

EXPERIENCES AND PERCEPTIONS OF BLACK SMALL-SCALE IRRIGATION FARMERS IN THE FREE STATE

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ABSTRACT

Nine focus group interviews with black small-scale irrigation farmers in the Free State, applying the principles of Participatory Rural Appraisal (PRA), revealed that this sector of agriculture is confronted with numerous constraints and obstacles. They need considerable land, funding, extension, marketing and credit services, and more than just a sympathetic ear from the authorities. Although they are highly motivated to become prosperous farmers, unless they are heavily supported by extensionists and receive aid from the government, the dream of revitalising, expanding and strengthening this sector, will be shattered.

1. INTRODUCTION

This article reports on only one objective of a broader research project with the title *A technological and socio-economic evaluation of production systems for small-scale irrigation farming in the Free State Province*. This project runs over a period of four years. It started in 1996 with the final objective of evaluating the technological feasibility and sustainability of various irrigation farm production systems in terms of meeting economic and social aspirations of small-scale irrigation farmers. The ultimate objective is to produce, (for such farmers, extensionists and advisors) guidelines and a decision support tool for evaluating the production risks associated with various cultivation strategies in the form of an easily understandable manual of guidelines and recommendations for small-scale irrigation farming production systems. The potential also exists for wider use of both the research findings and the support system in other parts of the country. Extensionists and small-scale farmers will hopefully be able to utilise the research findings (consolidated in an easily understandable manual), guiding them in choosing and applying appropriate cultivation strategies that make the best use of the water and climate resources in their particular areas.

This preparatory phase of the research reports on the production practices and strategies of existing small-scale farmers in the Free State, the problems, obstacles, limitations, blockages and constraints they encounter, their

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initiatives, farming strategies, resource bases, development potential, expectations and aspirations.

2. STATEMENT OF THE PROBLEM

When political independence in Zimbabwe was achieved in 1980, the new government openly declared that the redistribution of land was one of its top priorities. As is the case in South Africa, it was hoped that land redistribution would be one of the key means by which the government's stated objective of "growth with equity" would be achieved (Dengu & Mugova, 1996:6). The government embarked on a "Resettlement Programme" soon after independence, with the objective of settling on the land thousands of refugees returning from the war of liberation as well as those peasants who were living in areas with an acute shortage of arable land. The Land Resettlement Act was passed in 1980 to facilitate the acquisition of land for resettlement purposes. Dengu & Mugova (1996:6) state that the achievements of the "Resettlement Programme" were limited largely because land could only be acquired on a "willing seller, willing buyer" basis, and the funding, promised by the British Government, had achieved only 30 per cent of its targets. Another key problem was the lack of productive assets among the resettled people. No provision was made for loans to resettled people, resulting in agriculture production being far from impressive. The increasing population pressure and deteriorating agriculture productivity inevitably led to urban migration. The population of Zimbabwe's capital and largest city, Harare, increased from 373 000 in 1969 to 590 000 in 1979 (an annual growth rate of 5,8 per cent, while the country's natural population growth rate was 4,4 per cent per year). In 1982 the population numbered 658 000 and with an annual increase of 9,2 per cent over the next five-years, Harare's population reached 961 000 during 1987. By 1992 its population numbered 1,2 million and with an annual growth rate of 6,6 per cent over the previous five years, its estimated population in 1996 exceeded 1,5 million with an expected population of 2 million by the turn of the century (Dengu & Mugova, 1996:7).

As urban populations increase, so too does the need for efficient food production. According to Tomlinson (1994:16) the percentage of the urban black population of South Africa will increase from 53 (13,0 million) in 1985 to 69 (33,2 million) in 2010, while the percentage of rural blacks will decrease from 47 (11,4 million) to 32 (15,3 million) during the same period. Irrigation agriculture is currently the biggest consumer of South Africa's scarce resources. Savings on irrigation water through efficient farming practices will release precious water supplies for human and industrial consumption. Assisting small-scale irrigation farmers to optimally utilise the water

resources at their disposal is therefore of critical importance. At the time when this article was written, the White Paper on Water Affairs had not yet been finalised, but it was already clear that one of its main proposals would be the extremely limited use of one of South Africa's most precious resources, namely water.

The mission of the Department of Agriculture in the Free State Province is to create a better life for the people in the Free State through self-reliance and utilisation of agriculture and other resources within a sustainable living environment. At least 3 000 farmers, of whom many will be small-scale farmers, are to be settled in the Free State over the next five years.

Before April 1994, the Department of Agriculture in the Free State had 15 000 clients. By December 1996 it had 300 000 - an increase of 1900 per cent in less than three years. Most of these clients live in and around the townships, while the Department's aim is to serve 80 000 households by March 1999. It is envisaged that this will improve the lives of some 400 000 people (Anonymous, *Agriculture*, December 1996:1). It is estimated that some 450 000 to 750 000 small production and consumption units could be subsumed under the global category of "small-scale agriculture sector" in South Africa (Land Reform and Rural Development Support Research Proposal, 1995:5).

This increase in the number of clients as well as the expanding demands on their technological skills will put extensionists under tremendous pressure in the years to come. At a workshop held in Pretoria in January 1994¹ the training needs were already emphasised and it was stated that "... it became clear that lack of extensionists or advisors with specialised training in irrigation poses a serious problem in South Africa. This lack seriously impairs the technical efficiency of ... small-scale irrigation farmers.... It is imperative that such training programmes should be started as soon as possible" (De Lange, 1994:27). Marais & Bosman (1996) also came to the conclusion that there is still not enough in-services and re-training for extensionists.

What is complicating the problem of a growing number of small-scale farmers and expanding demands on the skills of extensionists to support and strengthen them, is the transformation of the agricultural sector in South Africa.

3. THE TRANSFORMATION OF AGRICULTURE

In a joint "Land Reform and Rural Development Support Research Proposal"

(1995) drafted by several universities* and the Land and Agriculture Policy Centre (LAPC) it is recognised that the current process of land reform and the envisaged revitalisation, expansion and strengthening of the small-scale agricultural sector represent a major challenge that will have a profound impact on the future of South Africa. In the mentioned proposal it is argued that agricultural and rural development processes up to now in South Africa have been shaped mainly by the drive to modernise agriculture in order to satisfy the needs of South Africa's economy and of the white farming community. The modernisation of agriculture did not only embrace a far-reaching political-economic reorganisation of the countryside, a deepening of apartheid and a heavy reliance on exogenous resources², but resulted in agriculture's increasing dependence on external resources and a production process which was increasingly dictated to by outside agencies. The modernisation process was also built upon, and consequently reinforced, by a thorough ignorance and negligence of endogenous resources.

This development, it is argued, has shaped the crisis of agriculture and the need to transform the agricultural sector. While large-scale, white-dominated agricultural enterprises still compose the hard core of the sector, the small-scale farming sector is becoming an important point of departure, both for land reform and for the general rural development process. The study of small-scale farmers' strategies should be linked as much as possible with the way endogenous resources are used, developed and remunerated. Such studies are especially urgent since during apartheid, it was mainly ignorance that was produced as far as the practice and the potential of small-scale farming were concerned.

The same document also points out that the new agricultural policies of South Africa, as well as the associated section of the "Reconstruction and Development Programme," have been designed to "overcome the blockages and constraints for those agricultural and rural development processes that might favour the majority of the people" (Land Reform and Rural Development Support Research Proposal, 1995:5-6). The proposal furthermore states that the existing small-scale sector will have to be revitalised and strengthened and that considerable land will have to be redistributed in order to expand the small-scale farming sector. This implies that *in-situ* and on-site research and social-culturally orientated fieldwork are needed in order to increase the knowledge about the development potential of the concerned

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areas and to establish sustainable ways to build upon its endogenous resources. As very little is known, particularly of black small-scale farmers, it is hoped that more information about them will not only contribute towards policy development, particularly when governments embark on approaches inspired by a bottom-up, participatory approach, but that existing, and ultimately new small-scale farmers will benefit from the research.

4. PROCEDURE

In an attempt to answer the question "What is wrong in development?" Kotze & Kotze (1996) point out *inter alia* the gap between the expert and the people. They state that it would seem as though the vast amount of information made available by advisors to developing countries has simply had no effect. Edwards (in: Kotze & Kotze, 1996:5) ascribes this state of affairs to the distance between the possessor of the information and those to whom it is supposed to be conveyed. Too often the information is inappropriate, partial and dated as a result of inappropriate research methods that satisfy nothing else but the expert's notions of science. In contrast to the expert, Kotze & Kotze (1996:5) state that "the poor people appear incompetent and ignorant, and nobody dares to challenge the superior scientifically acquired knowledge." The appropriateness of the approaches and the methodology applied by the experts remains unquestionable. "Data, knowledge and insight that could be obtained from the poor, the illiterate and the far-off, are often ignored by the expert. It is precisely those who have learnt to survive with virtually nothing at their disposal that possesses valuable knowledge. Indigenous networks of production, barter and mutual support, which have evolved over centuries and could form the basis for development, are sometimes destroyed by plans for commercial production" warn Kotze & Kotze (1996:5).

Due to alternative approaches in development and methodology, the majority of research that has recently been carried out within the field of small-scale farming is qualitative by nature. It was argued by the researchers that this approach is particularly useful and best suited for documenting the experiences and perceptions of small-scale farmers. A qualitative approach was therefore opted for, with application of the principles of Participatory Rural Appraisal (PRA).³

Participatory forms of research emerged during the 1970's as a response to the failure of conventional research techniques to adequately address issues in Third World or developing contexts. Participatory research is based on the belief that development should be people-centred. People are central to any

kind of development process, and communities should be part of the decision-making processes.

The objective of participatory research is exemplified in a concept introduced by MYRADA (one of the pioneer PRA-training organisations in India) at the workshop on PRA in Karnataka. The Four Squares of Knowledge illustrates the conceptual movement necessary for conducting authentic participatory research.

I We know They know	II We don't know They know
III We know They don't know	IV We don't know They don't know

Figure 1: The four squares of knowledge

“Too often the third quadrant of this diagram characterises the attitude of outside experts. The local community, impressed or more often intimidated by the neat pens and notepads of researchers, place themselves in quadrant II... In participatory research, knowledge is pooled and a shift in attitude pushes out the boundaries of quadrant I and reduces those of II and III” (De Koning & Martin, 1996:51).

Participatory Rural Appraisal (PRA) evolved from the parent methodology, Rapid Rural Appraisal (RRA). Other approaches include Participatory Learning Methods (PALM), Participatory Action Research (PAR) and Rapid Assessment Procedures (RAP).

Rapid Rural Appraisal (RRA) emerged as a result of three main factors:

- a growing dissatisfaction with the normal processes of questionnaire surveys and their results,
- the need for more cost-effective methods of obtaining information. This led to increasing awareness that rural people were knowledgeable about issues that affected their everyday lives. What became known as indigenous technical knowledge (ITK) was increasingly seen to have a richness and value for the practical purposes of outsiders. It would be cost-effective to make more use of that knowledge, and

- anti-poverty biases resulting from practitioners/researchers only spending a brief time in the area under investigation.

RRA and PRA share many of the same principles and methods but the main distinguishing factor lies “in roles, behaviour and attitudes” (Chambers, 1992:9). RRA enables outsiders to make use of indigenous knowledge but the mode is still mainly extractive. Thus, these ‘experts’ play the dominant role - setting the agenda, obtaining and analysing information and planning. However, with PRA, the community undertakes these tasks. PRA is therefore “an approach and method for learning about rural life and conditions from, with and by rural people” (Chambers, in: Pather, 1997:67). PRA recognises that people have considerable knowledge about their problems and their environment though they may not realise that they have the capacity to resolve their problems. PRA can therefore assist communities to organise their information in ways that they can control. ‘Outside’ researchers and ‘inside’ respondents are partners, exploring topics of mutual interest together. As Chambers (in: De Koning & Martin, 1996:51) points out, in PRA ‘outsiders are convenors, catalysts and facilitators to enable people to undertake and share their own investigations and analysis’.

PRA has been used in several fields, including natural resources, agriculture, health, nutrition, food security and programmes for the poor, with the emphasis on generating knowledge from the perspective not only of the researchers but also of the researched.

Within PRA there is a clear emphasis on learning with and from groups in the community in a relaxed and flexible way. PRA methods work through a powerful visualisation of situations and knowledge generated in dialogue with local people, and have expanded the ability of many grassroots organisations to trigger discussion and to document and acknowledge local knowledge.

The use of visual and diagrammatic methods in PRA helps shift the ownership of data from proprietary to share. Local participants using available materials in order to explain their concepts construct maps, diagrams, charts, graphs and pictures. Most techniques are grasped easily by literate as well as non-literate participants, and, therefore ‘level the playing field’. Visual materials have another advantage. By helping focus all group members’ eyes and attention on the topic in question, these aids led to greater in-depth discussion.

Using focus groups as the main source of data collection, a variety of methods were utilised, namely secondary data reviews, direct observations, transacts and group walks, key informants, key indicators, sketch mapping, stories, portraits and case studies, while rapid report writing took place in the field.

The focus group approach is a method of studying the opinions, attitudes, views etc. of individuals in the context of a group. This technique is especially productive in assisting policy making. One of the main advantages of the focus group is that they facilitate a large amount of information and interpersonal interchange on a topic in a relatively limited period of time. Having set the frame for the discussion the researchers maintained a low profile during the course of group interaction. However, a degree of control was exercised over the content and direction of the discussion to sustain relevance to the agenda.

Offices of the Department of Agriculture in the Free State were approached in search of a list of black small-scale farmers in the area under its jurisdiction. As it is not required of them to register as small-scale farmers⁴, alternatives had to be considered. Extensionists were therefore asked to organise meetings with all known and available small-scale farmers in their areas. Focus group interviews were eventually conducted during October and November 1996 with nine small-scale irrigation farming groups. The respondents were all black small-scale farmers, except one focus group, which consisted of coloured farmers in Brentpark, Kroonstad. A number of farmers, other than garden farmers, namely cattle and poultry farmers also attended the focus groups. These farmers were welcomed to the meetings as they, together with small-scale irrigation farmers, form a group of small-scale farmers all experiencing similar constraints, frustrations, problems, expectations and aspirations. Focus group interviews were held in Thaba Nchu (Sediba); Bethlehem (Kopanang); QwaQwa (Tsheseng, Makeneng, Makwane and Mangaung); Harrismith (Tshame) and Kroonstad (Maokeng and Brentpark)⁵. Altogether 90 individual small-scale farmers attended these meetings, representing about 300 farmers. Of these 90 farmers, 32 (36%) were women (see Table 1). The languages used were English, Sesotho and Afrikaans and all discussions were recorded on audiotapes. In some instances extensionists or the chairpersons of the farming committee acted as interpreter. Except for one focus group, where the majority of the farmers were young school leavers - The Community Young Farmers Co-operative (Makwane) - the focus groups all consisted of people between the ages of 50 and 70 years.

Table 1: Place of focus group, number of small-scale farmers and number of farmers who attended focus groups

Town/District	Place	Number of small-scale farmers	Number of farmers who attend focus group	
			Male	Female
Thaba Nchu	Sediba	±40	13	5
Bethlehem	Kopanang	9	5	3
Qwaqwa	Tsheseng	15	-	4
Qwaqwa	Makeneng	16	1	2
Qwaqwa	Makwane	54	6	9
Qwaqwa	Mangaung	9	-	2
Harrismith	Tshame	86	11	2
Kroonstad	Maokeng	29	8	1
Kroonstad	Brentpark	30	14	4
Total		288	58	32

5. FINDINGS

The activities of the existing small-scale farmers reveal that the majority of them practice irrigation farming on communal gardens. Community gardening provides them with the opportunity to develop a full range of entrepreneurial and farming skills on a small scale, as they have autonomy in decision-making on cultivation and marketing, but still have to co-operate in an organisational structure regarding shared water supply, infrastructure and equipment. This type of farming also provides to the unemployed an opportunity to improve their standard of living.

It was found that the farmers grew a variety of crops and that there were other crops, which they would like to grow, but were unable to due to lack of resources. The variety of crops they do grow include maize, wheat, dry beans, sugar beans, lucerne, onions, pumpkins, tomatoes, carrots, potatoes, spinach, cabbage, beetroot and sorghum. Crops that they would like to grow are sunflowers and peanuts. The majority of them practise sole cropping and intercropping, but a wide variety of production practices are implemented, which they themselves attribute to uncertainty of the best spacing. Most extensionists did not have manuals to guide them on production practices of the various crops.

Despite the socialisation process which reinforces gender inequalities both within the household and within the community and which customary behaviour and attitudes support, it was found that as much as one third of the

existing small-scale farmers in the present study were women. High unemployment rates, especially of women, may possibly contribute towards this high percentage of female farmers. Without exception these women (as well as the majority of male farmers) fall into the category of people with access to small units of land (seldom bigger than 0,1 ha) that they can use for subsistence farming. They are faced with a poor resource base and farm on soils that have become exhausted, need fertiliser and that in most cases were acidic. They experience problems of water availability and need advice on methods of irrigation. In addition to this they also do not know how much water the various crops require. In short, they realise that farming under these conditions will never produce all the income that their household needs. They are, at best, prepared to engage in farming on a part-time or sideline basis, still hoping for some alternative doors for them to open. Except for one woman, who preserved some of her crops for future consumption, all the women indicated that there was not enough yields for preserving or to be sold.

All of the respondents made use of human labour as no mechanical implements were available, and if available, it was either not in a working condition (as was the case at Kopanang), or there was no one to operate it (as was the case at Tshiame), or the implements were not fully equipped (as was the case at Maokeng). It was reported in *Agriculture* (December 1996:1) that "Officials from Kroonstad and Glen are supporting farmer groups from these communities (Maokeng and Brentpark) in developing dairy farms, including infrastructure on available commonages. A tractor provided through the Presidential Lead Project has been used for the production of fourteen hectares...". However, at a focus group held on the 19th of November 1996 at Maokeng, one of the farmers, quite upset, made the following remark: "Ons het 'n trekker gekry. Om iets nog by te voeg, kyk, hulle het ons trekker gegee nê, trekker gekry! Kyk mense, hier is die trekker. Julle kan nou aangaan, maar hy het nie met sy hele implemente gekom nie. Hy is net so kaal - soos hy daar is, gekom. Julle moet sien dat die ding kan petrol kry. Julle moet sien dat die ding kan ploeg kry, dat die ding kan wat kry. Net soos hy daar staan. Is dit nie (?) nie? Kyk, julle help 'n man wat niks het nie. Het niks nie meneer! Hy kan self nie sy pap koop nie, maar hulle sê hy moet petrol koop; hy moet diesel ingooi; hy moet ploeg gaan koop. Hy moet planter gaan koop. We are even fighting together now. We, down here, we are fighting each other. I see no progress ..."

This brings to the fore another constraint that these farmers are facing - one of disillusionment which leaves them with nothing but smashed dreams. More than 100 years ago (1856) the French social thinker Alexis de Tocqueville

wrote "Evils which are patiently endured when they seem inevitable become intolerable once the idea of escape from them is suggested" (in: Bassis, Gelles & Levine, 1991:192). The modern term for this phenomenon is *rising expectations*. James Davies (in Bassis *et al.*, 1991:192) has argued that severe poverty and extreme powerlessness lead to apathy and hopelessness. People who expect little in life and who are preoccupied with the daily struggle for existence are unlikely to take to the streets in protest, but if their economic and political situation improves, however, their expectations rise. They soon begin to believe that a better life is not only possible but lies just around the corner. When these hopes fail to materialise, they become angry and frustrated. The gap between what they expected and what they have now seems intolerable. Although they may be better off than they were in the past, in relation to what they anticipated, their situation has deteriorated. This is, in fact, what happened to most of the farmers in this study. All the groups revealed that they were expecting an improvement in their socio-economic position after the 1994-election, and that the situation showed great promise - at least that life would be more than a preoccupation with the daily struggle for existence. Only two male farmers turned out to be well-off farmers who's expected need satisfaction met with their actual need satisfaction. For the rest of the farmers it seems as if the gap between what they wanted and what they got became intolerable. One farmer states that "we have been given lots of promises, for funds, land... and we are still waiting. *Die regering kyk net na die groot boere. Ons klein boere - hulle kyk nie na ons nie. Ons het goeie kans gehad om 'n plaas te koop, maar ons het dit gemis deur die stadigheid van die amptenaar ... Meneer, ons verstaan dat die regering nog 'n jong mannetjie is, hoor meneer, hy's nog 'n jong mannetjie. Hy gaan nog reg (kom) om te regeer. Ons verstaan. Maar hulle moet kyk of daar nie iemand is wat skelm planne doen nie. Hulle sit met die geld net om die rente te kry.*" In one-group participants claimed that each farmer in that area was promised 200 ha of land. It was only later that they had to find out that the "promised land" was to be "given" to ten cattle farmers collectively. At the moment they are already 10 farmers with 70 cattle, and according to them "... too many people on one farm".

Regarding their future as farmers and their aspirations as young farmers, "The Community Young Farmers Co-operative" at Makwane intimated that they have already agreed upon the following: "There are five prerequisites for us to become successful farmers - and that is what we would like to be:

- (i) we need capital;
- (ii) we need knowledge/skills;
- (iii) we need to be well organised;

- (iv) we need co-operation - amongst ourselves and with all relevant stakeholders; and
- (v) we need the will to develop.

Of all these, we only have the organisation (here they refer to themselves as the Community Young Farmers Co-operative) and the will to develop." From a discussion with this group of young farmers it became clear that:

- (i) they had not decided to turn to farming voluntarily, but because they had had no other option due to lack of job opportunities;
- (ii) despite this "drawback", they are highly motivated to make a success of their enterprise (as was the case with all the focus groups);
- (iii) they do not have the essential knowledge or skills to farm;
- (iv) they have neither capital nor access to credit;
- (v) they do get extension support, but due to lack of capital and other resources, the advice, suggestions and recommendations cannot always be implemented;
- (vi) they face unstable markets and prices; and
- (vii) their "poor" situation is not because of laziness or carelessness, but rather due to constraints in the resources and technological base.

They concluded by saying that they are not yet farmers. They don't know how to farm. "We don't have any farming strategy - we just farm like we are farming now. ... We don't know how to control weeds. We take them out by hand. ... If we can be given all these skills ... how to plant ... how to irrigate and how to market, then we will become prosperous farmers." Problems that were mentioned (and discussed in more detail at the focus groups) by cattle and poultry farmers correspond with all the above-mentioned. To this list can be added that they also encounter problems with the high risk of spreading diseases from one animal to another, lack of vaccine, stockremedy and other medicine as well as the service of a veterinary surgeon, transportation of their cattle and cattle-theft. They would also like to know more about stockbreeding, trade in livestock and how to take action at a stock-fair.

6. SUMMARY AND CONCLUSION

True to its definition, it was found that the small-scale farmers in this study had access to only small units of land that is often naturally poor or depleted and fragmented. As a result of low income and limited production resources, they suffer chronic indebtedness and lack accessibility to institutional (and informal) credit and inputs. They face unstable markets and prices, which are beyond their control, and they receive inadequate extension support. As was the case in Zimbabwe after political independence was won, they are confronted with constraints such as an acute shortage of arable land, lack of productive assets, very little provision for loans, and deteriorating agriculture production inevitably leading to urban migration of the young leaving behind only the old to farm.

In summary, they face:

- lack of production resources (poor resource base):
 - shortage of land (units are too small);
 - fertilisers and pesticides (not readily available, too expensive and lack of knowledge regarding what and how to use it);
 - poor soil (in use for up to 35 years, often acidic, lack of knowledge how to analyse and treat the soil);
 - seed (seldom locally available, bad quality of seed);
 - water (availability, pollution, application); and
 - capital (shortage of capital and limited access to credit).

- lack of support services:
 - specialised irrigation extensionists (lack of knowledge and skills regarding cropping, equipment, appropriate irrigation technologies) and;
 - comprehensive extension service (some of the “farmers” enter the occupation with no or very little training).

Their present situation can be summarised as being one mostly of misery. However, confronted with these obstacles, they are motivated to become prosperous farmers, but they rely heavily on specialised and comprehensive support from extensionists. They also expect more than just a “sympathetic ear” (Mokoene, 1997:10) from the authorities. They claim that considerable land should be given to them by the state, that they need funding, marketing and credit services, as well as drought aid.

After research conducted amongst different categories of rural dwellers⁶ in Southern Africa, Erskine (1996:38) of the Institute of Natural Resources (INR) at the University of Natal came to the conclusion that “most households do not engage in agriculture as a serious income-generating exercise simply because, given the available resources, it is not now possible and never will be possible for these households to generate all the income they need from farming activities to escape from poverty.” He warns that there are too many people who believe that merely helping people develop their agricultural capability is going to put the ball rolling towards lifting them out of the poverty cycle, and goes on to say that “... if we listen to what rural people say when rural appraisals are conducted (in a relaxed, not rapid, way) they do tell us that agriculture is very low on their list of priorities” (Erskine, 1996:38).

Unless the existing farmers do get the support that they so urgently need, the dream of revitalising, expanding and strengthening this sector of agriculture can be nothing more than only a shattered dream.

NOTES:

1. *Workshop organised by Murray Biesenbach & Badenhorst Inc Consulting Engineers under contract to Water Research Commission of South Africa.*
2. *This concept refers to those resources that are basically disconnected from the locality and therefore from the local ecosystem, labour force, knowledge and skills, techniques, and local patterns linking production and consumption as entailed in the local situation.*
3. *See Chambers (1992), Chambers (1994(a) and (b)) Nabasa, Rutwara, Walker & Were (1995) for more detail about PRA, practical experiences of PRA and an analysis of experiences of PRA.*
4. *The definition of a small-scale farmer has been the subject of debate for a long time and several definitions have evolved. Various characteristics have been used to define small-scale farmers and among these are: size of farm, income level, input level, management level, use of technology and investment level. In most of the definitions there are two characteristics of small-scale farmers, which stand out, namely:
 - (i) *the small size in terms of resources, and*
 - (ii) *low income level, whilst from the economic point of view, the most significant characteristic being the resource base on which they operate.**

In terms of land, they have control over only a small area of land ranging from 0,4 ha to 20 ha which is often naturally poor or depleted and often fragmented. While small-scale farmers have the common characteristics of limited resources and low incomes, their modus operandi around the world exhibits tremendous diversity. Small-scale

farmers may practice dry land farming or irrigation farming. The addition of the term "irrigation" to small-scale farming brings about emphasis of particular characteristics of a small-scale irrigation farmer. The definition of small-scale irrigation farmers used in this article as derived from the research was: Farmers working on land in the range of 0.1 - 3.0 ha with low income, input, management level and technology. For a discussion of the small farmer concept in South Africa, see Van Rooyen & Botha (1994).

5. Sediba village is in the district of Thaba Nchu, a former part of Bophuthatswana (see Figure 2). Here small-scale farmers practise dry land farming on land ranging from 0,25 ha to 3,0 ha. They usually grow maize, wheat and beans, but due to "last season's drought the fields were not grown". They do practise intercropping with maize and wheat. Those farmers practising irrigation farming, farm on sites ranging from 0,25 ha to 1,0 ha and usually grow potatoes, cabbage, sorghum, spinach, beetroot, carrots, tomatoes, pumpkin, onions and lucerne. They would also like to grow maize, sunflower, wheat, beans, sugar beans and peanuts. No electricity is available.

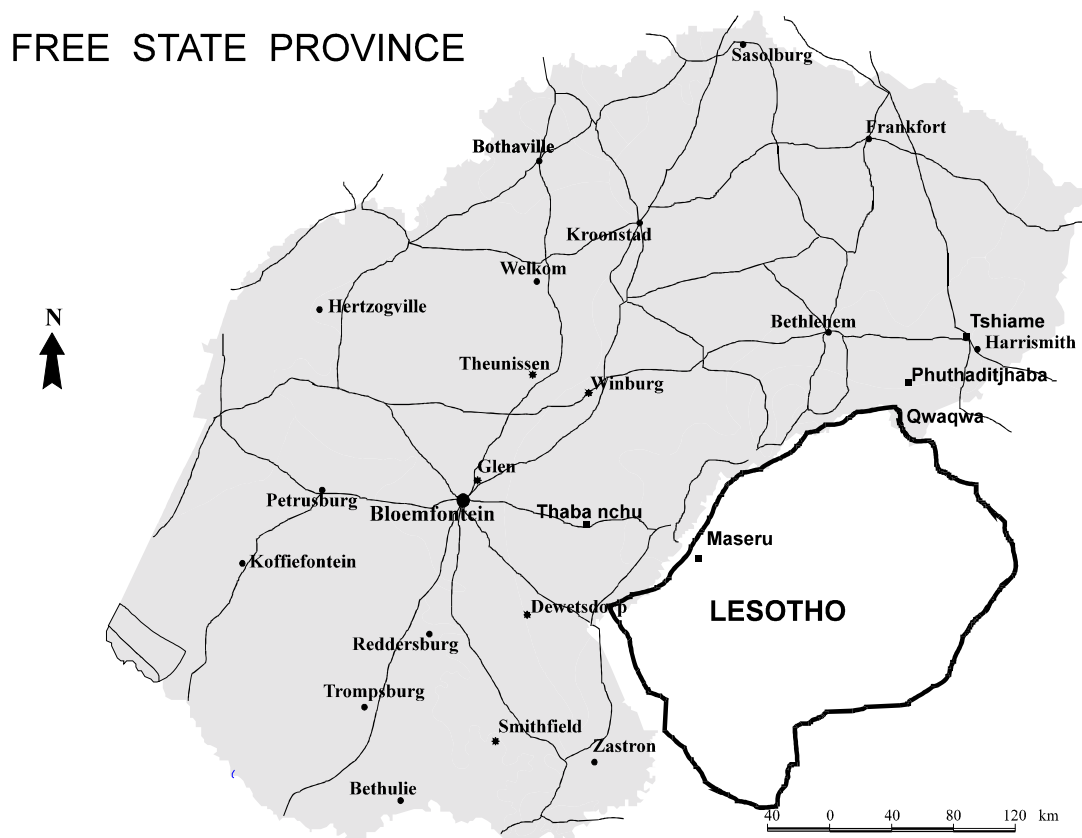


Figure 2: Map indicating districts where the survey was conducted

Kopanang is a village adjacent to Bethlehem where nine farmers practise communal garden farming with water from a nearby dam, which is highly polluted with diluted sewage. Buckets and hosepipes are irrigating the garden. They practise farming with pumpkin, beans, beetroot, potatoes, spinach, maize, tomatoes, onions, carrots and cabbage mainly "to escape poverty". Daily income ranges from R50 to R70 with an average of less than R10 per farmer. To supplement their income they sell glasses, candles and meshed wire, which they make themselves.

In QwaQwa four areas near Phuthaditjhaba were included namely Tsheseng, Makeneng, Makwane and Mangaung. QwaQwa is situated in the north-eastern Free State on the Free State, KwaZulu-Natal and Lesotho border. This former homeland has been described as "a peri-urban slum in the middle of nowhere". Phuthaditjhaba, the capital, with an average annual rainfall of 800 mm is surrounded on all sides by small settlements like those mentioned above. High-density population patterns and overpopulation, over-utilisation of land, unemployment and general social hardships characterise the whole of QwaQwa. Botes, De Wet & Heunis (1995:18) state that there were no available plots left in QwaQwa for distribution by the early 1970's, and that the homeland administration, by then, "was adamant that farm families had to sell all their livestock before entering the homeland. This resulted in the cramming of families from farms onto urban-size sites in sprawling shack-settlements, without farmland or cattle. Under these circumstances the dream of many ex-farmers was smashed". As a result, many small gardens are utilised for the purpose of vegetable and fruit gardening.

Tshiame is approximately 10 kilometres from Harrismith in the eastern Free State. It was allocated to QwaQwa in 1986 but was never officially incorporated into QwaQwa (Botes et al., 1995:20). Greater Tshiame consists of two residential areas: Tshiame A and Tshiame B. Tshiame B, with a population of approximately 18 000, is a lower middle class or lower class residential area with housing provision mainly intended for labourers of the nearby Industriqwa. The unemployment rate is high, due to many ex-farmworkers that have flocked to this area. Eighty-six plots have been developed for small-scale irrigation farming. Water is pumped from the Wilge River and the Sterkfontein Dam into a nearby reservoir. Although irrigation pipes cover all the plots, only a small number of these plots were being cultivated at the time of the research.

Maokeng and Brentpark are residential areas adjacent to Kroonstad in the northern Free State, where, respectively, mainly black and coloured people live. Although the majority of the small farmers in these areas are at present still farming in their backyards, considering themselves as being very inexperienced at this stage, there are a few farmers who farm with cattle and poultry. At present, dairy production is being upgraded and officials of the Department of Agriculture are supporting farmers from these communities in developing dairy farms.

6. *One of these categories identified by the Institute of Natural Resources is people with access to small units of land that they can use for subsistence farming, if they have the financial resources and labour available.*

REFERENCES

ANONYMOUS, 1996. *Agriculture*. Department of Agriculture. Free State Province. December.

BASSIS, M.S., GELLES, R.J. & LEVINE, A., 1991. *Sociology, an introduction*. New York : McGraw-Hill, Inc.

BOTES, L.J.S., DE WET, M. & HEUNIS, J.C., 1995. Land needs and related issues in the "northern" Free State: Survey and qualitative case studies in Tseki, Tshiamé, Viljoenskroon and Maokeng. Bloemfontein : Land and Agricultural Policy Centre.

CHAMBERS, R., 1992. Rapid and participatory rural appraisal. *Africanus*, 22(1&2):6-15.

CHAMBERS, R., 1994a. Participatory rural appraisal (PRA) : Analysis of experience. *World Development*, 22(9):1253-1268.

CHAMBERS, R., 1994b. The origins and practise of participatory, rural appraisal. *World Development*, 22(7).

DE KONING, K. & MARTIN, M. (eds.), 1996. Participatory research in health issues and experiences. London : Zed Books Ltd.

DE LANGE, M., 1994. *Small scale irrigation in South Africa*. Water Research Commission Report no. 578/1/94. Waltloo : Promedia Printers.

DENGU, E. & MUGOVA, A., 1996. Urbanisation and land policy in Zimbabwe. *Appropriate Technology* 23 (1) June:5-8.

ERSKINE, J.M., 1996. Rural community development. Facing reality. *In Focus Forum*, HSRC, May/June:38-41.

KOTZE, D.A. & KOTZE, P.M.J., 1996. What is wrong in development? *In Focus Forum*, HSRC, May/June:4-8.

LAND REFORM AND RURAL DEVELOPMENT SUPPORT RESEARCH PROPOSAL, 1995. *Draft version of a joint proposal of the University of Zululand, University of Fort Hare, University of Natal, University of the Free State, University of the North, University of Pretoria, Wageningen Agriculture University and LAPC*. Workshop held in Pretoria on 10 August 1995.

MARAIS, L. & BOSMAN, M., 1996. Die uitdaging van volhoubare landbou-ontwikkeling. *In Focus Forum*, HSRC. May/June 1996:28-33.

MOKOENE, S., 1997. Getting organised on (Black) farms. *Total in Southern Africa*, 21 (1) February:10-11.

NABASA, J., RUTWARA, G., WALKER, F. & WERE, C., 1995. *Participatory rural appraisal : Practical experiences*. Chatham, U.K. : Natural Resources Institute.

PATHER, J., 1997. Learning from, with and by the people. *In Focus Forum*, HSRC 4(4). January:67-71.

TOMLINSON, R., 1994. *Urban development planning : Lessons for the economic reconstruction of South Africa's cities*. Johannesburg : Witwatersrand University Press.

VAN ROOYEN, C.J. & BOTHA, C.A.J., 1994. Agricultural extension and small farmer development in South Africa : Problems and proposals. *S. Afr. J. Agric. Ext.*, 24:36-48.