

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In this chapter the main findings and conclusions from the preceding chapters and analysis are presented. This is followed by some recommendations for future implementation of FSPs, as well as for future research.

6.2 THE FSP EVALUATION IN RETROSPECT

In line with the guidelines of the Farmer Support Programme it has been decided to evaluate the FSPs on a long-term basis and this report is therefore the culmination of the three year programme initially agreed to. Broadly, the objectives of the evaluation programme were (Singini and Sibisi, 1992):

- to evaluate FSPs as instrument of agricultural development with a view to increasing the effectiveness and efficiency of the support services;
- to evaluate the progress and input of FSPs within the context of an integrated approach to rural development;
- to provide possible guidelines for the further course of the programme, as well as operational policy guidelines for the development of agriculture within South Africa.

The evaluation study consisted of the following activities:

- Evaluation of the FSP elements implemented
- Analysis of FSP impact
- Analysis of F'SP policy framework

The evaluation exercise consisted of three phases. The objective of the first phase was to give an overview of the position of the households and the agricultural scenario in the respective areas and to evaluate some of the FSP elements implemented. Sample surveys to obtain the information were conducted in the initial phase of the assignment. The second phase consisted of conducting interviews with implementing agents, input suppliers and contractors. The third phase involved a second round of household surveys to evaluate certain elements of the F'SP. Due to the very dry conditions, a lack of farming activities in many of the survey areas was experienced, which made the evaluation exercise not possible. This resulted in a change in objective for the third phase to monitoring the performance of the FSP under drought conditions.

In order to determine the impact or effect of the FSP, the ideal would have been to compare the situation with the FSP with the conditions experienced before the implementation of the programme. Thus, to compare the present situation with a baseline scenario would give a clear indication of the impact of the FSP on aspects such as agricultural output, input usage, household income and food security. Such a baseline study was, however, never done in any of the areas. This is unfortunate as the case for the implementation of such a study was argued in the original guidelines of the farmer support programme (DBSA,1986, p23):

"During the planning of the programme, an agricultural profile of the area should be established. Detailed base-line studies are not always necessary but an assessment of the following should be made:

- i) the farmers' perception of the constraints they face;*
- ii) the nature of land utilisation and distribution;*
- iii) the extent of migration, commuting and local employment in the area;*
- iv) the proportion of agricultural income to migrant income;*
- v) the institutional structures and infrastructure; and*
- vi) the identification of new constraints. "*

If this had been done, the progress of implementation of the FSP would have been more conspicuous and, furthermore, the task of evaluating the FSP and of determining the impact of the programme would have been easier.

Because it was not possible to determine the impact of the FSP, the best alternative available would have been to compare FSP farmers with those not taking part in the programme, or easily identifiable as farmers not being members of the various co-operatives or farmers' associations or those not receiving extension and training or credit. By means of this process it was possible to obtain some idea of the impact of the FSP on agricultural output, input usage, household income, food security, debt levels and standard of living. However, this process also has flaws, as the non-FSP farmers might also be able to obtain access to various support services. It is therefore not possible to arrive at intended conclusions solely based on the differences between FSP and non-FSP farmers.

The process of comparing the means of certain key variables of the two groups is open to criticism, since the means or average figures do not take cognisance of the distribution within each group. It is often believed that the "members" of the FSP are the rural elite, the more wealthy and those households with a larger asset base. In analysing the data from the surveys, large variations in all variables and key indicators were found.

To illustrate this, Table 6.1 provide an analysis of the distribution of the data with regard to certain variables as obtained from the survey of rural households in Venda. The wide variation of the data is evident from Table 6.1 and to some extent confirms that the means could well be considered as being representative and providing a fair picture of the real situation. Furthermore, if one considers the value of savings accounts and the ownership of cattle, it can be concluded that it is not only the rich and the more wealthy who join the FSP. The FSP members also do not necessarily own more cattle as is often believed. Often it is the other way around as the results in Chapter 3. 4 and 5 clearly demonstrate in the case of KaNgwane.

Table 6.1 Distribution of households in Venda with regard to certain indicators

Item	FSP households	Non-FSP households
Value of savings account (R)		
0	45.5 %	31.8 %
50 - 1000	19.4 %	22.7 %
1000 - 2000	14.3 %	22.8 %
2000 - 3000	5.2 %	18.2 %
> 3000	16.9 %	4.5 %
Access to cropland (ha)		
0	14.3 %	32.0 %
0.25	2.6 %	9.1 %
0.80	1.3 %	-
1	75.0 %	45.5 %
2	5.2%	9.1 %
> 3	1.3%	4.5 %
Share of cropland planted		
0	11.6 %	35.7 %
25%	4.3 %	-
50%	-	7.1 %
75%	-	-
100%	63.8 %	28.6 %
Ownership of cattle		
Cows:		
0	74.0 %	81.8 %
1 - 5	11.7 %	9.0 %
5 - 10	9.1 %	9.0 %
> 10	5.2 %	-
Oxen :		
0	89.6 %	86.8 %
1 - 5	10.4 %	13.6 %
5 - 10	-	-
> 10	-	-

Categorising households into non-FSP members and FSP members is also not satisfactory as the so-called "non-FSP members" could have access to certain support services. Those households who did not make use of credit supplied through the FSP programme and who did not take part in the extension programme were usually classified as non-FSP members. Although this could well be the case, it can also happen that these households have access to inputs and mechanisation services, without being a "member" of the FSP. It is difficult to isolate the FSP as it is supposed to be of a broad based nature reaching as many rural households as possible. It is therefore wrong to view the FSP as a "club" with "members". It should rather be viewed as a strategy to provide agricultural support institutions to rural households and to ensure access to these institutions.

Accepting the flaws in the process of comparing means between the groups, it is argued that the only feasible, and probably more correct, approach would therefore be to determine and

discuss the possible contribution of the FSP to certain key indicators. This was done mainly by using discriminant analyses.

The main findings from the analysis in each of the three survey areas are discussed next.

6.3 VENDA

The constraints experienced by Venda farmers in the target areas were identified as being:

- low local availability of agricultural inputs;
- insufficient extension and technical advisory support services;
- untimely and low level of availability of mechanisation services (winter ploughing / late planting); and
- a lack of local institutional structures to coordinate and effect input acquisition and produce distribution.

From the discussion in Chapter 2 it can be concluded that the implementation of the FSP, and the various elements of the programme, to a large degree succeeded in alleviating the mentioned constraints. Farmers who joined the FSP had improved access to inputs, extension advice was generally available to them and mechanisation services were more available and more reliable. The farmers' appreciation of and high regard for the mechanisation services provided by the FSP co-operatives could be related to the fact that untimely and low level of availability of mechanisation services were probably the biggest constraints for many of the Venda farmers. This was further emphasised by the important contribution of this element of the FSP to increased maize production, as shown in the discriminant analysis.

The increased availability and/or improved access to an input package consisting of tillage services in combination with improved seeds and fertilisers are the elements of the Venda FSP that had the greatest impact on the agricultural situation and practice of the households. Additional analyses showed that the contribution of access to credit to improved agricultural situations was not visible. Although access to credit is to some extent linked to the input package described above, the analyses show that the impact of credit in Venda is not that great.

Although extension advice was provided to farmers in general, and also contributed to increased production, the farmers' dissatisfaction with the extension service was clearly evident from the results of the household survey. This stems to a large extent from a lack of commitment by the extension officers of the Venda Department of Agriculture and also from a lack of coordination between the Venda Department of Agriculture and Agriven. The extension officers are not responsible to the FSP programme manager and they do not report to him at all. This creates all sorts of problems, mainly in terms of total lack of coordination and accountability.

Based on the survey data from the FSPs at Khakhu and Mashamba a number of discriminant analyses were done to determine what contribution the programme made to output and food security. It was found that the elements of the FSP, in particular mechanisation services and

inputs, can confidently be associated with surplus producing households. It was also found that there are more surplus producing households amongst those having access to the FSP services. This also implies a greater level of food security amongst these households.

Although the analysis shows that the FSP made some contribution to increased maize output, it is not enough evidence to view the FSP at Khakhu as a success. Rather, the success of the FSP can be attributed to the efficient operation of the co-operative at Khakhu. The cooperative is run by members from the community and is supported and trusted by the community. The co-operative succeeds in providing support services in an efficient manner to the community. It seems, however, that the success of the FSP in the Khakhu ward is to a great extent based on the positive role and influence of the tribal chief. In Mashamba the situation is improving. Agriven is currently training a member of the co-operative to eventually run the co-operative. Previously, corruption and negative opinion of the FSP reduced its effectiveness. The fact that especially the participants and the co-operative in the Khakhu ward increasingly make their own decisions clearly indicates that the FSP can meet the objective of "learning-by-doing". It should, however, be emphasised that the effectiveness of implementation of the programme will increase if more attention is also given to the other elements of the FSP, i.e. extension and marketing.

The analysis and results in Chapter 2, farmers' relatively positive perceptions of the programme, and their high appreciation for timely mechanisation services, provide a relatively positive picture of the FSP in Venda. However, things are not that rosy. A number of reports, such as Kirsten *et al* (1993) and Fischer *et al* (1992) refer to institutional inefficiencies as the main weakness of the programme in Venda.

In evaluating and reviewing the project description, it is evident that an over-designed institutional structure for the implementation of the FSPs in Venda was intended. As described in the original Farmer Support Programme description, a FSP requires (1) adequate provision of appropriate inputs and the funding thereof (credit) to the farmer, (2) the provision of a comprehensive mechanisation service, (3) marketing channels and services, (4) extension and demonstration services, (5) training, (6) the acquisition of the *de facto* rights to production and (7) the off-farm infrastructure. In order to provide the above, an institutional structure is required so that each element can support the other to obtain growth and development in Venda.

From the institutional analysis it is evident that the local institutional structure as a whole is still lacking coordination and efficiency. Some of the institutional structures established at implementation of the FSP, have disbanded or are in effect defunct. This aspect, being identified as the fourth constraint facing farmers, is clearly not resolved and it seems as if institutional inefficiencies, duplication and coordination are the major problem of the Venda FSP at present.

For a more efficient operation of the FSP in Venda, a review of the institutional framework within which the FSP operates is recommended. No institution or organization and/or committees should be involved and responsibilities assigned unless there is a clear definition of accountability by such an institution, organization and/or committee. All efforts must be aimed at closing the responsibility-accountability gap. This will comprise cutting out the "dead wood" in the FSP's institutional framework.

The FSP should, within Agriven, be accorded a higher level of managerial and organizational structure than the current sub-section in which the programme is managed. A fully fledged FSP section should be established within Agriven, manned by a team of well-qualified personnel rather than the present one-man show. All personnel involved in the FSP must, as a matter of practical rationality, fall under the supervision of a well-qualified FSP Programme Manager.

Although the implementation of the FSP in Venda seems to be generally successful, unfavourable climatic conditions, higher indebtedness and institutional inefficiencies could influence the success of the programme to a large extent.

The recent drought cast a further shadow on the potential success of the programme in Venda. The results of the second survey show that only a few respondents were able to harvest any maize. As a result a large number of households were indebted by participating in the programme. Fischer *et al* (1992) also indicated how difficult it is for the average household in a normal to good year to produce enough surplus (maize) to be able to pay off their production loan. Maize yields in Venda are very sensitive to slight adverse changes in weather. Adverse weather conditions make it virtually impossible for subsistence households to repay their debt and access services and inputs during the following year. Extension could still be accessed, but without the other elements, production would normally not be possible. In these circumstances it can be argued that the FSP in actual fact increases risk and does not succeed in breaking the poverty cycle.

No clear conclusion on the success or failure of the Venda FSP has emerged from the discussions and analysis. A number of positive aspects were identified but the major weaknesses in terms of institutional inefficiencies, the relatively poor natural resource base, the poverty, the high risk of commercial dry land maize production in Venda, cast some doubt over the ability of the FSP to ensure a sustainable agricultural development process. Households were put at great risk by high yielding maize cultivars and the purchase of off-farm inputs on credit. Although the programme might have achieved household food security, it remains to be seen how, if ever, households will be able to repay their production loans from agricultural income. In many cases remittances or income from other sources were used to finance household food production. The programme would therefore not necessarily lead to increased household income and improved living standards. It would thus fail to achieve many of the objectives of an agricultural development programme.

6.4 LEBOWA

From the surveys and analyses it appears that the success of the FSP in Phokoane is based on access to one of the FSP elements, namely extension and training. All other elements are in one or another way attached to this service. At present, it seems as if the FSP (especially at Phokoane) is successful, but it must be stressed that this is to a great extent based on the positive influence and commitment by the LAC officials involved in the FSP.

Besides extension and training, analyses have shown that the availability and access to credit, fertiliser and seeds were major contributors to the improvement of the agricultural situation of the households in especially the Phokoane region. It was also found that in all three survey areas, size of agricultural land had the largest impact on Phokoane households'

agricultural situation.

In general, it can be concluded that the implementing agents in Lebowa are determined to contribute to the upliftment of the rural population. Institutional record keeping is improving and the impression is gained that the FSP in Lebowa is successful. However, there is a lack of own decision-making by the participants and co-operatives, which indicate that the FSP, to some extent does not meet the objective of "learning-by-doing".

The FSP in Lebowa has the support of the people since it helped them to overcome their major daily problem - hunger. The FSP alleviated hunger by improving the food security situation in these areas and contributing to a better livelihood for thousands of households in rural Lebowa.

The institutional structure of the FSP in Lebowa is much slimmer than in Venda and there seems to be no major coordination problems as the programme is the sole responsibility of LAC. A lack of training personnel appears to be a major inhibiting factor. The dedication and commitment of the LAC officials and the two extension officers from LDA seconded to LAC, are the major factor contributing to the successful implementation of the FSP in Lebowa. The officials from LAC succeeded in bridging the cultural and communication gap between the implementing agent and the people. Although the approach is somewhat patronizing, it is done in such a manner that nobody is offended.

The effect of the drought in Lebowa was particularly noticeable through the difference in maize yields between the two surveys, and also the lower number of respondents being able to sell any maize in the drought year. The yield reduction as a result of the drought also resulted in households needing to buy more maize than in the 1990/91 season. This was due to the fact that the majority of households were unable to produce enough maize for household needs. This is clearly manifested in higher household expenditure on maize meal.

The success of the programme in the Phokoane area is to a great extent due to the way in which the needs of the community were met, in terms of food production. The rapid expansion of the membership of the co-operative and the adoption of the new cultivation techniques by other farmers in the region not participating in the FSP (the so-called spin-off effects from the Phokoane extension programme) are further evidence of the success of the programme. Initially the farmer groups receiving extension comprised mainly of women in their 50s and 60s. Their success in fanning and their success in producing enough staple food for the household led to more and more younger people taking up farming.

Further proof of the success lies in the community's positive perception of the programme and the fact that they attribute their improved food security situation and increased yields to the "school" which taught them the "maize language". The FSP restored hope and self-confidence in the community and many farmers are proud to tell of their success in farming. Table 4.63 provided the community's perception of the FSP showing that the majority of households attribute their improved living conditions and the production of sufficient food to the FSP. It is clear that the FSP has the support of the people since it helped them to overcome hunger which was their major daily problem.

The successful implementation of the FSP in Phokoane can be attributed to a number of

factors: Firstly, the Phokoane area is situated on high potential soil which is characteristic of the PLastern Transvaal Highveld, an important and high potential maize growing area. Secondly, the officials from the implementing agent succeeded in bridging the cultural and communication gap between themselves and the people, and winning the farmers' confidence. Thirdly, and probably the major factor contributing to the successful implementation of the FSP, is the dedication and commitment of the officials and extension officers of the implementing agent. The implementing agent took sole responsibility for the extension programmes and did not rely on, or shared the responsibility with the extensionists from the Lebowa Department of Agriculture.

The successful implementation of the FSP in Phokoane contradicts the difficulties experienced with the implementation of the programme in the Kadishi region of Lebowa. The results from the Kadishi survey were not all promising and were to a large extent contradicting many of the Phokoane results. The survey in the Kadishi area proved as a whole not to be satisfactorily. Much of the difficulties in the Kadishi region are to some extent, attributed to the political division in the community and are also due to the area's isolation from the rest of Lebowa. The political division often led to political unrest which, for a number of years made it impossible to do any extension work in the area. The Kadishi co-operative was successfully established and experienced an increase in agricultural input sales annually, thus indicating increased adoption of the new technology. Kadishi's problems could also be related to the poor soil (often rocky) and generally less favourable agricultural conditions. The recent drought had a much more severe impact in the Kadishi area than in Phokoane. Phokoane farmers did manage to harvest enough maize for home consumption, while farmers in the Kadishi area experienced total crop failures.

The experience with the FSP in these two areas of Lebowa showed that a particular approach to agricultural development, designed for a specific area, is not necessary replicable in another area. The experience also shows that a good natural resource base combined with good extension and official commitment based on community needs could lead to successful agricultural development.

6.5 KANGWANE

Evaluating the Farmer Support Programme in KaNgwane proved to be difficult since a number of problems were experienced. Firstly, the wide diversity of farming activities and the differences between and within regions made analysis and interpretation of the survey data somewhat difficult. Secondly, difficulties in identifying farmers and farmers' associations under the FSP complicated matters further. Thirdly, institutional cooperation in the evaluation process was sometimes lacking. Furthermore, general record keeping on the extent of the FSP *per se* was lacking, both with the farmers' associations as well as with the implementing agent. A paucity of useful data at the institutional level made it difficult to put the survey results in the correct perspective. These aspects resulted in difficulties in obtaining meaningful results from the analysis. Contradicting results were often obtained and for that reason different approaches as well as different angles were considered. Due to the problems described above, the results were discussed in three different ways to obtain a clear picture of farming in KaNgwane and to ensure a meaningful classification of farmers in order to determine the effect of the FSP.

Using the classification of farmers in 4 different groups it was possible to select two of the groups, i.e. FSP farmers and non-FSP farmers to be used in further analysis. In analysing the differences between these two groups it was determined that the FSP farmers have access to some FSP elements (extension, credit, inputs and mechanization services), while these services were generally not available to the other farmers. The FSP farmers produce more maize, obtain higher maize yields per hectare, sell more maize, use more fertiliser and seed and cultivate a larger area of maize than the non-FSP farmers.

It is uncertain whether the FSP contributes to increased agricultural output and improved standard of living. The results from the discriminant analysis, which was based on a limited data base, indicate that access to credit and extension make only a relatively small contribution to increased maize output. It is mainly factors outside the FSP framework, for example owning cattle, which contribute to increased output. However, FSP participants achieved substantially higher maize yields per hectare than non-FSP farmers. However, in subsequent analysis based on data from the second survey, it was found that credit availability significantly contributed to the improvement of the agricultural situation of KaNgwane households.

Agriwane followed a strategy of group lending in the provision of credit for agricultural activities. Although the idea seems to be sound, the manner in which the strategy was managed proved not to be. In interviews with farmers and farmer groups a lot of dissatisfaction was found amongst farmers around the provision of group loans. A number of groups defaulted on their loans and contributed to the dissatisfaction. The problems related to the group lending scheme could be attributed to groups being too large and too divergent. It is important that groups under such a dispensation should be small and have similar interests and operations. This is not the case in KaNgwane.

The drought impacted severely on the KaNgwane households' surplus maize production which are normally sold. In the 1991 survey, 80 per cent of the respondents were able to sell surplus maize while only 13 per cent of the 1992 respondents were able to sell surplus maize. Despite the drought, 75 per cent of households still managed to earn an income from crop production, mainly from selling vegetables produced under irrigation in community and homestead gardens. Income from livestock sales was higher in the 1992 survey, probably as a result of increased sales by the few large livestock owners in the region due to the dry conditions and deterioration of the condition of animals.

The confusing, and often contradicting, results obtained from the various analyses, make it important to consider the community's perception of the programme. The KaNgwane households generally do not view the FSP as contributing to sufficient food production and improved living conditions. This view could to a large extent be attributed to the fact that the FSP in KaNgwane was largely credit driven. Their perceptions are largely based on the working of the credit delivery system of Agriwane. The framework for the Agriwane support programme was based on the assumption of a spirit of co-operation and collectiveness within each of the farmers' associations in KaNgwane. The lack of unity and co-operation within the farmers' associations was ever present and was further aggravated by Agriwane's credit policy. The policy of collective responsibility for individual debt contributed to the division in the farmers' associations and undermined farmer cooperation. This and the resulting accumulation of debt contributed to the discredited image of Agriwane.

To access any of the other services provided under the FSP the farmers had to first acquire credit, and due to the strict credit policy this was often not possible. The KaNgwane households still view inadequate credit provision as the most important problem next to drought.

The impression was gained that Agriwane implemented the FSP in a "top-down" fashion similar to the other projects managed by Agriwane. This was confirmed by the description of a number of case studies of farmers' associations by Fischer *et al* (1992). To a large extent everything was still done "for" the farmer and there was little done "with" or in conjunction with the farmers. A number of farmers' associations highlighted the lack of coordination of the various support elements as the major problem. Some mentioned that extension and training was lacking, while others complained that Agriwane provided credit, seeds and fertilisers, but no implements or tractors. The sharing of the extension responsibility in the FSP between the KaNgwane Department of Agriculture and Agriwane created further difficulties with conflict between the lower staff ranks creating dissatisfaction and inefficiencies.

Judging by the perceptions and views of the farmers it seems that the implementation of the FSP in KaNgwane was not a great success. One contributing factor could be the fact that the FSP was only provided to dryland farmers while the irrigation projects and farmer settlement type projects applied to irrigation farmers. These farmers received services in a different manner and often more of Agriwane's man hours are spent on these projects than on the FSP. Dryland farming in the Eastern Transvaal lowveld, where KaNgwane is located, is very risky and often not suitable for commercial maize production because of the high temperatures and unreliable rainfall.

The effort by Agriwane to improve the accessibility and availability of modern inputs by establishing a number of service centres throughout KaNgwane was courageous and needs to be commended. However, the availability of inputs and credit do not guarantee a successful outcome for the programme. Good coordination with the other elements, in particular extension, is necessary to ensure success. It seems as if the lack of coordination in the delivery of the various elements, the lack of good and coordinated extension, the strict credit policy and the manner in which the group credit scheme was operated contributed to the limited level of success of the FSP implemented in KaNgwane.

6.6 REASONS FOR THE VARIATION IN RESULTS

The foregoing makes it imperative that an attempt must be made to find the reasons for the variation in results between different regions. This is done below.

History in a certain way played a major role in shaping the FSP in each of the mentioned areas. Therefore, one explanation for the variation of results can be found in terms of the historical context of each area. The Venda FSP at Khakhu, Mashamba and Mulima replaced the failed Venda dryland maize project in the three areas. When the Phokoane dryland maize project failed, a worsening relationship between farmers and the Phokoane co-operative and the co-operative manager resulted. The FSP was thus an opportunity to rescue the co-operative, save the managers life and to understand the basic needs of the community. The history of the Kadishi area is one of a relocated community (forcibly removed elsewhere) and

resulting in political divisions within the community and instability. The historical context of the KaNgwane FSP is not clear, except for the fact that the first ISP was implemented in KaNgwane during 1987. The FSP was initially seen as a way to provide support services to mainly dryland farmers in order to bring them on par with the services received by farmers on irrigation settlement farms.

A second reason for the differing results is the implementing agent which is to a large extent linked to the historical background. All the implementing agents signed loan agreements with the DBSA to implement the FSP in their respective target areas. The implementation had to take place according to certain guidelines (DBSA, 1986) referred to in earlier chapters. However, many of the implementing agents to a large extent departed from the original guidelines. Instead of providing all elements in a coordinated fashion, many of the implementing agents tended to emphasise one element above the other. In Venda, for example, a lot of emphasis was placed on mechanisation services, while the Lebowa Agricultural Corporation concentrated on an intensive extension and training programme. As showed earlier, in Kangwane the emphasis was more on the provision of credit (mainly in kind as fertiliser and seed). All three implementing agents thus emphasised that particular element which according to their perception was the major constraint facing their farmers. This, however, does not imply that the other elements were neglected.

It can be said that implementing agents have differed in their approach to implementing the FSP. Some, like the Lebowa Agricultural Corporation (LAC), made an effort to first of all win the farmers confidence by bridging the language and cultural gap, and in this way determined the specific needs of the farmers. It can be argued that LAC's approach tends to be patronising, but the way in which it was done did not offend the farmers, and it produced results.

In a DBSA interim evaluation report of the FSP (DBSA, 1989), it was concluded that the borrowers or implementing agents do not understand the FSP philosophy. This appeared to still be the case some four years later (although to a lesser extent in some areas. There has been a general lack of adherence to the agreed arrangements due to misinterpretation, misunderstanding and an inability to adjust these arrangements to operational reality and action plans. It often happened that "old style" project schemes were reinterpreted as "farmer support" actions (*cf.* Van Rooyen, 1993). The basic structure of these schemes remained paternalistic and centrally managed. Van Rooyen (1993) also mentions that the distinction between settlement projects and the FSPs became increasingly blurred since 1987. Settlement projects funded by the DBSA are now generally financed along the same lines as FSPs, the only difference being the settlement of new farmers within a project framework.

The DBSA (1989) argues that the FSPs tend to get managed rather than nurtured. This is more or less the case in KaNgwane and also to some extent in the Mashamba ward in Venda. In Lebowa the same argument applies since managers are appointed by the implementing agent to manage the various co-operatives. These managers take responsibility for input provision, coordination of mechanisation services, marketing and storage arrangements and general management of the co-operative. The managers report to boards of directors consisting of farmers from the local community, but the day-to-day running of the co-operative and of the programme is their responsibility. In all these cases there seems to be a lack of local institutional building since the element of "learning by doing" is missing. The

case study of the Khakhu co-operative is the only exception where community members are running the co-operative and where they are in control and make their own decisions.

A third reason for different success rates is the natural resource base of the target area. The natural resource base, in particular the soil quality and rainfall has an impact on maize yields which influence households food security position as well as their ability to repay loans received under the programme. The experience at Phokoane showed that a good yield response as a result of good climatic conditions and fertile soil leads to quick adoption of new technology and cultivation techniques and to some extent reduces the risk related to single cropping of hybrid maize. The natural resource base of the Phokoane area is the most favourable of the areas investigated and therefore explains to a large extent the more positive results obtained from the implementation of the FSP in the Phokoane area.

In the FSP guidelines (DBSA, 1986) it is emphasised that target areas for the implementation of the FSP should only be areas of high agricultural potential. The experience discussed above has shown that the success of the programme depends on the soil potential and that the higher potential areas tend to have greater success. This, however, should not rule out other areas to receive support services. With less emphasis on maize and staple food production, increased diversification and acknowledging the important role of livestock, programmes consisting of good and coordinated extension on a variety of production activities and a variety of available inputs available could succeed in areas of less favourable areas. Admittedly when one talks of staple food production or cash crop production on dryland and on small areas, production on low potential soil in areas with below average rainfall would lead to failure and dismay amongst farmers. This is due to the fact that programme participants often purchase off-farm (modern) inputs on a credit basis, which lead to households being indebted due to negative climatic variations.

Finally, it has been argued in certain circles that successful support programmes depend on farmer participation, increasing farmer control and less involvement by the implementing agent. The formation of voluntary farmer groups and farmer control of, and involvement in the management of co-operatives or service centres (thus the establishment of local institutions) are important aspects in this regard. If farmers view the programme and institutions as their own and not as part of the government or the development corporation, it could impact positively on the outcome of the programme. The importance of a bottom-up approach to address the community's needs, is evident from the discussions above.

6.7 THE INDIVIDUAL ELEMENTS OF THE FSP : A CRITICAL EVALUATION

6.7.1 The package approach

The basic approach followed in the FSP is the delivery of a package of services to farmers. The DBSA therefore required that all elements of the programme should be present and provided in a coordinated manner before finance is approved. In any case it is true that all the elements have to be provided in a coordinated manner to ensure successful implementation of the programme. This is why it is viewed as important to have a coordinated effort and why a package of elements or services is provided to farmers.

The concept of "packaging" is also used by Ellis (1992) to describe the process whereby one

agency (parastatal or government) provides all the mentioned services. In the literature it is argued that the provision of a number of services by one agency can create problems of access due to the fact that the target group is often narrowly defined. Although this might be true, the evidence from the South African experience suggests the opposite. Institutional confusion, duplication and lack of coordination has arisen in Venda and in KaNgwane due to the fact that the implementing agent did not have sole responsibility for extension, etc. These aspects do influence farmers' perception of the programme as well as the successful outcome of the programme. This again confirms the point made earlier that coordination of elements is important for the success of the programme. In the developing areas in South Africa it often implies that coordination can only be achieved when one institution takes responsibility for all services. However, this does not guarantee a successful outcome as has been shown often. The Phokoane case study did however show that success is possible by a coordinated effort.

One of the long term objectives of the FSP is that ultimately the majority of services should be provided by private entrepreneurs. In many of the FSPs this is partly achieved through the establishment and financing of tractor contractors. The other services, like input supply, marketing and credit provision, are still largely in the domain of the parastatal development corporations. Hopefully private input supply companies and private traders would later perform some of the functions. The problem with these private entrepreneurs and companies is that they will only concentrate on those areas that promise quick or high returns. Even if these private entrepreneurs do provide some of these services, it will still be the responsibility of the implementing agent or Department of Agriculture to provide those services that could not profitably be provided by private companies or individual entrepreneurs. Thus, to enable the households to make their own decisions and choices in the end, it will be necessary to ensure that all the elements or services are available at the right time and at the right place, and accessible to everyone.

Related to the aspect of packaging is the question whether development corporations are the appropriate institutions to implement the FSP or provide support services to farmers. Many of these institutions were used to implement development programmes in a top-down manner without noting of the needs of the farmers. In some of the cases discussed in this study it happened that the FSP was incorrectly implemented and that institutional inefficiencies within many of these development corporations contributed to the concerns expressed.

6.7.2 Credit

The approach to credit provision followed by the implementors of FSP seems to lean towards the conventional style programmes. Credit is largely provided in kind, mainly in the form of fertiliser and maize seed, supplied by the co-operatives or service centres.

The important part here, which in this regard goes right to the heart of FSP, is the target population. According to the FSP policy document (DBSA, 1986) the target is the emerging farmer group. Based on the definition of emerging farmers (DBSA, 1986) not all the respondents participating in FSP can be categorised as such. DBSA (1986) states that the FSP should be seen as inclusive and accommodating and that the services of FSP should be available to all farmers, although the benefits are specifically aimed at emerging farmers. Based on the agricultural production performance, the proportion of farming income to total

household income, and the marketable sales of farmers, it seems that only the Lebowa farmers (and specifically the Phokoane group - and some individual respondents in KaNgwane) could be called emerging farmers. Coetzee *et al* (1993) therefore raises the question, that if this is the case and if the FSP should serve all farmers, is the credit component adequately structured and does it answer the need for financial services for all the farming families in the target areas?

The behaviour of the agricultural development corporations (specifically in KaNgwane) follows a predictable course according to the conventional approach to credit programmes. Experiences of non-recovery exclude defaulters from the following years production loans. Over time the less risky borrowers are selected. Less risky borrowers usually are those with larger tracts of lands, higher off-farm and farming incomes. In this way some groups of households every year get less credit from the development corporations, while a more affluent group with time receives more access. In terms of the targeting of FSP to emerging farmers it could be argued that this selection process is now reaching the emerging rather than the subsistence farmers. However, the broad inclusion of all farmers in the FSP programme shows that the current FSP credit policy is diverting credit from some FSP clients.

During the first years of implementation of the FSP in KaNgwane, Agriwane changed individual loan practices to a group basis. Although this is a way to decrease transaction costs, success with a group approach depends on how the group concept is implemented. In this instance the development corporation chooses farmer association to be the group, and joint liability by the group is an important rule. Unilateral decisions where the individual members of the group are already in near default position, cannot be a measure that will ensure repayment. The group concept should be handled with care since mixed success has been reported, especially where groups have been formed exogenously and with the sole purpose to be used as a credit conduit (Slover, 1991; Bratton, 1986).

The behaviour of some group members in other homeland areas, such as KwaZulu, is also an indication of the extreme caution needed when using groups as a conduit. Cross and Evans (1991) observed that meetings of groups for repayment purposes are often badly attended and that the credit officers often need to visit an individual member repeatedly to obtain payments. This results in (expensive) home visits becoming the norm rather than the exception for collecting debts from individual group members. These problems are seen as systemic problems (based on the operational policy of the lender), rather than as constraints on the cash flows that inhibit repayment of loans (Cross and Evans, 1991). This implies that by following a more rigorous and well planned policy according to the local situation, the development corporation may have a more successful credit provision experiences.

The different credit use profiles of FSP and non-FSP members could be based on the access to alternative sources by FSP clients. Although it is not the intention of this section to discuss the theoretical basis of financial markets dealing with risk, transaction costs, information and related concepts, one theory could assist in the explanation of the selection of financial sources by respondents. Cuevas (1992) bases this selection procedure on a theory of "pecking order." This implies that the farmer or entrepreneur will follow the "safety first" principle and access financial sources so that the sources with the least external influence on decision making and ownership of his firm will be selected first, e.g., own

savings. This also implies that in areas where FSP credit is an important source the farmer may regard this as an "easy or cheap" source in terms of the external influence on the control of his firm (farm) and as a source where the perceived retribution when defaulting may not carry a high risk (Coetzee, 1993).

Interest rates for formal FSP credit are subsidised in all regions. Although informal rates are not available, Coetzee (1988) reported informal credit rates to be as high as 40 per cent per annum in KaNgwane (from money lenders) and on average 16.3 per cent (formal loans carried rates of on average 12.1 per cent for the same area and period). The negative effects of subsidised rates on the viability of lending operations and the lack of deposit mobilisation contributes to the reliance of these institutions on public sector injections of capital. This is one area in the FSP that needs much attention in future.

In general FSP policy in itself seems to be sound. However, problems arise in the implementation of FSP. The lack of appropriate policy guidelines to the implementors of FSP, specifically with respect to financial policies, is highlighted as a major contributing factor in this respect. The following suggestions should form part of a sound FSP financing policy. More attention should be paid to the characteristics of successful and viable rural financial institutions. The viability of institutions that supply credit services, can be ensured by including deposit mobilisation and other services, by lowering the levels of transaction costs of these institutions and their clients and by charging market related interest rates. The indicated importance of self-financing should allow for deposit mobilisation as a financial service provided to farming households and this could have the concomitant positive effects for the functioning of rural financial markets in these areas. Currently, subsidisation of interest rates rules out the provision of savings facilities by financial institutions. Due to low, if any, cost recovery on loans it is impossible to offer attractive interest rates on savings. The important role of deposit mobilisation has been argued.

FSP has the potential to contribute positively in alleviating the constraints to farming activities of emerging commercial farmers. Several constraints, however, are not adequately addressed by FSP. This may be due to different implementation of FSP in the different areas, but also to optimistic production targets on which input requirements, credit requirements and production activities of farmers are based, and the seemingly unimportant role risk play in the planning stages of FSP. Further, some confusion is evident due to the implied targeting of emerging commercial farmers and the all inclusive nature of FSP. The structuring of, and policy on provision of elements of FSP, especially for credit, should incorporate this dual objective. Rigid application of credit procedures and financial services should make way for area-specific adaptation of the credit supply element. This is not only true of the provision of credit support between different areas, but also of different types of clients within specific areas.

Access to credit for agricultural production from formal sources seems to have the highest impact where farming households have access to larger tracts of land and where these households have higher levels of off-farm income. It has been argued that for the emerging farmer complement agricultural credit may be more important than for subsistence and sub-subsistence farmers. Access to credit for other purposes may play a more important role for the latter group of farmers. As argued above the expansion of financial services rather than concentrating only on farmer credit may have a positive impact. All clients do not have the

same needs, resources and sources of income and the lenders should incorporate this in their policy- It seems that informal sources of credit have a better handle on this, most probably because of better information on clients and their activities. In the areas where FSPs were implemented it could be argued that the greatest need is not for production credit but for consumption credit (or consumption smoothing credit) and distress related credit. In targeting households for production credit one has to keep in mind that very few households are capable of sustaining a viable agricultural enterprise (especially on dryland) in the sense that they can take and repay loans.

Transaction costs for both borrowers and lenders are important components affecting the viability of financial institutions. More information in this regard is needed. Steps that could be considered has been discussed and include the following possibilities (Meyer and Cuevas, 1990): improving the economic environment - although FSP is intended to contribute in its totality to this, it also includes efforts outside FSP such as improved communication, transportation and information systems, improved marketing information services to farmers; improved regulatory structure; reduction of risks; diversification of services provided by financial institutions; expanding the service network; group based schemes; improved internal operations; and linking informal finance with formal finance.

Good intentions in development often result in failures and pain for those at the receiving end. For credit/financial programmes this is mostly due to inadequate information on the clients and the financial market in which they operate. It is also due to an ignorance of the risk factors inherent in financial transactions and the concrete fact that the lender can never have the same information on the potential and circumstances of the borrower, as the borrower himself. This is called the problem of asymmetric information, and may lead to adverse selection (more risky borrowers) or/and borrowers that have a high chance of willful default (problem of moral hazard)¹. Adams and Meyer (1989) concluded that by employing rural financial markets to transfer subsidies results in inequitable distribution of incomes and assets, also that targeted loans had little effect on borrower behaviour and that loan targeting and subsidies seriously damage the ability of financial markets to carry out their real role, i.e., that of improving the efficiency of resource allocation.

6.7.3 Input supply

In all three the survey areas inputs are provided to farmers via co-operatives and/or service centres. The way in which inputs are provided to these service centres differ between the various regions as described below.

The farmers in KaNgwane obtain inputs from any of the service centres established under the FSP. The individual service centres are not responsible for their own sourcing of inputs.

¹ These concepts are discussed in detail by Coetzee (1993). These are elements contributing to the principle-agent problem. This alludes to the problem of the relationship (contract) between the principles (e.g. shareholders of a bank) and their agent (manager or management of the bank). In this relationship the agent is acting on behalf of the principle. This highlight the problem of whether the agent will fulfil the wishes of the principle or not, which influences the return on the investment of the principle.

The Agriwane head office purchases inputs such as fertiliser and maize seed in bulk at a significant discount from the input supply companies. Sourcing of inputs is thus done by the Agriwane head office which also provides storage space for these supplies until the stock is distributed to the various service centres according to their particular needs. The production inputs are sold to farmers through the service centres at a predetermined price which include a mark-up above the purchase price. The farmers are able to purchase these inputs (on credit or cash basis) in smaller units from the service centres. All Sides are initially recorded by the service centres but the information is eventually transferred to head office where all sales are centrally recorded. The situation in KaNgwane is thus typically of an Agricultural Development Corporation which controls input provision and also takes responsibility for credit provision and extension services.

In the two case studies in Lebowa, namely Phokoane and Kadishi, farmers purchase inputs from the co-operatives at Phokoane and Kadishi on a credit and/or cash basis. The managers of the individual co-operatives are responsible for their own sourcing of fertiliser, seed and other inputs. It does, however, often happen that the co-operative managers meet to place orders collectively to ensure the best possible price. The procedure for input provision differ to a large extent from the situation in KaNgwane where the development corporation was solely responsible for input provision.

In Venda the same situation applies where farmers purchase inputs from the Khakhu and Mashamba co-operatives respectively. The primary co-operatives such as Khakhu and Mashamba used to buy their inputs from the Venda Secondary Co-operative. Due to the insecure future and various financial difficulties of the Venda Secondary Co-operative the co-operatives had to look for other sources of supply. It seems therefore as if the co-operatives are responsible for their own sourcing of inputs with little if any intervention from the government or the development corporation (Agriven). The management committee of the Khakhu co-operative, for example decide in cooperation with the local extension officer what type of fertiliser to apply and what the application rate should be. In accordance with this decision orders are placed with the appropriate suppliers.

In many developing countries the private sector was slow to provide reliable input supply systems. This led to governments embarking on efforts to provide inputs to farmers. The same argument applies to South Africa due to the virtual absence of input suppliers from the less-developed areas, resulting in governments supplying inputs to farmers through parastatal development corporations (and their co-operatives). This is the case in KaNgwane and to a lesser degree in Lebowa and Venda.

The case studies provide typical examples *of* development corporation involvement in the provision of inputs as identified by Ellis (1992). However, the range of problems and constraints related to these institutional arrangements for input provision, do not seem to apply in the three case studies. Inputs were normally on time, in the right size and quantity farmers needed it, and supplies were always sufficient. Although some inefficiencies would probably be found in some of the institutions, the input supply systems in all three cases generally succeeded in making modern inputs available to the farmers. The affordability of the inputs is another matter altogether. It could be foreseen that this institutional arrangements would for some time in the future carry on since the private delivery systems will for a number of years be inadequate. This is mainly due to the private companies' lack

of sufficient outlets and in some cases an unwillingness amongst these big companies to supply small quantities of inputs to small-scale farmers.

In conclusion it must be emphasised that inputs should be available on time and in the right quantities, according to the specific needs of the small farmers. This usually becomes a serious problem when dragging credit arrangements delay the ordering of inputs and farmers have to run around to get seed and fertilizer. To avoid this, service centres and co-operatives should also provide inputs to the general farming community on a cash basis and not necessarily link the ordering of seeds and fertilizer to credit arrangements with FSP clients.

Often many farmers are not sure as to why the co-operative or service centre provides them with a particular maize hybrid or fertilizer. They need to be informed on these issues, since it would help to clear suspicion. Farmers must also be informed about input prices and comparing price structures. Distrust and rumours about exploitation and excessive profits are many, and very often implementing agents do not deserve it.

The transport facilities for the delivery of inputs to the FSP co-operatives, especially in Venda, must be attended to as a matter of urgency. The lack of transport is causing the cooperatives a loss in income and farmers could have the problem of inputs not being available on time.

6.7.4 Mechanisation

Government tractor hire services have failed all over the developing world. The inefficient provision of mechanisation services by governments was also a contributing factor to failures of many of the dryland crop projects in the less developed areas of South Africa, some of which were transformed to FSPs. This was one aspect the FSP paid specific attention to, and as stated previously, the establishment of private tractor contractors is a major element in the FSP framework. It was argued that individual tractor ownership will remove the institutional inefficiencies mentioned above. In KaNgwane and Lebowa this was successfully achieved. In Venda, however, tractors were allocated to the co-operatives to be privatised at a later stage. Currently the co-operatives still own the tractors and fortunately provide an efficient mechanisation service to farmers. Farmers are appreciative of the services provided by the co-operatives and are of the opinion that it is an improvement to the service provided by the Venda government.

Agriwane provided loan finance to individual contractors in KaNgwane to enable them to purchase a tractor and implements. A large number of these contractors defaulted their loans due to various reasons, and due to financial difficulties experienced by the contractors. Agriwane repossessed virtually all the tractors and resold them to new buyers on hire purchase.

In Lebowa the contractor system seems to work well. The farmers and contractors in the Phokoane area are particular happy with the system operating there. The Phokoane cooperative coordinates the service to a large extent and ensures that the contractors are paid. The system makes provision that the farmer could determine whether the contractor should be paid or not. Although some authors do have several reservations with regard to individual

ownership of tractors, the process of individual contractors seems to work in some of the areas surveyed. Recently it was noted that the shortage of tractor contractors was becoming a major constraint in some of the areas, especially during planting time. This would increasingly happen as farmers adopt the new technology.

Farmers in all three areas view mechanisation services, and specifically ploughing and planting, as the most important factor in their farming operation and the most important element of the FSP. This is not because it is subsidised (it only happens in Venda), but because it reduces the time farmers (mainly women) have to spend in preparing the land and planting the seed. With more than 80 percent of farmers in all areas being women, and time being their major constraint, it is not surprising that mechanisation is rated so high. The results in Chapter 2 also show that the correct ploughing methods led to higher yields and often made it possible for the women to cultivate virtually the whole of their allocated piece of land. Thus the initial utilisation of ploughing by tractor created a need for more labour during the growing season as a larger area had to be weeded by hand. At harvest time more labour is needed to harvest bigger yields. The argument that tractors are labour displacing can therefore not be supported. To some extent it could be argued that tractors are actually labour using technology.

In conclusion it can be argued that the incorporation of individual tractor owners should be further developed. This was to some degree successfully implemented in KaNgwane and Lebowa, but could still be improved and expanded on. The further development and incorporation of tractor owners will require:

- a support service for tractor owners. Because their tractors are old, and owners lack funds and sometimes also the required mechanical knowledge, and because they are isolated and spare parts are not always available, it takes tractor owners sometimes a year or longer to repair their tractors in case of major as well as minor breakdowns.
- loans to repair tractors and not only to buy tractors.
- training in mechanical skills for contractors, owners and drivers, and farmers.

6.7.5 Extension

The success of extension systems in assisting farmers in developing countries to adjust to new technology has been, inevitably, variable. There are examples of complementarity, however, extension services can also be ineffective for many different reasons, such as lack of communication and conflicts between different state agencies involved in agricultural development programmes; lack of logistical support from base; lack of means of transport for getting around villages and farms; lack of motivation due to poor remuneration and inadequately defined or confusing goals (Ellis, 1992). Most of these problems typify the extension services of many of the less developed areas in South Africa and are therefore also present in some of the farmer support programmes studied.

The success story of extension and training in the Phokoane FSP has often been referred.

The extension element of the FSPs in the other two survey areas, namely Venda and KaNgwane, were not that successful and did not attract the same amount of praise from the farmers. Farmers in actual fact complained about the extension services in Venda and KaNgwane. The complaints and inefficiencies of these extension services relate largely to conflicts between state agencies and lack of communication, as mentioned above.

In Chapter 2 it was pointed out that the Venda extension service operates at a very low efficiency level due to inadequate training, lack of subject matter specialists, etc. In the Venda FSP the Venda extension service of the Department of Agriculture and Forestry assumed responsibility for the extension element. The extension officers of the department had to report to the FSP manager who was an employee of the development corporation. This created friction, and often no coordination of the extension effort was possible due to lack of communication and clashing interests. In KaNgwane the same problem had arisen due to the implementing agent and the Department of Agriculture in KaNgwane sharing the responsibility for the provision of extension to farmers. This institutional confusion often led to frustration and conflict between junior staff members of the two institutions. Being aware of the inefficiency of the Lebowa extension service, LAC, the implementing agent of the FSP in Lebowa, took sole responsibility for the extension effort by making its own staff available and by the secondment of two of the best extension officers from the Department of Agriculture of Lebowa to the FSP programme.

From the above it follows that the main problem of the extension element in the FSPs is a general low level of efficiency and effectiveness, with one exception, namely the Phokoane FSP. The extension effort at Phokoane is successful because it was driven by a zealous individual. This person, a former project manager, initiated the extension approach which was based on good extension methods applied in a most practical manner. The methodology used consisted basically of group formation and dynamics; needs analysis; adult education methods; practical demonstration; groups to ensure involvement; and sound communication methods and principles. The FSP in Lebowa is based on voluntary participation. No farmer is forced into the programme, forced to join or form a farmer group. Groups are activated spontaneously and the success of the programme at Phokoane led to many groups being formed. Farmer groups are essential to the working of the programme in terms of implementation and the provision of extension. Extension is only provided to the various farmer groups on a rotational basis and on a fixed schedule. The success of the extension programme at Phokoane created an increased demand for extension and training. This is fast becoming the biggest threat to the FSP in Lebowa and LAC is currently in the process of training more extension officers in the well tested extension methods applied in the Phokoane area.

Personal visits are the most common form of extension provided by the service in Venda, although media facilities, such as radio talks and publications, are used as well. Farmers' days are regularly arranged to address special problems within the various fields. From the surveys it was determined that farmers are of the opinion that they do not see the extension officer enough, thus pointing to a need amongst the farmers for more information. Inadequate extension was also identified as one of the major problems experienced in farming. Despite the need for information, low attendance rates at training courses were experienced. It is therefore clear that the approach to extension provision did not succeed in satisfying the farmers' information needs or delivering information and advice to farmers.

In KaNgwane the extension programme to a large extent works through the various farmer associations in the region, which often is not a voluntary composed and homogenous group of farmers. The extension officers employed by Agriwane and the KaNgwane Department of Agriculture pay regular visits to the farmers and the various farmers' associations. Farmers are presented with refresher courses and training in various farming and cropping techniques. In addition more formal training courses, demonstration plots and farmer days are also offered. KaNgwane farmers did however expressed the needs to see the extension officers more often, which is to some extent a reflection on the shortcomings of the extension programme in KaNgwane.

From the discussions above it is evident that the problems with extension provision in many of the less-developed areas of South Africa, correspond to a large extent with the problems of extension programmes in other parts of the developing world. It is clear that the extension element has not been effectively applied in most of the FSPs discussed in this study. There is however, a chance to improve the situation should the authorities be committed to extension. Hayward and Botha (1993) make the following recommendations to remove the inefficiencies facing many of the extension systems:

- A continuous system of in-service training to supplement the extension officer's formal education;
- Support by subject matter specialists;
- Extension to farmer interest groups;
- Programme planning techniques should be applied;
- Extension should be needs-based and also be based on informal adult education methods;
- Involvement of and participation by farmers.

It can therefore be argued that farmers can best be reached by well trained field extension officers within a well managed extension service using a participatory approach in conjunction with a comprehensive programme planning methodology. The involvement and participation of farmers in research and extension are aspects lacking to a large extent in the extension effort of all the FSPs analysed in this study. The rigidity of the recommendations for maize cultivation, for example, created difficulty for many of the farmers. The recommendations of extensionists often do not favour diversity in the farming enterprise, discourages mixed and intercropping and is mainly focused on mono-cropping. Although the extension effort was in some cases needs-based, recommendations for maize cultivation was never based on on-farm research and different levels of input application were rarely considered. The farmers and the on-farm conditions were virtually never considered and the farmers never involved. Extension programmes were in many cases designed with the attitude that "we think we know what the farmers want". The impression therefore exists that many of the technical recommendations are merely an extrapolation of commercial farming.

In conclusion, the lack of farmer participation in the implementation of the FSP and specifically the extension and research element of the programme is a major shortcoming in the make-up of the FSPs as they were implemented. The importance of farmer participation is stressed by Norman (1994: 13) as follows:

"...active participation is usually one of the major conditions for the success of agricultural projects - since they are in a sense buying into the action. Farmers' intimate knowledge of their local environment (i.e. both natural and human) together with their continuous informal experimentation, make their active participation in the design of strategies for improvement extremely useful. "

6.7.6 Marketing

Marketing is the aspect lacking most in all the FSPs discussed here. Due to the low volumes of commodities being offered for sale none of the implementing agents have done much to improve marketing infrastructure or marketing arrangements. Many of the commodities are sold through informal channels or through barter transactions, but the majority is stored for home consumption or consumed immediately by the households.

In KaNgwane the development corporation (Agriwane) only acts as facilitator and never handles or stores any produce. Crops such as sugar, maize and cotton are marketed through the formal marketing channels and Agriwane's role is fairly small in this regard. Agriwane acts also as facilitator in the process of arranging market facilities for fresh produce. In the case of Lebowa the co-operatives act as depots for maize deliveries by farmers for long term storage and exchange arrangements and for the sales of surpluses. The maize for storage and exchange is milled into maize meal at the nearest miller. The surplus is sold to agents of the South African Maize Board. In Venda the Khakhu and Mashamba co-operatives do not provide marketing facilities or do not act as marketing agent because farmers prefer to sell maize out of hand since they receive higher prices than through formal channels.

It can be argued that the underdeveloped state of agricultural marketing, and in particular marketing infrastructure and information, limit development of agricultural development in the developing areas since profit incentives do not exist. The success of future FSPs and other agricultural development efforts will depend on the extent to which this problem has been solved.

6.8 GENERAL CONCLUSIONS

Through a comparison between the results of the first and second survey it was determined that the results are in general consistent with exception of the average maize yield figures. The difference could to large extent be attributed to the drought. The comparison of the results therefore also highlights the impact of the 1992 drought on respondents.

Differences between sub-regions in each of the survey areas were also highlighted. From these results it became clear that different regions differ with regard to crop combinations (in KaNgwane), yield potential, income sources and household composition. It furthermore shows that aggregation of data ignores regional differences, which could lead to erroneous policy decisions.

Households' perceptions of the FSP were also reported. The perceptions and views of the community are what ultimately will determine the success or failure of the FSP. It was therefore important to determine how the community perceive the FSP. Households in

Venda had in general mixed perceptions of the contribution of the programme to improved living standards, while the KaNgwane respondents were generally not at all impressed with the contribution of the FSP. The households in the Phokoane region of Lebowa have a strong view regarding the FSP's positive contribution to increased food production. The Phokoane households in general attributed their improved living conditions, their ability to pay for education and ability to buy new clothes to their success in farming through joining the FSP farmer groups and co-operative.

From the results it became evident that the KaNgwane F'SP has failed the "acid test", while the households in the other regions do have mixed perceptions of the contribution of the programme to improved living conditions, etc. The households in the Phokoane region of Lebowa have a strong view regarding the FSP's positive contribution to increased food production.

The respondents were also asked to indicate which aspect of the programme they view as very important in their farming operation. The majority of the households in all three regions viewed mechanisation services as the most important aspect in their farming operation. In an analysis of all the respondents in all three regions the various elements were rated in the following order: Mechanisation, inputs, credit, marketing and training/extension. It is interesting to note that the KaNgwane respondents considered credit as the least important element. This should be put against the emphasis placed by Agriwane on the provision of credit to farmers in KaNgwane, which to some extent corresponds with the views of the respondents regarding the impact of the F'SP.

In Chapter 4 the likelihood of households participating in the Farmer Support Programme was investigated. The logit methodology was used to determine the characteristics of the households most likely to participate in F'SP extension and/or credit programmes and adopt the new cultivation practices promoted under the FSP.

Based on the results of the analysis, it was concluded that household and cropland size measured in absolute, equity and relative values are good predictors for programme participation. The analysis shows that the programme in some sub-regions can result in inequality, i.e. the probability that households with larger cropland (associated with higher maize yields) is bigger than households with smaller cropland. The results showed that household participation differs between homelands and its sub-regions. This may be the result of not only the absolute or relative value endowments, but different developmental approaches followed in different homelands (see the institutional analysis in Appendix 1).

From the analysis of households in the survey areas it was found that in the majority of sub-regions in KaNgwane households with medium size cropland and medium household size are more likely to participate in the FSP. In the Mswati and Mlondozi regions of KaNgwane households with small cropland size and medium household size are more likely to participate. In two of the sub-regions of Lebowa, namely Fensaam and Mathukuthela it was noted that households with large cropland and a large number of family members are more likely to participate in the FSP. These households are probably more food insecure due to the large number of persons in the household that needs to be fed. The F'SP was viewed to assist the household in providing enough food for all the household members. In the Nebo region, households with larger crop land and medium household size were found to be more

likely to participate in the FSP. In Phokoane it was a small area of crop land and large households that determined households' participation.

In the Mashamba ward of Venda medium size households and households with small crop land are more likely to participate in the FSP. In Khakhu medium size households with larger than average crop land were found more likely to participate in the FSP.

In Chapter 5 the survey data were used to study technical and scale efficiency in the areas of Venda, Lebowa and Kangwane where the FSP was implemented. Non-parametric techniques allow estimation of total productive efficiency, and its decomposition into scale and technical elements using distance functions, in the absence of price data. This methodology is extremely useful for many applications where there are often several prices, no prices, or price data which are too poor, or too distorted to be useful.

It was determined that total and technical efficiency levels were generally severely affected by the drought conditions. Technical efficiency of the Khakhu farmers in Venda, and Nebo, Eensaam and Phokoane households in Lebowa were less affected by the drought than the Mashamba households (Venda) and Mathukuthela farmers (Lebowa). This implies that drought affects efficiency of production differently in different regions which could be attributed to difference in agricultural practices.

In Lebowa and Venda, it was determined that most of the households likely to participate in the FSP are technically efficient (above 75%), i.e. Nebo, Phokoane and Khakhu. However, the more efficient agrarian households in KaNgwane do not participate in the programme.

The policy implications of these results are fairly clear; the allocation of land to black farmers, whether they manage their farms on a purely private basis, or through the co-operatives to gain access to credit and mechanisation, has to be sufficient to ensure viability and efficiency. In addition, if the land is not going to be used for agricultural production, but simply distributed to fulfill the requirements of the promised land reform legislation, the overall wealth of the country will fall, and everyone will be worse off.

6.9 RECOMMENDATIONS FOR FURTHER RESEARCH

During the introduction of this evaluation programme in 1990 it was envisaged that this first phase will be extended to further research and evaluation, based on issues identified during and lessons from experience with the first evaluation effort. Various trends and important findings and issues were identified and analysed in this report. Some of the major issues are briefly discussed.

The major thrust of the 1990-93 evaluation was directed towards assessing the "direct impact of the FSP on factors such as production, cropping mixes, farm incomes, technology adaption, changes in land use and the quality of support services in certain selected target areas". Although efforts were directed to evaluate the broader and indirect impact of FSPs, a clear framework of analyses and research methodology was not developed. These aspects was rather attended to in an ad hoc and some what superficial manner. It was, however, observed that the impact of the introduction of a FSP was far reaching. Apart from forward and backward linkages and multipliers, the social structure of families was affected, gender

issues became apparent, etc. The Phokoane FSP is one very good example of wide ranging impacts. It is argued that these aspects now require focused analyses to enable a more comprehensive and encompassing statement on the development impact of FSPs in rural areas.

The FSP approach was promoted by DBSA as a "demand driven" programme directed towards "those producing agricultural products in rural areas". One important characteristic of a demand driven approach is that changes over time can be expected in the package of services required. Such changes were observed and some changes were introduced in the FSP approach, project description and management procedures followed by DBSA and implementing agents. This flexible approach raises a few areas of interest. Firstly, it is important to keep track of such changes, secondly to analyse the impact thereof to ensure a regular feedback to policy and operations. A third aspect relates to the need to establish baseline information to be able to compare and analyse changes in FSP areas. The lack of such baseline information was noted at the FSP Workshop as a major deficiency. A perceptions audit through participatory processes was also felt to be lacking.

In addition to the FSP evaluation experience the relative lack of a reliable micro level data base on small farmer systems have been highlighted as an important constraints for future policy and planning (see World Bank memorandum). From the above discussion it is proposed that the continuation and expansion of analyses of FSP in selected areas and modules is justified and necessary to guide future investment.

The proposal for further research discussed below builds on the results discussed in this report, but extend the field of research to capture and analyse important impacts, trends and new events, triggered by the introduction of FSPs.

The following themes are proposed to be included in a comprehensive and integrated research programme, focusing on the various impacts of FSP's in the rural economy. Although each theme is designed as a separate module for research, the interactiveness of themes must be appreciated. For this reason the proposal is designed in a programme context to promote an integrated analyses of the impact of FSPs in the rural economy.

Main research themes:

(i) Tracking the FSP and maintaining the evaluation data base:

The present evaluation activated certain processes to capture data on the direct impact of FSPs. It is argued that the continuation of these activities are important to ensure a regular feedback on the progress with implementation. It will however be necessary to reduce the focus of present data gathering and identify specific track variables and proxies to indicate major trends. Data on new issues will also be required such as a perceptions audit by participants, gender and social aspects, labour and time allocations per households, changes in non-farm incomes, etc. This task will require redesign of the present questionnaire, and data gathering and analyses procedures to ensure a streamlined and well managed approach. For this purpose an intensive session with DBSA staff, and selected professionals from implementing agencies and active NGO's. will be required.

(ii) **"New style" FSPs in implementation**

Since the introduction of FSP many changes were accommodated in the approach. This resulted in "new style" projects. One example is a recent FSP in Zebediela in Lebowa, where credit is not provided, but emphasis is placed on training and support to participants to gain access to existing financial support services. What will the impact of such a "sequencing" be? Livestock farming irrigation and support to "large scale" farmers were also introduced in FSPs in Ciskei and Bophuthatswana. More flexible project descriptions allowed "grass roots" innovation (such as poultry farming). Evolving land rental markets are also supported. This research activity will be designed to keep track of such "new style" FSPs, and compare/contrast their impact with those "old" FSPs subjected to the present evaluation.

This proposal therefore argue for the extension of the original evaluation, but linked on to the redesign of questionnaires and data gathering processes (Theme i), base line survey (theme iii) as well as the analytical framework, themes (iv) and (v).

(iii) **Baseline surveys and FSPs in preparation**

One of the major points of critique of FSPs during the recent FSP workshop at DBSA was the unavailability of reliable base line information. It is therefore difficult to assess the real impact of FSPs. The design and testing of a FSP relevant baseline survey and procedure on selected new FSP's in preparation and early implementation, will contribute greatly to provide the necessary bench marks, as well as to internalize a standard baseline survey procedure. This survey should furthermore not only include data relevant to the direct FSP elements, but also linkages to the wider rural environment.

Apart from developing and testing a baseline survey approach, it is also proposed that follow-up surveys be conducted after three years for selected target areas.

(iv) **FSPs' impact on the rural economy : linkages and multipliers**

This module of the research programme will require the design of an analytical framework and research methodology to allow for the description and quantification of the rural economy in terms of:

- a) Forward and backward linkages indicating the impact of FSPs for example on input supply systems, output processing systems, food security etc; and
- b) Employment and income multipliers.

Once an analytical framework and data needs have been established, input, output tables should be compiled for each FSP target area.

(v) **Social costs and benefits and distributional impact of FSPs**

One of the most important questions on the impact of FSPs relates to "who benefits - who loses out?" These issues have not yet been explored in any detail and this module of the research programme proposes to analyse FSPs from an economic efficiency and social equity viewpoint. Social cost benefit analyses should be applied to selected FSPs. Distributional aspects should then be analysed through the interpretation of the multipliers and linkages (Theme iv) and public choice criteria.

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APPENDIX 1

EVALUATION OF THE FARMER SUPPORT PROGRAMME IN VENDA, LEBOWA AND KANGWANE:

THE INSTITUTIONAL ANALYSIS

INTRODUCTION

The purpose of this report is to provide an overview of the institutional aspects of the Farmer Support Programme (FSP) in Venda, Lebowa and KaNgwane. The report assesses how the various elements of the programme were implemented and how the farmers obtain access to them. Information for this report was compiled through interviewing the implementing officials from all institutions involved in the implementation of the programme. The following institutions and/or their representatives were consulted in this process:-

VENDA

- Agriven (FSP programme manager)
- Khaku and Mashamba cooperatives
- Extension officers from the Venda Department of Agriculture and Forestry
- Farmer representatives

LEBOWA

- LAC officials
- LAC / LDA extension officers
- Phokoane and Kadishi cooperatives
- Leaders of farmer groups

KANGWANE

- Agriwane officials
- Agriwane regional manager
- Farmers' Associations
- KDA extension officers

The report is structured in three parts discussing the institutional aspects of the FSP in Venda, Lebowa and KaNgwane respectively. The institutional structure as outlined in the project description of each of the farmer support programmes as agreed upon by the borrowers and DBSA are discussed initially. This was used as reference to evaluate the performance of the FSP and to determine any deviations from the project description. The same outline was followed in each of the three sections of the report.

PART 1 : VENDA

1. THE INSTITUTIONAL STRUCTURE AS OUTLINED IN THE PROJECT DESCRIPTION OF THE FSP IN VENDA

1.1 Introduction

The development objective of the Farmer Support Programme in Venda is the promotion of structural change away from subsistence agricultural production to commercial production, by providing comprehensive agricultural support services and incentives to emerging farmers thus facilitating increased efficiency of agricultural resource utilization, food security and entrepreneurial activity over a broad front.

The programme consists of a comprehensive supportive programme to three selected target areas in Venda namely, Mulima, Khakhu and Mashamba. The three target areas were part of the Venda Dryland Crop Production project formerly financed by the South African Department of Foreign Affairs and later being the responsibility of DBSA.

The conversion to farmer support in these target areas are in accordance with agreement reached between DBSA management and the borrower (Agriven) in August 1986 in terms of which the Dryland Crop Project will eventually be converted into a comprehensive farmer support programme. The constraints experienced by farmers in the target areas were identified as being the following:

- low local availability of agricultural inputs;
- insufficient extension and technical advisory support services;
- untimely and low level of availability of mechanization services (winter ploughing / late planting); and
- a lack of local institutional structures to coordinate and effect input acquisition and produce distribution.

The programme consists of the following elements in all three localities:

- the provision of credit for agricultural inputs to farmers and finance for mechanization equipment to co-operatives;
- the creation of suitable marketing structures and arrangements to facilitate efficient produce distribution;
- the establishment of suitable institutional arrangements for training, demonstration and extension support in each area;
- the provision of necessary financial support for the construction of co-operative buildings and facilities; and
- the provision of the necessary institutional support to facilitate proper development of local institutional structures with the eventual aim of independent decision making at individual and local levels.

The comprehensive programme address the major constraints identified and will ensure that farmers utilize existing agricultural potential, skills and facilities in raising productivity.

Existing skills will be upgraded through efficient training and extension support.

Livestock activities are not specially addressed in this programme. However, in view of the apparent natural potential as manifested in the existing livestock farming activities, the linking of a livestock farmer support programme to this programme will be actively pursued during implementation.

1.2. Institutional structuring and functions.

The institutional structuring of the programme provides for a well defined interdependent arrangement of roles of all participants in each target area identified.

1.2.1. Agriven / Venda Department of Agriculture.

Agriven (the borrower) and the Venda Department of Agriculture acting jointly as implementing agency, will launch and initially be the major implementation institutions of the programme. This will be effected through the appointment of a FSP Action Committee consisting of one senior official each from the borrower and the Venda Department of Agriculture and a dedicated programme manager.

The FSP Action Committee in co-operation with the Venda Registrar of Co-operatives will be instrumental in initiating the establishment of primary co-operatives by the farmers at each of the target sites through the appointed programme manager. These co-operatives will as far as possible be staffed by local people who will be assisted by the programme manager in their operational duties. The FSP Action Committee will assist the co-operatives in the organizational structuring, day to day management and training of local co-operative staff.

The two FSP Action Committee members will report jointly to the Venda Dryland Crop Production Committee as well as to Agriven's Chief Executive Officer and the Director-General of Agriculture.

Managerial responsibility for the implementation of the programme will, however, vest directly in these two officers jointly as well as in the appointed programme manager.

To assist them in their duties extension officers in each target area will report directly to the programme manager who will act in continuous consultation with the head of extension in the particular district.

The responsibilities of the action committee will include:

supporting the primary co-operative's managements in each area in order to:

- a) ensure sufficient available supplies of agricultural inputs to co-operative members.
- b) develop and implement the necessary accounting, stock management and control systems. This will include the establishment of the necessary accounting measures to identify co-operative mechanization units as separate cost centres within the co-operatives.

- c) establish and negotiate the necessary organizational system for the establishment, co-ordination, upgrading and logistical support of mechanization contracting services in each target area.
 - d) train of co-operative staff members in order to effect a gradual take over of full responsibility of operational management of the co-operatives by them.
 - e) develop and implement an appropriate separate costing centre within each co-operative in order to enable it to determine the actual cost to the co-operative of mechanization services rendered and credit granted to farmers for production inputs. Such a system will have to enable the co-operatives to submit timely monthly claims to the Venda Government for the relevant subsidies.
- the facilitating of private sector involvement in training and demonstration activities in the target areas;
 - the promotion of the comprehensive support programme amongst the existing farmers in each target area;
 - the co-ordination of the activities of the extension officers, co-operatives, mechanization units and farmers; and
- the co-ordination of extension and training services to farmers in each area.

1.2.2. Venda Secondary Co-operative.

Primary co-operatives will be affiliated to the Venda Secondary Co-operative who will act as supplier of the necessary gcxxls and services to the co-operatives.

Through their involvement as supplier the Venda Secondary Co-operative will act in a supporting capacity to assist the primary co-operatives in:

- the development and implementation of the necessary accounting, stock management and control systems;
- the provision of logistical support for mechanization services in the area;
- the establishment of viable marketing channels and arrangements for local produce; and
- the in-service training of co-operative staff with a view of eventually independent management for each primary co-operative.

1.2.3. Venda Government

Extension officers in each target area will be made available by the Venda Department of Agriculture to assist in the implementation of the Venda Farmer Support Programme. In their day to day activities in the target areas these officers will report to the programme manager who will act in continuous close consultation with the district head of extension involved in each case and will report to the FSP Action Committee.

The responsibilities of the extension officers will include:

- assisting, training and guiding the to be established farmer committees and individual farmers to enable them to properly plan and execute production programmes with the

- initial help of the programme manager and I S P Action Committee;
- providing technical support for farmer committees and individual farmers under initial guidance of the programme manager and I S P Action Committee;
- introducing advanced production techniques to farmers and facilitating the adoption of those practices by the farmers; and
- advisory support to the Co-operative management on credit and finance applications of individual farmers and contractors.

The FSP Action Committee, programme manager, extension officers and the primary co-operative staff in each area will form the FSP implementing team in each area. This team will operate under leadership and guidance of the FSP Action Committee with active support by the Venda Department of Agriculture and the borrower.

Venda Government subsidies will be paid over to each primary co-operative on a monthly basis based on claims submitted by the Co-operative and verified by the borrower.

1.2.4 Local Authorities

Local authorities in the different target areas will be involved and consulted in the initiation and implementation of the programme. The FSP Action Committee will liaise and consult with them on a regular basis. As such they will be directly involved in decision making on the programme.

The support of these authorities to ensure efficient operation of the programme will form part of the responsibilities of the FSP Action Committee and programme manager.

Local authorities will take direct responsibility for inter alia:

- the initial decision on the acceptance of the programme;
- the solving of disputes; and
- any land tenure issues.

1.2.5 Primary Co-operatives

Primary co-operatives will be established in each of the target areas. Each of these cooperatives will be governed by a management committee constituted in accordance with the Venda Co-operative Act and staffed, as far as possible, by local people.

These co-operatives will serve as the basic institutional vehicles for the development of the farmer support services in the areas.

The functions of the co-operatives will include:

- the creation of physical facilities in each target area;
- the supply, of agricultural inputs at reasonable prices to members;
- the initial supply, co-ordination and logistical support of mechanization services in each target area;
- if possible, the eventual identification, financing and logistical support of independent

- mechanization contractors in each target area;
- the coordination and training of independent mechanization contractors;
- the supply and administration of credit to members and debt recovery;
- the implementation of efficient asset management and control systems, stock management, accounting, financial management and control systems; and
- the facilitation of private sector involvement on financing, training and demonstration activities;

The FSP Action Committee and programme manager will actively support and advise the co-operative management committee at each target site. This will be done in close cooperation with the Secondary Co-operative management, Agriven and the Venda Department of Agriculture.

1.2.6 Farmers

Farmers will become members of the primary co-operative on a voluntary basis. Members will elect a management committee for each co-operative on which the programme manager will serve in an advisory and guiding capacity. The committees will take responsibility for:

- overall policy decision making for each co-operative;
- determining the strategy to be followed by the co-operative in each area;
- overall control of the co-operative manager and staff; and
- liaison with the borrower, Venda Department of Agriculture, Secondary Co-operative, private sector firms, etc.

In addition to this, farmers in each area will elect farmer committees. The extension officer(s) in each area will serve on the committees in an advisory capacity. Decision making on the land will be by the individual farmer who will take full responsibility for all operational decisions on his land and carry the risk involved.

1.2.7 Venda Dryland Crop Production Committee

The existing Venda Dryland Crop Production Committee (DCPC) will be responsible for overall coordination and decision making in the programme. The committee will take on this responsibility in addition to its existing functions under the Venda Dryland Crop Production project. The DCPC is constituted as follows:-

- 7 representatives from the Venda Department of Agriculture;
- 3 representatives from Agriven; and
- 1 representative from DBSA as observer.

The responsibilities of this committee under the Venda FSP will include:

- Monitoring of the progress in each target area;
- Recommending refinements and possible extensions to existing programmes;
- Identifying and initiating new target areas;
- Evaluating FSP's in implementation;

- Deciding on possible solutions to problems encountered in the implementation of FSP's;
- Coordinating the actions of all the institutions involved to ensure a comprehensive coordinated approach to the of all FSP's in Venda; and
- Ensuring that outstanding issues identified be addressed effectively during implementation of the Venda Farmer Support Programmes.

In order to fulfil these responsibilities this committee will meet four times annually at which meetings the FSP Action Committee will report on progress with the implementation of the programme.

2. THE INSTITUTIONAL STRUCTURE AS IMPLEMENTED

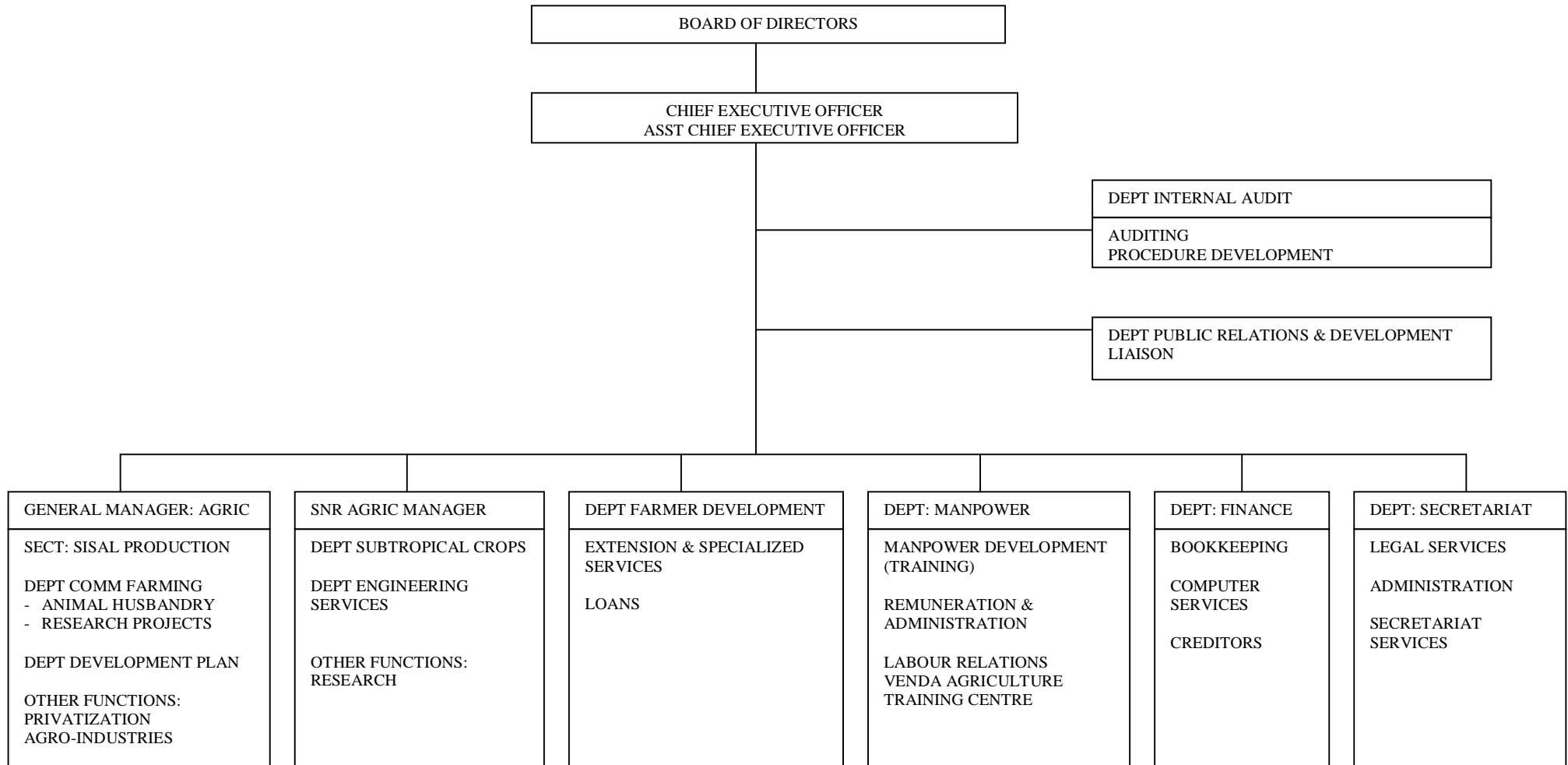
The purpose of this section is to discuss the institutional structure of the FSP in Venda as currently in operation. The intention of this discussion is to illuminate the deviation from the proposed institutional structure as discussed above.

It became clear from discussions with various officials that the joint responsibility of Agriven and the Venda Department of Agriculture and Forestry creates some problems and is to some extent contributing to the inefficiency in the implementation of the programme. This will be evident from the discussions below of the various institutions and committees.

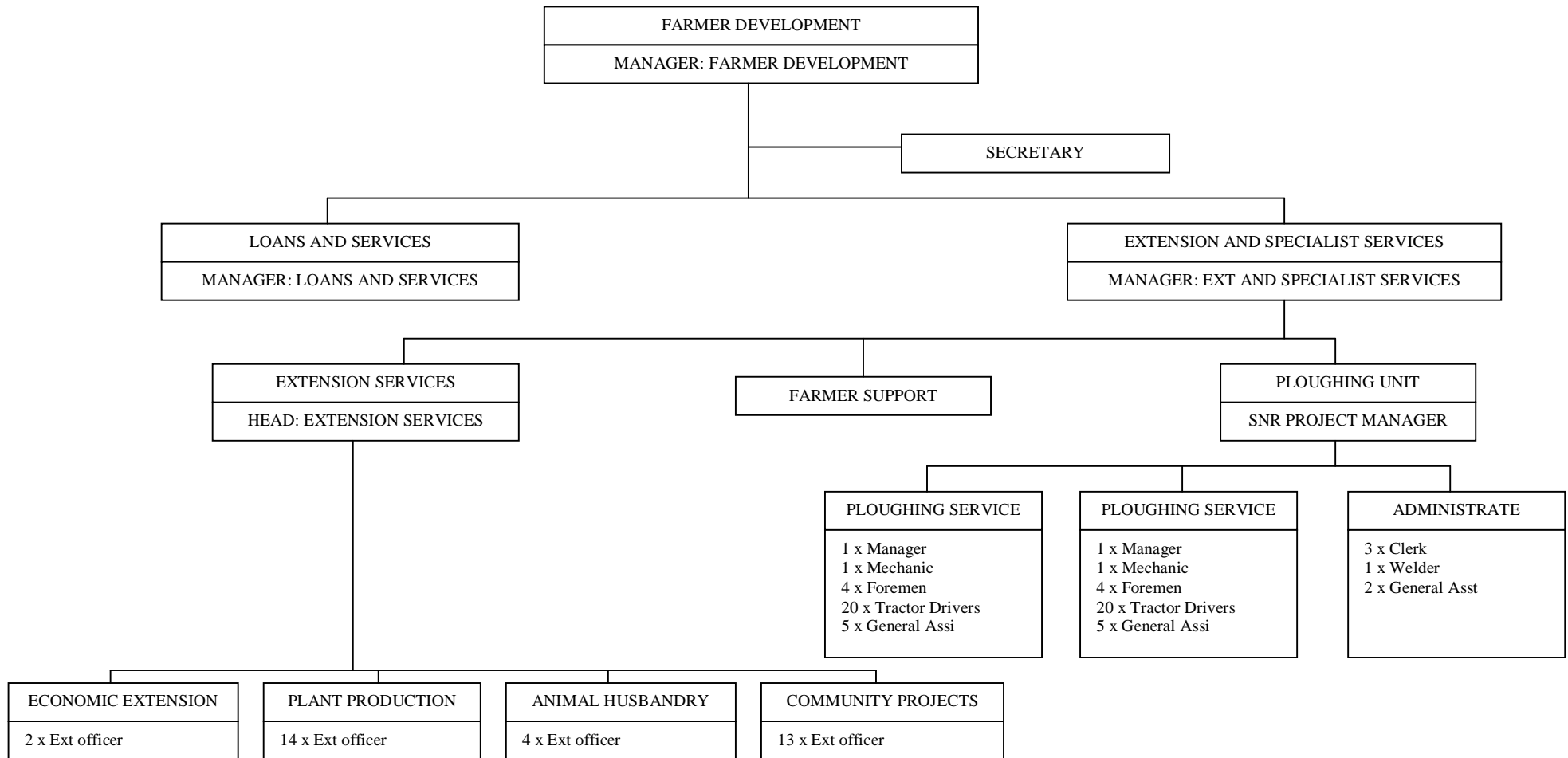
2.1 The FSP Action Committee and Farmer Committees:

According to the project description the FSP Action Committee was supposed to be instrumental in initiating the establishment of and assistance to the primary co-operatives, but was found to have effectively disbanded . The Committee was comprised of the Programme Manager and the Manager : Extension and Specialist services (representing Agriven) and an official representing the Department of Agriculture. The representative from the Department has since retired and it is understood that he had in fact lost interest even before retirement. No substitute has since been appointed by the Department of Agriculture and this is effectively rendering this committee non-existent.

VENDA AGRICULTURAL CORPORATION LIMITED (AGRIVEN)



STRUCTURE OF AGRIVEN'S DEPARTMENT : FARMER DEVELOPMENT



The appointment of the programme manager as a member of the FSP Action Committee also leaves much to be desired as the programme manager is also a member of the implementing team which reports to the FSP Action Committee. The absence of the FSP Action Committee creates a gap in terms of institutional responsibilities and the coordination of the FSP and is therefore bound to affect the FSP's efficiency. The FSP Action Committee was supposed to assist the co-operatives in their organizational structuring, day to day management and training of staff. It seems that the programme manager is now performing most of the duties of the FSP Action Committee. The role of the Venda Dryland Crop Production Committee is, however, not clear.

On the other hand, farmer committees, were found to be non-existent at all the FSP's. This also creates an institutional gap, and consequently certain responsibilities abdicated. In practice however, it has been learnt from the seconded manager at Mashamba co-operative that such a committee is not necessary because the manager usually takes all production decisions in conjunction with the extension officer. The situation at Mulima was also found to be the same, whereas the management committee at Khakhu was very much involved in the taking of production decision. The solving of disputes between farmers at Mashamba and Mulima was being done by the management committee of the respective co-operatives.

2.2 The Venda Farmers Secondary Co-operative:

It has been established from the programme manager that although the Venda Secondary Co-operative did supply inputs and some logistical support regarding mechanization, no training was ever provided to the staff of the primary co-operatives. The establishment of viable marketing channels was also never attended to. In fact, training responsibility as per project description, has been delegated to too many parties, an exercise which encourages the non-performance of any given task as no real accountability can be identified.

However, the Venda Farmers Secondary Co-operative has since been closed down due to financial problems and thus creating the need for an alternative supplier of inputs and logistical support.

Even during the period of its existence, the VFSC did not really offer competitive prices, a factor that directly affected the cost of production of the farmers. It is therefore advisable not to prescribe any single supplier to the primary co-operatives, but rather encourage the co-operative's management to buy from the cheapest suppliers. The consignment arrangement did not get off the ground as the VFSC supplied inputs on 30 days terms in order to alleviate its financial problems. The implementation of the consignment buying of stock will however greatly improve the financial position of the co-operatives.

2.3 The Venda Government

The formation of the Farmer Committees, according to the project description was the responsibility of the Venda Department of Agriculture and Forestry. The non-existence of these committees indicates the failure of the Department to attend to the issue. Coupled with the failure of the Department to nominate a substitute for the FSP Action Committee, the attitude and/or dedication of the Department towards the FSPs becomes questionable.

The provision, in accordance with the project description, that the Department should provide the extension service seems to completely overlook the findings of Bembridge on the quality of the extension service in Venda.

At all of the three FSPs, extension is being provided by the Department of Agriculture and Forestry as provided for in the project description. According to the programme manager, this institutional arrangement is not conducive to high production as those extension officers are not necessarily reporting to him despite the provisions of the project description. It is therefore felt that these extension officers should have been permanently seconded to Agriven reporting directly to the programme manager or his delegate for an improved supervisory/subordinate relationship. The efficiency of the extension service can be improved and its responsiveness to the development activities of the FSPs enhanced.

2.4 Local Authorities and Primary Co-operatives

The role of the local authorities in terms of solving disputes have been minimal except at Khakhu where the local headman (chief) is also directly involved in the activities of the co-operative.

The three primary co-operatives in the Venda FSP were found not to be involved in the purchase and marketing of surplus produce of members as well as the development of viable marketing channels. It also seems as if these co-operatives do not have the capacity to perform such a task. It would be of some benefit if this task is delegated to the Marketing Department of Agriven as an interim measure until such time that the co-operatives are capable of performing this task. The importance of the marketing function in the commercialization of subsistence agriculture cannot be over-emphasized.

2.5 Farmers

Farmers have virtually no input in policy and decision-making in the FSPs except at Khakhu where the farmers have some say in decision making mainly through the Management Committee of the co-operative. According to the seconded manager at Mashamba co-operative, this situation is caused by the lack of knowledge on the part of co-operative (FSP) members. The co-operative management is therefore expected to make all policy and production decisions.

The decisions on the land is therefore also not taken by the farmer as such. Farmers cannot decide on the type and quantities of production inputs to be used. At Khakhu it was learnt that although farmers participate through the Management Committee on production decisions, individual choice is limited as all plots are established with the same per hectare package of inputs (quality and quantity) and the individual is debited with a loan facility in proportion to the size of his plot.

3. AN OVERVIEW OF THE ACTIVITIES OF TWO OF THE PRIMARY CO-OPERATIVES IN THE FSP

The three FSP's in Venda were implemented towards the end of 1988 with the first credit provided to farmers in October 1988 intended for the 1988/89 production season. The main elements of the Farmer Support Programme in Venda are in order of importance: -

- Mechanisation
- Credit
- Inputs
- Extension and training
- Marketing

Mechanisation and specific ploughing services is viewed as the main thrust of the FSP in Venda. Ploughing services as well as credit and inputs are provided to the farmers via the primary co-operatives at Khakhu, Mashamba and Mulima.

The evaluation of the Farmer Support Programme in Venda was conducted in two of the three FSP's, i.e. Khakhu and Mashamba. Household surveys in the two areas were already conducted during 1990/91. The purpose of this section is therefore to give some indication of the operation of the co-operatives in Khakhu and Mashamba. A comparison of the size and the extent of the operation of the two co-operatives is provided by the analysis in Table 1.

The Khakhu co-operative is situated at Thononda in the Khakhu tribal ward approximately 68 kilometres North-west of Thohoyandou. The co-operative has at present 300 members, all of whom paid their R50 membership fee.

The Mashamba co-operative situated 75 kilometres South-west of Thohoyandou, is the bigger co-operative of the two with 592 members at present. A total of 332 members paid the full membership fee of R50 while 260 qualify only for half membership status as they could only afford to pay R20 each.

The members of the Mashamba co-operative plant more than double as much land (257 ha vs. 103 ha at Khakhu). The amount of credit per hectare provided to members at Mashamba is clearly lower than at Khakhu. This is to some extent attributed to the higher fertiliser application rate at Khakhu (4 bags/ha at Khakhu and 2 bags/ha at Mashamba) due to the higher rainfall at Khakhu. The increase in membership in both cases is encouraging and reflects to some extent the success of the programme in the opinion of the people in the two areas.

The role of the tribal chief in the successful implementation of the FSP's was emphasised. The chief in the Khakhu ward gives his full cooperation to the project and was also one of the first members of the co-operative. The presence of the chief as a member of the co-operative is believed to contribute to the success of the Khakhu co-operative.

Table 1: A comparison of the Khakhu and Mashamba KSP co-operatives

Season	Khakhu					Mashamba				
	Members	Area Planted	Credit per ha	Total Loan	Repayment	Member	Area Planted	Credit per ha	Total loan	Repav ment
1988/89	182	134 ha	282-19	R 37 672	93 8	?	?	?	R 83 713	68.0
1989/90	216	122 ha	330-49	R 40 21 8	61 9	514	416 ha	?	R 92 846	67 6
1990/91	250	104 ha	364-51	R 37 909	33.9	592	293 ha	?	R 80 000 **	63 4
1991/92	300	103 ha	364-51 **	R 53 492	1 9*	592	257 ha	309-13	R 75 265	19.8 *

* Due to drought
 ** Estimated figure

With respect to the Khakhu co-operative and ignoring the last season (drought), it is clear that the loans per member are decreasing, i.e. R207 to R150. The fact that credit per hectare increases is due to increased cultivations adjacent to Thononda, the location of the co-operative. It seems as if the decreasing repayments of credit reflects only to certain natural causes, e.g. drought, and that refunding is secured by the tribal authority.

In Mashamba the situation is completely different with farmers being dissatisfied with the co-operative staff due to previous involvement in corruption. Limited record keeping at the Mashamba Co-operative is one of the main problems at Mashamba and is clearly evident from Table 1.

3.1 Management committee and staff

The management committee of the Khakhu co-operative comprises of 9 members representing the following villages/communities:- Khakhu, Tshiendeulu, Maname, Maswimba, Thononda, Tshiheni, Sheshe/Dzamba and Tshixwadza. The chairman of the committee is the younger brother of the chief. The committee usually meets twice a month. The chairman and the treasurer are authorised to sign cheques, while the chairman is also involved in the ordering of supplies and the control of the stock. The manager of the co-operative is also responsible for allocating land to members. This task is performed on recommendation from the chief.

On the other hand the management committee at Mashamba co-operative was comprised of seven (7) members, five of whom are teachers. Despite this dominance of the management committee by teachers, with the chairman being a teacher at Tshitale, the management committee provides no inputs into the management of the co-operative as such. Only five members have been regularly attending the management committee meetings. The reasons for non-attendance by the other members were unknown.

According to the seconded co-operative manager at Mashamba, the relationship between the management committee and the co-operative's management staff at Mashamba Co-operative is not good. The Committee suspects that seconded officials have a hidden agenda. Some of the reasons leading to this suspicion are the following:-

- members are not clear on the functioning of the co-operative;
- members are surprised when their loan facility is suddenly terminated by Agriven

- without being informed of their outstanding balances;
- officials from Agmen do not visit the co-operative when requested;
- members do not know when they will receive their subsidy payments from the government;
- Agriven seems to be dictating terms. This was due to the suggestion by Managerial, Extension and Specialist Services Division of Agriven to transfer the co-operative's account from Standard Bank to United Bank because of a higher interest rate; and
- the fact that the seconded official is making use of the co-operative's car; suggesting that the car has been bought for him and not the co-operative.

It was also established that the seconded co-operative manager also did not know why the co-operative's credit facility was stopped, and was not even aware of the co-operative's credit limit. In fact, the manager was not even acquainted with the project description, let alone the conditions of repayment of the long-term loans. It was not even known to him as to how much the co-operative "owes" Agriven, except that according to him, Agriven is never "claiming" from the co-operative. Lack of basic information which directly and heavily affects the cash flow of the co-operative can have a detrimental effect on the financial position of the co-operative and warrants immediate attention. The basis of management planning, if any, can therefore not be understood.

The staff of the Khakhu co-operative consists of:

- a manager (Std 10 qualification)
- a cashier/sales lady (Std 10)
- 2 tractor drivers
- 2 guards

The salaries (a monthly wage bill of R2205.49 - April 1992) of these employees are paid from the co-operative's own funds (profits). Agriven is in no way involved in the paying of salaries of the co-operative staff. Agriven has insight into the books of the co-operative to ensure that proper records are kept.

The Mashamba co-operative has the services of a seconded manager from Agriven. The seconded manager has a matric and an agricultural diploma, hence a qualified extension officer. His salary and fringe benefits were, however, the responsibility of Agriven.

The assistant manager has a N2 commercial diploma from Finyazwanda Technical College in Venda, whereas the bookkeeper, apart from his matric, has an N2 welding diploma. A second bookkeeper has a diploma in commerce from Katekani Technical College in Gazankulu. Although the first bookkeeper indicated to have attended the 6M management course and financial management course during 1991, the latter had never been taken for any training since joining the FSP co-operative staff. The Mashamba co-operative has a staff complement of 11 employees consisting of:

- 3 clerks
- 6 tractor drivers
- 1 assistant
- 1 night watchman

The salary bill of the Mashamba co-operative amounts to R3 718-52 per month.

Both co-operatives realise profits from sales from the co-operative shop (mark-up of 30%) and from services rendered to members and non-members. The shop at Khakhu stocking mainly non-agricultural items, i.e. groceries has a turnover of R500 per day or approximately R10 000 per month. Cement, if in stock, is also a major item sold by the co-operative. If cement is in stock the average daily turnover increases to roughly R1000.

Daily sales at Mashamba co-operative were found to be about R200.00, with average monthly sales of R5 000,00. The stock turnover rate was found to be very low. Stocking has only been done 4 times between November 1991 and April 1992. The range of product lines was only found to be very limited. Tomato and cabbage seeds were the only agricultural inputs in stock, other than maize seed and fertilizer. Thiodan was the only chemical kept in stock. It was also established that only members were patronizing the co-operative.

The mark-up of 30 per cent at Khakhu is applied to all products sold by the co-operative but it is still viewed as the cheapest shop in the village. The mark-up for non-members is, however, 10 per cent higher. It was indicated that this mark-up has been determined to be in line with the mark-up percentage as recommended by the office of the Registrar of Co-operatives; and that transport costs did not necessarily affect the mark-up rate of any specific commodity, e.g. cement.

On the other hand, an official from Agriven informed management at Mashamba to effect a 30 per cent mark-up on all cash sales. A 20 per cent mark-up was however applicable to co-operative members. It was also realized that the impact of the suggested mark-up on the financial position of the co-operative has not been investigated by the co-operative's management. Competitive pricing was therefore also not done.

3.2 Mechanisation

The Khakhu co-operative owns two Fiat (54kW) tractors, a one ton trailer and a light pick-up truck. Agriven financed the acquisition of the tractors, etc. The co-operative is supposed to repay the Agriven loan for the tractors but has not paid any instalment as of yet. The co-operative has recently applied to Agriven for another tractor as the co-operative experiences a capacity problem during the planting season due to the increased cultivated area.

Members approach and request the co-operative to provide ploughing/planting services. A list is then drawn up according to the day and time members require the service. Mechanisation services are rendered to members on a credit or cash basis at a cost of R72.19 per hectare. The cost to non-members is R120 per hectare on a cash only basis. During the 1990/91 season the Khakhu co-operative rendered mechanization services to non-members to the extent of 151.7 hectares ploughed, 5 hectares disced and 2 hectares planted. The income earned by the co-operative for this services amounted to R6 578.

The Khakhu farmers are generally satisfied and pleased with the mechanisation services provided by the co-operative because it provides a better and more reliable system of ploughing than Agriven's or the Venda Government's tractor services. The yields of farmers

are higher due to the improved ploughing service, through deeper ploughing resulting in the soil holding moisture better.

The Mashamba co-operative owns 6 Fiat (56kW) tractors which are available to the members service for ploughing, discing and planting. The members of the Mashamba co-operative also view the tractor service as the most attractive element of the FSP.

Both the co-operatives have own transport in the form of a one ton delivery van. Such vehicles are mostly used by managers in the execution of their day to day responsibilities as well as for collecting stock, especially minor items.

Due to the poor state of access roads, very few private contractors were prepared to effect deliveries to the co-operatives. The co-operative at Khakhu has to arrange for transport to deliver inputs and other products to the co-operative as Agriven provides no transport. Transport is normally hired to deliver inputs to the co-operative store. Transfer costs varies but more or less amounts to R250 for a 7 ton truck load.

According to the head of the mechanisation division of Agriven, the tractors of the co-operatives initially had to be repaired on a monthly basis, with the co-operatives having to pay for this service. However, due to training of the drivers, the costs of repairs decreased, which furthermore improved the effectiveness of the co-operatives services, since the co-operatives now save these costs and can spend it on other items.

Table 2 : Mechanisation and input costs per hectare - Khakhu

Season	Tractor services			Fertiliser		Seed	Total cost per hectare
	Plough	Disc	Plant	2.3.2	L. A. N		
1988/89	37.50	18.75	18.75	94.32	71.37	41.50	282.19
1989/90	37.50	18.75	18.75	110.42	87.47	57.60	330.49
1990/91	65.63	32.81	32.81	93.56	85.80	53.90	364.51
1991/92	65.63	32.81	32.81	93.56	85.80	53.90	364.51

3.3 Credit

Revolving credit for fertilizer, ploughing, discing, seed, etc. is advanced to co-operative members. Credit is provided according to the area of land and is calculated on a per hectare basis. Credit provided to members for the 1991/92 season amounted to R364.51 per hectare at Khakhu and R309.13 at Mashamba. The interest rate is 9% per annum (or 0.75% per month) and the farmers are given 6 months to repay. The programme manager at Agriven and the manager of the co-operative are of the opinion that all the farmers know they have to repay their loans, know the terms involved and are aware of the consequences if they do not repay their loans. However, they admitted that only 25% of the farmers understood the principle of interest and the reason why they have to pay interest.

Most of the farmers make use of the credit, however, some farmers prefer not to take up the credit and rather pay cash for services and inputs. Farmers are generally advised to pay cash

for inputs if they do have available funds.

Crop failure and drought are the main reasons why farmers are not repaying their loans. The number of loans defaulted at Khakhu were initially low, with only 8 farmers not repaying their loan. However, it increased in line with the unfavourable crop conditions to 25 in the 1990/91 season. The credit situation of the Mashamba co-operative was not known to the management due to poor record keeping. According to the seconded manager, the situation can only be improved by computerizing the financial system of the co-operative. This would then enable the issuing of monthly statements to farmers. The continuous moving of clients from one village to another and the changing of identities are further complicating credit management.

Both the co-operatives have the policy that if a member has not repaid his debt from the previous season no new credit will be issued to such a member.

There are a number of actions the co-operatives can take to ensure that the farmers repay their loans. A monthly statement is issued to all members to inform them of their outstanding debt (no statements were issued at Mashamba). If a member has not repaid his loan after 6 months, the management committee of the co-operative will have a meeting with such a member to urge him to repay his debt. If a member still fails he will be referred to the local council where the chief will do his best to ensure that the member repays his debt. The last option will naturally be court action.

3.4 Inputs

The management committee of the Khakhu co-operative in cooperation with the extension officer decides on what inputs (fertiliser) to use. Advice from the Dryland Crop Production Committee (DCPC) is also used in their decision. The DCPC does soil analysis and according to the results obtained, it recommends the quantity and type of fertiliser to be used. At present the co-operative at Khakhu uses 2.3.2 fertiliser and applies 4 bags per hectare. At Mashamba only two bags of fertiliser are applied per hectare.

Primary co-operatives like Khakhu and Mashamba buy their inputs from the Venda Secondary Co-operative. There is however some doubt about the future of the secondary co-operative as discussed earlier and it can be assumed that the co-operatives will have to look for other sources of supply for the next season. The amounts of inputs used by the members of the two co-operatives during the 1991/92 crop season were as follows:

Table 3 : Inputs used in Khakhu and Mashamba in 1991/92

Input	Khakhu	Mashamba
Area planted	103 ha	257 ha
Seed	5 000 kg	3 924 kg
Fertiliser : 2.3.2	24 700 kg	28 700 kg
L.A.N.	7 500 kg	-

The yields of the previous season (1990/91) in the two areas were as follows. Due to the drought virtually no yields were recorded in the 1991/92 production season.

Table 4 : Maize yields in Khakhu and Mashamba (1990/91).

	Khakhu	Mashamba
Target yields (1990/91)	3 t/ha	1.5 t /ha
Actual yields	1.6 t/ha	0.72 t/ha

3.5 Extension

Extension services are provided by the Venda Department of Agriculture and Forestry. The Mashamba and Mulima wards are both served by two extension officers, while only one extension officer attended to the training and information needs of the farmers in the Khakhu ward. A great deal of training is also done through the various levels of the extension service of the Venda Department of Agriculture and Forestry, as well as Agriven. It was found that the Venda extension service is operating at very low efficiency level due to inadequate training, as various factors hinder the operation of an efficient extension service. There is a paucity of subject matter specialists within the Department of Agriculture and Forestry. During 1989, only four agricultural graduates were employed by the Department. The situation has, however, been found to be similar in other national states.

The situation within Agriven's extension service is not much different from that of the Department of Agriculture and Forestry. Extension services are mainly directed at the clients of Agriven. The shortage of subject-matter-specialists makes it almost impossible to implement a farming information supply system.

Personal visits are the most common forms of extension provided by the extension service in Venda, although media facilities, such as radio talks and publications, are also used. Farmers' days are also arranged to address special problems within the various fields, with various guest speakers invited to address the farmers.

Both the senior as well as the junior extension staff of the Department of Agriculture and Forestry did not have a clear knowledge of the objectives, as well as policy guidelines, according to which they can plan their work. This often results in ad hoc extension services being rendered to the farmers with very little effectiveness due to the lack of coordination and follow-up efforts. It has also been found that the Planning Division of the Department is not in a position to cater for the back-up services to the extension service, whilst contact with subject matter specialists and researchers is almost non-existent. As a consequence, adaptive research and technical and extension training of staff are also non-existent, whilst the division of staff between dryland and irrigation extension service has negative effects on training. Only 7,5 percent (12 posts) of the agricultural officers posts (160 posts) were filled by women.

Middle management was also found to be not very clear on the application of accepted management principles, an observation that was also made on field level extension workers. No work calendars were kept, hence extension on an ad hoc basis.

The conditions of service have been found to be in a poor state in Venda, and such factors usually demotivates an extension worker from performing his duty properly. Elements encouraging poor performance are, amongst others, lack of accommodation, lack of transport, shorter terms of service in an operational area, non-competitive salary, etc. Only 14 percent of field staff have been found to have more than four years experience in one operational area. Both junior as well as senior staff members were found to be dissatisfied with the level of training.

About 85 percent and 87 percent of middle and junior field staff, respectively, were found to be without transport, whilst almost all head office staff had motorized transport. Lack of transport is therefore a big constraint to field level extension work.

Although all officers have undergone some training at an agricultural college for periods varying from 2-3 years, only 39 percent of senior staff achieved a qualification (formal) above standard eight, compared to 76 percent of junior staff. Evidence also indicated that the majority of extension officers lack practical farming experience.

There are no subject matter specialists to play the key role by making contact with research stations, executing and supervising adaptive research programmes on farmers' fields, training field staff, and obtaining feedback from the field staff on farmers' problems. Evidence shows that the linkages between research, extension and farmers do not function effectively in Venda.

At all the FSPs, extension was provided by the Department of Agriculture and Forestry as provided for in the project description. According to the Programme Manager of the implementing agent, Agriven, this institutional arrangement is not conducive to high production, as the extension officers are not necessarily reporting to him despite the provisions of the project description. It is therefore felt that the extension officers should have been permanently seconded to Agriven with the aim of reporting directly to the Programme Manager or his delegate for an improved supervisors/subordinate relationship. The efficiency of the extension service can be improved and its responsiveness to the development activities of the FSPs enhanced thereby.

The present line of reporting in the FSP extension service thus does not encourage efficient management. It is recommended that FSP extension officers be permanently seconded to the implementing agents in order to improve the coordination and supervision activities.

The training of the extension officers serving the FSPs must be upgraded as a matter of priority. Such extension officers must introduce a programming approach in their day to day activities in order to improve contact with the farmers and facilitate adoption of improved varieties/techniques.

3.6 .Marketing

The Khakhu and Mashamba co-operatives do not provide marketing facilities as their members prefer to sell their maize out of hand. The main reason for this practice is that the farmers are currently obtaining higher prices through the out of hand selling. It is believed that farmers obtained prices as high as R50 per 70kg bag or R714 per ton during the 1990/91 season. One farmer delivered his total crop (20 bags or 1.4 ton) from his 1 hectare plot to NTK and earned an income of R419 which is equivalent to a price of R299 per ton. This compares favourably with the Maize Board's producer price of R302 (after accounting for deferred payments) during the same 1990/91 season.

4. CONCLUSION

In evaluating and reviewing the project description it is evident that an over designed institutional structure for the implementation of the FSP's in Venda was intended. As described in the original Farmer Support Programme description, a FSP requires (1) adequate provision of appropriate inputs and the funding thereof (credit) to the farmer, (2) the provision of a comprehensive mechanisation service, (3) marketing channels and services, (4) extension and demonstration services, (5) training, (6) the acquisition of the *de facto* rights to production and (7) the off-farm infrastructure. In order to provide the above, an institutional structure is required, so that each element can support the other to obtain growth and development in Venda. From the analysis of the actual institutional structure as implemented and currently operating, it appears that most of the institutions and/or committees are defunct, which, however, would not necessarily lead to negative results. With respect to the existing structure of institutions, a more slimmer institutional set-up with only **one** implementing agent with **coordinating** functions, so that all FSP elements are provided, seems to be more appropriate. Results show that especially the extension services are not effectively included in the Venda FSP package, because this function falls under the auspices of the Venda Department of Agriculture.

For a more efficient operation of the FSP in Venda, it is recommended that the institutional framework within which the FSP operates be reviewed. No institution or organization and/or committees should be involved and responsibilities assigned unless there is a clear definition of accountability by such an institution, organization and/or committee. All efforts must be aimed at closing the responsibility-accountability gap. This will comprise the activity of eliminating the 'dead wood' in the FSP's institutional framework.

The FSP should, within Agriven, be accorded a higher level within the management and organizational structures than the current sub-section in which the programme is managed. A fully fledged FSP Section should be established within Agriven, manned with a team of well-qualified personnel; rather than the present one-man show. All personnel involved in the FSP must, as a matter of practical rationality, fall under the supervision of a well-qualified FSP Programme Manager.

Considering the specific wards, it seems, as if the success of the FSP in the Khakhu ward is based on access to one of the FSP elements, namely mechanisation services. All other elements are in one or another way attached to this service. At present, it seems as if the FSP is successful, but it must be stressed that this is to a great extent based on the influence

to the FSP by the tribal chief, influencing all participants and the ground-root functioning institutions (i.e. the extension officer of the Venda Department of agriculture). With respect to Mashamba, the situation is improving. Agnven is currently training a member of the co-operative to eventually manage the co-operative. Previously, corruption and negative opinion against the cooperative and the FSP reduced the effectiveness of the FSP in this ward.

In general, it can be concluded that the implementing agents in Venda are determined to contribute to the upliftment of the rural population. Institutional record keeping is improving. The increasing own decision-making of especially the participants and the cooperative in the Khakhu ward clearly indicate that a FSP, based on mechanisation services meet the objective of "learning-by-doing" approach to make development in Venda possible. It should, however, be emphasized that the effectiveness of implementation of the programme will increase if more attention is also given to the other elements of the FSP, i.e. extension, marketing, etc.

PART 2 : LEBOWA

1. THE INSTITUTIONAL STRUCTURE AS OUTLINED IN THE PROJECT DESCRIPTION OF THE ESP IN LEBOWA

1.1 Introduction

The Farmer Support Programme in Lebowa consists of a comprehensive support programme to two selected target areas in Lebowa namely, Phokoane and Kadishi. The Phokoane area covers an area of 1 700 ha of dryland maize previously cultivated by the Lebowa Agricultural Cooperation (LAC) for their own account. The FSP in Phokoane entails the settlement of individual farmers on plots of 0.5 to 2 hectares arable land on the farms Rietfontein 876 KS, Vleeschboom 869 KS, Leeukraal 877 KS and Vierfontein 869 KS, which constituted the Phokoane Maize project financed by DBSA in 1985. Areas of 30, 30, 20 and 15 hectares respectively on each farm was retained as nucleus units to be farmed by the Phokoane tribal authority for their own account.

The conversion to farmer support in these target areas are in accordance with agreement reached between DBSA management and the borrower (LAC) in late 1986 in terms of which the Phokoane Dryland Crop Project will eventually be converted into a comprehensive farmer support programme. Previous constraints identified in the target areas were:

- low local availability of appropriate agricultural inputs;
- insufficient extension and training support services;
- untimely and low level of availability of mechanization services; and
- a lack of local institutional structures to coordinate and effect input acquisition and produce distribution.

This situation led to the implementation of a farmer support programme in Lebowa. About 500 individual farmers were settled in the Phokoane area on the existing 1 700 ha of cultivated land. Moveable assets (vehicles and mechanization equipment) were transferred from the current Phokoane maize project (LAC) to the Phokoane Co-operative. Settled farmers would be provided with production inputs, credit, marketing support, mechanization services, extension, training and demonstration and research. The structuring of the necessary institutional arrangements in order to facilitate the above and ensure the integration of the privatization of the project and the Farmer Support Programme were also given considerable attention.

The following principles formed the foundation of implementing the privatization programme on Phokoane:

- comprehensive support services will be provided to individual farmers to be settled on the basis of demand.
- sufficient flexibility of the provision of support services will be adhered to in order to foster independent decision making by individual farmers within the constraints of the proposed project model.
- goods and services will be provided to farmers at economic rates.

The programme consists of the following elements in all localities:

- the establishment of suitable institutional arrangements for training, demonstration and extension support in each area;
- the provision of credit for agricultural inputs to farmers and finance for mechanization equipment to co-operatives;
- the creation of suitable marketing structures and arrangements to facilitate efficient produce distribution;
- the provision of the necessary financial support for the construction of co-operative buildings and facilities; and
- the provision of the necessary institutional support to facilitate proper development of local institutional structures with the eventual aim of independent decision making at individual and local levels.

The comprehensive programme would address the major constraints identified, to ensure that farmers utilize existing agricultural potential, skills and facilities in raising productivity. Existing skills would be upgraded through efficient training and extension support. The development objective was set as settlement of individual dryland maize farmers and the provision of comprehensive agricultural support services and incentives to settled farmers to facilitate efficiency and emergence towards commercial production.

1.2 Institutional structuring and functions

The institutional arrangements basically provides for the expansion and strengthening of existing structures at Phokoane and Kadishi in order to enable sufficient support for the envisaged privatization of the maize projects.

1.2.1 Lebowa Agricultural Corporation (LAC)

The responsibilities and functions of the implementing agent was defined in the project description for the Lebowa Farmer Support Programme as *mutatis mutandis* applicable to the privatization of the maize project. The following additional responsibilities of the implementing agent (LAC) were identified:

- Effecting the transfer of all move-able assets of the maize projects to the co-operatives at outstanding loan value plus capitalized interest.
- Reaching agreement, to the satisfaction of DBSA, with respect to the repayment of outstanding DBSA loan amounts on these assets. These funds were to be on-lended to the co-operative under existing policy of LAC provided that the interest rates applicable will correspond to that charged by DBSA to LAC.
- Expanding the staff and management of the co-operatives in order to enable them to provide effective and efficient support services to farmers to be settled in the Phokoane and Kadishi areas.
- Integrating support activities to maize farmers under the farmer Support Programme in order to create one integrated support programme in each tribal area.
- On-lending, on demand, working capital provided by DBSA under the original maize project as production credit to individual farmers. Each co-operative would be enabled to on-lend these funds to farmers in the form of production credit with a 4 percent levy

to cover risk and administration costs.

1.2.2 *L-ebowa Government*

The functions and responsibilities of the Lebowa Government Departments would be *mutatis mutandis* applicable to the privatization of the Phokoane maize project and second two additional extension officers to LAC in order to ensure sufficient extension support in the Phokoane area. The Regional Director for Agriculture in the Nebo district would be a member of the Phokoane I-and Allocation Committee.

1.2.3 *Tribal authority*

The Phokoane tribal authority would, in addition to their normal responsibilities, nominate three members on the Phokoane Land Allocation Committee. As such the tribal authority would be involved in the selection of farmers to be settled.

1.2.4 *Phokoane Co-operative*

The functions of the co-operative as spelled out in the project description of the Lebowa Farmer Support Programme would *mutatis mutandis* be applicable to the co-operative role under the privatization of the maize project.

1.2.5 *Farmers*

Farmers who apply for plots under the privatization scheme would be required to become members of area specific co-operatives. As such they will be represented on the co-operative's board of directors.

The farmers settled on each farm would elect representative farmer committees, one for each farm. These committees, on which the relevant extension officers would have a seat would be responsible for:

- operational planning and co-ordination of communal activities such as mechanization (ploughing, planting etc.) marketing etc. which will all require joint decision making by farmers;
- liaison with LAC, tribal authorities, co-operative management etc.;
- settlement of minor disputes;
- recommendations to the land allocation committee on settlements, consolidation of plots, evictions etc.; and
- handling of day to day problems of an operational nature.

Each farmer would be individually responsible for the full management of his/her own unit including decision making on all his/her production activities. Livestock farmers would organize their own representative livestock farmer committees with similar responsibilities as above.

1.2.6 Mechanization contractors

Should mechanization contractors be established the institutional arrangements as per the project description should be applicable for the privatization of the maize project.

1.2.7 Phokoane land allocation committee

A land allocation committee for Phokoane would be established. This committee would take responsibility for all land related matters under the privatization of the Phokoane Maize project including farmer selection with representation of:

- The Nebo district Magistrate
- 3 Representatives of the Phokoane tribal authority
- Chairman of the Board of directors of the Phokoane Co-operative
- Phokoane Co-operative manager
- Regional Director for Agriculture: Nebo

This committee would operate on an on-going basis and deal with new allocations, re-allocations, consolidation of plots and, if necessary disciplinary action and evictions. Farmer selection would be based on objective criteria, equal access for selection transferability of production rights and full commitment for expenditure incurred in the operation.

1.3 Technical structuring

Since no technical structuring initially existed in Kadishi, only the Phokoane situation is described.

1.3.1 Mechanization

The mechanization package of the Phokoane maize project would be transferred at outstanding loan value plus capitalized interest to the Phokoane Co-operative.

The co-operative would render mechanization services to its members and LAC farming activities. The co-operative would be enabled to sell the equipment to interested private contractors and or farmers in accordance with the guidelines established in the project description of the Lebowa FSP.

The transferred equipment would form part of the existing mechanization package run as a separate cost centre within the co-operative. Services rendered to farmers and/or LAC farming activities would be at tariffs representing full cost recovery and including proportionate allocations of co-operative overhead costs. Tariffs would be calculated in accordance with guidelines established in the project description of the Lebowa FSP.

1.3.2 Production inputs

The Phokoane Co-operative would be responsible for the provision of production inputs to Phokoane farmers at market related prices. Funds provided by DBSA under the original maize project would be on-lended by LDC through LAC to the co-operative to enable it to

provide credit to farmers for production inputs and mechanization costs.

1.3.3 Buildings and facilities

Buildings and facilities financed under the Phokoane maize project together with those financed under the Lebowa FSP would be utilized by the Phokoane Co-operative to render the necessary services to Phokoane farmers.

1.3.4 Advisory support

Technical advisory support to farmers would be provided by the Co-operative Management and extension officers. Private Sector firms were already involved in this aspect under the Farmer Support Programme and the benefits thereof would be extended to newly settled Phokoane farmers.

1.4 Financial structuring

1.4.1 Fixed improvements

Fixed improvements financed under the Lebowa Farmer Support Programme would be utilized and no new fixed improvements were needed under the privatized project.

1.4.2 Moveable assets

All moveable assets financed under the Phokoane maize project would be transferred to the Phokoane Co-operative at outstanding loan value plus capitalized interest. Outstanding financial commitments by LAC on this equipment would be taken over by the co-operative on the applicable DBSA financial terms.

1.4.3 Production inputs

The loan for production inputs under the original Phokoane maize project would be made available by LAC to the Phokoane Co-operative on the applicable DBSA financial terms. This would enable the co-operative to provide production credit to individual farmers.

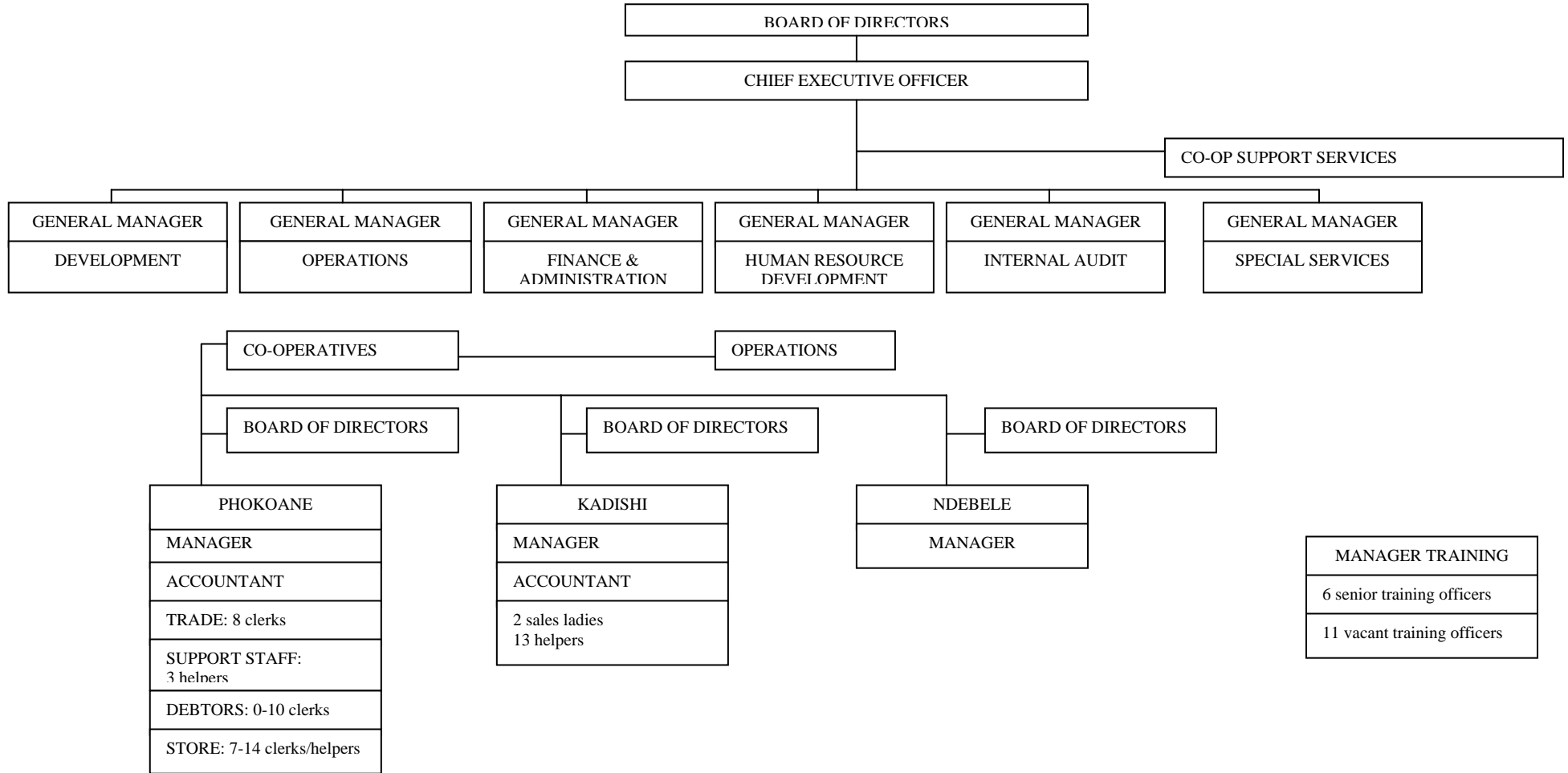
1.4.4 On-lending

The co-operative would be enabled to charge a levy of 4 percentage points additional interest on production credit and moveable asset finance provided to farmers and/or contractors to cover risk and administration costs of the loans.

1.4.5 Monitor and control

As the Phokoane project was incorporated in its entirety within the Lebowa Farmer Support Programme monitor and control of the implementation of this project would take place jointly with that programme and stipulations in that project description in this regard would *mutatis mutandis* be applicable to this project.

LEBOWA AGRICULTURAL CORPORATION LIMITED



2. THE INSTITUTIONAL STRUCTURE AS IMPLEMENTED

The purpose of this section is to discuss the institutional structure of the FSP in Lebowa as currently in operation. The intention of this discussion is to illuminate the deviation from the proposed institutional structure as discussed above.

2.1 Farmer Committees

It seems as if the FSP is promoted by officers invoked with the training programme with the Manager: Training of LAC as the driving force.

2.2 The Co-operatives at Phokoane and Kadishi

Two of the secondary co-operatives in Lebowa, i.e. Phokoane and Kadishi play an important role in the implementation of the FSP in Lebowa. Inputs, credit, ploughing services and advise are provided to the farmers through these two co-operatives. The Phokoane co-operative, supported by FSP and Non-FSP members is currently one of the few co-operatives in Southern Africa yielding profits. It is estimated that more than 4 000 households do their business there. If the average household size is taken into account, the estimated number of people served by the co-operative could be in the range of 28 500 people. This co-operative does not only supply inputs and some logistical support regarding mechanization and credit, but also arranges marketing opportunities, coordinate mechanisation services, and acts as development coordinator. The manager of the co-operative, appointed and remunerated by LAC, is responsible for all the managerial decisions tasks. His accountant is also a LAC employee. This, to our mind, is counterproductive to the intended principle of "learning by doing". The question therefore arises, what will happen to the co-operative when these expertise are not available any more and members having to manage the co-operative themselves?

The Kadishi co-operative is situated in a remote and isolated area of Lebowa. The FSP was implemented in Kadishi during 1991 and it is only since then that credit was provided to the members of the Kadishi co-operative. Some of the group leaders in Kadishi admitted that credit was the major constraint in agricultural production in that area. The provision of credit and training services resulted in a drastic increase in turnover, despite the severe drought. Similar to the situation at the Phokoane co-operative, the manager and the accountant are LAC employees.

2.3 The Lebowa Government

It seems as if the Lebowa Department of Agriculture is not interested in and committed to the F'SP, as observed by some of the extension officers previously working for the Department. Some of the regional directors showed some interest in the programme but generally the regional directors envy the success of the FSP and therefore they view the FSP as a threat to the Department of Agriculture and to their position. It has been said that this could be one of the reasons why the regional directors of the Lebowa Department of Agriculture do not provide any support to the F'SP.

At present more than 500 extension officers are employed by the Department of Agriculture. Apart from the two extension officers seconded to LAC for the FSP, none of the other 500 are involved in the FSP extension and training programme as they view the programme as "too much work". From our observation it would appear that the 4 training officers working on the FSP, are effectively reaching more farmers than the Department of Agriculture in Lebowa.

2.4 Lebowa Agricultural Corporation

The Lebowa Agricultural Corporation (LAC) was instrumental in implementing the FSP in Lebowa. As stipulated in the project description the LAC was responsible for the privatisation of the Phokoane Dryland Maize Project. LAC transferred all moveable assets of the maize project to the co-operatives at outstanding loan value plus capitalized interest.

LAC's approach to the development problem is people oriented and demand-driven and is basically a bottom-up approach. The FSP in Lebowa was designed and implemented by the then manager of the Phokoane co-operative and employee of LAC, Johan Adendorf, and the programme became a personal mission, pursued with missionary zeal and total commitment. One crucial aspect to the development of the programme was the freedom he was allowed from LAC. The LAC official responsible for the FSP did not manage or prescribe to Adendorf and instead worked with him, listening, meeting the farmers, etc.

LAC does however fulfill a supportive role to the co-operatives through the provision of management expertise, etc. The provision and scheduling of extension and training is also a further responsibility of the LAC officials and the two extension officers seconded from the LDA.

2.5 Farmers

Through interviews with some of the farmers who are members of the FSPs in Phokoane and Kadishi it was evident that they are generally very pleased with their improved situation after joining the FSP. They ascribe this mainly to training, because they view the lack of knowledge as the main factor inhibiting agricultural production. Inputs were always available but they did not know how to apply it.

The programme in Lebowa is based on voluntary participation. No farmer is forced into the programme or forced to join or form a farmer group. Groups are activated spontaneously through the success of the programme. Although the farmer groups are essential to the working of the programme in terms of implementation, divisions and group failure do occur.

The programme does not dictate to farmers on input use. It provides direction to the farmers and increase their farming options, farmers are still in control and practical farming decisions are taken by the farmers themselves, farmers only qualify for credit after they have completed the first phase of the training course.

The role of the tribal chief in the successful implementation of the PSP's seems to be small, which to a certain extent indicate their little support. However, as some group leaders mentioned, initially the chiefs were against this "new" FSP approach but changed their

attitude towards the programme because their people are satisfied and have enough to eat, even despite the severe drought.

3. AN OVERVIEW OF THE ACTIVITIES OF THE TWO PRIMARY CO-OPERATIVES WITHIN THE LEBOWA FSP

The Lebowa Farmer Support Programme was implemented towards the end of 1988 with the first credit provided to Phokoane farmers in October 1988 intended for the 1988/89 production season. The first group of farmers also took part in the first training programme during that year. The main elements of the Farmer Support Programme in Lebowa are in order of importance:-

- Extension and training
- Inputs
- Mechanisation
- Credit
- Marketing

Extension and training are for various reasons the main thrust of the FSP in Lebowa. Mechanisation and specific ploughing services as well as agricultural inputs were generally available and used in the rural areas of Lebowa. Lack of knowledge was however the major problem farmers faced in these areas. Knowledge of agricultural production being the major constraint, therefore, naturally resulted in the emphasis of the programme being placed on extension and training. Ploughing services as well as credit and inputs are provided to the farmers via the primary co-operatives at Phokoane, Kadishi and Ndebele.

The evaluation of the Farmer Support Programme in Lebowa was conducted in two FSP areas, i.e. Phokoane and Kadishi. Household surveys in these two areas were already conducted during 1991. The purpose of this section is therefore to give some indication of the nature and extent of the operation of the co-operatives in Phokoane and Kadishi.

The Phokoane co-operative is situated at Phokoane in the Nebo area approximately 50 kilometres east of Groblersdal. The co-operative has at present 2 248 members, all of whom paid their R20 membership fee.

The Kadishi co-operative situated 34 kilometres west of Graskop, is the smaller co-operative of the two with 146 members at present, paying the full membership fee of R100 over a period of five years. A comparison of the operation of the two co-operatives is provided in Table 1.

Table 1: A comparison of the Phokoane and Kadishi FSP co-operatives

Season	Phokoane					Kadishi				
	Members	Area Planted	Credit per ha	Total Loan	Repayment	Members	Area Planted	Credit per ha	Total loan	Repayment
1988/89	239	200 ha								
1989/90	830	1 036 ha	340-00	R 90 000	77.7					
1990/91	1 637	1 300 ha	340-00	R180 000	76.6	126	800 ha	453-55		
1991/92	2 248	1900 ha	486-50	R240 000	66.0	146	23 ha *	463-55	R8000	57.3
1992/93	2 703					146	?	?	?	

* Due to drought

The increase in membership in both cases is encouraging and reflects to some extent the success of the programme in the two areas.

The annual turnover of the Phokoane co-operative increased from R250 000 in 1988/89 to R1 920 000 in 1991/92. The high turnover of the co-operative as well as the central role it plays in the implementation of the FSP in the Phokoane area, clearly emphasises the importance of good management in the co-operative. The management committee of the co-operative is clearly aware of this and have great respect and appreciation for the work done by the co-operative manager appointed by LAC.

The annual turnover of the Kadishi co-operative amounts to R840 000. An analysis of the monthly sales statistics shows that the sales of agricultural inputs were higher after members received training because they were now applying the correct production techniques and using the correct amount of inputs. The availability and accessibility of credit could also have contributed to the increase in sales. Before the implementation of the FSP the monthly turnover during the planting season was usually in the order of R50 000, but after implementation of the programme (training and credit) the monthly turnover during the planting season increased to R145 000.

3.1 Management committee and staff

The management committee (or Board of Directors) of the Phokoane co-operative comprises of 7 members, six being farmers and one being a contractor/businessman/farmer. The manager of the co-operative, appointed by LAC, reports directly to the management committee. The chairman of the management committee admitted that they as directors and as co-operative members are very depended on the expertise of the manager. In all practical terms he basically runs the co-operative in consultation with the board of directors. He has sole responsibility for allocating loans, choice and purchase of input supplies and other stock.

The Phokoane co-operative employs an average of 23 people. The number of employees varies according to the season with as many as 35 people employed during the planting season. The staff of the co-operative comprises of the manager and accountant (remunerated by LAC), one senior clerk, 2 sales ladies, between 8 and 18 clerks, one driver and between 7 and 14 general assistants. The annual salary bill amounts to R84 000 and in addition the co-operative pays LAC an annual management fee of R36 000 for the services of the

manager and accountant.

The management committee of the Kadishi co-operative also comprises of seven (7) members, all being farmers. The similar situation as at Phokoane exists here with the manager and accountant appointed by LAC. In addition to the accountant and the manager, the staff at the Kadishi co-operative consists of two sales ladies and 13 helpers.

3.2 Mechanisation

Both co-operatives do not provide direct mechanisation services, but play a very important role in coordinating and facilitating the mechanisation service which is largely provided by private contractors. The Phokoane co-operative offers the following mechanisation services:-

- the co-operative's own tractors and implements are available to farmers;
- private tractor owners contracted by the co-operative.

The project description provides for the transfer of the mechanization package of the Phokoane maize project at outstanding loan value plus capitalized interest to the Phokoane Co-operative. As provided in the project description, the co-operative could sell tractors and equipment to interested private parties. The Phokoane co-operative sold most of its tractors on a five year loan basis to 15 individuals with the agreement that these new tractor owners should serve the "wishes" of the co-operative and the local farming community as to where, when and how to plough. Due to the continual growth of the programme the co-operative increasingly has to rely on additional private tractor owners to provide the ever expanding mechanisation service. During the 1991/92 season the co-operative arranged an additional 18 contractors to assist in providing ploughing services to the Phokoane farmers.

The co-operative coordinates and control the mechanization services provided by the private contractors. The co-operative once a year arranges a coordinating meeting between the management committee and the private contractors. The co-operative also compiles a list of tractor owners in the Phokoane area who are prepared to provide ploughing services to the farmers. Each farmer group will select a number of contractors to plough their fields, Each farmer has to approach the co-operative in order to arrange a specific day and time for his fields to be ploughed. From this the co-operative draws up a time schedule for each of the contractors and thereby ensures an efficient and fair utilisation of the limited tractor capacity.

The use of private contractors requires a control system to ensure contractors maintain acceptable standards of cultivation. The system that was devised made farmers themselves responsible for the quality of ploughing and planting of their fields. Upon concluding their credit arrangement with the co-operative, every farmer receives a duplicate set of tickets for ploughing and planting. The farmer will hand his ticket to the contractor only if he/she is satisfied with the contractor's work. The contractor needs the ticket to claim his money from the co-operative. This control system is very effective and the contractors are also satisfied with the system as they are guaranteed payment via the co-operative.

The Phokoane co-operative (or rather LAC) has 2 tractors with implements which are mainly used for the co-operative's own purpose. The following implements owned by the co-operative are hired out to contractors or farmers at a daily rate of R75:

- 15 maize planters
- 4 cultivators
- 8 rolling cultivators
- 5 vibrofax soil preparation implements.

Members of the Phokoane co-operative are in general satisfied with the mechanisation service provided via the co-operative.

In Kadishi the similar situation regarding mechanisation prevails. There are between seven and nine private contractors operating in the Kadishi area. The Kadishi farmers are, however, not satisfied with the ploughing services provided by the contractors. The contractors are apparently not willing to plough the depth as was taught to the farmers in the training courses. A further problem is that the contractors *do* not provide planting or mechanical fertilisation services. This is partly due to the rocky soils of Kadishi which damages implements and prevent contractors from applying the correct ploughing depth as well as not providing planting services. At present the farmers in Kadishi plant and fertilise in the traditional way - by hand!

Table 2 : Mechanisation and input costs per hectare - Phokoane

Season	Tractor services			Fertiliser		Seed Sensako 2147	Total cost per hectare
	Plough	Disc	Plant	3.2.0	L.A.N		
1989/90	80.00	40.00	50.00	96.00	44.00	30.00	340.00
1990/91	80.00	40.00	50.00	96.00	44.00	30.00	340.00
1991/92	104.50	66.00	66.00	144.00	66.00	40.00	486.50

3.3 Credit

Revolving credit for fertilizer, ploughing, discing, seed, etc. is advanced to members who have access to arable land. Credit is provided according to the area of land and is calculated on a per hectare basis. Credit provided to members for the 1991/92 season amounted to R486.50 per hectare at Phokoane and R463.55 at Kadishi. Members usually qualify for credit after attending one of the training courses. A deposit of 50 per cent is required for any credit arrangement but if a member has already received training this requirement is reduced to 40 per cent. To qualify for credit, farmers will have to clear the previous year's production loan plus interest. The composition of the credit amount for farmers in the Phokoane area is shown in Table 2. The rates in Kadishi consisted of R 128.55 for 3:2:0, R70.00 for LAN, R35.00 for seed, R100.00 for ploughing, R60.00 for discing and R70.00 for planting. Thus, total credit of R463.55 per hectare. The Kadishi co-operative only implemented their credit facility during the 1991/92 production season and extended a total loan of R8 000 to 39 farmers. The interest rate at both co-operatives is 18% per annum (or 1.5% JXT month) and the farmers are given 9 months to repay their loan.

The training manager at LAC, the managers of the co-operatives, the farmer group leaders and co-operative directors are of the opinion that most of the farmers know they have to repay their loans, know the terms involved, understand the concept of interest and are aware

of the consequences if they do not repay their loans. Crop failure and drought are the main reasons why farmers are not repaying their loans. The default rates for the last season are 37 per cent in Kadishi and 34 per cent in Phokoane. There are a number of actions the co-operatives can take to ensure that the farmers repay their loans. If a member has not repaid his/her loan after 9 months, the management committee of the co-operative will have a meeting with such a member to urge him to repay his debt. If a member still fails he will be referred to the local council where the chief will do his best to ensure that the member repays his debt. The last option will naturally be court action.

Most of the Phokoane farmers make use of the credit facility at the co-operative, however, some farmers prefer not to take up the credit and rather pay cash for services and inputs. Farmers are generally advised to pay cash for inputs if they do have available funds.

3.4 Inputs

Soil surveys and analysis were carried out in order to determine the specific type of fertiliser to use in the FSP areas as well as the correct application rates. The recommendations that followed from these analyses are conveyed to the farmers by means of the training courses. It forms a major part of the phase 1 course. The farmers through the years applied only the fertilisers that were available (usually the wrong type) or which they could afford. The recommended application rates of fertiliser in the Kadishi and Phokoane areas are similar, i.e.:-

- 3 bags (150 kg) of 3:2:0 per hectare, plus
- 2 bags (100 kg) of LAN per hectare

It is also recommended to the farmers to use 10kg of Sensako 2147 (a hybrid cultivar) per hectare as the maize cultivar to be planted.

The Phokoane co-operative provided some interesting statistics regarding their total sales of fertiliser and maize seed over the past three seasons. The sales statistics were provided in terms of hectares, calculated according to the recommended application rates. From Table 3 it is evident that enough fertiliser was sold to fertilise at least 3 380 hectares at the recommended application rate. This should be compared with the total area cultivated by FSP members, namely 1 900 hectares. The same trend was apparent in the sales of seed. Seed for at least 4 057 hectares were sold during the 1991/92 season. These statistics clearly give the impression that the FSP has some spill-over effects with non-member farmers practising the production techniques as taught to the FSP farmers. It is clear that the successful yields of FSP members have resulted in a demonstration effect to other households in the area.

Table 3 : Sales of inputs at Phokoane Co-operative, 1991 92 (calculated in hectares).

Year	Fertiliser	Seed	Area cultivated by FSP members
1989/90	1172 ha	669 ha	1036 ha
1990/91	1904 ha	2297 ha	1300 ha
1991/92	3380 ha	4057 ha	1900 ha

The yields of the previous season (1990/91) in the two areas were as follows. The crop and yields for the 1991/92 production season were considerably lower due to the drought, but at least there was some harvest.

Table 4 : Maize yields in Phokoane and Kadishi (1990/91).

	Phokoane	Kadishi
Target yields (1990/91)	3.0 t/ha	3.0 t /ha
Actual yields	2.8 t/ha	3.5 t/ha

3.5 Extension

Extension and training are provided to the farmers in the Phokoane and Kadishi areas by the LAC training section consisting of two senior training officers and two extension officers seconded from LDA. These four men, have since the implementation of the programme, reached almost 4 000 households. Many of the farmers only became members of the respective co-operatives after completion of the training schedule. The training schedules are coordinated through the co-operatives and the extension officers also use the co-operatives as their "base". Training is, however, given in the specific village or area of each farmer group.

The success of the training programme is evident from the increase in yields experienced by the majority of farmers who completed the training programme. The success of these farmers has resulted in an increase in demand for training. The expectation thus far created, could become the biggest threat to the FSP in Lebowa as there is only limited manpower to provide the extension and training. This threat forced LAC to embark on a new initiative to train more officers for specific application in the FSP areas. This is also a pro-active measure in view of the intended implementation of the FSP in other areas of Lebowa which will put further strain on an already full training schedule. The number of farmers who attended training courses in each of the two areas is indicated in Table 5.

Table 5: Number of farmers attending training courses at Phokoane and Kadishi

Season	Phokoane		Kadishi	
	Phase 1	Phase 2	Phase 1	Phase 2
1989/90	48			
1990/91	814		146	
1991/92	460	640	0 *	31
1992/93	492	386	- **	- **

* Training was suspended due to political unrest in the Kadishi area

** Due to the drought, farmers were involved in non-agricultural activities

Phase 1 consists of basic training, explaining the very basic principles of maize production, while Phase 2 consisted of more advanced lectures, touching on elements of soil conservation, plant protection, finance, etc. The drop-out rate from Phase 1 to Phase 2 is 28 per cent in Phokoane and 38 per cent in Kadishi. After successful completion of each training course, farmers were issued with certificates. By the end of 1992, 1 960 certificates were issued to farmers who have already completed the Phase 1 training course. At that same point in time 1 057 farmers have completed the Phase 2 training course in Phokoane and Kadishi.

3.6 Marketing

The Phokoane and Kadishi co-operatives provide limited marketing facilities to their members, by providing mainly storage facilities and facilities whereby coarse maize can be exchanged for maize meal. I-SP members in the Phokoane area have the option of delivering their maize for the above mentioned purposes to either the Phokoane co-operative or the OTK's Sekhukhunie mill situated adjacent to the Phokoane co-operative. A large group of the FSP members deliver their maize at the OTK mill as the milling fee is somewhat lower than the fee charged by the co-operative. In addition, members also indicated that the maize meal originating from this mill tastes better. The difference in exchange fees is attributed to the fact that the co-operative does not own its own mill. The co-operative only serves as a depot from where the maize are transported by road to the nearest mill. The exchange/milling fee charged by the two co-operatives are presented in Table 6.

Table 6 Exchange/milling fees

Weight of bag	Phokoane Co-operative	OTK
80kg bag (meal)	R 8.25	R 7.00
50kg bag (meal)	R 7.15	R 6.50

Note : 80kg maize meal are produced of 96kg of coarse maize
50kg maize' meal are produced of 60 kg of coarse maize.

The Phokoane co-operative delivers its maize receipts to a mill which falls under the jurisdiction of the Maize Board. The mill therefore has to comply with the regulations and policy of the Maize Board. This arrangement could in some instances work to the detriment

of the FSP farmers. The current year is such an example. Because of the shortage of white maize in the country due to the drought, all millers are compelled to mix white and yellow maize meal. Due to this, FSP members who battled to produce their few bags of white maize now receive a mixture of yellow and white maize meal. As the people prefer white maize this creates all sorts of frustrations and suspicion amongst the farmers. It is for this very reason the co-operative at one stage thought of investing in his own mill. This is once again another example of how the present marketing structure discriminates against the subsistence and small farmers in South Africa.

An indication of the deliveries of maize received by the Phokoane co-operative is provided in Table 7. This is also compared with the receipts of the OTK mill in certain years.

Table 7 : Maize deliveries at Phokoane Co-operative

Year	Phokoane Co-operative			OTK mill
	Total Receipts	Storage	Sales	Total Receipts
1989/90	1 828 t	1 620 t	208 t	-
1990/91	2 145 t	1 416 t	729 t	3 300 t
1991/92	820 t	686 t	134 t	1 400 t

In 1990/91 Phokoane farmers delivered 2 145 tons of maize to the Phokoane co-operative and 3 300 tons of maize to the OTK mill. If an estimation is made of maize sold to local traders and of maize used for household purposes, the total production of maize in that year in the total Phokoane area (FSP and non-FSP) could be in the order of 9 000 tons. From the above, it can be concluded that the area under maize cultivation exceeds 3 000 ha. It is estimated that maize deliveries in the total area during the 1991/92 season were down to 2 500 tons due to the drought.

Notable from the table above is the increase in the sales of maize relative to storage. In 1989/90 farmers sold on average 11.4 per cent of their crop. This increased in the following year to 34 per cent. This provides some indication that the households are more food secure and therefore has surplus maize to sell. On the other hand it could be argued that farmers were forced to sell more of their crop to settle outstanding debts and therefore it could imply that food security did not improve but merely stabilised.

The marketing situation at the Kadishi co-operative are similar. Maize deliveries increased from 122 tons in 1989/90 to 220 tons in 1990/91. The share of the maize crop delivered to the co-operative increased from 43% to 60% over the same period. It is expected that the 1991/92 maize crop would virtually be zero. However, the community are food secured due to previous good yields and households storing enough maize to provide for as much as three years' needs, in some cases.

4. CONCLUSION

From the discussion above it seems, as if the success of the FSP in Phokoane is based on access to one of the FSP elements, namely training. All other elements are in one or another way attached to this service. At present, it seems as if the FSP is successful, but it must be stressed that this is to a great extent based on the positive influence and commitment by the LAC officials involved in the FSP.

In general, it can be concluded that the implementing agents in Lebowa are determined to contribute to the upliftment of the rural population. Institutional record keeping is improving and the impression is gained that the FSP in Lebowa is successful. However, own decision-making by the participants and co-operatives is lacking, which indicates that the FSP, to some extent does not meet the objective of "learning-by-doing".

The FSP in Lebowa has the support of the people as it helped them to overcome their major daily problem - hunger. The FSP chased hunger away, it improved the food security situation in these areas and contributed to a better livelihood for thousands of households in rural Lebowa.

The institutional structure in Lebowa for the implementation of the FSP is much slimmer than in Venda and there seems to be no major coordination problems as the programme is the sole responsibility of LAC. The dedication and commitment of the LAC officials and their two extension officers are the major factor contributing to the successful implementation of the FSP in Lebowa. The officials from LAC succeeded in bridging the cultural and communication gap between the implementing agent and the people. Although the approach is somewhat patronizing it is done in such a manner that nobody is offended.

The successful implementation of the FSP in Phokoane contradicts with the difficulties experienced with the programme in Kadishi. The success of the FSP in Phokoane can be attributed to the personal interest of the LAC extension officers (Adendorf and Van Tonder) in the Phokoane area. It could also be argued that their approach was specifically designed for the circumstances in the Phokoane area and was successful due to the fact that they are always present in the area and that they saw the programme as a personal challenge. The difficulties in Kadishi are to some extent attributed to the political division in the community and because the region is so isolated from the rest of Lebowa.

The FSP in Lebowa has improved food security in rural Lebowa. The question now remains, will the programme as currently implemented also help these households to become emerging or small commercial farmers?

PART 3 : KANGWANE

1. THE INSTITUTIONAL STRUCTURE AS OUTLINED IN THE PROJECT DESCRIPTION OF THE FSP IN KANGWANE

1.1 Introduction

The objectives of the FSP in KaNgwane are similar to the FSP in the other regions namely, the promotion of structural change, away from subsistence agricultural production to commercial production by providing comprehensive agricultural support services and incentives to emerging farmers, thus facilitating increased efficiency of agricultural resource utilisation, food security and entrepreneurial ability over a broad front.

The KaNgwane FSP was introduced in four phases. The first three phases addressed the provision of sheds, agricultural inputs and small scale water supply systems, respectively. The Livestock Farmer Support Programme is the fourth FSP to be implemented in KaNgwane, but the First specifically addressing support for livestock production. The second phase of the KaNgwane FSP is partly an extension of the first phase to provide more comprehensively for mechanisation services as well as an expansion of all FSP elements into new areas. Furthermore, it will entail the provision of further comprehensive farmer support services to approximately 2 700 additional small-scale farmers on approximately 10 000 ha in eight additional localities in all three main regions of KaNgwane.

The project consists of the supply of comprehensive agricultural support services consisting of the following elements:

Service centres

The provision of eight service centres, to farmer groups, to facilitate the furnishing of the following farmer support services in new localities within the three main regions of KaNgwane:

- Production inputs and capital requirements;
- credit of farmers;
- marketing;
- training; and
- extension, demonstration and research.

Mechanisation services

The second phase of the implementation of the FSP would involve the provision of credit to approximately 30 additional contractors for the repair of their existing tractors, or the purchase of second-hand reconditioned tractors. It will also finance the purchase of equipment for both the 26 existing contractors established during KaNgwane FSP I and the

30 additional contractors to enable them to provide comprehensive services to the farmers and the local community, as required.

Irrigation equipment for small-scale farmers

The financing of approximately 26 individual farmers or farmer groups to purchase irrigation equipment and engines for their existing small irrigation farms on which they have *de facto* land rights.

Production loans to farmers

The provision of production loans to dryland farmers, as well as for new small-scale irrigation farmers, for the partial financing of short-term production inputs for their crops. The existing production loan facilities provided for in KaNgwane FSP I are considered sufficient to cater for KaNgwane FSP II requirements as well.

Training and extension

The comprehensive support services will assist farmers and contractors to utilise existing skills in raising the productivity of land, labour and capital, as well as upgrading the farmers and contractors' skills through extension and training.

The training facilities provided for under a separate loan will be sufficient for KaNgwane FSP II requirements as well.

1.2 INSTITUTIONAL STRUCTURE AND FUNCTIONS

The institutional structure to be followed in the implementation of the FSP in KaNgwane was decided upon after discussion between the borrower (Agriwane) and DBSA. The programme was structured according to the needs and conditions of Agriwane as they are familiar with the local circumstances. Thus, the programme was designed by Agriwane in close cooperation with DBSA taking into account the realities of agriculture in KaNgwane.

1.2.1 Agriwane

According to the project description Agriwane will have the responsibility to implement the programme and to provide management support for the KaNgwane FSP. They should recover their costs for all elements for which they are responsible, by way of a nett annual budgetary allocation from the KaNgwane Government and mark-up on production inputs to farmers. Agriwane will also be responsible for the implementation of the following elements and facilities:

Service centres

According to the project description Agriwane will oversee the construction of the eight service centres to be undertaken with the assistance of local entrepreneurs and the local community at an estimated cost of R296 000. Tender procedures will be applied should outside contractors construct the service centres or part thereof. The following criteria were

to be applied in the selection of localities for service centre construction:

- There should be sufficient agricultural potential of the natural resource base;
- significant actual and potential demand for support services by individuals and communities;
- availability of existing infrastructure such as access roads, water, etc.; and
- sound co-operation between the Tribal Authorities and their respective communities in respect of support services.

Mechanisation services

It was also specified that Agriwane will make loans available to contractors for the repair of additional tractors or the purchase of second-hand reconditioned tractors, as well as for the purchase of equipment for new and existing contractors. Based on the estimated average repair/purchase cost of R7 000 per tractor and average equipment cost of R3 000 per unit on which contractors will pay approximately 5 per cent deposit, the total loan amounts to be furnished to contractors amounted to R381 000, consisting of R210 000 for approximately 30 tractors and R171 000 for equipment for approximately 60 contractors.

Selection of contractors

With regard to the selection of contractors, it was agreed that Agriwane will, in consultation with the Tribal Authorities and the Farmers' Associations, select approximately 60 contractors using the following selection criteria:

- They are recognised members of the community;
- they have a reasonable credit rating;
- they preferably own a second-hand tractor;
- their respective localities are not already over-supplied; and
- approval of respective Tribal Authorities is obtained.

The responsibility of training of the contractors was also given to Agriwane. Training of the contractors was viewed as important to ensure that the contractors are initially trained in basic tractor maintenance. This will be followed with further training in financial and other related aspects. Based on the principle of freedom of choice, Agriwane will train, encourage and assist contractors to open up personal savings accounts with commercial banks in order to provide for tractor and equipment maintenance costs and other contingencies. In an effort to explore various alternatives relating to the maintenance issue, Agriwane will also investigate a possibility of making arrangements with an appropriate private sector garage capable of providing a reliable maintenance service to the contractors and simultaneously determine a possibility of handling contractors maintenance accounts on behalf of such a garage.

Irrigation equipment for small-scale farmers

According to the project description Agriwane will in phase two of the project make funds available to approximately 26 individual farmers or farmer groups for the purchase of irrigation equipment and engines as well as being responsible for assisting in the overseeing of the detailed planning and implementation of small irrigation farms.

The provision of medium term loans for a maximum of approximately 26 small irrigation farms of between 1 ha and 15 ha each, at an estimated average cost of R30 000 per farm will result in a total cost to all farmers amounting to R780 000. The loan to each farmer will cater for the purchase of irrigation equipment such as mainlines, engines, etc. The cost of the design by an outside consultant will be added to the total cost. Farmers will pay a deposit of approximately 5 per cent on the purchase price.

It was decided that support to small irrigation farms will be in accordance with the following criteria:

- Demand analysis;
- de facto land rights;
- agricultural potential of the area;
- availability of basic infrastructure such as roads;
- proximity to and reliability of water supply;
- credit-worthiness of the farmer;
- financial feasibility of the farm; and
- Tribal Authority approval and granting of right to occupy.

The following design criteria applied to the irrigation systems:

- Technical design should accommodate the given properties of the natural resources;
- suitable and reliable irrigation water should be available and be able to be utilised on a cost-effective basis;
- appropriate technology to optimise the stated development objectives and all design criteria should be applied within resource and market constraints; and
- technical design should promote the intended target income of small-scale irrigation farmers.

Marketing

With regard to marketing, it was decided that Agriwane will co-ordinate the marketing of the surplus production through the service centres in conjunction with the private sector in the case of cotton and a marketing agent in the case of other crops. No crop finance is deemed necessary at this stage. Marketing arrangements will focus on an investigation of a possibility of supplying agricultural products to local processing industries based on economic and financial viability. Agriwane will conduct this investigation in co-operation with the

KaNgwane Economic Development Corporation.

Training

The service centres will in each case serve as the base for the training programme.

A separate training project implemented by Agriwane was also foreseen. This will provide for mobile training units and the associated personnel for the overall training of both farmers and contractors in both KaNgwane FSP I and II, as well as subsequent developments. Special attention will be given to irrigation farmers under KaNgwane FSP II.

The Agriwane management involved in the provision of the other elements will also be involved in the training programme.

Demonstration Plots

Demonstration plots will be developed on portions of some individual dryland and irrigation farmer's arable land. The individual farmers will be responsible for the upkeep of their demonstration plots under the guidance of Agriwane staff in co-operation with the Extension Service, as was the case in some of the localities under KaNgwane FSP I. The plots will be utilized in both extension and training and will aid in the demonstration of improved technology. This will receive special attention, particularly with regard to the small-scale irrigation farms where extension, training and demonstration is considered a priority.

Agriwane Management

The same Agriwane management structure and functions identified in KaNgwane FSP I will also apply in Kangwane FSP II, supplemented by 8 additional service centre clerks, 2 project managers and 2 development officers.

Regional Managers

It was envisaged that Agriwane will utilise four regional managers, who will assume overall responsibility for the programme in each of the regions in KaNgwane. Their main responsibility remains with other Agriwane projects and only about 15% of their time will be spent on the second phase of the FSP in KaNgwane. The total estimated management time to be spent on both KaNgwane FSP I and II is, therefore, 46% (30% + 16%). Their responsibilities on this programme will include:

- liaison with the Tribal Authority and the Government Extension Officer;
- supervision of the project manager and development officers;
- assisting in the provisions of training; and
- the provision of credit.

Project Managers

The main managerial responsibility for the projects in each region was said to be with the project managers, who will be responsible for 3-7 programme localities each and will report

to regional managers.

The project managers' responsibilities will include:

- the co-ordination of development officers' functions;
- the supervision of the service centre clerks;
- routine checking of the contracting services and control over the contractors debt repayment;
- the control of maintenance/servicing for the contractors;
- participation in the training programme;
- routing checking of the small irrigation projects; and
- control over the farmers' debt repayment.

The project description also assigned certain responsibilities to:

- Development officers
- Service centre clerks

The service centres in each area will be run by a service centre clerk. The clerks will be employed by Agriwane and will report to the project managers and their responsibilities will include:

- stock issue and control of the production inputs as well as assisting in the marketing of produce;
- liaison with the farmers;
- assisting with the training programmes; and
- providing reports on the various support services to the project manager.

The service centre clerks will be selected from the community and will be appointed and trained in administrative aspects.

1.2.2 KaNgwane Department of Agriculture

According to the project description the main function of the Department in the KaNgwane FSP was to provide extension services in the specific programme localities. In addition to these functions, the Department will, through its Engineering Branch, also assist in the detailed planning of the small irrigation farms.

1.2.3 Liaison Committee

The existing regional liaison committees between Agriwane and the Department, as well as their regular contact at policy level, will be maintained.

1.2.4 Farmers' Associations

In order to strengthen formal farmer organisations and institutions, Agriwane has developed a five year programme. The programme is as follows:

Year One and Two

Establish or revive the Farmers' Associations and have them elect a Management Committee.

Agriwane will grant one production loan to the Association. The Association keeps a loan account for the association and individual farmers accounts for each farmer utilizing the loan facility. The clerk at the service centre keeps these books.

Year Three

The Management Committee of the Association starts taking over these accounts.

Year Four

The Association has sufficient funds from annual membership fees, and Agriwane together with the Association start planning the take-over of the service centre.

Year Five

The take-over is finalised.

Agriwane will, through its management and the training project encourage the Farmers' Association to play an active role in the provision of the support services. The intention is for the associations to be sufficiently active and organised to be in a position to control operations (at farm service levels) and also purchase the depots within five years of their establishment. This is a very important process in the programme and will require pro-active attention by Agriwane.

1.2.5 Contractors

The project description provides for the establishment of approximately thirty private contractors in each of the first two phases of the FSP, to enable them to provide services to farmers and other members of the community. It was envisaged that they will operate independently of Agriwane. They will reach agreement with the farmers and farmer groups about the services which they are to provide and the control over the quality of work will lie with their clients.

The potential exists for the contractors to expand their role as Agriwane has indicated they would be willing to utilise them on other projects and the transportation of produce where needed.

The contractors will be selected and provided with the mechanical packages in time to provide ploughing services for the coming production season.

1.2.6 Integrated Rural Development Planning

In an effort to promote and optimise the impact of the FSP activities, it should be endeavoured to locate economic activities such as small business, cottage industries, community food gardens and other rural-based activities, together with the FSP service centres. Agriwane should, therefore, plan such target areas and the localities of service centres in consultation with the KaNgwane Economic Development Corporation and other institutions involved with integrated rural development.

1.3 MONITORING AND CONTROL

Agriwane will submit to DBSA regular progress reports to be prepared on a format already agreed upon, as well as maintain separate financial accounts for purposes of this programme to facilitate the monitoring process. Close monitoring of progress on KaNgwane FSP II will take place by means of regular meetings between Agriwane, the Department and the DBSA Project Team.

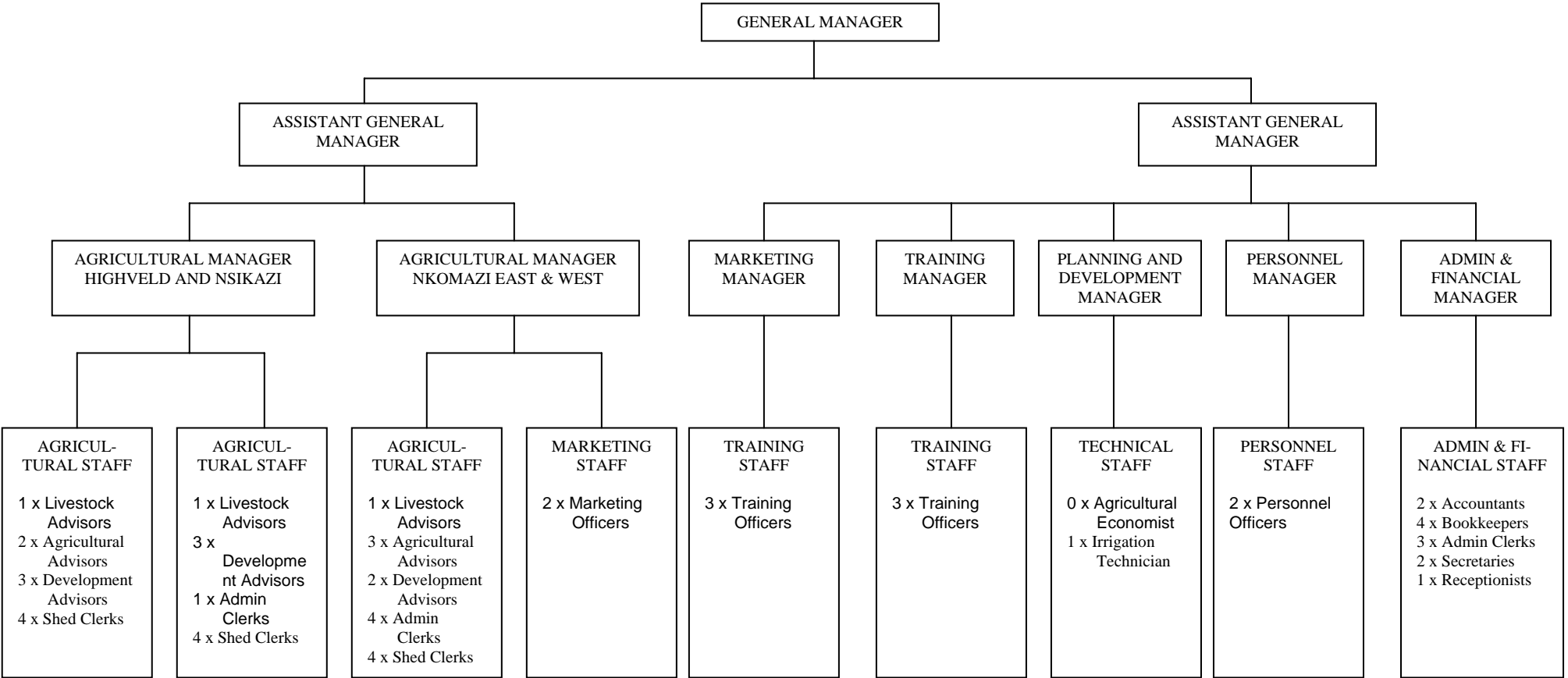
2. THE INSTITUTIONAL STRUCTURE AS IMPLEMENTED

The first support programme to small farmers based on the FSP principles was implemented by Agriwane. The manner in which the programme was implemented differs to some degree from the other regions discussed earlier. To investigate this aspect as well as to compare the implemented programme with the project description, this section provides, therefore an overview of the implementation of the FSP in KaNgwane and specifically the functioning of the institutional framework of the programme.

2.1 Agriwane and the KaNgwane Department of Agriculture

The Agricultural Development Corporation of KaNgwane (Agriwane) was responsible for the implementation of the very first FSP (Agriwane also calls the programme as the farmer support and development support programme - FS and DS) in South Africa. Agriwane was thus the first organization to borrow money from DBSA for this purpose and is currently responsible for the implementation and management of this programme in KaNgwane. The organizational structure of Agriwane is provided in Figure 1, indicating that the management and the implementation of the FSP is the responsibility of the Assistant General Manager: Agriculture and his two agricultural managers (respectively responsible for the Highveld, Nsikazi and Nkomazi East and West). The Department of Agriculture in KaNgwane also plays a role in the programme through the provision of extension and training services. Agriwane employs 26 extension officers while the Department has 104 extension officers in its service. The Department generally employs qualified extension officers with at least an agricultural diploma, whereas Agriwane employs specialists with grass roots experience who are knowledgeable on the agricultural practices in the particular regions.

ORGANIZATIONAL STRUCTURE: AGRIWANE



The fact that Agriwane also provides extension services to farmers leads to some tension between the junior officials of the two institutions. According to an arrangement between Agriwane and the Department it was decided that the Department of Agriculture will be solely responsible for training and that all extension officers would be transferred to the KaNgwane Department of Agriculture. However, at the beginning of December 1992 the 26 extension officers were still employed by Agriwane.

It was found that, at senior and management level cooperation between the two institutions is good. The KaNgwane Department of Agriculture has a bi-weekly management meeting. To ensure further coordination in agricultural development efforts in KaNgwane, the Assistant General Manager: Agriculture is also represented on the management committee of the Department of Agriculture. The General Manager of Agriwane and the Secretary of Agriculture in KaNgwane also meet regularly on an informal basis to ensure close cooperation between Agriwane and the Department. Regular informal project development meetings are also jointly held to discuss project proposals.

2.2 Liaison Committees

The regional liaison committees between the regional officials and Agriwane and the Department of Agriculture and officials of the local agriculture union meet formally on a monthly basis. The liaison committee meetings are reportedly working very well in the Nsikazi region and fairly well in the Highveld region. In the Nkomazi region the liaison committee is not meeting often and liaison is taking place on an irregular basis.

2.3 Farmers' Associations

There are presently 126 farmers' associations in KaNgwane with a total membership of 2 921 farmers. Of these, 12 associations are situated on formal project schemes but are also serviced under the FSP programme. A total of 87 farmers' associations (69%) are receiving assistance through the FSP programmes. The crops and acreage cultivated by some of the farming associations as well as the yields obtained are shown in Table 1.

Agriwane was not in a position to provide the research team with data on total yields recorded by each farmers' association. The reasons for this is that Agriwane does not control the marketing of the farmers' crops. They regard the farmers as "responsible individuals who are responsible for their own marketing". Agriwane apparently only assists the farmers when requested to do so. Agriwane, therefore, does not have records of the farmers yields nor have they access to the farmers' records. The average yields according to Agriwane are: maize = 3 tons/ha ; cotton = 1.5 tons/ha and groundnuts 1.5 tons/ha. Production loans to the farmers' association are also based on these yields.

Table 1 : Crops grown by selected Farmers' Associations in KaNgwane

Farmers' Association	Year	Maize	Cotton	Tomatoes	Groundnuts
Mashihambisane	1989/90	20 ha	0	0	0
	1990/91	46 ha	0	0	0
	1991/92	47 ha	0	0	0
	1992/93	31 ha	0	0	0
Mashibambisane	1989/90	37 ha	0	0	0
	1990/91	37 ha	0	0	0
	1991/92	35 ha	0	0	0
	1992/93	90 ha	0	0	0
Thutukane	1987/88	200 ha	56 ha	0	0
	1988/89	122 ha	65 ha	0	0
	1989/90	132 ha	89 ha	0	0
	1990/91	108 ha	127 ha	0	0
	1991/92	-	160 ha	0	0
	1992/93	-	185 ha	0	0
Juluka	1987/88	33 ha	0	0	0
	1988/89	40 ha	0	0	0
	1989/90	30 ha	0	0	0
	1990/91	30 ha	0	0	0
	1991/92	0 ha	0	14 ha	0
	1992/93	30 ha	0	0	0
Ingogo	1988/89	43 ha	0	0	0
Vukani (Swallowsnest)	1989/90	45 ha	0	0	0
	1990/91	50 ha	0	0	0
	1991/92	45 ha	0	0	0
	1992/93	45 ha	0	0	0
Nhlanhla	1989/90	0	0	0	28 ha
	1990/91	0	0	0	36 ha
	1991/92	-	-	-	-
	1991/93	-	-	-	-
Zamani	1987/88	200 ha	0	0	0
	1988/89	200 ha	0	0	0
	1989/90	100 ha	0	0	0
	1990/91	110 ha	0	0	0
	1991/92	-	0	0	0
	1992/93	-	0	0	0

3. AN OVERVIEW OF THE IMPLEMENTATION OF THE VARIOUS FSP ELEMENTS IN KANGWANE

3.1 Inputs

Agricultural inputs are provided to farmers through 22 agricultural service centres commonly known as "sheds":

Highveld region	-	5 sheds (One owned by Mashibambisane FA)
Nsikazi region	-	6 sheds (One privately owned by a FA in Hazyview district)
Nkomazi west	-	6 sheds
Nkomazi east	-	5 sheds

It should be emphasised that these service centres do not perform similar functions as a typical agricultural co-operative. The service centres are also not linked to the provision of mechanization services and do not play a role in the marketing of surplus produce as was intended in the project description.

In each of the areas the tribal authority allocated the site where these service centres were eventually erected. Many of these sites do however have a problem regarding accessibility as well as the availability of water. Although there was sound cooperation between the tribal authorities and Agriwane the criteria for selecting the localities for the construction of some of the service centres were not met. This is clearly a deviation from the project description and is in most of the cases caused by the self-interest of the tribal chief.

According to Agriwane's five year programme to strengthen the farmer organizations, Agriwane will assist farmers' associations in taking over the service centres. Agriwane is therefore currently in the process of selling off all the sheds. The Mashibambisane farmers' association was the first to take over a shed when they took over the Bettysgoed shed from Agriwane in 1989 along the lines suggested in the five year programme. In a separate report (Fisher, et al 1992) it was indicated how this take over resulted in the "shed" being the major problem for the Mashibambisane farmers' association. They have realised that they cannot run the shed on their own and their debt with Agriwane incurred as a result of the takeover is also a major problem for them. The main reason behind the problem was that the shed was bought complete with stock. The farmers' association was however, unable to meet the repayments of the loan which eventually lead to Agriwane not supplying any credit or stock to the Mashibambisane farmers' association. The FA was therefore unable to obtain credit in order to finance purchases of new supplies for the shed. With the initial stock being sold out, nothing was available to supply farmers with. Other farmer associations were as a result complaining about the take over due to the unavailability of certain inputs from the Bettysgoed shed. The question could also be asked if the new managers of the sheds were well trained to ensure a successful take-over.

Agriwane purchases inputs (e.g. seed and fertiliser) in bulk at a discount price from input suppliers and supply the various "sheds" according to their particular needs. The production inputs are sold to the farmers through the "sheds" at a predetermined price which include a

mark-up above the purchase price. The mark-up on the price of the production inputs is according to the project description and is used to finance Agriwane's operations as well as the cost of storing the various inputs. The farmers are able to purchase inputs (on credit or cash) in smaller units according to their needs at the service centres. The bulk purchases are thus repacked to suit the needs of the small-scale farmers. The value and tonnage of the annual fertiliser contract negotiated by Agriwane has increased since the introduction of the FS & DS programme from 2 800 tons (R1,3 million) to 3 950 tons (R2,0 million). Although there was some increase in fertiliser consumption on Agriwane's projects most of the increase can with some certainty be assigned to the FS & DS programme.

In interviewing farmers it was determined that farmers sometimes (12% of farmers) buy their inputs from the nearest town as it is often cheaper than the prices at the shed. This trend is furthermore also caused by the limited stocks of agricultural inputs at these service centres. However, in the majority of cases inadequate transport and infrastructure lead to farmers only being able to purchase inputs from the sheds.

Agriwane employs a service clerk at each of the sheds to manage the service centre and to control the stock and sales of inputs. Each of the clerks keeps record of sales and stocks. The documentation (records) from each of the service centres is collected at the four regional offices from where it is forwarded to the Agriwane head office. The process is not computerised and it is therefore somewhat difficult to obtain data on input sales, etc. from these documentation. In addition high employee turnover resulted in the disappearance of data/information on sales, etc at the shed. It is therefore not possible to determine if the implementation of the FSP in KaNgwane resulted in the greater availability of inputs or if it has resulted in an increase in the sales and usage of inputs. Agriwane is, however, in the process of computerising this process.

3.2 Credit

The mission of Agriwane is generally viewed as financing the development of agriculture in KaNgwane. The provision of credit to farmers and farmers' associations and ensuring the repayment of these loans is the major goal of Agriwane. Agriwane therefore emphasises their role as a financial intermediary and pays particular attention to financial management to ensure the lending of funds at minimum risk.

Agriwane provides credit on a group or association basis. This implies that one loan is provided to a farmers' association and that the association is responsible for the repayment of the total loan. Agriwane therefore requires dryland farmers to form a farmers' association before they can obtain any credit. However, exception to this rule is sometimes made when short and medium term loans are provided to a few individual farmers farming on irrigated land or larger dryland acreage. Agriwane is reluctant to supply credit to individual farmers due to their inability to provide collateral as security and due to the risk that individuals may disappear. Agriwane therefore relies on the pressure from the individual group members to ensure that loans are repaid.

Each farmers' association applies for a production loan at the beginning of the production season. This process requires the farmers' association to submit a budget specifying input needs for the coming season. After approving the loan Agriwane provides a letter of credit

to the association stating the physical quantities of the various inputs, which members of the association could purchase on a credit basis from the service centres. The management of the farmers' association allocates the approved credit facility amongst the members of the association. Each member is provided with his/her own letter of credit specifying the amounts of the various items they could purchase on credit from the service centres. This procedure ensures that the credit facility or loan is only used for productive ventures and only for the purchase of agricultural inputs. The on-lending procedure is therefore just a matter of book entries with no physical transfer of funds involved.

Agriwane recently decided that no loan will be provided to an association in the following crop year if less than 75 per cent of the loan for the current crop year is repaid. A new loan will only be provided if the outstanding (more than) 25 per cent are repaid. Agriwane provides financial training to the farmers' associations to ensure sound administration of these loans. Loans are provided to farmers' associations at an interest rate of 6 per cent. The individual loans to the members of the farmers' association are on-lended at an interest rate of 8 per cent. The 2 per cent "mark-up" is supposed to be used by the associations to finance the take-over of the various sheds. Agriwane also considers individual loan applications from irrigation farmers and larger dryland farmers. The interest rate charged on these loans amounts to 8 per cent per annum. The difference is related to the cost of obtaining life insurance for the individual applicant. The irrigation farmers produce crops, for example sugar and cotton, which have fixed marketing channels. It is therefore easier to ensure repayment of the individual loans in these cases.

Although the credit policy of Agriwane is very strict and to some extent a bit unfair to the individual farmer in the group who has repaid his loan punctually, Agriwane views the policy as effective with a low loan default rate. Agriwane officials recently indicated that they are currently considering a change in their credit policy. This change in policy would make it possible to accommodate farmers owing outstanding amounts, on an individual basis. Such farmers will have to be identified by the extension officers in each region. The system of group credit, however, creates a problem in this regard. It is particularly difficult to determine which of the individual members are responsible for the outstanding debt of the farmers' association as record keeping at the farmers' association is not of a high standard.

According to Agriwane the farmers also view the credit policy in a favourable light. This could be the case in certain farmers' association, but there is also a negative perception about the credit policy amongst other farmers in KaNgwane. For example in a recent survey amongst farmers in KaNgwane receiving group credit, it was determined that 22 per cent of these farmers did not favour the policy of group credit, furthermore 47,7 per cent of the respondents indicated that they do not feel responsible for the repayment of the loan of the farmers' association.

Table 2 : Loans and repayments of selected farmers' associations in KaNgwane

Farmers' Association	Crop Year	No of farmers	Total Loan granted	Credit/ha granted	Loan amount used	Repayment	Balance carried over
Zamani	1987/88	27	R31 000	R155.00	R27 784.88	R25 152.61	R 2 632.27
	1988/89	28	R37 406	R 187.03	R31 460.04	R12 946.60	R18 513.44
	1989/90	-	No loan	-	-	-	-
	1990/91	18	R43 972	R399.75	R42 776.35	R2 108.55	R40 667.80
	1991/92	-	No loan	-	-	-	-
	1992/93	-	No loan	-	-	-	-
Mashihambisane	1989/90	4	R 3 200	R160.00	R 4 381.47	R 2 394.58	R 1 986.89
	1990/91	7	R 7 360	R160.00	R 6 806.67	R 3 903.41	R 2 993.26
	1991/92	6	R 7 520	R160.00	R 6 711.18	R 6 733.96	R (22.78)
	1992/93	5	R 8 990	R290.00	*	*	*
Mashibambisane	1989/90	12	R 5 920	R160.00	R 4 610.63	R 3 525.40	R 1 085.23
	1990/91	12	R 5 920	R160.00	R 5 911.74	R 4 070.56	R 1 841.18
	1991/92	6	R 5 600	R160.00	R 5 494.62	R 5 111.10	R 383.52
	1992/93	15	R26 100	R290.00	*	*	*
Vukani (Swallowsnest)	1989/90	10	R13 500	R300.00	R11 373.30	R11 373.30	R 0.00
	1990/91	10	R25 050	R501.00	R21 249.40	R17 461.48	R 3 787.92
	1991/92	10	R30 000	R666.67	R22 436.83	R10 5(X).00	R11 936.83
	1992/93	10	R32 716	R727.04	*	*	*
Thutukane	1987/88	5	R 18 788	R335.50	R15 879.14	R16 492.92	R (613.78)
	1988/89	7	R 28 990	R446.00	R17 307.79	R 14 14-6.11	R 3 161.68
	1989/90	10	R 41 905	R470.84	R27 896.20	R26 027.50	R 1 868.70
	1990/91	19	R 78 740	R620.00	R48 037.52	R28 071.44	R19 966.08
	1991/92	24	R137 600	R860.00	@	@	
	1992/93	27	R 154 475	R835.00	*	•	
Juluka	1987/88	11	R 5 280	R 160.00	R 4 647.52	R 3 037.84	R 1 609.68
	1988/89	11	R25 380	R 540.00	R23 858.84	R 9 293.43	R14 565.41
	1989/90	13	R16 140	R 538.00	R15 336.60	R21 963.88	R(6 627.28)
	1990/91	11	R20 472	R 682.00	R 8 441.76	R 8 653.92	R (194.16)
	1991/92	11	R36 400	R2600.00	R18 518.15	R 4 501.88	R14 016.27
	1992/93	11	R26 330	R 877.66	*	*	*
Ingogo	1988/89	23	R10 139.40	R235.80	R 8 573.76	R 7 920.50	R 653.17
	1989/90	#					
	1990/91	#					
	1991/92	#					
	1992/93	#					
Nhlanhla	1988/89	12	R13 888	R496.00	R12 562.81	R12 530.24	R 32.57
	1989/90	12	R18 504	R514.00	R14 593.96	R 2 400.00	R12 193.96
	1990/01	#					
	1991/92	#					

* = Current loan still in operation

= No loan application received

@ = Loan not used due to drought

No loan = No loan granted

Agriwane was able to provide useful information on loans provided and on the repayments of the loans by the farmers' associations (See Table 2). Only the information of selected farmers' associations, all of whom receive support under the FSP programme, are listed in Table 2 above. From the table it follows that Agriwane did not apply the "25 per cent rule" very strictly and it was only when a farmers' association had an outstanding balance of more than 50 per cent of the loan used, that no new production loan was issued to that particular

farmers' association. The case of the Zamani farmers' association as shown in Table 2 is such an example. Of some concern is the high outstanding balances on the various loans. Using the data in the table, a calculation was made to determine the default rate or the total outstanding balance in each year calculated as a percentage of the total loan to all the mentioned farmers' associations. The results were as follows:

1987/88	8.8 %
1988/89	39.3 %
1989/90	21.9 %
1990/91	51.9 %
1991/92	49.5 %

The default rate in the last two seasons is exceptionally high but could be related to the high outstanding balance (95%) on the 1990/91 loan to the Zamani farmers' association as well as the effect of the drought in the case of the 1991/92 crop season. The fact that these figures more or less represent the typical situation in KaNgwane, implicates an opposite view to that of Agriwane that the default rates on loans to farmers' associations were low. It therefore brings into question the principle of group lending and its apparent successful implementation in KaNgwane.

3.3 Mechanization

Agriwane as well as a number of tractor contractors provide mechanization services to farmers in KaNgwane. In each of the agricultural regions of KaNgwane tractor associations were formed and they collectively determine the rates for the various mechanization services. Agriwane provided finance to contractors to obtain 26 new tractors and 30 second-hand reconditioned tractors. Loans for this purpose were provided to contractors at an annual interest rate of 10%. The contractors were supposed to repay the loan to Agriwane on a per hour basis, but many of the contractors avoided repayment through all sorts of fraudulent activities like disconnecting the hour meter of the tractor, etc. This resulted in many of the contractors being in arrears, with outstanding debt being higher than the initial loan. Agriwane eventually had to repossess 13 tractors and a number of implements. Twelve of these were resold to new contractors on hire purchase. The lesson with the loan repayment on an hourly basis resulted in Agriwane changing its credit policy to contractors to financing on a hire purchase basis. This proved to be very successful with all the contractors still in operation with only a few arrears. There is only one contractor that is still repaying his loan on an hourly basis, the rest were all changed to hire purchase contracts.

Agriwane owns 30 tractors with most of these stationed at the irrigation projects under Agriwane's control serving the needs of the farmers on these projects. Agriwane also owns and rents out implements to contractors at a predetermined daily rate. Agriwane provides mechanization services to the dryland FS & DS farmers only when the contractors are not available or the contractors are not able to meet the demand in peak seasons. Agriwane generally prefers not to become involved in this market. Agriwane provides only more sophisticated services at a rate of R53,27 per hectare. The shortage of contractors and Agriwane's reluctance to compete in this market is a major concern to many KaNgwane farmers. Furthermore the long waiting times and delays due to breakages are also a concern to farmers. Typically the rates for mechanization services charged by some of the contractors

during 1992 were as follows:

- Plough - R1 10 per hectare
- Disc - R70 per hectare
- Plant - R50 per hectare

Agriwane makes cash payments to farmers to enable them to pay for these mechanization services and labour.

Repairs are generally the responsibility of each of the contractors, but Agriwane could provide financial or technical assistance in certain circumstances. The nearest mechanic is usually consulted for repairs. Agriwane also provided training to contractors through the FS programme. This has resulted in an increase in the performance of the contractors.

3.4 Marketing

Agriwane acts as facilitator in the marketing of agricultural products and never handles or stores any produce. Crops like sugar, cotton and maize do have fixed marketing channels and the role of Agriwane in this regard is small and limited to the arrangement of contracts, etc. The role of facilitator played by Agriwane concerns mainly the provision of four market facilities for fresh produce. Agriwane does the necessary arrangements to ensure the availability of the site (through negotiations with tribal or local authorities) but is not responsible for the administration and coordination of the activities at such markets. Agriwane only monitors the activities and keeps record of daily sales. The markets are situated at KaNyamazane (30km outside Nelspruit), Kamaqhekeza, Schoemansdal and Kabokweni in the Nsikazi region. Typical produce traded at these markets are cabbage, tomatoes, beetroot, spinach, beans, onions, avocados, bananas, eggs, broilers, other sub-tropical fruit and milk. To pay for the facility and all the administrative arrangements, the tribal or local authority collects a levy of R4 per pick-up and R6 to R8 per truck using the marketing facility. Agriwane is at present negotiating a DBSA loan to finance the building of a basic structure at the market locations.

The increase in sales at these markets is clear from the analysis of annual sales at two of the markets in Table 3. It should, however, be stressed that not all the produce are produced in KaNgwane but are also imported from other regions.

Table 3 : Sales volumes on selected markets in KaNgwane

MARKETS	1990	1991	1992
	Ave/month	Ave/month	Ave/month
KaNyamazane	64 619 kg	86 062 kg	78 253 kg
Kamaqhekeza	55 974 kg	105 972 kg	144 662 kg
Kabokweni	-	-	78 013 kg
Schoemansdal	62 800 kg	91 044 kg	90 234 kg

3.5 Extension and training

The number of farmers reached by Agriwane through the training programme is provided in Table 4 below. In the 1991/92 season, Agriwane presented a total of 194 courses which were attended by a total of 2 644 farmers. The extension officers employed by Agriwane and the KaNgwane Department of Agriculture pay regular visits to the farmers and the various farmers' associations. Farmers are presented with refresher courses and training in various farming and cropping techniques. Agriwane has 2 mobile training units and 1 panel van equipped with training equipment. These are used for training at various locations in the field. Furthermore, 4 training officers are employed to present training courses on a more advanced level and in a lecture and classroom format. Demonstration plots are also used in the extension effort under the FS & DS programme. These demonstrations are used to show the yield effects of new bird resistant sorghum cultivars and "streepsiek" resistant maize cultivars. Agriwane furthermore combines efforts with the KaNgwane Department of Agriculture in organising farmer days where information is shared with the farmers. Gatherings of up to 400 farmers at such events are quite common.

Table 4 : Training courses presented and attendance

Year	No. of courses presented	No. of farmers attending	No. of farmers expected	Percentage attendance
1987/88	80	1 573	3 546	44.36 %
1988/89	137	1 834	3 948	46.45 %
1989/90	154	2 162	4 424	48.87 %
1990/91	168	2 432	4 984	48.80 %
1991/92	194	2 644	4 775	55.37 %

4. CONCLUSION

The impression was gained from interviews with officials from Agriwane, that they view Agriwane's mission as the provision of credit to farmers and/or farmers' associations in KaNgwane at minimum risk and to ensure the minimum default rate on these loans. The impression was also gained that the FS & DS programme or the FSP in KaNgwane is largely credit driven. This view was also expressed by farmers interpreting the FS & DS as "Agriwane helping them with credit". However, as indicated in Section 4.5, Agriwane also views the training programme and extension effort as of importance in obtaining their goal of developing agriculture in KaNgwane.

Considering the project description, it seems that the KaNgwane FSP was designed to obtain a DBSA loan to finance the construction of service centres, to finance loans to tractor contractors, to finance production loans to farmers, to finance irrigation equipment for small-scale farmers, to finance the purchase of mobile training units and to finance the construction of market structures. Although these are all elements of the FSP strategy it is not clear how they are coordinated as Agriwane is largely interested in the repayment of the on-lended loans. Agriwane officials also stated that they do not want to become involved in the various farming activities and it is therefore not viewed as a part of their task to know the extent of

harvests, etc. The take-over of the various service centres by the farmers' associations, is a further example of Agriwane reducing its involvement, in this case with regard to the provision of inputs to farmers. Apart from the limited facilitative role played by Agriwane in the marketing of surplus produce, Agriwane does not play an active role in improving access to markets and seemingly does not want to become too involved in marketing.

Although the various elements of the comprehensive agricultural support service as stipulated in the project description were implemented, there seems to be a lack of coordination between the various elements. The approach of providing all the elements as a "package" was not adhered to. There exists, thus, no sign of a holistic approach linking all the FSP elements. The impression was also gained that Agriwane as far as the FSP programme is concerned, is merely run as an on-lending institution, working to ensure full repayment of the loans. This resulted in a lack of commitment with regard to the other elements of the FSP approach.

In the dealings with the Agriwane management, the research team obtained a general impression of a lack of commitment to the FSP approach. Monitoring of the implementation of the programme was also lacking to some extent. The reason behind this could be attributed to the fact that the Agriwane management is more involved and more concerned with the projects where Agriwane follows to a large degree a typical top-down approach. Most of their efforts are therefore concerned with project farming on irrigated land. The majority of the projects are located on fertile land with access to irrigation water. Typically the projects produce crops like sugar, cotton and bananas where supply response is fast and good results are generally obtained.

A total of 87 farmers' associations out of a total of 126 are assisted through the FS & DS programme. It should be emphasised that the FS & DS programme is mainly provided to dryland farmers where agricultural risk is considerably higher (only 12 farmers' associations on formal project schemes are assisted through the FSP). Because many areas in KaNgwane are believed to be unsuitable for dryland maize, cotton and vegetable farming, the success rate of the FS & DS programme is therefore somewhat lower. This could provide an explanation for Agriwane's apparent lack of commitment and enthusiasm for the FSP approach.

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APPENDIX 2:

INTERIM FINDINGS AND RECOMMENDATIONS FROM THE EVALUATION OF THE FSP IN VENDA, LEBOWA AND KANGWANE

1. INTRODUCTION

The Development Bank of Southern Africa (DBSA) requested the research team responsible for the evaluation of the Farmer Support Programme (FSP) in Venda, KaNgwane and Lebowa to provide interim findings and recommendations that could be considered in the further implementation of the programme. Two interim reports, a socio-economic and an anthropological report were already submitted to DBSA. Due to the different approaches of the socio-economic (or agricultural economic) and anthropological surveys, it was considered necessary to reconcile the findings of the two reports.

This research note therefore intends to extract the central findings from both these reports and to determine the compatibility of the various findings. The different approaches and research methodology of the agricultural economic and anthropological research teams are discussed initially. Secondly, the findings of the two studies in the various FSP areas are summarised and finally, some interim recommendations based on the findings are provided.

2. THE RESEARCH METHODOLOGY

The evaluation of the FSP consists of a qualitative analysis done by the anthropologists and a more quantitative socio-economic analysis done by a team of agricultural economists. The anthropological report was mainly based on extended case studies through intensive field work. As this approach requires the continued presence of researchers, fieldwork assistants who monitored farming activities in selected settlements in the research areas were employed and trained to complement the researchers' own observations, discussions and interviews. In this way farmers' perceptions of the FSP and the institutions involved, as well as the effect of the elements of the FSP (sec DBSA, 1986) on the operations and decisions of the farmers were obtained.

The socio-economic survey, on the other hand, made use of structured questionnaires to quantitatively assess the farming situation in the different areas, as well as to determine the effects of the FSP on agricultural output.

This section gives an overview of the methodology followed by the two research teams.

2.1 Agricultural economic (or socio-economic) survey

A sample survey of farmer households was carried out in different areas/wards of Venda, Lebowa and KaNgwane. The following table summarises the surveys which were done in order to (1) evaluate the FSP as instrument of agricultural development with a view to

increase the effectiveness and efficiency of the support services; (2) to evaluate the progress and input of FSPs within the context of an integrated approach to rural development; and (3) to provide possible guidelines for the further course of the programme, as well as operational policy guidelines for the development of agriculture within South Africa.

Table 1 : Summary of the areas surveyed and sample sizes

Major region	Sub-region	Sample size	Usable questionnaires
Venda	Mashamba	75	50
	Khakhu	73	41
	Total Venda	148	91
Lebowa	Kadishi	42	33
	Phokoane	131	92
	Total Lebowa	173	125
KaNgwane	Mlondozi	45	28
	Nkomazi	80	69
	Mswati	80	79
	Total KaNgwane	205	176
TOTAL		526	392

Surveys were done by means of questionnaires. The questionnaires consisted of the following sections: (1) general information, (2) factors of production, (3) crop production and consumption, (4) inputs, (5) extension service, (6) training, (7) institutional issues, (8) credit, (9) household income and expenditures and (10) general farming problems.

2.2 Anthropological study

The anthropological study consisted of three different studies, each analysing the dynamics of the FSP from a different angle. The KaNgwane study analysed the FSP from the perspective and experience of the farmers, the Venda study evaluated the institutional structure of the FSP, and the Lebowa report described the implementation and effects of the FSP in the Phokoane area.

In Venda the analysis differed from Lebowa and KaNgwane in that the study focused more on the physical and institutional constraints of the FSPs in the Mashamba and Khakhu wards of Venda.

In KaNgwane the farming experience and perceptions of dryland maize farmers from Bettysgoed and Hartebeeskop (in the Mswati area), irrigation farmers from Vlakplaas (in the Mlondozi area) and a struggling farmers' association from Schulzental (in the Nkomazi area) are presented in four in-depth case studies. In Lebowa the study concentrated on the Phokoane area, largely through a case study of the implementation and effects of the FSP in the Mathukhutela settlement.

The case studies were selected to represent a variety of farming situations, as well as different views of the FSP and the implementation thereof.

3. SUMMARY OF FINDINGS

A summary of the findings of the two preliminary reports is presented after which the different findings are compared.

3.1 Findings from the household surveys in Venda, Lebowa and KaNgwane

This section presents the findings of the sample survey of farmer households in the Kadishi and Phokoane areas of Lebowa, the Mashamba and Khakhu wards of Venda and the Mswati, Mlondozi and Nkomazi areas of KaNgwane.

3.1.1 Venda

It was determined that, in general, the FSP clients in Venda are more productive land users, achieve higher farm incomes, have higher household expenditures, make greater use of extension services and farmer institutions than do non-clients. The higher standard of living of the FSP members are indicated by their higher education, personal and medical expenditures. These expenditures were significantly higher in the case of the FSP clients.

Through discriminant analyses it was determined that the FSP contributes towards creating surplus producers through the provision of ploughing and extension services. It was further determined that surplus producers are more concerned with soil erosion affecting production, are dependent on the availability of ploughing services, produce more maize, have less females in the households and use more chemical fertilizer than the deficit producers. Furthermore, it was found that the surplus producers have savings accounts which in a way contribute to households being surplus producers.

3.1.2 Lebowa

Farm sizes and the factors of production in the two areas, Phokoane and Kadishi are different. The households in the Kadishi area own bigger areas of land, while in the Phokoane area, the FSP members have bigger garden plots and residential sites and own larger dryland cropland areas than the non-members. The FSP members ploughed all their land, tend to need more land for farming purposes, regarded themselves as more able to work additional land and it seems as if they (in Phokoane) are more productive farmers. In contrast, the non-FSP members in Kadishi were found to be the better farmers.

A striking feature was the high regard respondents had for the training programme in Phokoane. FSP clients in Phokoane feel that the training programme has benefitted their farming enterprises and has contributed to their "success".

A discriminant analysis of surplus versus deficit producers indicated that surplus production was associated with households who use chemical insecticides, intercrop larger areas, plough smaller areas and have more adult females in the household. These factors are also related to purchasing inputs on credit from the co-operative, participating in the FSP programme and

receiving higher wage remittances. Because income from agricultural activities contribute only a relatively small share of total rural earnings, income effects from non-agricultural earnings such as wage remittances are important. The results also illustrate that finance is important in promoting emerging commercial farmers.

With respect to Kadishi, no clear conclusions could be made. However, it was clear that the availability of ploughing services and extension services could support the upliftment of the rural community in Kadishi. The reason for no clear conclusions can be attributed to the short existence of the FSP in its present form. Although surplus producing farmers ploughed less land than deficit farmers, they worked the land more intensively (they intercropped a larger area). The larger number of adult females in surplus producing households probably contributed to this phenomenon. It is also relevant to mention that land size and labour availability are severe limiting factors in the Phokoane area.

3.1.3 KaNgwane

In general, income from farming activities contributed, on average, to half of the KaNgwane households' income, while farm expenditure was roughly only a quarter of total expenditure. However, there is a big difference between FSP and non-FSP households with regard to income generated by farming. It may be an indication that the FSP significantly increases the income from farming, thereby eliminating the need for other employment.

FSP farmers in general had significantly more access to mechanization services and training than the non-FSP farmers. With regard to the use of inputs, FSP farmers used more chemical fertilizer, insecticides, pesticides, hybrid seed and mechanical harvesting than the non-FSP farmers. It was also determined that inadequate credit was a bigger problem amongst non-FSP farmers.

The FSP farmers in Mswati had generally more contact with the Agriwane training officer, carried out more soil conservation practices, cultivated bigger areas and were more aware of soil loss than the non-FSP farmers. The average yield for maize production of the FSP farmers was higher than the non-FSP farmers. The difference in yield could be related to the lower use of inputs by the non-FSP farmers. Farm income of the FSP farmers is somewhat higher than that of the non-FSP farmers. The non-FSP households earn significantly more from occasional work.

In Nkomazi it was found that FSP farmers have larger areas of cropland, while the community garden plots of the non-FSP households are larger. Further notable differences are maize production, maize consumption, tomato consumption as well as the higher earnings from agriculture by the FSP farmers. The farmers in this area produce a wider variety of crops, i.e. spinach, tomatoes, sugar cane, leather ferns, etc.

In Mlondozi the non-FSP farmers are significantly different in all aspects as listed, namely they cultivate a larger area of maize, obtain higher yields, higher production, higher crop income, etc.

In determining the effects of the KaNgwane FSP on farm output, it was found that significant differences between food-surplus and deficit producing households occur mainly with respect

to farm income, other sources of income, investment in livestock and expenditures on transport, education, food, etc. With respect to farming, the differences in general, refer to maize planted and purchased seed used.

In general, surplus producers diversify their farming operations to a greater extent than those of deficit producers. Income is also derived from a larger number of sources. Access to credit and extension are the major variables discriminating between surplus and deficit producers. In KaNgwane as a whole, access to finance is further accentuated by the significance of the savings variable in the discriminant function. Access to markets is also an important variable in differentiating between surplus and deficit producers.

Surplus producers have significantly larger savings accounts, greater access to credit, extension and markets, spend more on education and less on durable items than deficit food-producing households.

3.1.4 Conclusions from the household surveys

Due to the difference between the three regions in terms of agro-climatic aspects, farming practices and institutional constraints, it is difficult to generalise on the above findings. However, the results indicate that increased real earnings in rural areas will change consumption patterns as the demand for staple foods is expected to increase less than the demand for more luxury goods such as clothing. The demand for goods produced by the household is expected to increase less than the demand for purchased goods.

In general, surplus production was associated with households who make use of FSP related services, e.g. credit. These financial measures specifically are dimensions of the income or liquidity impact on food production. As earnings from agriculture are a relatively small share of total rural earnings, income effects from non-agricultural earnings such as wage remittances are important. The results also indicate that input subsidies on credit and support services will increase surplus production.

Policy intervention through resource markets such as provision of credit to small farmers should be actively pursued. Small farmers lacking collateral to borrow, may under invest in agriculture. Resource market intervention in this manner may improve both efficiency and equity. The objective should be to lower the transaction costs of borrowing money rather than subsidising interest rates

Surplus producing households have greater access to financial resources. This confirmed earlier findings (cf. Nieuwoudt and Vink, 1989) and may be attributed to the liquidity constraint on food production where farmers with access to non-farm income are better able to invest in agriculture. The relationship between agriculture and non-agriculture is expected to be competitive as far as the labourer's time is concerned, but it could be complementary as far as other factors are concerned, i.e. where wage remittances can be an input in agriculture. It is also possible that increased earnings in agriculture will make agriculture more attractive for some members who were previously engaged in non-farm employment.

The results thus also illustrate that finance is important in promoting emerging commercial farmers. Improved earnings from agricultural production are expected to have similar

positive income effects on food production through their effects on the demand for resources. As earnings from agriculture are a small share of rural earnings, income effects from non-agricultural sources such as wage remittances are important. Training and extension seems to be a crucial issue. In conclusion, it seems that the FSPs contribute positively towards increased output in rural areas.

3.2 Findings from the anthropological case studies

3.2.1 Venda

The study in Venda concentrated on the institutional framework of the FSP in Venda, highlighting important institutional problems. One aspect highlighted in this respect is the lack of coordination between the Department of Agriculture of Venda and Agriven. Furthermore, both institutions provide overlapping functions, i.e. mechanical services, extension, training and research.

The report further suggests that the FSP may well have missed the target group, which was identified to be the "emerging farmers". It shows that the main FSP participants were pensioners (Khakhu 47.4% and Mashamba 44.0%) and migrant workers (Khakhu 24.1 % and Mashamba 28.9%). (In the household survey it was found that only 20% of the economic active population in the sample were either pensioners or migrant workers). The report also doubts the ability of the FSP to promote "structural change away from subsistence agriculture". This is demonstrated by the case study of a farmer at Mashamba who harvested 18 bags of maize during the 1990/91 season (more than average yield), which is 6 bags more than his home consumption. Theoretically this farmer could be classified as a commercial farmer. This is only theoretically, because there will be nothing left of his marketable surplus after he has paid the equivalent of 3.8 bags for his inputs, 2.4 bags for milling costs and 3-4 bags for transport and labour. It was therefore stressed that commercial farming with staple crops on limited one hectare plots needs to be reconsidered seriously.

3.2.2 Lebowa

The report on Lebowa initially provides a geographical and historical overview. It furthermore indicates how the FSP in Lebowa was born from the failure of the Phokoane cooperative and the Phokoane dryland maize project. It describes at length how the implementation of the FSP had to overcome obstacles like the mistrust, resistance and suspicion of the actions and activities of the Phokoane co-operative. The implementation of the FSP in Phokoane became the responsibility of the then Phokoane co-operative manager, Johan Adendorf. The approach of the FSP at Phokoane, and for that matter the whole of Lebowa, obtained a personal characteristic due to the commitment, belief and calling of the particular individual. He designed the FSP in Phokoane and implemented it with imagination and originality. Crucial to the development of the programme was the freedom allowed to Mr. Adendorf by the Lebowa Agricultural Corporation (LAC). In technical terms, the approach can be described as participatory development, which in practise means regular contact with farmers, understanding and involvement. The programme is also based on voluntary participation with nobody being forced into the programme. Training is the basis of this integrated support programme and is a prerequisite for participation.

Food security was identified as the basic need of the community in the Phokoane area. The goal of the FSP in Phokoane was therefore accordingly determined to be the increase of maize yields. The urgency of food security superseded any long term ideals of promoting commercial farmers. Thus, the FSP objective of supporting the emerging farmer to become a commercial farmer was therefore again overridden due to the immediate aim of increasing maize production to improve food security. It was believed that improved food security through visible food production would overcome suspicion and resistance. The lack of knowledge was identified as the main obstacle inhibiting increased production. The transfer of knowledge by means of extension and training was therefore viewed as the solution of the problem.

The report then uses case studies involving farmers at Mathukhutela and Eenzaam in the Phokoane area to describe the working of the various elements of the FSP. Corresponding to the findings of the agricultural economic survey, the various personal discussions of the anthropologists with farmers in the area also revealed the great appreciation of the farmers for the training programme.

Farmers' perceptions of the programme was generally positive due to the fact that the programme succeeded in "chasing hunger away". Farmers who participated in the programme since 1990/91 experienced dramatic yield increases and viewed it as a miracle. The success of the programme gave farmers confidence in the co-operative and its credit system and also provided them with self-confidence. Thus the programme met the self-established goal of food security, but it was mentioned in some circles that this did not contribute to promoting the commercialisation of agriculture in Phokoane.

The major achievements of the FSP in Phokoane are that it has replaced suspicion and trust and that it has revived agriculture in Phokoane and also restored "confidence" in agriculture. This could also be attributed to the few good seasons the Phokoane area had since the inception of the programme. However, the context and framework of the FSP in Phokoane have restricted the programme largely to the "betterment of betterment".

The report, however, also emphasises that the FSP did more than the improvement of subsistence farming. Using case studies from the Eenzaam farmers, it was shown that farmers increased agricultural land by leasing additional land. The significance of this should not be overlooked, because it reveals that the programme has the potential to contribute meaningfully to the process of agricultural reform. The FSP equipped farmers to cultivate more land economically. This ability of the programme was confirmed by the views of the farmers from Eenzaam and the fact that they extended their farming operation by leasing additional land. Through the programme these farmers not only increased their yields, the programme also equipped them to farm more land. This was also found to be the case in the agricultural economic survey (see 3.1.2).

Almost the total length of the anthropological report concentrated on the implementation of the FSP in Phokoane. The implementation of the FSP in Kadishi was not surveyed to the same extent as Phokoane, with the report only providing a short overview of the implementation of the FSP in Kadishi. It was mentioned that the programme in Kadishi was still struggling to get off the ground due to obvious reasons, i.e. the present drought and less obvious reasons, i.e. the internal conflicts in the community. It was concluded that the FSP

in Kadishi is essentially the export of a part of the Adendorf-designed Phokoane FSP. This suggests that training in itself, even though it is the basis of the programme, is not sufficient for the successful transfer of such a specifically designed FSP.

3.2.3 KaNgwane

The anthropological report on the KaNgwane FSP initially provides an overview of the institutional framework of the FSP, or better known in KaNgwane as the FS and DS programme of Agriwane. The report states that KaNgwane farmers are generally unfamiliar with the FSP, as well as the FS and DS programmes. To them the programme is "Agriwane" who "help" them, and they conceptualise this "help" in terms of credit and the provision of inputs (shed). By referring to and associating the programme with credit and inputs, farmers give expression to the emphasis Agriwane places on credit in the implementation of FS and DS.

The report subsequently described at length the farming situation in the various areas of KaNgwane, as well as the different historical and current circumstances of the different farmers' associations. It is therefore necessary to summarise the analyses of each of the farmers' associations to provide some explanation for the results of the agricultural economic survey.

Case studies were done in Bettysgoed in the Mswati area involving the Zamane and Masibambisane farmers' associations. Less than a quarter of Bettysgoed's 500 households have access to arable land. The Masibambisane farmers' association has been farming at Bettysgoed since the late 1970's and was not interested in the credit facilities offered by Agriwane. Therefore, farmers in need of credit and interested in facilities provided by Agriwane in the late 1980's, had to organise themselves in another farmers' association (FA), namely the Zamane FA. The division between Zamane and Masibambisane was also echoed along political lines with the political affiliation of Zamane farmers, who depend on the support of Agriwane, being with the ruling Inyandza Party.

The first farmers who began farming in Bettysgoed (Masibambisane and Zamane FAs) in the late 1970's were each allocated 20 ha. Those who arrived in the early 1980's were granted 10 ha due to the lack of sufficient land. Further allocations in 1987 were only between 3 and 5 hectares. Besides their arable land, almost all Bettysgoed farmers have livestock. But farming, be it on 20 or 3 ha and with or without Agriwane's help, did not provide an escape from the problems of poverty and insecurity. Farming in Bettysgoed is therefore for some farmers the principal means of income, but for the majority of farmers part of a general economic strategy to survive.

Both Masibambisane and Zamane F'A's include farmers who are committed to farming and for whom farming is a means of living. Both associations, however, also included farmers for whom farming is primarily an additional source of income.

Despite these similarities in farming orientation between the farming associations, their farming progress stand in stark contrast. The Masibambisane FA had been farming without Agriwane credit over the past ten years. The association has been dominated by a core of successful farmers who:

- are predominantly from a farming background and who make a living from farming;
- have their own agricultural implements and help each other with implements and advice;
- are agriculturally well informed and know farming; and
- are well motivated to succeed in farming and have an association of their own because they are in principal against farm credit.

Profit is one of the main aims of the Masibambisane farmers and one of the reasons why they took over the Bettysgoed shed from Agriwane in 1989. This step, however, became the association's major problem. Furthermore, the takeover meant that the Bettysgoed shed no longer provides the services intended to the Bettysgoed farmers at large. This could mean an effective end to Agriwane's programme of farmer support in Bettysgoed, if Agriwane continue with its current credit policy.

The story of the Zamane FA, on the other hand, is one of decline, disappointment, and despair. This was mainly because of accumulating debt and Agriwane's credit policy, whereby credit was provided to the FA as a group. Because the Zamane farmers could not repay their loan as a group, it resulted in Agriwane refusing further credit for the 1991/92 season. This implied that farmers could either not work their fields properly or could not work their fields at all, which started the process of decline. The debt had a depressing effect on the Zamane farmers. They became increasingly despondent as they could not see how to continue farming. There is therefore a general feeling of disappointment among the Zamane farmers.

The report furthermore gives the views of the farmers on the various FSP elements. Almost all Bettysgoed farmers speak positively of the agricultural training being offered at the Bettysgoed shed. However, they also have realistic reservations about Agriwane's training programmes. A general complaint among farmers of Bettysgoed is the absence of extension officials in the area. There is also the perception and belief that Agriwane's training schedule is removed from the farming realities in Bettysgoed. Regarding Agriwane's credit policy, the general feeling is that the policy discriminated against them because of their membership of the association. The successful farmers who repay their loans are penalised for other members' debt. Since the system of social credit control, as the policy can be termed, is ineffective and morally questionable, Agriwane may have to look once more at more conventional ways of credit control.

Only a few Zamane farmers have their own tractors and implements. In the past Agriwane provided them with the necessary implements. These services were, however, terminated since the 1990/91 season. Zamane farmers therefore feel that the lack of agricultural implements, as well as the reduction in input applications due to smaller production loans from Agriwane, were the real causes of their agricultural failure.

In the Hartebeeskop area, case studies involved farmers of the Litjelebube FA. The Hartebeeskop population consist of:

- immigrants who fled the violence in the Msinga area of Natal;
- families who moved from white owned farms in the Highveld; and
- families who stayed at Hartebeeskop and neighbouring areas before it became part of KaNgwane.

The population live dispersed on small farms all over Hartebeeskop. Every homestead is surrounded by fields varying in size from 1 to 10 ha and more.

Hartebeeskop farmers generally believe that the soil in Hartebeeskop is not suitable for maize production. Despite the climate and the soil, Hartebeeskop farmers continue to farm at Hartebeeskop. Though some are aware of the environmental damage of the widespread practice to cultivate on slopes, contour ploughing is rare. Farmers expressed concern because no soil surveys were taken prior to input recommendations.

Regarding the FSP elements, it was found that the farmers believe that training and extension and other very essential support services should be provided in addition to credit. The Litjelebube FA's overriding complaint was that Agriwane assisted them with credit, seed and fertilisers, but not with implements. Many were therefore forced to plough with cattle. Hartebeeskop farmers, who are familiar with the climate and the soil, believe they need appropriate seeds and suitable fertilisers, implicating wrong input recommendations by Agriwane. The further complaint of the Litjelebube farmers was that the training and extension effort was lacking and that it seems that there is very little coordination between extension and training services of the Department of Agriculture and Agriwane.

The third case study was carried out in the Steynsdorp valley involving the Juluka FA on the Juluka irrigation project. This is one of a number of projects in the Mlondozi area. The Juluka irrigation fields were once the lucerne fields of a highveld farmer who used to over-winter his livestock in the valley. When the Steynsdorp valley was incorporated into KaNgwane, the Department of Agriculture replaced the simple flood irrigation system with a sophisticated sprinkler system. This confronted the Juluka farmers with a new and complex farming system.

The majority of the Juluka farmers are old-aged pensioners who lived as labour-tenants in the valley. They never had the opportunity to develop the technical farming skills need for the irrigation farming. These farmers now have to cope with a two crop season made possible by the new irrigation system, but which in turn necessitates better production management.

Expectations due to reasonable crops, however, led to frustration as farmers experienced obstacles in marketing of greenmealies and tomato crops. Despite Agriwane's attempts to find markets, distance and isolation escalated production costs. This left farmers with no other option than to sell their produce directly from their fields, which in turn necessitated the cultivation of a variety of crops which further demanded better management.

To summarize, the problems of the Juluka farmers are twofold, i.e. training and extension as well as marketing.

The last case study in KaNgwane involved the farmers of Nhlanhla in Schulzental in the Nkomazi area. The Nhlanhla FA originated through the effort of the Schulzental inhabitants to break out of the subsistence cycle and to maximise agricultural possibilities in the area.

The Nhlanhla FA was established as a collective and in true communal fashion, the farmers combined their efforts to prepare their fields and infrastructure to start farming in 1989.

After the enthusiastic start, with Agriwane providing them with production loans for a peanut crop in the first two years, Nhlanhla farmers were discouraged when the crop failed and future prospects also looked bleak. Nhlanhla farmers became increasingly despondent not knowing what to do about the approaching season. Agriwane could not provide the farmers with any constructive farming suggestion to overcome the situation. Furthermore, no further credit was made available to the Nhlanhla farmers as they collectively owned approximately R13 000.

At this stalemate unexpected help arrived from Cottona. Cottona found the Nhlanhla fields to be suitable for cotton production and after some discussions some of the members decided to cultivate cotton with production loans from Cottona. Some farmers were, however, disheartened and ended their relationship with Nhlanhla. This meant the end of the Nhlanhla FA as a collective. The land was divided amongst the members by ballot. It was also decided to divide the debt of the FA with each member responsible to repay his/her share of the debt.

Many Nhlanhla farmers believe that there are no well trained extension officers to give them advice. While Cottona's interest and concern for the farmers planting cotton stems from a commercial interest, the regular visits by the company's extension officers to the farmers in the fields, and their various demonstrations in the fields have greatly impressed the farmers.

Because of the collective nature of the Nhlanhla FA, the Nhlanhla fields were ploughed and harrowed by contractors. With the disbanding of the association, individual farmers had to rely on their own tractors and equipment.

The peanut crop failure and the resultant debt strongly influenced the associations perception towards Agriwane in particular and debt in general. The Agriwane credit system is seen as unfair and some farmers say they will accept credit from any institution except from Agriwane. While some farmers give recognition to the services rendered by Agriwane, most members regret having taken part in Agriwane's credit facility.

3.2.4 Conclusions from the anthropological study

The general trend following from the anthropological case studies, is one of negative image and credibility of the institutions involved in the FSP. Agriwane, Agriven and the LAC are all creations of "national" development and are associated with the unhappy history of intervention, whatever their intentions with FSP and development may be. Widespread suspicion is therefore a basic and permanent reality which the implementing agents of the FSP will have to contend with. But this does not mean that a FSP can not be successfully implemented. From the case studies it is clear that the implementation of the FSP had mixed success with failures in some areas.

The FSP farmers in Venda had great appreciation for the mechanization services provided through the FSP cooperatives. The more efficient and timely available mechanisation service was to a large extent responsible for the increase in area cultivated and the increase in maize yields. However the increased yields were not enough to encourage the commercialization of agriculture in Venda, which is the ultimate goal of the FSP. This could also be attributed

to the lack of institutional co-ordination and the unnecessary duplication of functions.

In Lebowa, food security was identified as the basic need of the rural community, and the increase of maize yields became the objective of the FSP in Lebowa. To achieve this, training was emphasised as the major element in a well co-ordinated support programme, and this, together with personal commitment, contributed to the well-documented success of the FSP in the Phokoane area of Lebowa.

In KaNgwane, poor agricultural productivity was conceptualized as being caused by a lack of access to credit. The programme is therefore "credit-driven" with the other support elements lacking to some extent. The framework for the Agriwane support programme was based on the assumption of a spirit of co-operation and collectiveness within each of the farmers' associations in KaNgwane. The lack of unity and co-operation within the farmers' associations was ever present and was further aggravated by Agriwane's credit policy. The policy of collective responsibility for individual debt contributed to the division in the farmers' associations and undermined farmer cooperation. This and the resulting accumulation of debt contributed to the discredited image of Agriwane.

4. COMPARING THE FINDINGS

The anthropological report provides farmers's perceptions of the FSP and as was indicated earlier, it is difficult to compare these perceptions with the statistics of the agricultural economic report.

The agricultural economic report, through comparing non-FSP and FSP farmers, established that the FSP farmers are, in most of the areas surveyed, experiencing increased yields and a larger contribution of farming income to total household income. The general trend of the findings from the agricultural economic study is that the various elements of the FSP contribute in differing ways to increased agricultural output and increased real earnings. The main conclusion from the agricultural economic survey was that surplus production is associated with households who make use of FSP related services.

This to some extent provides a very positive picture of the FSP when considering production increases, household income and food security in general. This was however down played by the negative perceptions of some FSP farmers sketched in the individual case studies in the anthropological study. It was only in Lebowa where the case studies and interviews did not present a negative image of the FSP as such.

The findings of the anthropologists in Venda regarding the institutional constraints and institutional duplication were also confirmed in the agricultural economists' forthcoming report on the institutional analysis of the FSP. The agricultural economists found that the FSP in Venda contributes towards the development of farmers from deficit producers to surplus producers. The anthropologists, on the other hand, was of the opinion that the FSP will not ensure the commercialization of agriculture in Venda. However, the latter should be considered in the light the household composition (see 3.2.1).

From the analysis it follows that the FSP necessitates the production of surpluses to repay

production loans, leaving little to sell after household needs were taken care of. Therefore any below average yield (due to drought or marginal soils) will firstly result in a shortfall of staples for the household and secondly in the accumulation of debt. It is therefore expected that only in exceptional cases, income will be earned from staple production on small plots. However, it can also be argued that producing more staples for the household will in effect release scarce funds (eg. wage remittances) for other purposes i.e. purchases of other food and other household items (see also Dankwa, 1992). As such the FSP could contribute to increased standard of living but still falling short of the stated goal of "commercialisation of agriculture". This is mainly due to the fact that farmers are not yet making a profit from cultivating their land. The FSP could, however, be viewed as a first step in the commercialisation of agriculture. Some participants will be more successful than others and will use this opportunity to expand their production.

Regarding KaNgwane there seems to be a discrepancy between the two reports. The anthropological report seems to indicate a total failure of Agriwane's FS & DS programme, while the socio-economic report through its results of increased earnings and increased food production creates the impression of some success of the FSP. When analysing the socio-economic variables of the individual farmers' associations, some similarities in the findings of the two studies were, however, found. It should, further, be mooted that the better FSP results were obtained in areas not mentioned in the anthropological case studies.

The reason for apparent contradictions and discrepancies between the findings of the two studies could be the diverse nature of the anthropological and socio-economic studies. The research methodology and approach followed in the socio-economic survey involves aggregation, while the anthropological studies have a more disaggregate approach analysing individual cases.

The results of the anthropological analysis are the result of the intensive focus on specific farming situations limited to the particular tendencies and perceptions obtained from the particular case studies. The results from the quantitative survey tend to provide a more general picture. Therefore, when the particular and the general findings appear to contradict each other, it reveals the analytical weaknesses of each approach, or the usefulness of a combined effort or lastly, the necessity for further analysis and research to interpret the contradictions which stems from the various limitations of the research methodology.

Nevertheless, one of the most concerning aspects which came out of the evaluation programme thus far, is the manner in how the implementation of the FSP's differ from the original policy guidelines of the Farmer Support Programme (DBSA, 1986). It appears that where the guidelines were adhered to more strictly, greater success was obtained. Each implementing agent implemented its own version of the programme and in many cases only addressing and providing some of the elements of the programme. In this light some recommendations are made whereby the future success of the FSP can be promoted.

5. INTERIM RECOMMENDATIONS

Recommendations (whether they are merely suggestions, or indeed more firm recommendations) are not of the same order. In hierarchical order basic, strategic and instrumental recommendations are distinguished. Some recommendations are more fundamental reflecting on the basic FSP framework. These recommendations bearing on the policy and approach of the programme are distinguished as basic recommendations from strategic and instrumental recommendations. Strategic recommendations have to do with essential features and basic requirements of the programme, and instrumental recommendations with the implementation of the FSP elements.

Basic, strategic and instrumental recommendations are interrelated: Basic recommendations dealing with the policies and principles of the FSP give direction to the programme and to strategic and instrumental recommendations; strategic recommendations outline the basic requirements to sustain the programme and instrumental recommendations give effect to the programme. Basic recommendations have to do with the image and style of implementing agents and the principle of support. Strategic recommendations centre on the need for understanding and information for a sustainable FSP programme. These provide the framework and essentials for instrumental recommendations having to do with training, credit, marketing and the other elements of the FSP.

Besides their order, the nature of recommendations also differ. This distinction roughly corresponds with the distinction between basic and instrumental recommendations, but it operates on a different level and is not hierarchical. The FSP is implemented in any area as a single process, involving institutional bureaucracies, officials, contractors, labourers and farmers, as well as services and technology. Though part of the same process, actions and processes related to the relations between implementing agents, officials, farmers, etc. can analytically be distinguished from production related technical, economic and agricultural actions and processes. Recommendations reflecting the social realities of the implementation of the FSP primarily bear on issues of attitude and approach, whereas production related recommendations focus on the contents and substance of the programme.

5.1 Basic recommendations

5.1.1 Image and Credibility

Agriwane, Agriven and the LAC are all creations of "national" development and associated with an unhappy history of agricultural intervention, whatever their intentions with FSP. Widespread suspicion is therefore a basic and permanent reality the implementing agents of the FSP will have to contend with, and the reality they will have to overcome. Because of prevailing suspicions implementing agents will have to prove and maintain credibility, and they should take care not to damage their images. In every community, clients and people who are not interested and even opposed to FSPs, live side by side.

The fact that implementing agents control, or are perceived to control agricultural resources is the most important reason why farmers participate in the programmes. But many farmers are reluctant and refuse their support precisely because of this perception and the historically founded suspicions people in rural areas harbour against those in control of their resources.

In many areas, implementing agents have to restore credibility by improving their general image. The attitude, style and approach of implementing agents are crucial to this end. Actions that may lead to perceptions of exclusivist support and intervention in established agricultural and land use patterns should be avoided. Such perceptions reinforce suspicions causing damage to their images. The programme should therefore be promoted on the basis of voluntary participation, and it should in no way become associated rezoning or the redistribution of communal land.

Style and approach in implementing the programme are crucial to maintain and restore credibility in the eyes of sceptic farmers. Implementing agents should therefore pay attention to their attitude. That will require an effort, not an order from head office. Rural people cannot be fooled. Commitment speaks for itself and officials should be involved on the level of implementation. They must be seen and should participate and not only manage or organize the programme. The official on the ground is the key to the image and success of FSP. His task is not merely that of an official performing a duty, but rather a commitment. Only this attitude and a belief in what they are doing could put their image straight. Also important is good communication with, support from and co-operation with the management and head office structure of the implementing agent.

5.1.2 Support

FSP is agricultural support, not aid. Farmers should be made aware of this from the very beginning by promoting the programme in terms of the principles and realities of support. They should be careful not to create aid related expectations. This *inter alia* means that the FSP should be conducted as a support programme according to "business" principles, and clients should understand it in this way. Farmers should realise from the very beginning that FSP is business and that it impose obligations and responsibilities on them.

It therefore implies that the support elements should not be introduced in isolation, but should be considered in an integrated fashion. The impression was gained throughout the study that the various implementing agents tend to emphasise only one of the FSP elements in the implementation of the programme. This, however, is coincidental mainly due to the paucity of that particular element or that the particular support element is the most visible. It should, however, be emphasised that without coordination and integration of the various elements (e.g. credit without training, etc.) failure is almost certain. A holistic approach to the implementation of the various FSP elements is therefore important in ensuring the successful implementation of the programme.

5.2 Strategic recommendations

5.2.1 Understanding and information

A sustainable FSP depends on an understanding of the nature and ability of the programme, the local farming situation and the agricultural background and experience of farmers.

Implementing agents should understand the FSP and they should understand what they want to achieve through the programme in the broader sense of agricultural development, and in particular local settings. It is therefore of strategic importance that implementing agents

should consider and decide the importance and priority they would attach to the programme in agricultural development. FSPs consist of a set of principles that should be applied and made to work. It is therefore of the utmost importance that implementing agents clearly understand the DBSA policy guidelines in respect of the FSP and **implement the programme strictly according to these guidelines.**

This has further strategic implications. Implementing agents should consider their FSP approach in relation to the diversity of local circumstances. Consequently, they should be informed about local situations and prevailing social and agricultural realities. Information through baseline community studies and ongoing "on-farm research" is therefore strategically indispensable to sustain a FSP.

To sustain a FSP, the programme should be co-ordinated at various levels as specified in the policy guidelines (DBSA, 1986). Co-ordination as strategy does not merely mean the existence and availability of FSP elements in the implementation of the programme. Co-ordination is a much more fundamental issue. As a strategy it implies the co-ordination of the programme with regard to local circumstances, the agricultural cycle and the co-ordinated availability of FSP elements and services.

The programme should be co-ordinated with the agricultural needs of clients and possible clients. Wherever it is implemented it should correspond and tie in with prevailing socio-economic and agricultural realities.

Although a recommendation for the co-ordination of support elements and services may sound too obvious to mention in terms of the FSP strategy, it is not an uncommon experience to find a lack of co-ordination in the application of the strategy. Where the essential support elements were not co-ordinated the programme failed.

5.3 Instrumental recommendations

5.3.1 Training and Extension

Training should form an integrated part of the extension service and should be coordinated. A successful training programme requires more than the mere transfer of farming skills. The content of training programmes is not all that matters. It should meet farmers' needs, and it should be intelligible to farmers. It can, however, not be assumed that all farming communities in rural areas have only a subsistence background, many have experienced the production side of commercial farming, and others have farmed for themselves for years. They know the basics of commercial production. It is obvious that they cannot be subjected to the same training programmes. Training programmes should therefore be diversified in accordance with the needs of local farming communities to cater for farmers who may either need more basic or more sophisticated knowledge.

5.3.2 Credit

The provision of credit to small farmers is a crucial element of the FSP. Great care should therefore be taken when providing credit to farmers. It is recommended that credit provision to small farmers should take into account local risk factors. FSPs are mainly implemented

in rain-fed areas where agricultural production is risky and varies greatly over time, farmers in developing areas are, on the other hand, risk averse as only a small setback can leave them destitute. Farming also only partially contributes towards the household's total income. At present, FSPs encourage the use of credit as it is one of the cornerstones of the FSP initiative. In the light of these facts, as well as the fact that households cannot get "new" credit unless "old" credit has been repaid, the whole issue should be re-examined. The present system increases the risk small farmers have to face, especially as there is no contingency plans for bridging poor seasons. With their limited resources farmers cannot do it on their own.

Credit provision to small farmers should also include effective but fair credit control measures. International experience has it that the system of social (or group) credit control could be an effective way of ensuring credit repayments. However, the way in which Agriwane adopted the system led to it being perceived as an ineffective, unfair and counterproductive credit control system. If the system in KaNgwane was applied according to proven international norms it might have had better results.

The provision of credit should be integrated with the other support elements and services. It is lastly recommended that the control of the credit system be computerized to ensure that farmers will receive regular statements regarding the balances of their accounts. This could improve repayments.

5.3.3 Inputs

Inputs should be available on time and in the right quantities according to the specific needs of the small farmers. This usually becomes a serious problem when dragging credit arrangements delay the ordering of inputs and farmers have to run around to get seed and fertilizer. To avoid this, sheds and co-operatives should also provide inputs to the general farming community on a cash basis and not necessary link the ordering of seeds and fertilizer to credit arrangements with FSP clients.

Often many farmers are not certain as to why the co-operative or shed provide them with a particular maize hybrid or fertilizer. They need to be informed on these issues, as this would help to clear suspicion and improve image. Farmers must also be informed about input prices and comparing price structures. Distrust and rumours about exploitation and excessive profits abound, and very often implementing agents do not deserve it. To avoid this, farmers should be informed.

The transport facilities for the delivery of inputs to the FSP co-operatives, especially in Venda, must be attended to as a matter of urgency. The lack of transport is causing the co-operatives a loss in income and farmers could have the problem of inputs not being available on time.

5.3.4 Mechanization

Because of the widespread possession of tractors, the incorporation of individual tractor owners should be further developed. This was to some degree successfully implemented in KaNgwane and Lebowa, but could still be improved and expanded on. The further

development and incorporation of tractor owners will require:

- a support service for tractor owners. Because their tractors are old, and owners lack funds and sometimes also the required mechanical knowledge, and because they are isolated and spare parts are not always available, it takes tractor owners sometimes a year or longer to repair their tractors for major as well as minor breakdowns.
- loans to repair tractors and not only to buy tractors.
- training in mechanical skills for contractors, owners and drivers, and farmers.

5.3.5 Marketing

One of the main problems farmers experience in the marketing of their production, is transport. Surplus maize, as well as, the maize for storage must be transported to co-operatives or roller mills, and maize meal for home consumption must then be transported back home. These transport costs not only add to production costs, it increases the costs of maize produced for food. Something to consider is the home storage of maize and support for small local milling facilities. This would reduce the social costs incurred by farmers. Presently they deliver white maize to the co-operative or local miller, but due to Maize Board policy (because of the drought) they receive the less popular yellow maize meal in return.

Stored maize must be transported twice (to the co-operative, and back home), and although there are various milling possibilities and exchange agreements between farmers and local roller mills or cooperatives, farmers are the losers.

In addition it would be correct to state that some farmers in the FSP areas still experience some marketing constraints. Although storage facilities, exchange arrangements, marketing infrastructure, etc. are to some degree in place, further development of the various marketing services would still be required. It is therefore recommended that attention is paid to these matters.

5.4 Other recommendations

One overriding recommendation is that the DBSA must ensure that implementing agents strictly keep to the letter and spirit of the DBSA's policy guidelines in respect of the FSP. The authors are of the opinion that this would prevent the failure of the programme. If all the elements of the programme are fully in place it should ensure the successful emergence of commercial farmers.

5.4.1 The necessity of a baseline study

It was found in the agricultural economic study that comparing non-FSP farmers with FSP farmers as a way in determining the impact of the FSP is not at all satisfactory. It would have been much easier and more correct to have a baseline study from which the impact and

success of the FSP could be evaluated.

It is further not clear why baseline studies were not done prior to implementation of the FSPs as it was so specified on page 23 of the policy guidelines (DBSA, 1986):

"During the planning of the programme, an agricultural profile of the area should be established. Detailed base-line studies are not always necessary but an assessment of the following should be made:

- i) the farmers' perception of the constraints they face;*
- ii) the nature of land utilisation and distribution;*
- iii) the extent of migration, commuting and local employment in the area;*
- iv) the proportion of agricultural income to migrant income;*
- v) the institutional structures and infrastructure; and*
- vi) the identification of new constraints. "*

If this was done, the progress of implementation of the RSP would have been more conspicuous and, furthermore, the task of evaluating the FSP would have been much easier and probably more purposeful. The authors therefore recommend that some form of base line study, along the lines as indicated above, is done before any further FSP is implemented.

5.4.2 The natural resource base

The DBSA policy guidelines state clearly that areas of limited agricultural potential should not be considered for agricultural support. This was again confirmed by the results of the various surveys showing that farmers in low potential areas are now actually worse off due to the FSP. The survey results also indicated that the implementation of the FSP in areas with high agricultural potential, e.g. Phokoane, are more likely to be successful.

To avoid the implementation of FSPs in low potential areas, it is important to investigate the agricultural potential of proposed target areas before implementation. Aspects that should be attended to in this regard are soil surveys, crop suitability and location with regard to general infrastructure. Soil surveys are particularly important for future crop recommendations as well as fertiliser application rates. Findings from the two studies suggested that this was not carried out in all the areas surveyed.

Relatively high potential areas through their yield response to the FSP services, contribute to the increased visibility of the programme and increased confidence in agriculture. Although it could be argued that the FSP would increase living standards in any area, the risk involved in low potential areas is higher with the visible success of the programme also remarkably lower. The increased risk could also result in increased indebtedness of the farmers which creates a negative image of the programme and lead to farmers being disillusioned once more. This again emphasises that great care should be taken before FSPs are implemented.

6. CONCLUSION

It can be concluded that Farmer Support Programmes contribute to increased production, household income and food security. It is also clear that institutional factors are major constraints in the development of emerging farmers.

There are three factors that are considered to be critical for the future success of the farmer support initiative i.e. transparency, participation and the correct target areas. Providing the various elements of the support programme in a transparent manner will ensure trust between the farmers and the implementing agent and will prevent suspicion and the discredited image of implementing agents. It is, furthermore, important that the programme is designed and implemented "with" the farmers and the community and not "for" them. This will ensure a high level of participation. Lastly, it would be critical to analyse the agricultural potential of each area and to avoid implementation in areas of low agricultural potential.

Finally, it would be appropriate to once again emphasise the need for implementing agents and DBSA officials to study the policy guidelines for the FSP. The guidelines as stated is perfectly clear and if the programmes are implemented along these lines increased success would be ensured. Stacey (1992) showed that when all the necessary support elements are in place and tribal institutions are reduced, the "commercialization of agriculture" will take in a natural evolutionary way. It is therefore important to ensure that all the support elements as identified in the policy guidelines are perfectly in place and are well coordinated and integrated.

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