Government take over the responsibility for extension and development, hardly receives less support than the other alternatives.

11.6 CONCLUSIONS AND RECOMMENDATIONS

The findings regarding privatisation of extension lead to the following conclusions and recommendations:

- The path of privatisation should be treated with care. The reluctance or lacking enthusiasm is as such sufficient reason. The topic of privatization appears to be an emotional issue, and seems to evoke affective responses, probably stemming from feelings of insecurity or fear of ultimately losing employment and the fear and tends to cloud rational deliberations. Respondents disagreed about its relevance and significance even where circumstances would normally justify it. Results about privatization in developing countries are not convincing and Limpopo should not succumb to international pressure and be forced into large-scale privatization of the state extension service.
- The current South African policy of restoring equity and the consequent focus on the large numbers of marginalized small-scale farmers make privatization in general less relevant, as it is with the promotion of all “common good” issues. In such cases there is no financial output that justifies the inputs. Unless a big premium is placed or a high price tag is attached to changes in any form of capacity building or human development, it has no commercial attraction for most NGO’s. Whenever or wherever commercial interests are pursued, the results are bound to be of a gap-widening nature, unless affirmative measures are introduced as precondition for financing by the government.
- In general a cautious, evolutionary approach towards privatization is recommended for the Limpopo Department of Agriculture. Concrete steps should, nevertheless, be taken towards privatisation,

- Bring the topic of privatisation into open debate to rid it of emotional ties and to enable rational debate. This includes the realisation that there are many forms and degrees of privatisation, of which some are likely to be very appropriate under the current South African situation. The principles of effectiveness and efficiency should apply and the Government has the responsibility to step back and make space if there are non-governmental organisations capable of providing an equally good or better service, and that a stage may be reached where, however desirable a service is, considerations of affordability can enforce the acceptance of alternatives.
- Introduce partial privatisation or forms of privatisation selectively and where appropriate. This could include certain “packages of services” within certain communities or the “in-sourcing” of knowledgeable experts or managers. In all cases the introductions should be accompanied with systematic evaluations.

Promote and sponsor research in the field of privatisation

Increase efforts to promote the form of privatisation encompassing the empowerment of communities to increasingly take ownership of extension and development. However, it has to be realised that this is not a short-term goal, but that communities have to be guided and developed through the various stages of participation until ready for full ownership. Currently the partnership model still seems to be the most appropriate and should be purposefully pursued.

CHAPTER 12

KNOWLEDGE AND RESOURCE SUPPORT

12.1 INTRODUCTION

Extension is a line function of the Department of Agriculture. One of its main purposes is to provide appropriate agricultural information and knowledge to enable and capacitate land users and farmers towards improved, sustainable and economic development. Seen in this light, all the other services of the Department of Agriculture could and should contribute towards this purpose thereby making extension more effective (Düvel, 2002:127). This applies in particular to research where information and knowledge is generated. Every effort should be made that findings and recommendations are continuously made available to extension and thus become available to the farming community (Arnon, 1989; Bunting, 1986 and Van den Ban & Hawkins, 1990: 293).

The development and flow of information and knowledge is however subject to a large number of constraints and has been the focus of many debates. Frequent organisational restructuring and policy formulations remain a challenge for most agricultural research and development organizations (Düvel, 2002:130). The need for knowledge support arises out of the fact that the extension situation, usually characterized by a large variety of enterprises, demands of the extensionist to deal with the variety at hand, but also to be a specialist in the commodity or area on which his programmes or projects are focused.

With ongoing research and the continuous generation of new information and insights, extension workers require constant upgrading of their agricultural-technical knowledge. Of paramount importance is that extension resources and support systems are such that these objectives can be accomplished. This chapter focuses on the importance of knowledge support, the providers and sources of such support and the perceived sufficiency.

12.2 PERCEIVED IMPORTANCE OF KNOWLEDGE SUPPORT

Proper knowledge support is ultimately intended to improve extension delivery. How important it is perceived can best be judged by comparing it with other measures that could be taken to attain better extension delivery. Respondents were asked to give their views regarding the most appropriate means of better extension delivery by placing different alternatives in rank order. The findings are presented in Figure 12.1.

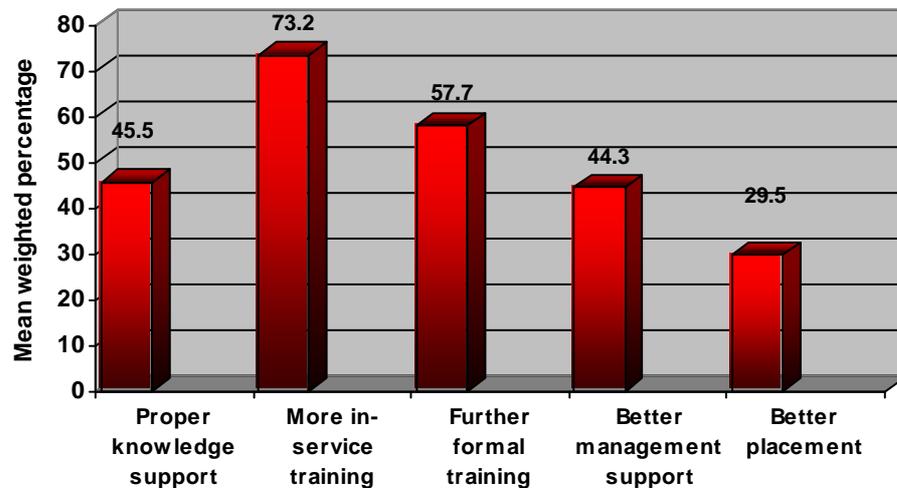


Figure 12. 1: Mean rank order positions (expressed as weighted percentages) of different delivery options

In view of the mentioned necessity for frontline extensionists to keep abreast of new information and development in a variety of commodities and disciplines which is exacerbated by their overall low qualifications respondents were requested to evaluate different options in terms of contribution towards the improvement of extension efficiency. Among the alternatives knowledge support takes in a middle position with a mean rank order percentage of 45.5. It is surpassed by more in-service training (73.2 percent) and by further formal training (57.7 percent).

The role of training is, no doubt, appreciated and it could be argued that knowledge support is a form of in-service training. If this is appreciated (including the notion that it can be a much more systematic and complete form of in-service training) knowledge support could get the necessary support and its rightful place as an

important means of ensuring that extensionists have the appropriate level of knowledge and are kept abreast of the latest innovations.

12.3 SOURCES OF KNOWLEDGE SUPPORT

There can be various sources of knowledge support (Düvel, 2002, 33). According to Arnon (1989) research institutes are important sources of knowledge that can be used. Chambers (1983) recommends farming communities for the same purpose.

An assessment of the knowledge support situation was made by requesting respondents to judge the contribution of different sources of knowledge in terms of the knowledge support that they currently provide. The mean ratings of these sources, using a 10-point scale, are summarised in Table 12.1.

Table 12. 1: The perceived knowledge support provided by different sources and expressed as mean scale point on a 10-point scale with ‘10’ being the most desirable

Districts	ARC ⁽¹⁾ Researcher	Researcher of Dept. of Agriculture.	Subject Matter Specialist	Extension Supervisor	NGO's
Sekhukhune	4.5	3.8	3.6	5.9	4.4
Mopani	5.1	5.9	3.7	5.7	4.3
Vembe	4.0	4.1	3.3	6.5	4.3
Bohlabela	3.5	4.8	4.0	6.4	4.6
Capricorn	5.0	5.5	4.3	6.3	4.7
Waterberg	3.9	4.9	4.5	6.3	5.0
Total	4.5	4.9	3.9	6.2	4.6

⁽¹⁾ Agricultural Research Council

The results in Table 12.1 confirm that the general knowledge support service is on a low level. Evidence shows that extensionists in the four districts currently rely primarily on their supervisors for such support while the Mopani, district mostly relies on the researcher of the department of Agriculture. The likely reason could be the fact that extension workers perceive the extension supervisors as the most important

source of knowledge support. When considering the perceived low level of qualification of extension supervisors (as indicated in chapter 6, Table 6.5) and the lack of professional training, one doubts the accuracy of this assessment. The extension workers might have been influenced by the frequent contacts they have with their supervisors when in reality they seem not to get useful backstopping knowledge.

The researcher of the Department of Agriculture is perceived by the extensionists as the second most important source of knowledge. The Department of Agriculture uses the services of agricultural researchers in what is now called “research satellites” such as Mara, Tsoelike, Stellenbosch, Dobie and Hartbees. (The mandate for doing research in South Africa is given to Agricultural Research Council).

There is no clear line of distinction on the question of whether the agricultural scientist based at the provincial office within the directorate of Research and Extension are researchers or subject matter specialist are the preferred sources of information. The nature of specialization locates them more toward subject matter specialist (SMS) specializing in a wide spectrum of disciplines such as agronomy, horticulture, irrigation, pasture science and aquaculture.

There is lack of more qualified Subject Matter Specialist (SMS) in the Department and in the districts. For example in Capricorn, there are only 10 scientists²³ who could be taken as SMS's and have to service 197 extensionists. The reason why these two sources of knowledge namely ARC and SMS, were questioned could be linked to the costs attached to involving the ARC. As a parastatal the ARC provides services on a pay basis to recoup costs. As far as SMS's are concerned, the respondents might not see the usefulness of them because they are very thinly spread.

12.4 TYPES OF KNOWLEDGE

An effective knowledge system can be expected to provide knowledge support in different fields (Düvel, 2002:34).

Respondents' judgments concerning the level of support in the different knowledge areas are summarized in Figure 12.2.

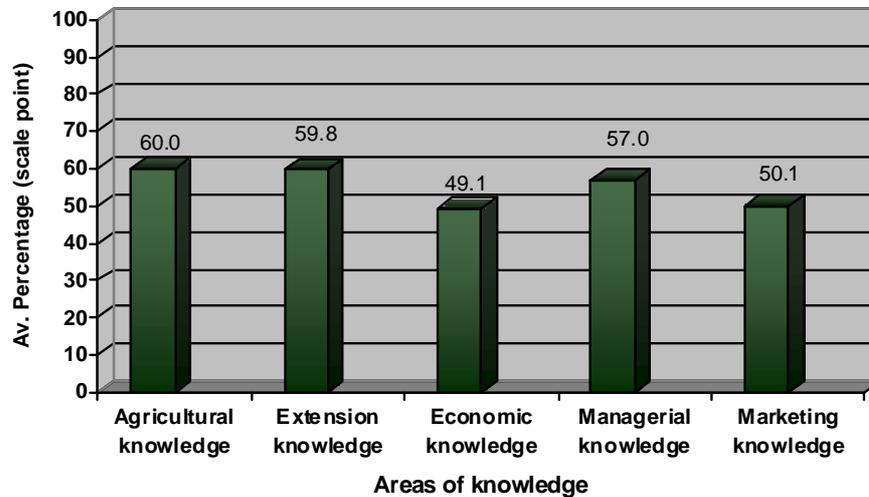


Figure 12. 2: Respondents' opinions of the level of knowledge support in different areas expressed as mean percentages

The overall impression is that there is positive recognition for knowledge support. For example, the most knowledge support is in the areas of agriculture with 60 percent and extension with 59 percent, while economic and marketing knowledge support is somewhat lower, but still significantly higher than expected.

It is uncertain to which degree these judgments were based on quantitative or qualitative considerations. On the other hand it would appear as if not too much should be read into these findings, since they may be clouded by the phenomenon of respondents tending towards choosing an assessment close to the mid-point of a scale.

12.5 DEGREE OF SUFFICIENCY OF EXTENSION RESOURCES

As part of institutional support for extension (Bembridge, 1983) finds that extensionists need to be provided with the necessary tools of trade referring to

²³ *Out of the ten, 4 are new appointees specialising in horticulture (1), agronomy (2) and soil scientist (1). All 4 have no working experience. The other 6 are old scientists distributed as animal scientists (2) and agronomists (4). All have no working experience.*

transport, teaching aids, housing and office accommodation. The respondent's assessment of the situation is depicted in Table 12.2.

Table 12.2: The assessed sufficiency of extension resources as perceived by extension staff expressed as mean scale point (15-point scale)

Districts	Extension or teaching aids	Office accommodation and equipment	Transport	Kilometers	Other
Sekhukhune	5.1	5.77	5.0	4.8	5.8
Mopani	4.4	4.4	5.0	4.1	3.8
Vembe	4.1	6.8	3.9	3.5	3.1
Bohlabela	4.9	6.8	4.3	5.3	3.2
Capricorn	5.8	6.4	5.5	5.6	5.3
Waterberg	5.0	5.3	5.9	4.5	5.0
Total	5.1	6.1	5.0	4.9	4.7

The general impression of the findings is that extension resources are inadequate in the various districts. The main constraints point to insufficient transport and allocation of kilometres.

12.6 THE USE OF SUBJECT MATTER SPECIALISTS (SMS)

According to (Düvel, 2002:136), the use of SMS could be used as an alternative in providing knowledge support to extension staff as opposed to increasing the number of extensionists or completely replacing them with subject matter specialists. This means bringing in an additional information intermediary.

The SMS is preferred in Limpopo due to its potential in providing useful information into the Researcher-Extensionist- Farmer information chain. Different functions were identified and respondents' opinions obtained regarding their importance. The findings are summarized in Table 12.3.

Table 12.3: The importance assessment by respondents of the different functions to be performed by the SMS

	Mean scale	Rating	Mean Weighted % ²
1	Training of extensionists on request (provide courses where necessary)	7.59	60
2	Continuous and purposeful knowledge upgrading and capacity building of extensionists working in the respective fields (pro-active)	7.65	56.5
3	Assistance and advice to farmers when requested by farmers and/or extensionists	7.51	51.9
4	Training of farmers where knowledge base does not exist among extensionists	7.23	48.3
5	Assistance of extensionists with problem cases	7.33	49.3
6	Assistance of extensionists with message design i.e. designing messages that are technically, economically and human behaviour relevant (where requested)	7.05	45.1
7	Become specialist regarding relevant commodity/discipline in area of responsibility in relation to current production, prevailing problems, needs of farmers (including research needs if there is no solution), priorities and solutions to be promoted by extension	7.0	46.9
8	Seeking solutions through adapted research/demonstrations (adapting innovations to specific local conditions)	7.34	45.8
9	Remain abreast of new research, developments and knowledge in field of specialization	7.54	42.7

¹ Based on a 10-point scale, with 1 = unimportant and 10 = extremely important

² Based on a rank order position from most to least important.

The general impression gathered from the information of Table 12.3, is that all the listed functions receive wide support. For example, all were rated as very important with assessments of more than 7 out of a maximum of 10. It does seem though that the more familiar functions are perceived as somewhat more important. There is however encouraging support for new functions, which will have to be introduced in order for subject matter specialists to make a significant impact. These functions include continuous and purposeful knowledge upgrading and capacity building of extensionists working in their respective fields.

Another important function is assisting extensionists with message design i.e. designing messages that are technically, economically and human behaviour relevant. This implies having specialist knowledge of the relevant commodity/discipline in the area of responsibility in relation to current production, prevailing problems, needs of farmers (including research needs if there is no solution), priorities and solutions to be promoted by extension. The SMS has a part to play in South African extension as a source of knowledge. When they are used the following preconditions need to be observed namely (subject matter specialists) have to see the extension staff, (at least those dealing with their discipline or commodity) and not the farming community as their major target group, and they should operate more pro-actively than re-actively (Düvel, 2002:138).

12.7 CONCLUSIONS AND RECOMMENDATIONS

The findings of this chapter show a strong perceived need for knowledge support in extension. This is also reflected in the majority of respondents being in favour of knowledge support. Using these findings as a basis of departure the following policy guidelines are proposed

12.7.1 The need for knowledge support

The tremendous need for knowledge information makes the establishment or expansion of a proper knowledge support system one of the most urgent challenges facing the Department of Agriculture's extension service. This evidence includes, amongst others, the need for training (58.3 percent) and the fact that the large majority of respondents believe that training is the factor that can contribute most to the improvement of extension delivery in Limpopo.

12.7.2 Sources of knowledge support

The extensionists recommend their supervisor (with a mean scale of 6.2 percent) as an important source of knowledge support. This assessment is not consistent with earlier results where supervisors were perceived not to be knowledgeable. Furthermore a

knowledge support system in the form of an extensive SMS system is strongly recommended. For the proper functioning of the SMS the following is important namely:

- The function of the SMS is to supplement and not to duplicate or perform the same task as the extensionists.
- The primary target group of the SMS is not the farmer, but the extensionist serving the farmer. The SMS should have an increasing pro-active function and should not only respond when requested. Some of the pro-active functions should be continuous and purposeful knowledge upgrading and capacity building of extensionists working in that specific field.
 - Supporting extensionists with message design, i.e. designing messages that are technically, economically and human behaviour relevant. The SMS needs to focus on the following:
 - i) Becoming a specialist regarding his/her own commodity/discipline in relation to current production, prevailing problems/needs of farmers, indigenous knowledge, (including research needs if there is no solution) priorities and solutions to be promoted by extension.
 - ii) Seeking solutions through adapted research/demonstrations (adapting innovations to specific local conditions).
 - iii) Serving as linkage or knowledge intermediary between research and extension, particularly in terms of feedback to research regarding the needs and problems of clients.
 - iv) Remaining abreast of new research, developments and knowledge in his/her field of specialization and make them available in a systematic and regular way to those having a potential need for them.

- v) Coordinate the above in commodity focused programs implemented through and by means of frontline extensionists over the total target area (e.g. district municipalities).

Forging a close collaboration between subject matter specialists of the same field of specialization within a district and, if possible, even beyond the districts in order to function in a maximal complementary fashion this may also apply to scarce specialists, for example those specializing in aquaculture and bee farming. Strengthening of the knowledge support system by also engaging college lecturers as subject matter specialists.

12.7.3 Other supportive initiatives

- Transport and office support material

The lack of sufficient transport and its allocated kilometres is identified as the constraint in terms of the availability of resources that may impact negatively towards knowledge support and service delivery. The Department of Agriculture should (in line with improving the service benefits of the extensionists,) ensure that minimum standards are provided in terms of offices, office support such as means of communications, office furniture and means of transport.

- (i) The Department is aware of the problem of transport and has developed a transport policy to address it. There is a provision in the policy that where genuine reasons exist, privately owned vehicles of agricultural technicians can be recommended to be used under scheme B. This alternative can be expensive, depending on the size of the vehicle.
- (ii) Extension workers are sometimes part of the problem and are to blame because a small number do not possess driver's licenses.
- (iii) The circumstance of the extensionist's task needs should be understood and be taken into account. A uniform approach should be applied to all districts to avoid inconsistency. Considering the three paragraphs above, one can argue that it is not fair to see all transport problems as the fault of the Department,

each case needs to be treated on its own merit. Blanket generalization should be avoided. Alternative options of transport such as allowances may need to be investigated and extensionists be consulted properly prior to its implementation.

The situation of office accommodation needs attention in terms of numbers, equipment, particularly office furniture.

- Establishment of Information Centres

As far as knowledge support for extension science is concerned, the current need can temporarily be dealt with by subject matter specialists in extension. Ultimately, however, this function should be taken over by the extension supervisors and managers. The need for in-service training is clearly demonstrated in the text and it should receive attention. The concept of the digital doorway could serve as foundation for future Centres of Information to solve farmer's problems. Limpopo has made a start wherein three districts are participating in digital doorway pilot studies.

The Department should recruit a qualified person specializing in Information Technology who will be stationed in the Centre to act as a SMS. The districts do not have reliable sources of reference for extensionists. It is recommended that districts should establish Information Centers which can work like a library.

CHAPTER 13

CONCLUSIONS AND RECOMMENDATIONS

13.1 INTRODUCTION

The study suggests that there is no universally acceptable extension system which fits all situations. An extension system should be situation-specific and dependent on a conglomerate of factors the agro-ecological, infrastructural, historical (previous experience), environmental, socio-economical and even political situation. For this reason a single extension system may not be appropriate for all districts in the Limpopo Province. In view of this discernment, the researcher decided to develop a flexible framework of principles that can serve as broad guidelines for the extension system for the Limpopo Province rather than coming up with a rigid system.

13.2 CURRENT EXTENSION SITUATION

Extension in Limpopo is of a two-pronged nature, namely an advisory approach in the case of the commercial sector and a more educational approach in the case of both the subsistence and emerging small-scale sectors. There are donor-funded projects such as the Limpopo Agricultural Development Programme (LADEP) and (BASED) operating in the Province. Each donor-funded project tends to use different extension approaches.

The Departmental initiative to institutionalize PEA is welcomed because of the implied support for participatory development which should be a basic principle in any seriously considered extension approach. Some of the other characteristics of extension in Limpopo or the environment in which it operates are the following:

- The very diverse farming systems. This presents tremendous challenges to extension personnel in terms of their knowledge and skills, particularly in the fields of economics, farm planning, financial planning, economic viability and

marketing. This must be seen against the background of tremendous knowledge gaps that occur in these and other fields and which have serious consequences for extension personnel's credibility. This emphasises the necessity for a knowledge support system providing in-service training so that extension personnel attain specialised knowledge and skills in their fields of operation.

- Uneconomical and unsustainable farming units. The principle of profitability and sustainability is often overlooked and occurs particularly in cases where large numbers of people are accommodated in projects of limited profitability or size. If unprofitable and unsustainable, the outcome can only be a failure.
- The environment for extension is not favourable. On the one hand there are the multitude of functions and expectations within widely diverse agricultural systems and on the other hand insufficient support in terms of equipments, facilities and training. This calls for a priority approach that purposefully matches the various functions and expectations with the resources available.
- Confusion exists regarding the concept of extension. This detracts from purposefulness among frontline extension staff, while management fails to provide clear policy guidelines in this regard and in some cases even negates the nature and role of extension, seeking to replace it with concepts like “crop facilitation”, etc.

The efficiency of extension in Limpopo is at low ebb. When extension personnel rate their efficiency on an input/output ratio at R81 output per R100 input or investment compared to R130 output per R100 input, which is assumed to be an estimated mean international figure, there is cause for concern; even more so if supervisors judge the same personnel in terms of output per R100 input, to be operating at a mere R60. Although the assessment appears to be an honest assessment, the possibility of a significant over-assessment by respondents cannot be ruled out. This gives justification for a reassessment of the extension service and a revised policy around the following recommendations

13.3 RECOMMENDATIONS

Having presented detailed recommendations at the end of the various chapters, the following serves the purpose of a brief overview or summary of recommendations relating to the various principles, and in some cases providing additional perspectives or emphasis.

13.3.1 Needs-based and priority focused extension

The importance of needs assessment as a basis for setting priorities and making decisions such as the allocation of resources is widely recognized. There is however agreement about PRA being the only method of accomplishing this. The purpose of need assessments is well appreciated, namely to find a leverage or linkage point for behaviour change purposes, to identify the main focus or content of development and to encourage participation.

However to give effect to these different purposes, it should be clear that the customary PRA approaches are as such insufficient or even inappropriate and need to be adapted to be more problem focused and to pursue a compromise between an “objective” problem assessment (based on considerations of improvement potential of commodities) and community expressed needs or preferences.

There is general consensus, and rightly so, for the principle of participation, but opinions vary regarding the meaning of participation. Similar differences occur among extension personnel as far as the focus or content of development is concerned.

Based on rank order the ultimate in participation (namely the full empowerment and ownership) was awarded a ranking percentage of less than 40 percent (4th rank order position out of five) while the most favoured partnership (percentage rank order of 70 percent) is one that is based on the biggest agricultural need (usually a commodity) that has the biggest improvement potential considered on an input/output ratio and where farmers need to be persuaded about the priority.

13.3.2 Participation and community involvement

The principle of participatory development is widely accepted as essential. However, extension personnel differ in opinion as to whether participation should be a means to an end or an end in itself. The latter view is shared by 51.6 percent of the respondents and should be further promoted if the ultimate goal of community empowerment and ownership is to be pursued. However much confusion exists regarding the alternative goals of human and agricultural development.

Policy needs to be clear in setting the right priorities, namely that the ultimate goal ought to be agricultural development, with the important proviso though, that it is to be pursued primarily if not exclusively through the means of human development.

The goal of community empowerment to the degree of taking ownership of the development process should, no matter how important, be seen as a long-term goal, which requires a certain degree of maturity on the part of the communities and cannot necessarily be taken for granted.

A challenge for extension workers is to pitch into the most appropriate level of participation or partnership with the farming community. Currently it seems that a partnership where the Department of Agriculture (as service provider) still has to take the major initiatives and responsibilities. However, with the necessary facilitation a partnership equally sharing the development responsibilities should be achievable in most extension service areas. In fact it is already favoured by most respondents as the most appropriate model.

13.3.3 Institutional linkages for participatory and coordinated development

There is widespread support for the inclusion of the human factor in development. This finds expression in the unreserved support for participation and especially its purposes and goals, namely that participation is primarily seen as an ultimate goal of development, more so than a means to an end. This is also reflected in the majority of respondents being in favour of human development as the ultimate goal of the Department of Agriculture. However, there are indications that much of this support is

mere lip service, as is evident from the practical implementation, which is often in direct contradiction with the supported principles.

For extension to function as a partnership between the service provider (Department of Agriculture) and the beneficiaries (communities), interaction between the partners is essential. Given the wide ratio of extension worker of one to up to - 3000 farmers, an effective interaction is only possible through a body representing the various interest groups within the community, and thus acting as its mouthpiece and being given the task of coordinating and taking charge of the total development process, but delegating projects and operational activities to specially appointed or nominated task groups (project or programme committees).

These task groups should be accountable to the central or over-arching coordinating or linkage body. Over and above a policy providing for such institutional linkage structures, the following guidelines, as suggested by Düvel (2002), should also be laid down:

- A clear distinction be made between the coordinating and operational functions
- The coordinating or central development body should be limited to one per extension service area. This represents a compromise between, on the one hand, proximity to the grassroots community and, on the other hand, effective coordination (something that would not be possible with coordinating bodies located in every sub-community).
- Operational task groups (project or programme committees, etc.) should be commissioned by the central coordinating committee or council and be regularly accountable to it.
- Service providers should remain partners and not become members of the local community structures so as not to undermine the process of empowerment.

- For the purpose of integrated development, the coordination and linkages should extend beyond agricultural development and seek linkages with other fields of rural development (if not at the extension ward or service area level, then beyond it) and with the local government and municipal structures.

13.3.4 Purposeful programmed extension

Programmed extension should, in view of its unquestionable advantages, be accepted as policy by the Department of Agriculture. It is proposed that at least half of the frontline extension workers' time should be spent on purposeful or programmed extension. In spite of the general support for a programmed approach, it is not reflected in personnel activities. One of the obvious reasons for this (reported by 87.6 percent of the respondents) is the frequent interference in the form of unscheduled responsibilities enforced on frontline extension personnel. To overcome this problem management will have to:

- Be part of the decision making process regarding the time to be devoted to programmes and projects and the subsequent protection enabling them to adhere to the planned schedules;
- Assist in building in programme flexibility;
- Provide dates that have to be accommodated in work plans at a very early stage; and
- Protect personnel against "external interference".

It is important that extension programmes be owned or co-owned by communities and implemented in a situational appropriate manner that provides for maximum participation, ownership and self-determination. Accountability should be to target communities (or their coordinating structure) as well as to management structures within the Department of Agriculture.

13.3.5 Monitoring, evaluation and accountability

The general and widespread support for the importance of monitoring and evaluation (M & E), especially with regard to its potential contribution to improve current and future extension delivery, justifies the implementation of a national evaluation and monitoring programme compulsory for all extension personnel.

As far as evaluation procedures and criteria are concerned, the following guidelines should be considered:

- The number of objectives and criteria should be as many and as extensive as possible in order to provide for as much evidence of extension achievements as possible. Programme objectives should be chosen and formulated to focus on and include the full spectrum of criteria ranging from resource and activity inputs to clients' responses and opinions, behaviour determinants, behaviour change (practice adoption), outcome or efficiency aspects and, where possible, the impact in terms of job creation, increase in living standard etc.
- Due attention needs to be given to criteria related to behaviour change since they allow for true monitoring and are the best and most direct reflection of extensionists' achievements. Behaviour determinants, viz. needs, perceptions and knowledge, are the actual focus of extension and their positive change is a precondition for behaviour change (practice adoption) and the consequent change in efficiency and the resulting financial and other outcomes. Behaviour determinants are the focus of every encounter and thus lend themselves to monitoring after every extension delivery. In this way extension can continuously (on a monthly basis) come up with evaluation evidence.
- There is a clear difference between the program objectives and those of the extensionist or program manager, particularly in the phase of program development, i.e. until the delivery begins. For this reason activity objectives should be formulated to form the basis of the agricultural technician's monthly work program or work calendar. Their evaluation, although of an input nature, can

form the basis of performance management and could also serve the purpose of public or community accountability.

- Ultimately the use of evaluation results should be as multi-focused as possible, with as much emphasis on issues relating to the extension process (enabling better extension delivery) as to the outcome. Once the decentralization of local government has been fully implemented and funding is being channelled to district municipalities for distribution or coordination, such local institutions will also have to be accountable for the funds received by them. They are, after all, not the sole stake holders. However, since the farmers, as beneficiaries, are not the only stakeholders of public funds, ways need to be found for them to also account for the aid received. Such a process may revolutionize development aid.

13.3.6 Privatization and outsourcing

The path of privatisation has to be treated with care, but cannot be ignored. It is important that the topic be brought into open debate to rid it of emotional ties and to enable rational debate. In it should feature the strengths and weaknesses, principles of effectiveness and efficiency as well as the issue of affordability which could dramatically change within a short time, depending on national priorities and policy.

Other recommendations in this regard are:

- An immediate but slow introduction of various forms of privatisation where appropriate, such as outsourcing and in-sourcing;
- Promoting and sponsoring research in privatization; and
- Increasing efforts leading to ownership of communities as probably the most ideal form of privatisation.

In judging ostensibly successful privatisation efforts elsewhere in the world, care should be taken that the real determinants, often not part but only associated with privatization, are identified.

13.3.7 Knowledge and resource support

A strong knowledge support system is inevitable in view of the low effectiveness and efficiency regarding extension delivery in Limpopo as well as in other provinces of the country, as it can (if correctly implemented) provides the most drastic improvement in the relatively low credibility of extension personnel and thus their extension impact.

The most far-reaching recommendation is a proposal regarding a strong team of subject matter specialists and their revised functions and a new focus on frontline extension workers as primary target audience. The proposed new functions include continuous and purposeful upgrading and capacity building of extensionists working in their specific field or discipline supported with message design, strengthening the link between extension and research and coordinating commodity programmes falling within their (the subject matter specialist's) field of competence.

As far as knowledge support for the extension science is concerned, the current need can temporarily be dealt with by subject matter specialists in extension. Ultimately, however, this function should be taken over by the extension supervisors and managers. The need for in-service training is tremendous and needs urgent attention on a continuous basis.

The concept of the digital doorway could serve as foundation for future Centres of Information needed to solve farmer's problems. Limpopo has made a start wherein three districts are participating in a digital doorway pilot study. The Department should recruit a qualified person specializing in Information Technology who will be stationed in the Centre to act as SMS.

REFERENCES

- ADAMS, M.E., 1982. Agricultural extension in developing countries. Extension problems in developing areas. Longman group limited, Longman house. Essex. UK.
- ALBRECHT, H., 1989. Agricultural extension, Volume 1: Basic concepts and methods. TZ Verlag Rossdorf.
- AMEUR, C. 1994. Agricultural Extension. A Step beyond the Next Step. The need for strategy. World Bank Technical Paper no. 247. World Development Bank. Washington D.C
- ARNON, I., 1981. Modernization of agriculture in developing countries. Resource potentials and problems. Social and Economic Constraints. John Wiley & Sons, New York.
- ARNON, I., 1989. Agricultural research and technology transfer. Agricultural Knowledge Systems. Elsevier Applied Science, London.
- AXINN, G.H., 1988. Guide on alternative extension approaches. Rome. FAO.
- ASHBY, J.A., 1987., Farmer participation in on farm varietal trials. Discussion Paper number 22. Agricultural Administration Unit. University of Sussex Brighton.
- ASCROFT, J.R. & RÖLING, J.N., 1973. Extension and the forgotten farmer, Wagenigin; Landbouwhogeschool. Bulletin van de Afdelingen Sociale Wetenschappen, Number 37.
- BAJA, T.L., 1989. Some aspects of agricultural extension experiences in India In: Kesseba A.M (ed) Technology systems for small farmers. Issues and Options. West View Press. Bouldes, San Francisco and London.
- BAKER, H., 1987. The program planning process. In: (Ed) Blackburn, D. Extension Handbook, University of Guelph, Canada.

BAXTER, M., 1989. Investments in agricultural extension. The sustainability of extension. In: editors Kessaba, M.A. Technology Systems for small farmers. Issues and Options. West view press, Boulder, San Francisco & London.

BEMBRIDGE, T.J., STEYN, G.J, & WILLIAMS, J.H.L., 1983. An evaluation of the Kwazulu Extension Service. Agricultural Extension Service. Agricultural and Rural Development Research Institute. University of Fort Hare, Alice, Ciskei.

BEMBRIDGE, T.J., 1984. A systems approach study of agricultural development. PhD thesis, Department of Agricultural Economics, University of Stellenbosch.

BEMBRIDGE, T.J., 1988. An evaluation of Venda agricultural extension service. University of Fort Hare, Alice, Ciskei.

BEMBRIDGE, T.J, 1990. An agricultural extension model for developing areas in Southern Africa. Paper presented in the South African Society for Agricultural Extension Conference held in Cape Town.

BEMBRIDGE, T.J., 1993. South Africa rural restructuring programme. Paper 11: Phase 1. Assessment of existing agricultural support services. Commissioned by the World Bank through the Land and Policy Centre, Johannesburg.

BUNCH, R., 1990. Encouraging farmers's experiments. In: Farmer first farmer innovation and agricultural research: (editors) Chambers, R., Pacey, A. & Thrupp, L.A. Reversal learning. Intermediate Technology Publications, London.

BUNTING, A.H., 1986. Determinants of technical change in agriculture. In: Investing in rural extension strategies and goals(editor).Jones, G. E. Extension and Technical change in agriculture. Macmillan, UK.

BOONE, E.J., 1987. Extension from a world perspective: Commonalties in extension education. Paper presented at the Annual Conference of the South African Society for Agricultural Extension.

BOTHA, C.A.J., 1992. 'n Organisatoriese model vir Landbouvoorligting in Suid Afrika. Thesis for Doctor of philosophy, University of Pretoria.

BOTHA, C.A.J., STEVENS, J.B. & STEYN, G.J., 1999. The compatibility between extension aims of staff and their organizations: implications for management. South African Journal of Agricultural Extension, 28:12-44.

BOYLE, P.G., 1981. Planning better programs. Adult Education Association Professional Development series, 143-159.

BROKENSHA, D., 1980. Indigenous knowledge and development. Washington: Lanham (MD): University Press of America.

COMPREHENSIVE AFRICAN AGRICULTURE DEVELOPMENT PROGRAMME (CAADP) 2003. NEPAD.

CRISTÕVÃO, A., KOEHNEN, T., & PORTELA, J., 1997. Developing and delivering extension programmes. Making participation happen. In: (Ed) Swanson, B.E., Bentz, R.P. and Sofranko, A.J. Improving Agricultural extension. A reference manual. Food and Agriculture Organization of the United Nations. Rome.

CROMPTON, J.L., 1984. Extension programme development In: (Editors) Swanson, B.E, and Claar, J.B. Agricultural extension: A reference manual alternative models and recent trends in organising agricultural extension. Food and Agriculture Organisations of the United Nations, Rome.

CROWDER,L.,2001. Contracting-out and contracting-in approaches in extension services from Mozambique. FAO, Rome. Bureau of USAID. In : (editor) Brewer.F.L. Agricultural Extension Systems. An International Perspective. Courier Custom Publishing Inc. Michigan

CHAMBERS, R., PACEY, A. & THRUPP, L.A., 1990. Reversal learning. Intermediate Technology Publications, London

CHAMBERS, R. & JIGGINS, J.L., 1986. Agricultural research for resource-poor farmers: A parsimonius paradigm. Brighton (Sussex) IDS, Discussion Paper 220.

CAMPBELL, D.A. & BARKER, S.C., 1997. Selecting appropriate content and methods in programme delivery: Developing appropriate content. In: (Ed) Swanson, B.E., Bentz, R.P. and Sofranko, A.J. Improving Agricultural extension. A reference manual. Food and Agriculture Organization of the United Nations. Rome

CAREY, H., 2001. Extension. Train the trainer programme: Communication, extension methods, social processes, and leadership development. Extension methods, adoption and diffusion. Paper delivered in a workshop sponsored by the TELP Project, Pennstate University and the University of the North at Oasis Motel.

CONTANDO, T.E., 1997. Formulating extension policy In: Improving Agricultural Extension (ed) Swanson B.E, Bentz, R. P, and Sofranko, A. J. A reference Manual. FAO. Rome

CROMPTON, J.L., 1984. Extension programme development. In: (Editors) Swanson, B.E, and Claar, J.B. Agricultural extension: A reference manual alternative models and recent trends in organising agricultural extension. Food and Agriculture Organisations of the United Nations, Rome.

DEPARTMENT OF AGRICULTURE NORTHERN PROVINCE, 1995. Progress Report. Department of Agriculture.

DEPARTEMENT VAN BEPLANNING EN PROVINSIALE SAKE, 1991. Nasionale streeksontwikkelingsprogram. Ontwikkelingstreek G. Streekprofiel en Ontwikkelingsriglyne. Volume 2.

DEVELOPMENT BANK OF SOUTHERN AFRICA, 1986. Venda development information. Development Bank, Sandton.

DEVELOPMENT BANK OF SOUTHERN AFRICA, 1990. Farmer support program Definition of farming systems concept.

DÜVEL, G.H., 1991. Towards a model for the promotion of complex innovation through programmed extension. Revised extension model. *S.Afr.Jnl. Agric. Ext.* 20.

DÜVEL, G.H., 1992. ARD 726 Course Reader. University of Pretoria.

DÜVEL, G.H., 2001. Participatory programmed agricultural extension. Paper delivered at the Mid-Term review Workshop on Extension Services. 24 November 2001, Midrand, South Africa.

DÜVEL, G.H., 2002. Towards developing an appropriate extension system for South Africa. National research project. National Department of Agriculture.

DUVEL, G.H., 2004. Developing an appropriate extension approach for South Africa: Process and Outcome. Introduction. Strategies for successful extension and development: Expectations, possibilities and experience. Proceedings of 38th Conference. Pine Lodge, Elizabeth. South African Society for Agricultural Extension.

DUNN, W.N., 1981. Public policy analysis: An Introduction. Englewood cliffs, NJ: Prentice-Hall, Inc.

EHRET.W., 1997. Reorientation of extension. A Case Study of Participatory Action Research with a Non-Government Organization in Northern Nigeria. (Unpublished Thesis for PhD).

ENGEL, P., 1989. European seminar on knowledge management and information technology. Vital qualities of primary agricultural knowledge system. Wageningen : The Netherlands.

EWANG, P & MTSHALI, S., 2000. Alternative extension system of enquiry for sustainable agriculture and rural development in extension for the new millennium: Proceedings of the conference for the South African Society for Agricultural Extension held in Mykonos, Langebaai. Western Cape.

EWELL, P., 1990. Links between on-farm research and extension in nine countries. Developing linkage mechanism In: Kaimowitz, D. (ed.). Making a link agricultural research and technology transfer in developing countries. International Service for National Agricultural Research, Westview Press, London.

FREIRE, P., 1970. Concientization. *GISRA* 2(4). Trinidad Consultation on Development, Rome (Mimeo).

FAO Farming System Development, 1991. Guidelines for the conduct of a training course in farming systems development. Introduction to the basic concept of FSD, Rome Italy.

GOULET, D., 1968. That third world. *The Center Magazine* 1(6): 47-55.

GREGORY, J. 1989. Extension worksprogramme. Programme development notes. (Mimeo).

HAYWARD, J.W., (undated). Training to support agriculture extension in development. Agricultural Extension (Mimeo).

HAYWARD, J.A. 1989. The world bank Approaches to Extension In : (Eds) Technology Systems for small farmers. Issues and Options.

HAGMANN, J. & SHUTZ, P., 2000. Documentation of the Second Regional Workshop of the Sector Network on Rural Development (SNRD) extension working group on: Towards a Common Framework for Extension. Held in Boadzulu, Malawi, May 14-18.

KAIMOWITZ, D., 1990. Making a link: Agricultural research and technology transfer in developing countries. ISNAR, Westview Press, London.

KIDD, A; LAMMERS, J; FICARELLI, P, & HOFFMAN, V., 1998. Privatising agricultural extension: Caveat emptor. Department of Agricultural Communication and Extension. University of Hohenheim, Germany.

KESSABA, A.M., 1989. Technology systems for small farmers. Issues and Options. Introduction. West View Press, Boulder, San Francisco.

KLINE, S. & ROSENBERG, N., 1986. An overview of innovation. In: R. Landau, and Rosenberg (eds) The Positive Sum Strategy. Harnessing Technology for Economic Growth. Washington. DC. National Academic Press.

KNEUBUSCH, K., 1987. Recommendations: Report of the long range planning task force. The Ohio State University, Ohio Cooperative Extension Service.

KREITNER, R., 1989. Management. Princeton, N.J: Houghton, Mifflin Co.

LILLEY, H.W., 1978. Agricultural extension efficiency in Lebowa: A preliminary investigation of the extension situation at ward level. Department of Plural Relations and Development, Pretoria.

LAST, C., 2004. Contribution towards a strategy for public extension. Paper presented in the Annual Conference of SASAE. South African Society for Agricultural Extension Proceeding of 38th Conference Pine Lodge.

LANDBOU ONTWIKKELINGSPROGRAM, 1991. Agricultural development plan for Region G.

LONG, N. & VAN DER PLOEG, J.D., 1989. Demythologizing planned intervention. *Sociologia Ruralis*.

LOXTON & VENN, 1982. Population density and economic indicators of Vuwani. DBSA.

MANSTRAT CONSULTANCY, 2002. Training needs of extension technicians in Sekhukhune District. Project funded by Finnish government in Limpopo Province Department of Agriculture.

McCASIN ,N.L. & TABEZINDA, J.P., 1997. In: (Ed) Swanson, B.E, Bentz. R.P, and Sofranko, A.J., 1997. Improving Agricultural Extension: A reference manual. Food and Agriculture Organization of the United Nations. Rome.

McDERMOTT, T.K., 1987. Making extension effective : The extension/research linkages. Technology innovation Process (TIP) model In: Rivera M.W. and Schram, G.S. (editors). *Agricultural extension worldwide: Issues practices and emerging priorities*. Agroonhelm Ltd., London.

MISRA, D.C., 1984. Agricultural extension effectiveness in India. In: (Ed) Swanson, B.E, Bentz. R.P, and Sofranko, A.J., 1997. Improving Agricultural Extension: A reference manual. Food and Agriculture Organization of the United Nations. Rome

MOYO, E. & HAGMANN, J. 2000. Facilitating competence development to put learning process approaches into practice in rural extension. In: Human resources in agricultural and rural development. FAO. Rome.

MURTON, T.A., 1965. Extension hand book. Adopter categories. Government Press. RSA.

MWANGI, J.G., & RUTATORA, D.F., 2002. Is needs assessment in extension programs rationally objective or mostly political. The concept of needs assessment. *South African Journal of Agricultural Extension*, 31.

NAGEL, U.J., 1980. Institutionalization of knowledge flows: An analysis of the extension role of two Agricultural Universities in India. Special Issue of the quarterly Journal of International Agriculture, Number30, Frankfurt: DLG Verlag.

NAGEL, U.J., 1984. Alternative approaches to organizing extension. General Clientele Approaches. In: (Ed) Swanson, B.E, Bentz. R.P, and Sofranko, A.J., 1997. *Improving Agricultural Extension: A reference manual*. Food and Agriculture Organization of the United Nations. Rome

NESAMVUNI, E., 2002. *Study of the agricultural industry in the Limpopo Province. A study commissioned by the Limpopo Department of Agriculture for Provincial Economic Cluster*. School of Agriculture, Rural Development and Forestry. University of Venda for Science and technology, Thohoyandou.

NEUCHATEL GROUP, 1995. *Common framework on agricultural extension*. The environment of agricultural extension is changing.

NORMAN, D.W., MOLLEL, N.M., MANGHENI, M.N.K. & PARADZA, P.C., 1994. *Experiences of some African countries with the unification of their extension services since independence: Lesson for South Africa*. Paper delivered at the third extension conference for

developing areas held at Eskom Conference Centre, Published by South African Society of Agricultural Extension.

ONTWIKKELINGSTREEK G, (undated). *Fisiese faktore wat ontwikkeling beïnvloed*. Departement van Beplanning en Provinsiale Sake.

OAKLEY, P., 1991. *Projects with people: the practice of participation in rural development: Interpretation of participation*. International Labour Office, Geneva.

OAKLEY, P. & GARFORTH, C., 1985. Guide to extension training: Understanding extension, food and agriculture. Organisation of the United Nations, Rome.

ORAM, P.1985. Agricultural Research and Extension: Issues in Public expenditure. In J. Howell (Ed.), Recurrent costs and agricultural development. London: Overseas Development Institute.

ORIVEL, F., 1981. The impact of Agricultural Extension Services: A review of literature. Discussion Paper, The World Bank. Washington DC.

OXENHAM, J., & CHAMBERS, J., 1978. Organizing education and training for rural development: Problems and challenges. The World Bank Washington, D.C

OWENS, M. & SIMPSON, B.M, (2002): Farmer field schools and the future of agricultural extension in Africa. AIAEE. Proceedings of the 18th Annual Conference. Durban, South Africa. <http://www.joe.org/joe/1998august/rb1.html>. (Downloaded 02/04)

PICKERING, D.C., 1987. An overview of agricultural extension and its linkages with agricultural research. The World Bank Experiences. W.M. Rivera and S.G. Schram (eds). Agricultural Extension Worldwide. Croom Helm, London.

PETERSON, W., 1997. The context of extension in agricultural and rural development. In: Improving Agricultural Extension (eds.) Swanson B.E, Bentz, R. P, and Sofranko, A.J. A reference Manual. FAO. Rome

PRETTY, N.J. & VOLOUHE, S.D., 1997. Using rapid or participatory rural appraisal. In: (Ed) Swanson, B.E.; Bentz, R.P. and Sofranko, A.J. Improving Agricultural extension. A reference manual. Food and Agriculture Organization of the United Nations. Rome.

PONTIUS, J., DILTS, R & BARTLETT. A., (EDS.), 2000. Ten years of building community: From farmer field schools to community IPM. FAO Community Integrated Pest Management Program: Jakarta. Pretoria Statement on the Future of African Agriculture, December 01-03, 2003. Conference: Successes in African Agriculture: Building for the Future.

RAY, E., 1985. Top down approaches. Extension approaches (Mimeo).

RECONSTRUCTION AND DEVELOPMENT PROGRAMME, 1994. A policy framework for African Congress. Human Resource Development.

RENAISSANCE CONFERENCE ORGANISERS 2007. What is a policy. Strategic planning and policy Development. Department of Agriculture.

RIVERA, M.W., 1989. An overview of agricultural extension systems. Extension definitions and systems in: Kesseba A.M. (ed.). Technology systems for small farmers : Issues and options. Westview Press, Boulder, San Francisco and London.

RIVERA, M.W, & CARY, J.W., 1997. Privatising agricultural extension. Gradual “Privatisation” In: (Ed) Swanson, B.E., Bentz, R.P. and Sofranko, A.J. Improving Agricultural extension. A reference manual. Food and Agriculture Organization of the United Nations. Rome.

ROGER, E.M, 1983. .Diffusion of innovations. Third edition .New York. Free Press.

ROLA, A.C., QUIZON, J.B. & JAMIAS, S.B., 2001. Do farmer field school graduates retain and share what they learn? An investigation in Hoilo, Philippines.FAO. Rome.

RÖLING, N., 1988. Extension science: Information systems in agricultural development types of extension. Cambridge University Press, Cambridge.

RÖLING, N., 1985. Communicatiewe interventies: Instrumenten voor vrijwillige. gederagsverandering. Wagenigen: Agricultural University, Department of Extension Science. Publishers. Paper for Symposium on the occasion of the Fourth Lustrum of the Department of Extension Science.

RÖLING, N., 1995. What to think of extension? A comparison of three models of extension practise. Article for Franchophone issue of AERDD Bulletin. Edited by Nouridin Salamna, ICRA.

ROSSOUW, J.G., 1989. The impact of imposed technology on a traditional rural society in Transkei an evaluation of the Ncora irrigation scheme. Linkage with research. PhD Thesis. Department of Agriculture Extension and Rural Development, University of Fort Hare.

SEEPERSAND, J. & HENDERSON, T.H., 1984. Evaluating extension programmes. In: (Eds) Swanson, B.E., and Claar, J.B. Agricultural Extension: A Reference Manual. Food and Agriculture Organization of the United Nations. Rome.

SIMPSON, B.M., 2001. IPPM farmer field schools and local institutional development: Case studies of Ghana and Mali. FAO.

SCHMIDT, E.H., 1997. Participatory extension: Insights from three agricultural development projects in Africa. An investigation on participatory extension in three countries. The framework of extension. Swiss Agency for Development and Cooperation.

SCHWASS, R.H. & ALLO, A.V., 1982. Training the extension worker. Professional requirements of the extension worker. Course content for training extension service personnel. Food and technology Center Extension bulletin. Ministry of Agriculture, Tel Aviv, Israel.

SCHMINK, M., POATS, S.V. & SPRING, A., 1988. Gender issues in farming systems research and extension linking FSR-E and gender: An introduction. Westview Press, London.

SOUTH AFRICAN SOCIETY FOR AGRICULTURAL EXTENSION, 2002. Report for the strategic initiative on career path.

SPEDDING, C.R.W., 1988. An introduction to agricultural systems. Second edition. A systems approach to Agriculture. Elsevier Applied Science, London. Press, London.

STOOP, K., 1985. Extension system. Participatory versus Top down. (Mimeo).

SULZER, R. & PAYR, G., 1990. Socio-economic development approach: Anmation Rurale in Francophone Africa. In H.Albrecht et al, (Eds) Agricultural Extension Vol. 2. Examples and background material. Eschbonn. Deutshe Gesellschaft fur Technische Zusammenarbeit (GTZ).

SWANSION, B.1990. Global consultation on Agricultural Extension: A report. Rome, FAO.

SWANSON, B.E., & CLAAR, J.B., 1984. Agricultural extension: A reference manual. Alternative models and recent trends in organizing agricultural Extension. Food and Agriculture Organization of the United Nations. Rome.

KRAFT, J.N., 1997. Public and private extension: Who pays and provides. Paper delivered in the Annual Conference: South African Society For Agricultural Extension, Aventura, Warmbad.

TACKEN, W., 1996. The Dutch extension service. The change from a publicly funded Extension Service to a privatised, client – oriented organization. In: Extension workshop. Alternative Mechanisms for Funding and delivering Extension, SA2, The World Bank. Washington, D.C.

TERBLANCHE, S.E. & DUVEL, G.H., 2004. Finding the key to successful farmer settlement: Dependency versus independency models. Paper delivered at the extension conference held in Pinelodge, Port Elizabeth. Published by the South African Society of Agricultural Extension.

UMALI, D.L., & SCHWARTZ, L., 1994. Public and private agricultural extension. beyond traditional frontiers. Agricultural extension: Some country experiences. World Bank Discussion Papers No. 236. World Bank Washington, D.C.

UMALI, D.L., 1996. New approaches to an old problem: The public and private sector in extension. In: Extension workshop. Alternative Mechanisms for Funding and delivering Extension, SA2, The World Bank. Washington, D.C.

UPHOFF, N., 1986. Local institutional development: An analytic sourcebook with cases. Kumarian Press: West Hartford

UTZINGER, J.D. & WILLIAMS, B.J., 1984. Needs assessment: A national survey of extension professionals relative to their needs for in-service education in home horticulture. Ohio Home Horticulture Center, Department of Horticulture. The Ohio State University

VON OSTEN, A, EWELL, P. & MERILL-SANDS, D., 1989. Organization and management of research for resource poor farmers. In: Kesseba A.M. (ed.). Technology systems for small farmers : Issues and options. Westview Press, Boulder, San Francisco and London.

VAN DEN BAN, A.W. & HAWKINS, H.S., 1988. Agricultural extension: Definition of extension. The extension research linkage. Longmans Scientific and Technical, New York.

WILLIEBOET, A. 2007. What is Policy. Strategic management Course. Renaissance Conference Organisers

WEIDEMANN, C. J. Designing agricultural extension for women farmers in developing countries. Agricultural Extension Worldwide, W.M. Rivera and S.G. Schram (eds).

WEAVING, R.1975. African experience with rural development : a digest report on the African development study. Staff Working Paper no. SWP 195. World Bank <http://.worldbank.org>

WILLIAMS, S.K.T., 1968. Role of the subject matter specialist in the extension. Research liaison. Division of the Research Institutes (Memeo).

WITKIN, B.R., 1984. Assessing needs in educational and social programs. San Francisco: Jossey-Bass.

WORTH, S., 2002. Sustainable extension: Not transformation, but renewal. Proceedings of the 18th Annual Conference of AIAEE. Durban. South Africa.

WORLD BANK, 1990. Agricultural policy. Washington.

WHITE PAPER IN AGRICULTURE, 1995. Definition of a farmer. Ministry of Agriculture, Pretoria.

ZIJIP, W., 1992. Agricultural delivery systems. From Agricultural Extension to rural information management Investment in Extension in: Public and Private Roles in Agricultural Development (Eds) Anderson J, R., De HAAN, C. Proceedings of the Twelfth Agricultural Sector Symposium. The World Bank, Washington, D.C

ZWANE, E.M, 2001. The evaluation of impact of BASED in two pilot projects of Limpopo province. (unpublished).

ZWANE, E.M, 1988. An evaluation of the efficiency of the agricultural extension service in Gazankulu with special reference to the management of extension workers. Dissertation for the Degree of Bacheolor of Agricultural Extension Honours, University of Fort Hare. (unpublished).

APPENDIX A

DICUSSION DOCUMENT RELATING TO THE PRINCIPLES OF AN APPROPRIATE EXTENSION APPROACH

The purpose of this document is

- ❑ To be thought provoking and to stimulate debate and interaction about what has, in a participatory manner, been identified by representatives of all Provinces in a National Workshop as the most important principles of extension.
- ❑ To identify and to create awareness and a wider perspective of the various dimensions and aspects within each of the principles.
- ❑ To discuss and debate the acceptability of the various principles and the dimensions within each of them, in an attempt to obtain a reasonable degree of consensus.
- ❑ To serve as a measure of how individuals from senior management level of Extension to frontline extension workers perceive the various issues related to extension approaches and their principles.
- ❑ To form the basis for the development of a document on an appropriate extension approach for Limpopo Province, which, on the basis of wide consultations and involvement of role players, will find acceptance and implementation in the quest for improving Extension..

To achieve all the above, this document has been designed as a form of questionnaire. However, the provision of personal viewpoints should be preceded by intensive interactions and debate, and should thus be as informed as possible. It is hoped that especially senior managers who normally have tight schedules, will take enough time to fully participate in the process and to help make the outcome really worthwhile.



DOCUMENT FOR GUIDING DISCUSSIONS AND FOR CAPTURING INDIVIDUAL
 VIEWPOINTS RELATING TO PRINCIPLES OF AN EXTENSION MODEL

Name: Tel: V1

Province:.....Limpopo. V2

Region/District: V3

District Municipality: V4

Local Municipality: V5

Extension ward: V6

Rank: V7

- (1) Agricultural Technician
- (2) Senior Agricultural Technician
- (3) Chief Agricultural Technician
- (4) Control Agricultural Technician
- (5) Scientist
- (6) Senior Scientist
- (7) Principal Scientist
- (8) Assistant Director
- (9) Deputy Director
- Director
- (11) Other (Specify)

- 1. Position/Function
- 2. Assistant Extension Worker
- 3. Extension Worker
- 4. Extension worker and Supervisor of Extension
- 5. Supervisor and or Manager of Extension V8
- 6. Support services
- 7. Other: Specify:

Gender: Male (1) Female (2) V9

Primary focus or client base:

V10

Primarily small-scale farmers (1)

Equally small and large-scale farmers (2)

Primarily large-scale farmers (3)

1. What is your age?

No. of Years:

V11

<30 (1)

30-40 (2)

41-50 (3)

51-60 (4)

>60 (5)

V12

2. What level of school education did you complete?

Std 8 (1)

Std 9 (2)

Std 10 (3)

V13

3. What is your highest tertiary qualification?

Please specify:

Certificate (1yr) (1)

Diploma (2 or 3yr) (2)

Adv. Diploma or B Tech (3)

Bachelor's degree (4)

BSc (5)

Honours (6)

BSc Hons (7)

Masters (8)

MSc (9)

PhD (10)

V14

4. Please indicate your field of specialisation in the highest qualification mentioned above:

- (1) Extension V15
 (2) Extension and Other (specify:)
 (3) Other (specify:)

5. What formal training have you had in Extension or Rural Development

1. None
2. Extension courses in Agricultural Diploma Programme
3. Extension courses in B Tech program
4. Extension courses in B Agric, BSc or Hons. Programme V16
5. Diploma in Extension
6. Advanced University Diploma in Extension and Rural Development
7. Honours degree in Extension
8. Masters degree in Extension
9. PhD degree in Extension

6. How many years of experience in extension do you have?

- a) Frontline extension work V17
 b) Supervision or management of extension V18
 c) Total V19

7. For how long have you been employed in the Department of Agriculture?

- < 5 yrs (1)
 5-10 yrs (2)
 11-15 yrs (3) V20
 16-20 yrs (4)
 21-25 (5)
 > 25 (6)

1. PARTICIPATION

Participation (viz. the involvement and participation of the clients or farmers in the development process) is nowadays more generally accepted as a very important principle of Extension. However, there are big variations in terms of the goals pursued with participation, the functions of participation and even the meaning attached to the word.

1.1 Assess the following purposes of participation by rating them using the following scale:

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----



Very unimportant



Extremely important

- To allow for more effective extension/development
- To allow for more sustainable community development
- To provide for what is a value or customary in local cultures
- To provide for democracy as entrenched in the country's constitution.
- To allow for the unfolding or implementation of the principle of *help towards self-help*

	V21
	V22
	V23
	V24
	V25

- Purpose or goal of participation

1.2 Which of the following do you perceive as the most acceptable alternative regarding the purpose or goal of participation? Please place them in rank order of preference.

- Participation as an ultimate goal (e.g. to promote self-reliance, self-sufficiency and self-responsibility) should be the ultimate and primary goal of public Extension Service (normative goal.)
- Participation as goal and as a means. (Combination of 1 and 3)
- Participation as means only. (i.e. it should contribute towards the development intervention being more effective in the form of better support, more identification, more sustainability, etc.)
- Other (Please specify):

1st 2nd 3rd 4th

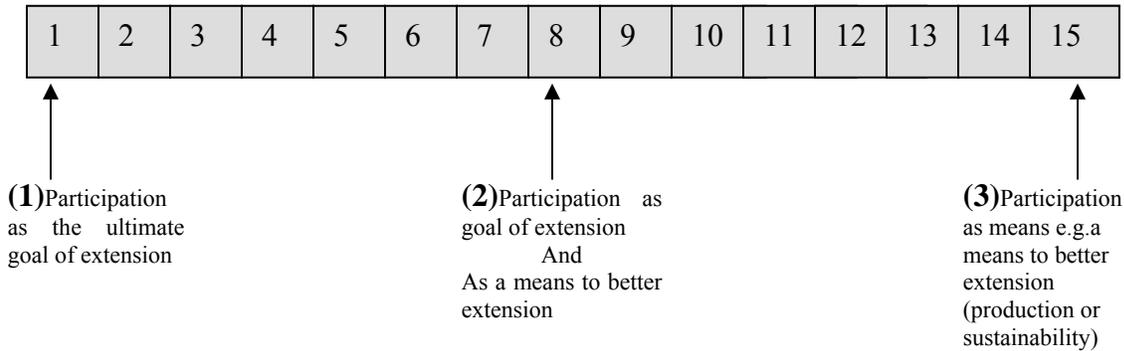
--	--	--	--

V26-29

1.3 The above alternatives can also be seen as points on a continuum or scale varying from

1 (= participation as the ultimate goal) to 15 (= participation purely as a means to goal, viz more effective extension or change). Which scale point or range of scale points do you regard as ideal or most acceptable?

from to V30-31



1.4 The following are degrees or levels of participation. Please rank them in order of acceptability.

1 st	2 nd	3 rd	4 th	5 th	
					V32-36

1. The community coordinates, owns and finances the development process
2. The community coordinates, owns, finances and implements the development process and in the process involves one or more development agents
3. The community in partnership with the development agent initiates, plans, finances, coordinates and implements the development programme or project
4. The community is involved in needs assessments, but decisions, planning and implementation of the development processes are the responsibility of development agents or organisations
5. Development remains the responsibility of the development organisation and should be done in a way they deem fit

1.5 Which of the above is the most common in your ward/district/province

V37

Human versus Agricultural Development

1.6 The following are alternatives regarding the relative importance of human development (capacity building) and agricultural development. Place them in rank order of preference.

1 st	2 nd	3 rd	V38-40

1. Human development (capacity building) should be a means towards agricultural development
2. Agricultural development should be a means towards human development
3. Both human and agricultural development should be goals of equal importance in the Department's development endeavours

1.7 Extension can be seen as including a smaller or larger degree of education and can be accepted to vary from 1 (= formal or non-formal training) to 15 (= providing advice or recipes on request)

1.8
a) Which scale point (or range of scale points) do you regard as ideal or most acceptable? *from* *to* V41-42

b) Which scale point (or range of scale points) do you judge the extension in your area to be like? *from* *to* V43-44

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----



(1) Formal or non-formal training i.e. training farmers for future problems that they may encounter

(2) Helping in decision-making. Providing insight whilst giving advice, so that client becomes more independent in future problem situations

(3) Providing recipes for implementation. Main or only concern is the achievement of agricultural development goals

2. NEEDS-BASED

2.1 How important do you regard needs assessments in extension? Assess the importance by making use of the following 10-point scale

	1	2	3	4	5	6	7	8	9	10		
	↑									↑		
	Very unimportant										Extremely important	

V45

2.2 What are the main purposes of needs assessments? Rate each of the following purposes by means of the scale above:

To identify the main focus or content of development

--

V46

To find a linkage for behaviour change purposes

--

V47

To satisfy what is customary in our culture (and organisation)

--

V48

To encourage participation

--

V49

2.3 What should be the most important purpose of needs assessments? Please rank them in order of importance

1 st	2 nd	3 rd	4 th	

V50-53

- 1) To determine the most important need as perceived and felt by the community
- 2) To determine the most important agricultural need as perceived by the farming community.
- 3) community.
- 4) To determine the most important agricultural need (felt or unfelt)
- 5) Other (please specify.....)



2.4 How important do you regard the assessment of needs by the whole community by means of PRA techniques?

- Essential (1)
- Useful (2)
- Not essential (3)

V54

2.5 At what intervals should needs assessments be made?

- 1) Not at all –
- 2) continuously but informally
- 3) Before the beginning of a program
- 4) Once a year
- 5) Once in 2 years
- 6) Once in 3 years

V55

2.6 Assessed needs are usually characterised by

- limited consensus,
- creation of expectations that cannot be met,
- domination of views by some individuals, etc

In view of this what do you see as the solution:

2.7 The following have been offered as solutions. Please indicate your view regarding their acceptability, using the following scale:

- Unacceptable (1)
- Hesitant/Don't know (2)
- Acceptable (3)
- Very acceptable (4)

(a) Do less assessments or depend less on PRA assessments

V56

(b) Seek a compromise between felt and unfelt needs

V57

2.8 As far as the ultimate content of a program is concerned, which of the following alternatives do you support most? Please rank them in order of preference

1 st	2 nd	3 rd	4 th	5 th

V58-62

- 1) The program should be focused on what the community expressed as most important need, irrespective of whether it is of an agricultural nature or not
- 2) The program should be focused on the agricultural need that is ranked highest by the community
- 3) The program should be based on the biggest agricultural need, usually on a commodity that has the biggest improvement potential considered on an input/output ratio. Where necessary, farmers need to be persuaded about the priority
- 4) The program should be focused on the community's decision after being presented with findings regarding (3)
- 5) The program should be focused on the Departments priorities, which are the promotion of "common" rather than "individual" good

3. INSTITUTIONAL LINKAGES AND ORGANISATION

3.1 It is increasingly maintained that a partnership between the service provider (development or extension agent) and the community is not possible without the necessary institutional or organisational structure(s). Give an indication of your degree of agreement/disagreement by choosing the alternative corresponding most with your opinion:

V63

- 1) Disagree altogether
- 2) Institutional structures can be useful but are not essential
- 3) Institutional structures make a partnership relationship (form of partnership) easier
- 4) Without institutional linkage structures a real partnership with full or co-responsibility on the part of the community is impossible.

3.2 By definition a linkage structure consists of a number of community members, representing their community (acting as their mouthpiece) in negotiations and dealings with the development organisation(s) or other agencies

At what level should these linkage structures be established? Indicate every of the following levels with

- 1 = No
- 2 = Hesitant, don't know or
- 3 = Yes

- 1) National Level
- 2) Provincial level
- 3) District Municipality level
- 4) Local Municipality
- 5) Ward level (service area)
- 6) Village or sub-ward level

	V64
	V65
	V66
	V67
	V68
	V69

3.3 It is widely accepted that

- The lower the level of the linkage structure (the closer to the grassroots) the more effective the participation from an ownership and self-determination point of view, BUT
- The poorer and more difficult the development coordination

In view of these divergent tendencies, at which level would you regard the linkage structure to be ideal or the best compromise from an extension point of view? Place the above levels (Question 3.3) in rank order of importance or preference:

1st 2nd 3rd 4th 5th 6th

						V70-75
--	--	--	--	--	--	--------

3.4 As the most preferred level for a linkage structure, opinions are divided between

(A) The village level

It is the most specific and potentially the most cohesive unit and with the highest level of solidarity. It is the level where participation to the level of ownership and self-responsibility and self-determination makes most sense. This would seem the ideal solution if resources were abundant and unlimited (approx. 500% more than are currently available) and an extension worker could be appointed for every village or sub-community. Where this is not the case, such an approach is likely to lead to inequity or to a duplication of inputs and coordination problems.

and

(B) The Extension Ward level

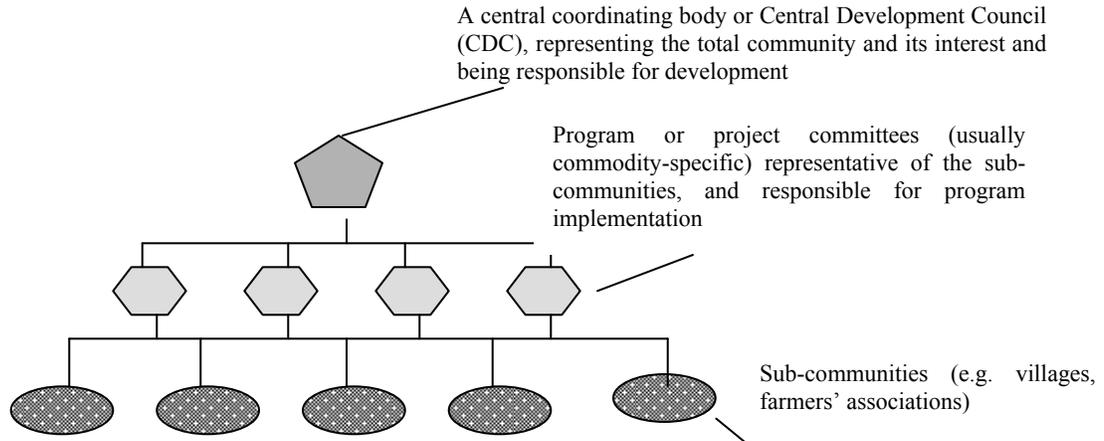
This is the community or area served by an extension agent and usually encompassing a few sub-communities (villages in the case of traditional communities and farmers' associations in the commercial situation). Arguments in favour of linkages at this level is that It is more realistic and practical against the background of available resources (number of extension workers and financial resources available) and less likely to promote inequity or discrimination in terms of extension focus, and also allows for a more coordinated and priority focused development.

Please indicate your viewpoint by choosing one of the following:

1. A is much better than B
2. A is better than B
3. No real difference/Undecided/Don't know
4. B is better than A
5. B is much better than A

V76

3.5 An organisational linkage structure widely recommended or supported is the following:



Among each of the following alternatives identify (indicate) the one that you regard as the most acceptable:

V77

Alternative A:

- 1) Per target community (community for which extension worker is responsible) there should be only one community organisation or structure that is responsible for the coordination and implementation of all development projects and/or programs.
- 2) Per target community there should be one overarching coordinating body representing the total community and all its development interests as well as a potential multitude of committees or structures that are responsible for the implementation of individual programs or projects. (Clear differentiation between body with coordination function and those with implementation or operational function)

ALTERNATIVE B

- (1) To have one CDC (Central development Council) or overarching and coordinating body per extension ward V78
- (2) To have one CDC per sub-community (e.g. village or farmers Association)
- (3) To have one CDC only at the Municipality District level



ALTERNATIVE C

- 1) To have operative (commodity specific) programme development committees responsible for the total service area (e.g. extension ward) V79
- 2) To have operative programme committees for every sub-community (e.g. village within service area)

ALTERNATIVE D

- 1) To have a CDC (Central Development Council) catering for only a specific commodity
- 2) To have a CDC catering only for agriculture V80
- 3) To have a CDC catering for all development issues

4. PURPOSEFUL OR PROGRAMMED APPROACH

4.1 Programmed Extension, characterised by a purposeful pursuit of objectives identified on the basis of a situation analysis and regularly evaluated and monitored, is known to have many advantages. How valid do you assess the following, using the given scale?

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

↑
↑

Invalid and unimportant
Extremely valid and important

- 1) It promotes effectiveness and efficiency due to its motivating and activating nature, its priority focus, and the provision of continuity. V81
- 2) It allows for full implementation of the “help towards self-help” principle, not V82
- 3) Not only focused on the individual, but the whole community. V83

4) Through it effective monitoring, evaluation and accountability is possible.

4.2 With which of the following viewpoints can you associate or best associate yourself (which of the alternatives is closest to your viewpoint):

1) Behaviour change programs cannot be planned or programmed as they have to be allowed to unfold.

2) Clearly defined and measurable objectives are essential for accountable and effective extension. V84

4.3 What is your view regarding the ownership of extension? Rank the following alternatives in order of preference:

1st 2nd 3rd

--	--	--

V85-87

1) The program should be solely owned and managed by the extension worker.

2) The program should be co-owned i.e. owned by the program committee consisting of farmers representing the community and the extension worker.

3) The program should be owned by the community represented by farmers on the program committee, who are responsible to the community or to its representative body.

4.4 Which of the following alternatives do you prefer in terms of

a. Specificity

1) For a specific program focus (e.g. maize production) there should be one program committee **per extension service area** (e.g. extension ward). V88

2) For a specific program focus there should be one programme committee **for every sub-community in the service area** (e.g. per village, or per farmers' association)

b. Accountability

1) Every program committee should be self-sufficient, self-responsible or self-accountable. V89

2) Every program committee should be commissioned by and responsible to a community body representing the total community and all its development interests.

c. Time devoted to programmed extension

Please indicate

- i. The time you think is currently devoted to programmed or project focused extension in your area, and
- ii. The time than you believe should be devoted to programmed extension

Nil (0)

1 day per week (1)

2 days per week (2)

3 days per week (3)

4 days per week (4)

5 days per week (5)

Current: V90

Recommended: V91

4.5 A common problem facing frontline extension workers is that if they have taken a decision regarding the time to be allocated to the program and have developed a plan on that basis, they cannot adhere to it, because of other commitments enforced on them with short term notice. To what degree does this apply or is a problem in your situation? (Please indicate the relevant alternative – see (a))

- Don't know (1)
- No problem whatsoever (2)
- Somewhat of a problem (3) V92
- It is a problem (4)
- It is a serious problem (5)

If the above is no problem in your situation, it can be attributed to different alternatives.

(a) Indicate to what degree the following apply in your situation using the following scale:

- Does apply (4)
- Applies partially (3)
- Does not apply (2)
- Don't know/Uncertain (1)

(b) Please indicate also (under (b)) to what degree the following (alternatives (1) to (5)) can be a solution

- Is a solution (3)
- Can be a partial solution (2)
- Certainly no solution (1)

(b) (b)

- 1) The time (to be spent on the program) has been agreed upon with supervisor or manager. V93-94
- 2) The program is/programs are sufficiently flexible or of a low input intensity that unplanned intervention can be easily handled. V95-96
- 3) Other responsibilities, expectations or commitments are given to field personnel well ahead of time so that they can accommodate them in their planning. V97-98



4) Extension workers with programs are protected by their managers “from outside interference”. V99-100

5) The above is no problem because frontline extension workers don’t yet have scheduled programs with detailed work plans of calendars. V101-102

4.7 Regarding the planning within a district (region) or Province, how should it be coordinated?

.....

4.8 Please list the following alternatives in order of acceptability:

1 st	2 nd	3 rd
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

V103-105

- 1) Priority setting and planning should be done by management, while frontline extension workers need to link into these programs and plans.
- 2) Planning and priority setting should be done at community or grassroots level, while the responsibility of management is to coordinate the various programs.
- 3) Planning and priority setting should be done at community or grassroots level, but it has to happen and be reconcilable with a clear mission and broad development objectives set by management.

4.9 As far as extension projects and programs are concerned, indicate your degree of agreement/disagreement (using the appropriate code number) of the following statements:

- (1) Fully agree
- (2) Agree
- (3) Partially agree/disagree or undecided
- (4) Disagree

(5) Disagree altogether. Development programs or projects should be owned by and be the total responsibility of the community (initiation, planning, budgeting, implementation). Development agents or organisations can be requested to assist. V 106

The community, through Program or project committees, should have ownership of the project of program, with one or more development agents or Extension worker(s) operating as executive officer, but being responsible to the community. V107

The development agent(s) or organisation(s) are responsible for development and thus for all projects and programs in this regard. They should involve communities in the form of representative committees for purposes of bigger effectiveness and sustainability. V108

Development agents or organisations should be working for the farming community (and not with) since they are responsible for development and not accountable to the community. V109

5. Evaluation and accountability

5.1 Effective Monitoring and Evaluation (M&E) is often regarded to be one of the most important and effective instruments enabling an improvement of all current and future extension. Please indicate the degree to which you agree with this statement.

1	2	3	4	5	6	7	8	9	10	<input type="checkbox"/>	V110
---	---	---	---	---	---	---	---	---	----	--------------------------	------

↑
↑
 Disagree completely Agree absolutely

5.2 The following are different levels of criteria that can used in monitoring and evaluation. Could you please

- a) assess the importance of every level for M & E purposes (using Scale A), and
- b) assess the degree or effectiveness with which they are currently implemented in your situation, using the Scale B, and
- c) indicate the frequency with which evaluations regarding the various criteria should be evaluated or reported on (indicate number of months)

To whom should the frontline extension worker be accountable (a) monthly, (b) annually and (c) on completion of the project/programme?

Indicate 1 = No, or 2 = Yes in the spaces provided for the different alternatives

	Monthly (a)	Annually (b)	On completion (c)
1. Program or project committee	V136	V137	V138
2. Extension management	V139	V140	V141
3. Local councils	V142	V143	V144
4. Local farmer forums	V145	V146	V147
5. District Municipality	V148	V149	V150
6. District farmer forum	V151	V152	V153

5.5 Considering the various report forms sent in by extension workers every month, what purpose do they currently mainly serve and should they mainly serve

(In both cases list the following alternatives in order of preference)

(a)

(b)

1st 2nd 3rd 4th

--	--	--	--

V154-158

1st 2nd 3rd 4th

--	--	--	--

V159-162

- 1) To provide information mainly for policy makers
- 2) To provide information for management (to improve management)
- 3) To provide information that allows frontline extension personnel to improve their extension
- 4) To provide information that serves as evidence of success or progress for purposes of accountability

5.6 The following are two rather contradicting views regarding monitoring and evaluation. Indicate the one that reflects your view or comes closest to it:

- 1) Objectives (against which evaluations are made) should be as limited as possible, in order to be as simple as possible and prevent confusion.

V163

- 2) Objectives should be as extensive and as detailed as possible to ensure that a maximum of evidence of success is gathered for purposes of accountability.

6. HOLISTIC APPROACH (6):

6.1 What is your view of the Department’s approach regarding the following aspects or dimensions. Please indicate

- a) your judgement of the **current focus** of the Department of Agriculture, and
- b) your view of where the **focus** of the Department **should be** using the provided 10 point continuums.

(a) (b)

Only Agricultural development	1	2	3	4	5	6	7	8	9	10	Only Rural development			V164-165
Commodity approach (at farm level)	1	2	3	4	5	6	7	8	9	10	Systems approach (at farm level)			V166-167
Only “common good” issues	1	2	3	4	5	6	7	8	9	10	Only “individual good” issues			V168-160
Only reactive advice for solving current problems	1	2	3	4	5	6	7	8	9	10	Only capacity building for future problem solving			V170-171
Only on agricultural production	1	2	3	4	5	6	7	8	9	10	Only on value adding and marketing			V172-173
Only rural agriculture	1	2	3	4	5	6	7	8	9	10	Only urban Agriculture			V174-175
Only on willing and potentially productive farmers	1	2	3	4	5	6	7	8	9	10	Only on disadvantaged and small scale farmers, trying to restore equity			V176-177

6.2 Please indicate the percentage time that

- a) frontline extension workers currently spend on different target audiences, and

b) you believe frontline extension workers should spend on the different target audiences. (a) (b)

- | | | | |
|--|--------------------------|--------------------------|----------|
| 1) Large scale commercial farmer | <input type="checkbox"/> | <input type="checkbox"/> | V178-179 |
| 2) Small scale commercial farmers | <input type="checkbox"/> | <input type="checkbox"/> | V180-181 |
| 3) Subsistence farmers or rural households | <input type="checkbox"/> | <input type="checkbox"/> | V182-183 |
| 4) New farmers (LRAD) | <input type="checkbox"/> | <input type="checkbox"/> | V184-185 |
| 5) Urban agriculture | <input type="checkbox"/> | <input type="checkbox"/> | V186-187 |
| 6) Schools | <input type="checkbox"/> | <input type="checkbox"/> | V188-189 |
| 7) Farm labourers | <input type="checkbox"/> | <input type="checkbox"/> | V190-191 |

Total 100%

6.3 In case of insufficient resources or steady declining resources indicate the sequence in which the various target groups should be withdrawn from being the extension worker's responsibility.

Sequence of withdrawal:

1 ST	2 nd	3 rd	4 th	5 th	6 th	7 th
192	193	194	195	196	197	198

6.4 Please indicate the percentage time

a) that you think the "average" frontline extension worker in your area currently spends on the following activities, and

b) how you believe his time should be sent (a) (b)

- | | | | |
|--|--------------------------|--------------------------|----------|
| 1. Projects and programmes | <input type="checkbox"/> | <input type="checkbox"/> | V199-200 |
| 2. Administration | <input type="checkbox"/> | <input type="checkbox"/> | V201-202 |
| 3. Advising farmers on their request | <input type="checkbox"/> | <input type="checkbox"/> | V203-204 |
| 4. Self-development/ In-service training | <input type="checkbox"/> | <input type="checkbox"/> | V205-206 |
| 5. Liaising with other service providers | <input type="checkbox"/> | <input type="checkbox"/> | V207-208 |
| 6. Other (Specify):..... | <input type="checkbox"/> | <input type="checkbox"/> | V209-210 |
| 7. Non-productive, idle | <input type="checkbox"/> | <input type="checkbox"/> | V211-212 |

Total 100% 100%

7. SUPPORT SERVICES

7.1 How do you judge the following sources in terms of their (a) current and (b) potential contribution as knowledge support to the frontline extension worker, using the following scale:

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

↑
Very small

↑
Very big

	Current	Potential	
ARC researcher	<input type="text"/>	<input type="text"/>	V213-214
Dept. of Agriculture Researcher	<input type="text"/>	<input type="text"/>	V215-216
Subject Matter Specialist	<input type="text"/>	<input type="text"/>	V217-218
Extension supervisor	<input type="text"/>	<input type="text"/>	V219-220
NGO's	<input type="text"/>	<input type="text"/>	V221-222

7.2 How important do you rate the role of the SMS (Subject Matter Specialist) as a knowledge support intermediary (between research and extension) in the following situations, using the given scale:

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

↑
Unimportant

↑
Extremely important

Subsistence farming situation	<input type="text"/>	V223
1) Small commercial farming situation	<input type="text"/>	V224
2) Large commercial mixed farming situation	<input type="text"/>	V225
3) Large commercial homogenous farming situation	<input type="text"/>	V226

7.3 How important do you rate each one of the following functions of the SMS (Subject Matter Specialist):

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----



Unimportant



Extremely important

- | | | |
|--|--------------------------|------|
| 1) Training of Extensionists (courses where necessary) (reactive Function) | <input type="checkbox"/> | V227 |
| 2) Continuous and purposeful knowledge upgrading and capacity building of extensionists working in the respective fields (pro-active) | <input type="checkbox"/> | V228 |
| 3) Assistance and advice to farmers when requested by farmers and/or extensionists | <input type="checkbox"/> | V229 |
| 4) Training of farmers where knowledge base does not exist among extensionists | <input type="checkbox"/> | V230 |
| 5) Assistance of extensionists with problem cases | <input type="checkbox"/> | V231 |
| 6) Assistance of extensionists with message design i.e. designing messages that are technically, economically and human behaviour relevant(where requested) | <input type="checkbox"/> | V232 |
| 7) Become specialist regarding relevant commodity/discipline in area of responsibility in relation to current production, prevailing problems, needs of farmers (including research needs if there is no solution), priorities and solutions to be promoted by extension | <input type="checkbox"/> | V233 |
| 8) Seeking solutions through adapted research/demonstrations (adapting innovations to specific local conditions) | <input type="checkbox"/> | V234 |
| 9) Remain abreast of new research, developments and knowledge in field of specialisation | <input type="checkbox"/> | V235 |

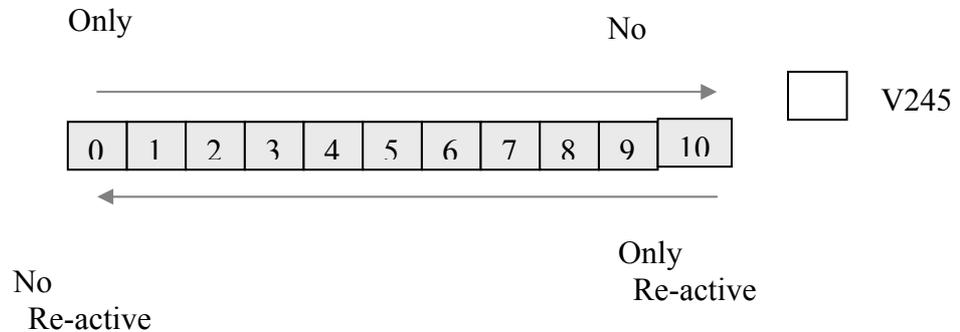
7.4 In order to gain an additional insight of your perspective, kindly place the above in rank order of importance

1st 2nd 3rd 4th 5th 6th 7th 8th 9th

--	--	--	--	--	--	--	--	--	--

V236-244

7.5 Some people see the function of the SMS to be mostly reactive in nature (helps or makes inputs when requested), while others believe it should be mostly proactive (purposeful programs). What is your view? Please select the ratio that you favour most:



(a) How much time (days per year) do frontline extension workers currently devote to in-service training?

Current number of days V246

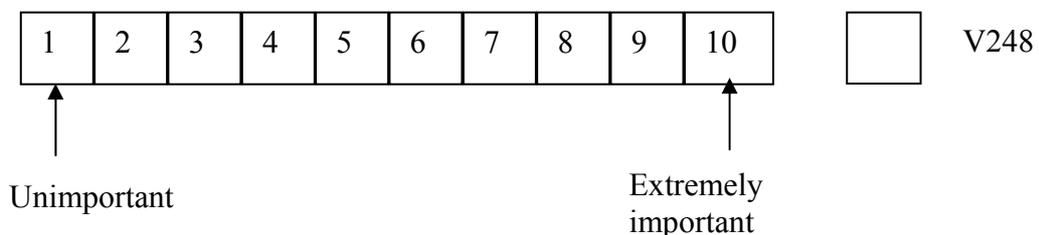
(b) How much time is appropriate in your situation

Recommended number of days V247

8. CO-ORDINATION

Lack of coordination between different extension organisations often results in unnecessary duplication or working at cross-purposes, with the result that the frequently scarce extension resources are not effectively utilised, thereby seriously reducing or undermining the potential extension input.

8.1 How serious is this problem in your opinion? Please give an assessment on the following scale:



8.1 To get another perspective of your viewpoint regarding the seriousness of the lack of coordination as a problem, please consider it along with some other problems and list them in order of importance.



1st 2nd 3rd 4th 5th 6th 7th

1) Lack of coordination

--	--	--	--	--	--	--

V249-255

2) Poor competence of extension workers

3) Lack of commitment of extension personnel

4) Poor management of extension

5) Inappropriate extension approach

6) Lack of credit and other input resources

7) Lack of land

8.3 Which of the following is closest to your idea of good coordination:

1) Extension organisations and/or agents assist each other and work together to be more effective and efficient.

V256

2) Extension organisations and/or agents work in such a way that they don't do the same work, but complement each other by either focusing on different areas, different communities, different commodities or different functions.

3) It is generally accepted that different extension or development organisations (whether public, private or company-oriented) have different objectives and agendas and are not equally interested in coordination.

4) Indicate (using the following scale) the acceptability of the following in terms of solutions to poor coordination:

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----



Very unacceptable



Highly acceptable

8.4 Each organisation must commit itself to coordination and contribute equally to the process.

V257

The difference between organisations must be accepted and respected and coordination must be planned accordingly

V258

8.5 What do you see as the solution to poor coordination between different extension organisations?

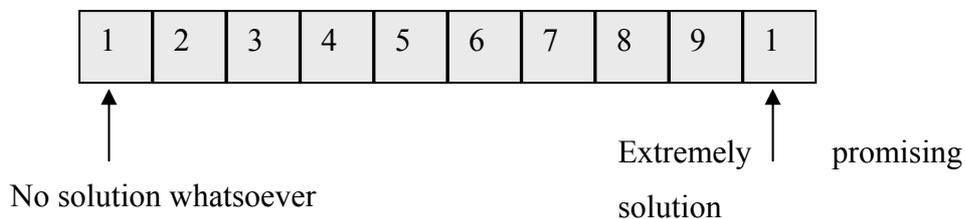
.....

.....

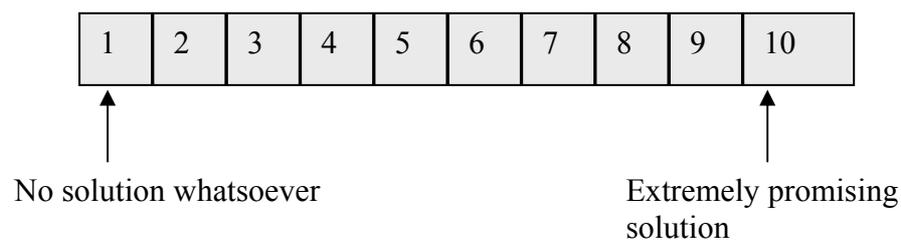
8.6 Two widely proposed solutions are the following:

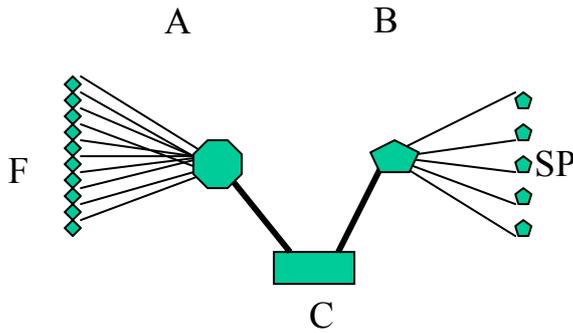
- A. *The establishment of a coordinating extension forum for extension organisations.* This proposal is said to be a potential solution in situations where different extension agents are involved in and focus on the same commodity. Experience shows that representatives from commercial or company-based organisations usually choose not to participate. V259
- B. *Enforced coordination by the community, viz. through a community body representing the community and promoting and coordinating its interests.* If the community lays down coordination guidelines, service providers can hardly ignore them. V260

Please assess each of the above alternatives in terms of their potential solution of uncoordinated extension in your area, using the following scale:



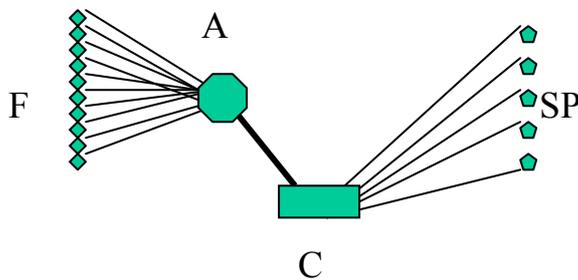
8.7 In the case of interaction or linkage between extension agents or organisations and the farming community, which of the following structures do you regard as most acceptable? Assess their acceptability or appropriateness (using the scale provided) as a solution in facilitating a partnership interaction between agents and community and the coordination between agents.





(1) Indirect representation:
 Service providers (SP) form a coordinating body (B), which in turn is represented on the development forum (C), where farmers are also represented via their representative body (A)

V261

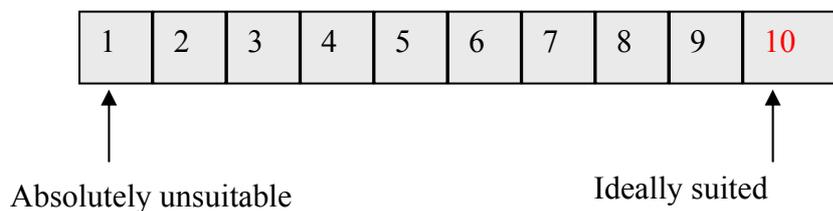


(2) Semi-direct representation:
 Service providers (SP) maintain their independency and are directly represented on the Development Forum (C), which provides for coordination but also allows for service providers' direct interaction and negotiation with the farmers representative body.

V262

Diagram illustrating alternative linkage structures between service providers and farmers

8.8 Which of the following organisations (agents) would be most suited in leading or chairing a coordination forum?



- | | | |
|---|--------------------------|------|
| Department of Agriculture | <input type="checkbox"/> | V263 |
| NGO's | <input type="checkbox"/> | V264 |
| Private or farmer-owned extension service | <input type="checkbox"/> | V265 |
| Company based organisation (e.g. Fertiliser reps, etc.) | <input type="checkbox"/> | V266 |

8.9 At which of the following levels is coordination most important? Please list in order of importance

1st 2nd 3rd 4th 5th

- 1) Village level
- 2) Extension ward level
- 3) Local Municipality level
- 4) District Municipality level
- 5) Provincial level

--	--	--	--	--

V267-271

9. PRIVATISATION OR OUTSOURCING

9.1 The average efficiency of Extension is, according to some literature sources, approximately 130 percent, i.e. for every R100 invested in extension, the return is R130.

9.1.1 What would you guess is the average efficiency of the Department of Agriculture, (expressed as a percentage or return per R100 invested as above)

a) in your area (or your own efficiency) V272

b) in your Province V273

c) in South Africa

- i. in the small scale or subsistence farming situation V274

- ii. in the small scale commercial farming situation V275

- iii. in the large-scale commercial farming situation V276

9.1.2 What would you guess is the average efficiency of NGO's in South Africa?

i. in the small scale or subsistence farming situation V277

ii. in the small scale commercial farming situation V278

iii. in the large-scale commercial farming situation V279

9.2 Under what circumstances would you favour a privatisation or outsourcing of the Extension services of the Department of Agriculture? Indicate

a) whether you agree or not to privatisation under the following circumstances, by inserting the following:

- 1 = Agree (in favour of privatisation)
2 = Hesitant/ Don't know
3 = Disagree (not in favour of privatisation)

b) the relevancy of the mentioned circumstances in your own situation, using the following scale:

1	2	3	4	5	6	7	8	9	10
↑					↑				
Completely irrelevant					Highly relevant				

- | | (a) | (b) | |
|---|--------------------------|--------------------------|----------|
| (1) When the Department (or its personnel) hasn't got the competence or ability to still provide the service | <input type="checkbox"/> | <input type="checkbox"/> | V280-281 |
| (2) When private organisations (NGO's) can provide a service more effectively, i.e. at a more favourable input/output ratio | <input type="checkbox"/> | <input type="checkbox"/> | V282-283 |
| (3) When private organisations (NGO's) can provide a service as effectively. | <input type="checkbox"/> | <input type="checkbox"/> | V284-285 |
| (4) When private organisations provide the same service with own funds, albeit at a lower efficiency. | <input type="checkbox"/> | <input type="checkbox"/> | V286-287 |
| (5) When the Department can no longer afford it (Government has no funds for this purpose) | <input type="checkbox"/> | <input type="checkbox"/> | V288-289 |

The following are different alternatives of privatisation. Assess each of them in terms of acceptability as an option in your Department (Province, Region, District or Ward) using the following scale:

1	2	3	4	5	6	7	8	9	10
↑			↑			↑			
Absolutely unacceptable			Consider implementation			Highly acceptable Urge immediate implementation			

STRATEGY 1 – COST RECOVERY

- Minimum cost recovery (Farmers pay for specific packages or Services) V290
- Cost recovery for extension services (Farmers pay fully for all services) V291
- Total Privatisation (Government no longer involved, also no financial support) V292

STRATEGY 2 – OUTSOURCING

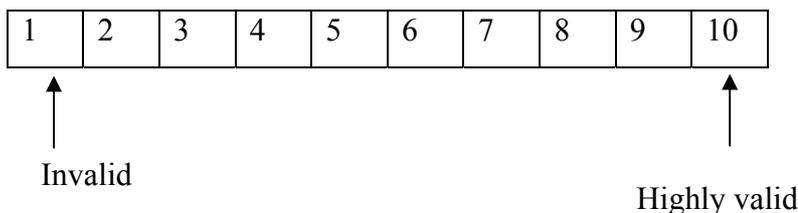
- 2.1 In-sourcing of Management V293
- 2.2 In-sourcing of Knowledge / Expertise V294
- 2.3 Outsourcing of Personnel (secondment) V295
- 2.4 Outsourcing of the Total Service V296

STRATEGY 3 – OUTSOURCING (DECENTRALISATION) TO BENEFICIARIES

- 3.1 To Municipality (officials under a different ministry) V297
- 3.2 To District Municipality V298
- 3.3 To Local Municipality V299
- 3.4 To Community Organisations V300

The following are benefits associated with the outsourcing or privatisation of extension services.

9.4.1 Indicate your opinion regarding their validity by using assessment on the following scale:



- 1) Greater operational efficiency and cost effectiveness. V301
- 2) Greater accountability of extensionists to perform and produce results. V302
- 3) Contractor (government) can demand a service standard from the agent that government cannot deliver by itself. V303
- 4) Contractor (government) can specify clients to be served (small, poor and marginal farmers). V304
- 5) Reduces permanent staff requirements and allows redeployment of resources to higher-priority or sensitive areas. V305
- 6) Enhances extension impact by accessing providers with special skills or comparative advantages in providing specific services. V306
- 7) Creates partnerships and working relationships with other providers. V307
- 8) Enhances flexibility and credibility in responding to special needs of diverse clientele. V308
- 9) Is useful for testing innovative and higher risk “new” systems. V309
- 10) Increases provider accountability. V310

9.4.2 Identify what you regard to be the five most important and valid ones and place them in rank order of importance.

					V311-315
1 st	2 nd	3 rd	4 th	5 th	

9.4.3 Privatisation or outsourcing of extension is usually considered when (a) funds are insufficient or (b) when other organisations are more effective and efficient.

By how much (what percentage) do you think the effectiveness and efficiency of the government extension service would have to increase to prevent privatisation or outsourcing to other extension or development organisations (*e.g. if to be doubled, indicate 200%*) % V316

(2) to justify a long term government extension service % V317

9.4.4 What conditions are essential or steps need to be taken to ensure the above?
Place those that you consider essential in order of priority

- 1) Improved management of extension
- 2) Improved competence through training of extension officers
- 3) Improved monitoring, evaluation and accountability
- 4) Improved support services
- 5) Better coordination between extension organisations
- 6) Better facilities and equipment
- 7) No political interference
- 8) Improved extension approach
- 9) Other:
- 10) Other:

1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th

V318-327

APPENDIX B

ASSESSMENT QUESTIONNAIRE OF EXTENSION IN (PEA) BASED.

LIMPOPO PROVINCE DEPARTMENT OF AGRICULTURE

1. Respondent Number	V1	<input type="text"/>						
2. District Number	V2	<input type="text"/>						
3. PEA Trainer	V3	<input type="text"/>						
4. PEA facilitator	V4	<input type="text"/>						
5. Pilot Number	V5	<input type="text"/>						
Personal characteristics of extension staff								
6. Sex		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="padding: 2px;">Male</td> <td style="padding: 2px;">1.</td> <td style="padding: 2px;">Female</td> <td style="padding: 2px;">2</td> </tr> </table>	Male	1.	Female	2	V6	<input type="text"/>
Male	1.	Female	2					
7. Highest qualifications					<input type="text"/>			
a) Number of years of formal education in school	V7				<input type="text"/>			
(b) Tertiary	V8				<input type="text"/>			
(c) Total	V9				<input type="text"/>			
8. Marital status								
Married		1						
Widow		2						
Widower		3						
Divorced		4						
Unmarried		5						
	V10				<input type="text"/>			
9. Experience, No of years in the service								
less than 10 years		1						
11 -20years		2						
21- 25years		3						
26-30 years		4						
above 31 years		5						
Total	V11				<input type="text"/>			
	V12				<input type="text"/>			
10. Present rank:								
Agricultural technicians		1						
Senior Agric. Technician		2						
Chief Agric technician		3						
Control technician		4						
	V13				<input type="text"/>			



11. Age

less than 25yrs	1	
25 –30	2	
31-35	3	V14 <input type="checkbox"/>
36-40	4	
41-50	5	
>51	6	
Total number of years.....		V15 <input type="checkbox"/>

MERIT ASSESSMENT

12. Were you appraised for promotion while working as PEA change agent in the past three years?

Yes 1	No 2
-------	------

V16

13. Were you awarded any merit recognition for second and third notch during the past three years?

Yes 1	No 2
-------	------

V17

FIELD VISITS

14. Please provide the following information:

	PEA	Other extension
a) Number of group contacts per month	V18	V19
b) Total no. of individual within groups	V20	V21
c) Other contacts?	V22	V23

15. Provide the information of farmers that participate in PEA pilot areas and non pilot areas according to the table given below:

Name of village	Number of farmers	PEA focus 1= yes 2 =No	Number of active members
(a)	V24	V25	V26
(b)	V27	V28	V29
(c)	V30	V31	V32
(d)	V33	V34	V35
(e)	V36	V37	V38
(f)	V39	V40	V41
Total			

16. Accepting that a month has 20 working days. How many days do you spend on the following?

- a) PEA field work V42
- b) PEA administration V43
- c) Training in PEA V44
- d) Other extension activities V45
- e) Other responsibility e.g. servicing other departments V46
- f) Non- extension issues V47

TRAINING OF EXTENSION OFFICERS

17 Provide the information in the table below on how much training have you received since 1998 relating to (a) The PEA approach and (b) other training?

	Methodology (Number of weeks)	Technical training (Number of weeks)
a) PEA approach	V48	V49
b) Other training approach	V50	V51

18. Give your rating whether the PEA methodology training has achieved or not achieved its purpose using the following scale?

- Very good 1
Good 2
Poor 3
Very poor 4

V52

19. Has the PEA technical training achieved or not achieved its purpose. Give your opinion using the scale hereunder

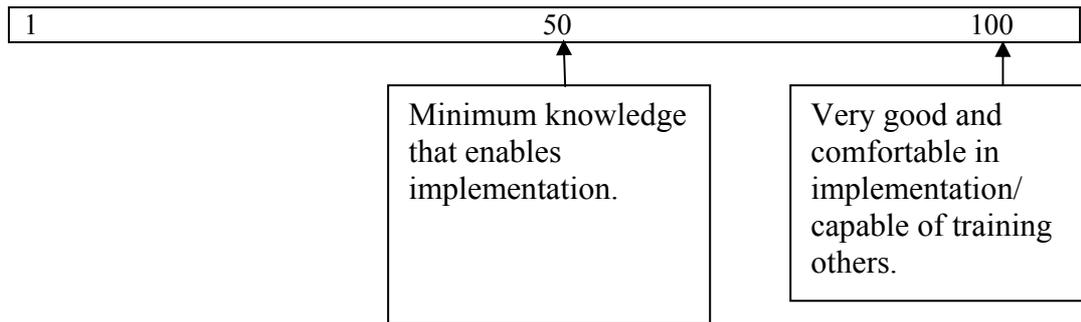
- Very good 1
Good 2
Poor 3
Very poor 4

.....V53

20. Should the intensity of the PEA training be evaluated how many weeks of training did you attend prior 1998 in terms of methodology and technical training in other extension approaches.

	Methodology (Number of weeks)	Technical training (Number of weeks)
a. Other extension approaches training	V54	V55

21. How do you rate your knowledge /competence/skills in terms of implementing the PEA approach using the following scale:



- a) Your current knowledge of PEA methodology V56
- b) Your knowledge before training V57
22. How much knowledge do you possess in the associated technical field?
Rate yourself, on the same scale
- a) current technical knowledge V58
- b) knowledge before training V59
23. Assume that you (did not have any) diploma training, how many weeks of training would be required to reach the same level of competence?
Number of weeks V61
24. How much more training in PEA methodology do you need days/weeks) to achieve the highest scale point?
- a) With a diploma in extension V62
- b) Without a diploma in extension. V63

25. How do you rate the quality of the following training programmes:

a) PEA methodology?

- Very good 1
- Good 2
- Reasonable 3
- Poor 4
- Very poor 5

V64

b) Technical training?

- Very good 1
- Good 2
- Reasonable 3
- Poor 4
- Very poor 5

V65

26. How do you rate the importance of extension methodology versus subject training within PEA approach?

- Extension method much more important than subject matter 1
- Extension method more important than subject matter training 2
- Extension method equal to subject matter training 3
- subject matter training more important than extension method 4
- Subject matter much more important than extension 5

V66

27. When comparing PEA with other forms of extension how important do you regard the technical knowledge of the agricultural technicians?

- Technical knowledge is much more important in PEA 1
- Technical knowledge is more important in PEA 2
- No difference 3
- Technical knowledge is less important in PEA 4
- Technical knowledge is much less important in PEA 5

V67

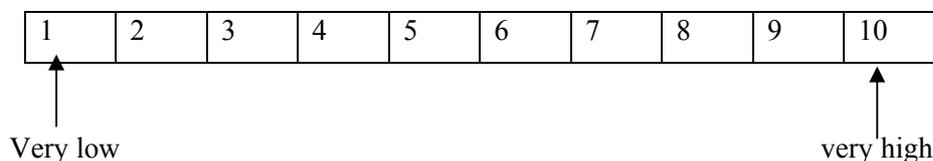
COST OF TRAINING

28. What is the maximum amount of money (R) that the Department should put aside annually per officer for the training of one agricultural technician? R

V68

EMPOWERMENT

29. How do you assess yourself as an agricultural technician using the following scale:



30. Organizational competency
- a) Current V69
- b) Before training in PEA V70
31. Facilitation skills/competency
- a) Current V71
- b) Before training in PEA V72
32. Skills/knowledge of Linking farmers with service providers
- a) Current V73
- b) Before training in PEA V74
33. Knowledge of human relation.
- a) Current V75
- b) Before training in V76
34. Confidence
- a) Current V77
- b) Before training in PEA V78
35. What in your view constitute the five most important components of the PEA process
- | | | | | | | |
|---------------|-----|---|----|---|-----|--------------------------|
| 35 (a) | Yes | 1 | No | 2 | V79 | <input type="checkbox"/> |
| (b) | Yes | 1 | No | 2 | V80 | <input type="checkbox"/> |
| (c) | Yes | 1 | No | 2 | V81 | <input type="checkbox"/> |
| (d) | Yes | 1 | No | 2 | V82 | <input type="checkbox"/> |
| (e) | Yes | 1 | No | 2 | V83 | <input type="checkbox"/> |



SUPERVISION

36. How do you assess the needs for supervision in PEA compared with other extension approaches using the following scale:

- | | | |
|---|---|------------------------------|
| Supervision is much more important in PEA | 1 | |
| Supervision is more important in PEA | 2 | |
| No difference | 3 | |
| Supervision is less important in PEA | 4 | |
| Supervision is much less important in PEA | 5 | V84 <input type="checkbox"/> |

PARTICIPATORY EXTENSION APPROACH

37. How do you think farmers rate your current delivery of extension service?

- | | | |
|------------|---|------------------------------|
| Very good | 1 | |
| Good | 2 | |
| Reasonable | 3 | |
| Poor | 4 | |
| Very poor | 5 | V85 <input type="checkbox"/> |

38. How do you think farmers rate your service before PEA approach?

- | | | |
|------------|---|------------------------------|
| Very good | 1 | |
| Good | 2 | |
| Reasonable | 3 | |
| Poor | 4 | |
| Very poor | 5 | V86 <input type="checkbox"/> |

SUSTAINABILITY

39. Will the process introduced by PEA, namely helping the community towards self help, continue if the extension officer is no longer there?

- | | | |
|----------------------|---|------------------------------|
| Yes | 1 | |
| Don't know /hesitant | 2 | |
| No | 3 | V87 <input type="checkbox"/> |

40. Why? Or why not?.....

IMPROVEMENT IN GENERAL

41. Do you think there has been improvement of production in the pilot project since using the PEA approach? How do you judge (them) the improvement using this scale:

- Very good 1
- Good 2
- Reasonable 3
- Poor 4
- Very poor 5

V88

42. If yes which are they? List them and give evidence

List of achievements	Evidence

43. **What do you regard to be the strength of PEA?**

.....

V89

44. For approximately what percentage of the Limpopo Province do you regard the PEA as the most appropriate extension approach?

V90

45. What do you regard to be the weakness of PEA?

.....

V91

46 In your view what are the core values of PEA approach?

(a)	Yes	1	No	2	V92	<input type="text"/>
(b)	Yes	1	No	2	V93	<input type="text"/>
(c)	Yes	1	No	2	V94	<input type="text"/>
(d)	Yes	1	No	2	V95	<input type="text"/>
(e)	Yes	1	No	2	V96	<input type="text"/>

LESSON LEARNT FROM THE INTERVENTION

47. Under what condition would it be difficult to introduce PEA?

.....

V97

SELECTION CRITERIA

48. Who selected villages of the pilot sites as beneficiaries?

- Farmer committee 1
- Project manager 2
- Regional heads 3
- Don't know 4
- Other 5 (specify).....V98

BEHAVIOURAL CHANGES OF FARMERS

49. Using the scale below how do you rate the contribution of PEA

to farmers in terms of the following:V99

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

↑
Very low

↑
Very high

50. Adoption of farming practice

- a) Current V100
- b) Before PEA exposure V101

51. Knowledge of farmers related to PEA

- | | | |
|-------------------------|------|--------------------------|
| (a) Current | V102 | <input type="checkbox"/> |
| (b) Before PEA exposure | V103 | <input type="checkbox"/> |

52 Skills of farmers related to PEA.

- | | | |
|-------------------------|------|--------------------------|
| (a) Current | V104 | <input type="checkbox"/> |
| (c) Before PEA exposure | V105 | <input type="checkbox"/> |

53 Perceptions/attitudes of farmers towards extension.

- | | | |
|------------------------|------|--------------------------|
| a) Current | V106 | <input type="checkbox"/> |
| d) Before PEA exposure | V107 | <input type="checkbox"/> |

54. Meeting the needs of clients/farmers

- | | | |
|------------------------|------|--------------------------|
| a) Current | V108 | <input type="checkbox"/> |
| e) Before PEA exposure | V109 | <input type="checkbox"/> |

55 In few words give reasons why farmers under PEA processes perform differently as compared in the past.

56. The PEA is designed to be need responsive. Is it also appropriate or suitable for addressing issues like conservation or “common good” (rather than “individual good”) which seldom feature among farmers needs. V110

- | | |
|--|---|
| Much more suitable than other approaches | 1 |
| More suitable than other approaches | 2 |
| Same as other approaches | 3 |
| Less suitable than other approaches | 4 |
| Much less suitable | 5 |

V111

TECHNOLOGY GENERATION

57 Has PEA contributed towards research becoming more involved in participating technology development and thus becoming more relevant?

- | | |
|------------------|---|
| Very significant | 1 |
| Significantly | 2 |
| Somewhat | 3 |
| Not at all | 4 |

V112

APPENDIX C

FINDINGS OF THE PROVINCIAL PROJECTS IN LIMPOPO

Institutional arrangements in land reform projects

Out of the 8 projects only one had a formal organization namely Steilloop but the constitution was not working. The rest of the projects did not have any working institutions, except for the old form of CPA or a trust. Many members have fallen off for example Makgofe had a total membership of 37 but only 8 were active at the time of the survey. Other projects did not bother in revising their constitutions to allow a separation between the trust and the management hence the members who were active were discouraged by those who came to share the harvest but failed to lend their labour. There is also a problem of lack of agreement between the role played by management and the interim executive committee (for example Laboheme). Lack of proper institutional framework creates secondary challenges for the management of the project where some farmers sub-lease for grazing to members of the community. This is an illegal activity which usually sparks violence if found.

Technical know-how possessed by land reform beneficiaries

All the projects have shown high need for practical skills. Members were trained. In some cases they were only exposed to theoretical training by some NGOs such as Boskop. Some could not realize the use of kraal manure such as Lwalalameetse. Other skills include leadership and institutional (organisational) intervention. The University of Limpopo was found to have donated training and ploughing units to Makgofe.

Financial assistance for land reform farmers

- Nwanedi was vocal in terms of complaining about lack of financial support from financial institutions. Farmers were worried that financial institutions were not accessible because of its geographical locations which is 120km away from Thohoyandou. The insufficient infrastructure such as pipes, proper fencing, electricity, transport and machinery were cited by Nwanedi farmers. They also blamed the financial institutions for their poor cash flow which make it difficult to pay their labourers. High mortality rate of chicks due to insufficient heaters were also blamed lack of finance. Donations were reported from the Department of health and welfare of about R18 000 as part of their outreach programme to Makgofe Trust.

Marketing aspects of produce

Farmers in all projects were producing on subsistence level even though they could sell their produce. Some had a potential to be commercial for example the two livestock groups namely Steilloop and Strydpoort as well as the two crop producers namely Nwanedi and Laboheme. They all market locally whereas some had problems of marketing for example Makgofe and Matshehla Trust. They lack marketing strategies. Hired transport has proved to be very expensive for the farmers. The farmers of Steilloop expressed a hope that their Association would establish their own market with the passage of time.

Social /health status of farmers

HIV/AIDS diseases was found to be one of the threats that affect the health status of farmers. Only one project was open to talk about it while the others were not comfortable to discuss the topic.

Future training needs of land reform beneficiaries

All projects have raised concern for the need of satisfying their capacity building needs. The needs are as follows per category. Livestock farmers emphasized the following :

- Supplementary feed management e.g. fodder production at Steilloop
- Animal diseases
- Prevention of disease and vaccination
- Disease control
- Processing of hides
- Processing of cheese
- Marketing
- Erections of farm houses on some sites
- Relationship with other stakeholders.
- Production of piggery i.e. from the birth of piglets to the finishers and housing. They also need training in the technical aspects of cattle rearing. They don't have appropriate skills of running the farm e.g. Ikageng.
- How to keep farm records.
- Financial management
- Managerial skills (Ikageng)

Whereas crop farmers were vocal concerning the following needs:

- Techniques of fertilizing the soil./ crops.
- Vegetable production. e.g. Makgofe.

Lessons learnt

Following the challenges presented the following lessons were learnt

- The implementing agent provided technical training as identified during the need assessment. They outsourced where they did not have expertise. Both farmers and extensionists were exposed to practical training. Although it was not sufficient extensionists visited Irene, the livestock branch of the Agricultural Research Council as well as Hygrotech field trial plots.
- Farmers were prepared to adopt team work especially where they work as groups like in the SLAG projects. Those who came from leased projects such as Steilloop were prepared to collaborate with external agents. They collaborated with ARC and SAVet offered them to provide services on condition farmers sign contracts to buy all livestock remedies from them.

- The reorientation of extensionists is important prior to implementing training to farmers. This gesture helps to prepare the local extensionists who are supposed to take over when the implementing agent exits the pilot project. The local extensionist develops more confidence and his/her interaction with the farmers is improved making it easier during farmer training. It also improves the mentorship, monitoring as well as chances for the sustainability of the project.
- It is important that fundraising skills are imparted to the farmers so that they could be in the position to access and identify sources of funding for their projects. Farmers complained that financial agents are far from them. Experience has shown that as long as farmers are organized, financial institutions go where farmers are if they have potential to do good business with them.
- Farmers who were new to farming required more time to be introduced into farming. Management training therefore became very important and this should be provided. During training sessions the instructor has to take this fact into consideration trying different ways of imparting knowledge.
- The performance of extensionists in land reform was not satisfactorily. The performance of all extensionists linked to land reform projects ought to be monitored on a monthly basis by the district management.
- Land reform projects did not have any explicit short, medium and long term development plans, and it is encouraged that this should be given a priority by the department.
- Farmers tended to show dependency upon the Department. They should be facilitated to have interactions with external service providers in order to reduce dependency.
- Farmer institutions were found to be weak, in varying degrees for example some projects were well constituted (Steilloop – Rebone farmers Association,) but without enforcement capability of a constitution, whereas some did not even have working committees (Ikageng) or any constitution to guide the members in their daily activities(Lwalala metse). Poor managerial capacity also stems from weak farming institutions creating a vacuum of leadership in times of crises or conflict for example Laboheme project displayed similar challenges.
- All SLAG projects faced a challenge of dealing with Trustees or ‘intruders during harvest time’ who do not understand that they have to offer their labour in producing whatever income is accumulated by the project before sharing profits e.g.Makgofe. Many Trustees came to share the profit in Makgofe without due respect of re-investing some back into the project. This caused the collapse of the project until it was saved by a donation from the Department of Health and Social Welfare.

There is a need to find an innovative mechanism which separates the project from a

mere asset (owned by the trustees who have equal rights to dividends whenever it is declared), into a business entity (in which it generates income through labour and management of the few).