

THE ROLE AND CONTRIBUTION OF SOUTHERN AFRICA'S DEVELOPING AGRICULTURAL SECTOR : CONDITIONS FOR GROWTH

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Introduction

Agriculture in the developing areas of Southern Africa² is often viewed as inefficient and unproductive if compared to the modernised farming in the White areas. It is also proposed that agriculture in these developing areas should rather be viewed as socio-economic or even "ethnic" in nature practised by the old aged or the "useless" ie "old age home farming". It is therefore argued that investment should be directed away from this type of agriculture in favour of modern sophisticated farming, especially in the developed White areas and/or to other economic activities which would render a greater contribution to economic and social development.

The analysis of developing agriculture, however, shows that the level of activity in this farming is an economic rational response to market forces and opportunities (see Van Rooyen, Vink & Christodoulou, 1987 for a comprehensive reference list on local studies in this regard). Studies on rural credit indicate that "informal"

investment, especially from non-agricultural sources, in small scale farming is substantial, while productivity increases can be observed across a broad front in developing agriculture, (Nieuwoudt 1989; Coetzee, 1988; Van Rooyen, Fenyes & Van Zyl, 1987).

In this paper the case for a key role for farming in the developing areas of Southern Africa will be argued. The argument will emphasize agriculture's potential to create income and employment in the broader economy.

Agriculture in Southern Africa

A realistic assessment of agriculture in Southern Africa indicates a highly diverse situation with South African commercial farming dominating the scene (Natrass, 1981; Van Rooyen, Fenyes & Van Zyl, 1987). (See Tables 1 and 2). Relatively efficient, commercially oriented and capital intensive White farming exists alongside subsistence oriented Black farming in the independent and national states.

TABLE 1. *The position of the agricultural sector in various Southern African states, 1980-1982*

Countries	Total GDP** (R million)	Agriculture contribution to GDP (%)	Economically active population in agriculture (%)
RSA	75 670,00	7,0	30
National states:			
KwaZulu	425,7	27,5	10
Qwaqwa	29,6	5,7	3
Lebowa	221,7	29,4	20
Gazankulu	62,3	25,0	21
KaNgwane	46,1	17,0	24
KwaNdebele	*	*	8
TBVC states:			
Transkei	712,7	23,2	76
Bophuthatswana	724,9	3,9	47
Venda	60,8	18,9	85
Ciskei	131,9	8,3	8

* Not available

** 1980/81 : US\$ = R0,75

Source: Van Rooyen, Fenyes & Van Zyl, 1987.

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² Southern Africa to include South Africa and the Self Governing states, National states and Transkei, Bophuthatswana, Venda and Ciskei.

TABLE 2. Gross value of agricultural production in SA, the self-governing states, and the TBVC states, 1979/80

Country	Field crop production		Horticultural production		Livestock production	
	R'000	(%)*	R'000	(%)*	R'000	(%)*
SA (Commercial)	2 648 963	(49)	849 383	(16)	1 886 397	(35)
Transkei	52 000	(44)	7 800	(7)	58 200	(49)
Bophuthatswana	9 131	(34)	4 429	(16)	13 721	(50)
Venda	1 805	(26)	1 665	(24)	3 543	(50)
Ciskei	830	(11)	2 085	(28)	4 430	(61)
KwaZulu	37 052	(34)	31 472	(28)	40 665	(38)
QwaQwa	116	(10)	722	(62)	325	(28)
Lebowa	12 275	(41)	4 472	(15)	13 540	(46)
Gazankulu	3 442	(32)	2 212	(21)	5 132	(47)
KaNgwane	1 862	(40)	1 040	(22)	1 800	(38)
KwaNdebele	124	(7)	1 020	(56)	649	(37)
TOTAL	2 767 600	(48)	906 300	(16)	2 028 400	(36)

* Percentage contribution within a country.

Source: Van Rooyen, Fenyes & Van Zyl, 1987.

The performance levels, cost structures, and levels of activity of these "two agricultures" differ considerably. For example "White" commercial farming produced an output of R1 298 per man (R119/ha cultivated) in comparison to R65 per man (34/ha cultivated) for "Black" agriculture. Although each sector employs roughly the same number of people, the commercial white sector area cultivated under agriculture, covers about six times the land under subsistence (or developing) farming (Cobbett, 1987) and the output per commercial worker is more than twenty times the output of a subsistence farmer. The productivity gap between subsistence and commercial agriculture has been widening consistently while at the same time the black population has increased at a rate of 3,1% per annum. Consequently black rural areas became increasingly dependent on food imports from the commercial white sector.

An interesting question arising now with important future implications for Southern Africa's agricultural and rural structure relates to whether this observed phenomena of differing levels of farming productivity among white and black farming can be explained by an inherent dualism in Southern Africa.

An assessment of the prevailing situation in Southern Africa's "two agricultures", highlights the different environment or milieu in which each operate. The commercialised white farming sector generally operates under farm business principles, encouraging commercial production, while comprehensively supported by the private sector specialised service institutions and organisations such as the Land Bank, Agricultural Marketing Boards, the Co-operative Movement, research institutions, and a strong political lobby in "Organised Agriculture". Government support through subsidies and protection to this sector also has a long

standing, although indications are that some of these measures are on the way out.

Agriculture in developing areas on the other hand operates largely outside this comprehensive support structure restricting access and opportunities to black farmers to compete on agricultural markets.

Decisions on labour allocation, production programmes, livestock farming/holding, choice of technology, etc., in developing agriculture are further largely governed by household economics and social considerations. This generally results in low levels of agricultural production and productivity, despite the general high agricultural potential of these areas.

The existence of successful, albeit relatively few, independent commercial black (also Indian and Coloured) farmers must be appreciated as these farmers operate commercially despite numerous restrictions facing them in relation to access to resource markets and support systems (Motsuenyane, 1987; Stacey, 1988).

Apart from common problems such as the price-cost squeeze as indicated by input costs rising faster than "farm gate" commodity prices and adverse natural conditions, the vastly different modes of production give rise to different sets of problems to farmers in Southern Africa. Commercial farmers and particularly white farmers in the summer crop producing areas of SA, recently struck by crippling droughts, presently find themselves in financial straits due to over capitalisation, high debt burdens, surplus production, the "cost-price squeeze" and too intensive or incorrect cropping systems (Groenewald, 1985). The black small farmer faces problems related to insecure and fragmented land rights, non-viable and small farm units, over-stocking and the deterioration of land, lack of supporting in-

infrastructure, water supplies, transportation networks, financial support and research services as well as restricted opportunities to compete in agricultural markets. Markets are often restricted both by economic factors related to high transportation costs and legal arrangements eg quota entitlements while representation and participation in agricultural policy decisions by these farmers are limited. Access is further accentuated by legal restrictions along racial lines to entry in the wider Southern African land market (Fenyves, Van Rooyen & Vink, 1986).

Most of the rural smallholder farming households are dependent on migrant remittances influenced by economic conditions in the non-agricultural sectors whilst land utilization relates to social security rather than productivity goals. Capital formation in Black farming is thus highly unlikely.

Against this background a simple comparison between white and black agriculture and their respective characteristics is not sufficient and meaningful in explaining the diversity in agricultural production between the two. It can, however, be stated that differences are not related to the issue of economic rationality. Economic forces operate in both agricultures.

Various studies for example, substantiate the economic rationality of smallholder black farmers in Southern Africa (see Van Rooyen, Vink & Christodoulou 1987 for comprehensive references). Evidence can also be cited from elsewhere in Southern Africa. An interesting study in Zimbabwe indicated that high levels of productivity are generally related to areas of favourable environmental conditions and support systems, irrespective of the farming mode eg large scale commercial white farming vs black farming on communal land (Weiner, Moyo, Munslow & O'Keefe, 1985). Increasing evidence that the smallholder farmer can successfully grow a wide range of crops is also cited. For example, in the 1981-82 crop year, the Umfarudzi smallholders recorded average cotton yields of 1 738 kg/ha, as compared to 1 500 kg/ha and 4 067 kg/ha maize as compared to 4 164 kg/ha for local large scale commercial farms. Recently analysis from some Farmer Support Programmes (FSP)³ notably in Kangwane, KwaZulu, Transkei and Lebowa funded by the Development Bank of Southern Africa increasingly confirm the above observations. A large variety of farming activities are supported by FSP's. These range from dryland maize production, irrigation farming, garden farming, cotton production, livestock farming and sugar farming, to name some activities.

It can be argued, and substantial evidence points to the validity of this proposal, that the "two agricultures" phenomena in Southern Africa should be viewed as the consequence of historical events in particular legislation biased against black smallholders, restricted access and

³Programmes structured towards enabling of access to agricultural inputs, credit, markets and marketing services, extension, training and research services, managerial support services, and mechanisation services by farmers (all agricultural resource users) in developing areas. Both private and public sector are involved in the support activities.

past policy approaches (see for example Beinart, Delius & Trapido, 1986; Bundy, 1979).

Evidence of a racial explanation being an important factor in successful farming so often "confidentially" expressed, is thus clearly devoid from all scientific and practical evidence!

Agriculture's Key Role in Development of Entrepreneurs, Employment and Income

It is generally agreed that the creation of income and employment opportunities in Southern Africa must receive high priority in development strategies (Department of Manpower, 1987). The full role of agriculture in such a development strategy, however, is often little understood.

It can be argued that agriculture performs three functions essential for economic development (Mellor, 1979). **Firstly**, because food makes up the bulk of marginal expenditures among the lower income people, farming provides the physical goods to support: (a) increased employment; (b) higher wage earnings; and (c) improved living standards for rural dwellers and farmers. **Secondly**, increased agricultural production places additional income in the hands of the cultivators, who tend to spend a substantial proportion of it on non-agricultural commodities and consumer goods. **Thirdly**, increased agricultural production generates both employment and income linkages throughout the economy which could in turn be exploited by means of labour creation strategies in industry and business.

The relationship between agricultural growth, economic growth and employment is thus clear: If an increase in employment of lower income people does not accompany increased agricultural output, there will be inadequate demand for food and real agricultural prices will decline sufficiently to discourage continued growth in agricultural production and the associated intersectoral linkages and multipliers.

It is further important to relate employment creation to entrepreneurial development as this approach has been shown to significantly contribute to the generation of employment.

One implication for such a strategy is clear for Southern Africa. Emphasis in agricultural investment must increasingly be shifted towards the smallholder farmers and emerging entrepreneurial groups in the developing areas to ensure increased agricultural production and

the corresponding trigger actions. The answer does not lie in large scale plantation/estate/corporative farming to supply food and fibre to Southern Africa.

The Potential Contribution of Developing Agriculture

A key role for developing agriculture will have validity if three questions can be answered affirmatively (Mellor, 1986):

- i) Can agricultural production be increased by means of advances in resource productivity?

- ii) Can effective demand for agricultural commodities expand apace with accelerated agricultural growth?
- iii) Can a dynamic agriculture provide an effective demand pull for growth in other sectors?

Within the present unbalanced growth pattern of the Southern African economy a **Fourth Question** should be added:

- iv) Can agricultural development and agricultural growth contribute to more balanced economic development?

These questions are now examined.

1. Productivity Increases

It is estimated that the developing states have more than 25% of Southern Africa's agricultural potential while large areas are still un- or under-utilised. It is also observed that although 4% of the land resources and some 16% of the arable land is found in black states, only 6% of the gross value of agricultural production reaches commercial markets (Brand, 1986). On basis of yields achieved elsewhere in Southern Africa, it has further been estimated that developing farming realises only one third of its potential production (Bembridge, 1986).

As to productivity increases recent observations of positive smallholder response to comprehensive farmer support programmes indicates a real opportunity to exploit the untapped natural resource base (Van Rooyen, Vink & Christodoulou, 1987; Weiner, Moyo, Munslow & O'Keeffe, 1985; DBSA Annual Reports and internal evaluations of the impact of farmer support programmes; Coetzee, 1988). The above assessment underlines the potential to increase agricultural production by means of advances in resource productivity.

2. Effective Demand Expansion for Food and Agricultural Commodities

Demand and supply features in the Southern African market needs to be assessed carefully to determine future trends. Increasing demand for food is essentially a function of population increase, income growth and income elasticity of demand (Mellor, 1966). With an expected population growth of $\pm 2,7\%$ per annum and in view of the relative stable income elasticity of demand of food (around 0,6) since 1950 (Van Zyl & Vink, 1988) and provided that sufficient jobs can be created to enable real income growth consistent increase in demand for food can be expected⁴.

Regional differences in population and income growth prospects should be noted (DBSA Annual Report, 1988) while the positive impact of income and employment creating strategies and higher income elasticities of demand for food in developing

⁴Applying the given percentages and estimating on a 1% per annum increase in real income, the demand for food can be expected to grow with 3,3% per annum.

areas will further boost the demand for agricultural products. Studies in rural areas show that income elasticities for other than staple food is for example 0,80 and 0,4 for staple food (Nieuwoudt, 1989).

Provided that employment and therefore income earning opportunities especially for the poorer groups can be expanded, indications are that agricultural producers will be faced with a steady increase in demand for food and fibre.

3. Agricultural Linkages

An assessment of the intersectoral linkages and multipliers in the agricultural sector indicate that agriculture plays an important role in the Southern African economy with different economic sectors influenced differently by changes in agricultural production: "The fertilizer and pesticide industries are shown to be most sensitive, followed by the agricultural machinery industry"; "Another important feature is that the total impact of a change in agricultural production on the economy is more than twice that of the direct impact" (Van Zyl & Vin, 1988).

It is, for example, interesting to note that although agriculture's direct share of employment creation recently decreased rapidly (Fenyés & Van Rooyen, 1985) the agricultural sector's ability to create employment opportunities inside and outside the farming sector was established as second largest, after the construction sector, of all the economic sectors. (124,4 jobs per R1 million investment in agriculture vs 60,4 jobs in mining and 60,8 in manufacturing (RSA input:output tables (Mullins & Scheepers, 1980)).

Substantial linkages and multipliers can further be expected as the result of support and productive investment in developing areas directed towards small farmers and businesses. Studies in rural KwaZulu in this regard for example, show a highly positive income elasticity of demand for the following: household expenditures = 0,93; clothing = 1,27; household durables = 1,24; savings = 2,61; education = 0,93; and transport = 0,86 (Nieuwoudt, 1989).

Indications are therefore that growth in other sectors can be expected through agricultural growth. The multiplier effect of increased agricultural incomes and employment under low-income groups is expected to generate a substantial demand for agricultural as well as non-agricultural commodities.

4. Balanced Economic Growth

From the above assessment it can be argued that investment in developing agriculture, especially to benefit smallholders across a broad front, will create entrepreneurial actions, employment and income in poor under developed areas. Economic upliftment and growth could be expected to occur in these areas. This will, under certain conditions, result in a more balanced economy in Southern Africa.

Conditions for Growth and Agricultural Restructuring

In the preceding sections the point for a substantial role for and investment in developing agriculture in economic development strategy for Southern Africa was argued. It is, however, also clear that the restructuring of the Southern African agricultural sector is required to ensure that the major conditions for the stimulation of entrepreneurial and employment opportunities and income growth in agriculture are met. Some of these conditions are now discussed.

Equitable Access to Participate in Agriculture

It would be important to ensure that farmers everywhere in Southern Africa have equitable access to opportunities to compete in the market with pertinent emphasis on integrating "emergent" smallholder farmers and entrepreneurs into the commercial economy. This will promote the economic optimal utilisation of agricultural resources and generate important income and employment linkages in the other sectors in the economy. Various aspects in this regard would require attention. This point is comprehensively argued by Van Rooyen, Vink and Christodoulou (1987) where the case of opening access for emerging farmers in the developing areas by means of comprehensive support programmes and affirmative action is presented. They pointed out that, although this may imply a degree of re-distribution of agricultural resources towards smallholder farmers in developing areas, this will eventually result in increased efficiency of resource use and lead to progressive and broad based agricultural and regional economic growth over the long run.

In addition to the availability of support services, access to participate will depend on a person's ability to command or entitlement over commodities (Sen, 1986). Within the Southern African context the entitlements of smallholder farmers and Black commercial farmers are presently severely restricted by various factors such as the lack of *de facto* production rights, limited exchange opportunities to trade in the wider South African economy, limited opportunities to transfer assets and labour to higher returns opportunities, legal restrictions, etc. The success of emerging farmer support programmes and the entry of Black, Indian and Coloured farmers into commercial agriculture would depend to a major degree on arrangements to ensure access and to improve entitlements of these farmers. An "entitlement approach" to agricultural restructuring is required. Legislation and arrangements to solve the acquirement problem facing emerging black farmers needs priority on the agenda for restructuring.

Adjusting the Present Distribution of Agricultural Resource Endowments

An "access and entitlement" approach to agricultural development will inevitably direct attention towards the present availability and distribution of agricultural land resources in Southern Africa. Regardless of the political sensitivity of this issue, it must be appreciated that individual restrictions to access and entitlement of land would jeopardise the long run economically optimal utilisation of land resources while effectively undermin-

ing private enterprise initiatives in agriculture. Land issues in all states in Southern Africa will receive increasing attention in future and should be placed on the agenda (De Klerk, 1986; Motsuenyane, 1987; Van Rooyen, 1988). It is necessary that this issue be assessed within a sound economic framework attending to efficiency and equity criteria, and not solely in terms of its political considerations. An evolutionary approach is proposed to handle this political sensitive issue with emphasis on direct access to farm land under the land consolidation to Black farmers, increasing the productive value of land and stimulating an informal land market in tribal/communal areas and utilising farming opportunities around urban complexes, especially for market gardening. (Fenyesh, Van Rooyen & Vink, 1986 and 1989).

Comparative Cost Considerations and Cost-Benefit Analysis

The principle of market related economic activities require that sound economics dictate the location and establishment of agricultural activities. With present efforts to stimulate the economic potential of the less developed areas of Southern Africa and the opening of access to all farmers to compete in the market, the application of the principle of comparative cost advantages may imply certain shifts in production localities to ensure the economically optimal utilisation of scarce agricultural resources and markets.

Historical occurrences and infrastructural development, which may have for example prevented developing areas (especially certain developing (black) farming areas) to compete cost-effectively in the market, would have to be discounted in terms of social cost-benefit considerations favouring a shift in the locality of production. It is expected that cost of labour, supply and transportational cost factors will be major items in establishing comparative advantage shifts. Rigidities and inflexibilities due to declining supply elasticities in commercial agriculture, selected market opportunities in the Southern African and international market and adjustment programmes will, however, need the urgent attention of policy makers and agricultural planners (Groenewald, 1987). In general it can be argued that Economic Cost-Benefit analysis should increasingly be employed to enable public sector decision-makers to attend to the above problem areas.

Availability of Appropriate Technology

The appropriateness of available technology in South Africa needs to be thoroughly assessed in terms of future requirements. Both biological and chemical technology (seeds, pesticides, etc.) and mechanical technology has reference here. Commercial agriculture is presently characterised by over-investment with the emphasis on expensive imported technology and on large scale machinery (Groenewald, 1987). Restructuring in this regard should be towards less expensive, local and possibly more modest mechanisation equipment. Smallholder farming on the other hand lacks the financial resource base to register needs for appropriate scale neutral or small scale technology in the market. Improved seed, fertilizer, pesticides and mechanisation are viewed as some of the most promi-

nent inputs required to modernise developing agriculture, improve productivity and promote equity based development (Mellor, 1985). A system to stimulate research and development towards appropriate technical inputs adapted to local conditions and to the diversity of agriculture in South Africa is an important requirement, *inter alia* to enable suppliers to provide inputs in the correct form and at the required time. In this regard the Farm Systems Research approach (Development Bank of Southern Africa, 1988; Van Rooyen, 1984; Rosé & Tapson, 1984) seems appropriate to direct attention to the biological, chemical and mechanisational needs of smallholders in developing agriculture. This approach could equally be applied to the commercial farming sector as it focuses on the farmer operating within the farming environment. Movements towards smaller "family" farms in White agriculture will benefit from such an approach. The changing labour market should also be assessed when optimising technological packages.

Restructuring of Institutions and Organisations

Generally government action (or any public sector organisation) must be directed towards facilitating private sector to operate in an effective and efficient manner in agriculture. Public sector organisations involved in agricultural development often participated in farming processes in competition with private sector, *inter alia* small emerging farmers. Public sector institutions such as agricultural development corporations and companies as well as government departments should thus withdraw from profitable (sometimes not so profitable!) agricultural production ventures in their own right on estate projects and redirect their attention towards the very important "mission" to support and facilitate the activities of local communities, emerging businessmen, contractors and individual and groups of emerging farmers. Of great importance in this respect, will be the involvement of private sector in the supply of certain farmer support services where cost recovery and profit making can directly be sourced from farmers. Input supply, training, extension, mechanisation services and marketing services are areas to facilitate increased private sector participation and funding. Attempts to institute greater public sector centralisation and control in the organisation of production services in developing agriculture should be viewed as counter to a sound long term development strategy aimed at creating capacity and greater sustainabilities at local and individual levels. Local "grass roots" organisation should be promoted where possible. Co-operative movements should for example rather be promoted and based on collective action activities at grass roots level, than on "top down" approaches enforced by government.

Agriculture in Rural Development

Agricultural development strategies should increasingly be viewed within its broader economic context. Such an approach will focus attention on agriculture's leading role in development viz stimulating forward and backward linkages and multipliers in the local, regional and national economy. The optimization of rural linkages will *inter alia* be achieved by stimulating and supporting of local initiatives and small emerging entrepreneurs to cater for required agricultural services eg marketing, mechanisation, contractor services, transportation, etc. Establishing the required infrastruc-

This proposed approach stands in contrast with those proposing high tech, large scale type of farming or viewing agriculture as an subsistence or "Old age home" pastime in rural areas, while emphasising health, educational transport and other basic needs with insufficient attention to production programmes.

A "Declaration" on Agricultural Policies and Strategies

In order to ensure the introduction of measures to promote the above-mentioned conditions, a view of the Southern African agri-milieu is required which would allow for accross border consultation and co-operation at policy as well as production and marketing levels. This does not necessarily imply the need for a formal "Common Agricultural Policy" (CAP), although an agreement by the various Southern African states through a "Declaration of Intent" on basic principles and guidelines for future agricultural development would be important. Such an approach would for example accommodate the various activities of the Multi-lateral Technical Committee on Agricultural Environmental Affairs (AGEN), efforts towards formulating accross border marketing arrangements and strategies for agricultural commodities, the opening up of the South African Land Bank to fund commercial Black farmers, etc. The declaration should further be extended to "normalise" agricultural production on a market related basis, preventing the costly duplication of organisational and institutional structures, such as co-operative movements and marketing institutions and promote equitable access to production opportunities and resource endowments. The arrangements to facilitate private sector involvement in the provisional capital and farmer support services should also be attended to. The application of "affirmative" action to enable Black "emergent" farmers to optimise their access to opportunities should be addressed, as well as environmental and conservational issues. The issues discussed under the above-mentioned subheadings could be on the agenda of such a declaration.

Trends in Agricultural Development and Investment

In view of the discussion so far, it is appropriate to assess whether current approaches and investment in agricultural development are in support of the directions and actions proposed in this paper. Reference to the annual reports of the major public sector institutions involved in agricultural and rural development (agricultural development corporations and companies, government departments, etc.) indicate the support to farmers as a general theme.

Relative little, however, is reported on progress towards entitlements, the optimizing of linkages within an integrated development approach, the structuring of appropriate institutional support, especially at "grass roots" levels, research on problems experienced by smallholder farmers and private sector support in the provision of farmer support services and funding.

The impression is left that agricultural development is still considered within a project based approach funded and controlled by the corporate public sector with the concept of broad based access and support still of secondary importance.

An assessment of the support to agricultural development by the Development Bank of Southern Africa, (DBSA) shed some further light on the topic. The Development Bank is presently one of the major institutions promoting agricultural and rural development in Southern Africa. The Bank does not involve itself in the implementation of projects but act as a primary source for development capital which cannot be sourced from the private sector through loan funding. DBSA generally provide loans through government departments and development corporations to implement projects and programmes directed towards the support of "emerging" farmers. Recently, DBSA support has also been channelised through non-governmental agencies where such agencies were viewed as appropriate support institutions.

Farmer settlement and farmer support (support to all people using resources to produce agricultural products - generally smallholders) are considered as the main area of agricultural investment by DBSA. In this respect, DBSA have contributed R821,8 million (78,6% of total investment) to DBSA supported projects and programmes in the field of agricultural and rural development since 1984.

In addition to investment in agricultural production activities, DBSA support is also directed towards rural development actions and community and village support programmes. Apart from project investment, other major areas of DBSA support is in strategic planning and policy, strategy formulation and institutional development. These activities are considered as of

TABLE 3. DBSA Supported projects; 1984-1989

Type of project	Number	Number of farmers
Farmer Settlement:	27	6 550
Irrigation	19	4 337
Dryland	8	2 213
Farmer Support:	21	± 24 000
Crop/Vegetables	16	21 000
Livestock	5	± 3 000
Agro-industry:	5	-
TOTAL	53	30 550

Source: Information from DBSA project reports.

strategic importance in the restructuring of developing agriculture and is supported through DBSA's Technical Assistance Programmes. (Other areas of support not directly related to rural and agricultural development refers to urban, business, infrastructural, industrial and human resource development, financial control, development programming and planning, development research, data collection and analysis, etc).

An analysis of the Bank's investment in agricultural development indicates a shift in emphasis from high

tech farmer settlement projects (irrigation and dryland) to broad based farmer support programmes (FSP). This is illustrated by the comparison of 20 irrigation settlement projects supported since 1984 by the Bank in comparison with 20 FSP's since 1987. In the last financial year, eight FSP's have been approved by DBSA with five irrigation settlement projects.

It is interesting to note that currently FSP's serve approximately 24 000 farmers (Table 3) at an average fixed investment cost of R5 000 per irrigation and R350 per dryland farmer. Annual variable costs are R2 000 and R780 respectively per farmer. Irrigation Settlement projects are presently supporting approximately 4 300 farmers at a fixed cost of ± R200 000 and annual variable cost of R4 500 per irrigation farmer. An important feature in this regard is therefore the cost effectiveness of FSP's *vis-à-vis* settlement projects.

The shift towards investment in broad based programmes providing access to farmers to support services can in general be considered as a sound movement in terms of the points argued earlier and should further be encouraged.

Conclusions

Growth and redistribution are two vital ingredients for future development in Southern Africa. Southern Africa's developing agricultural sector has a key role to play in this process. This contribution, however, depends largely on the ability to restructure farming activities in developing areas on an economically sound basis focussing on entrepreneurial development, employment and income generating strategies. The conditions for such strategies to be successful emphasize the recognition of production increasing opportunities within developing agriculture especially through the promotion of smallholder farmers to participate in agricultural production. In this respect the mobilisation of private sector to establish the requirements of smallholders and to fund and provide certain farmer support activities should be highlighted. The advantages of developing agriculture *vis-à-vis* other economic sectors in respect of inter sectoral employment and income linkages and multipliers should also be recognised and exploited in developing strategies and programmes.

The promotion of equitable access and entitlements to enable black farmers to compete in agricultural markets, should receive priority from an economic and political viewpoint to ensure long term efficiency in the South African agricultural economy. In general a shift in agricultural investment towards farmer support programmes in the developing rural areas is viewed as very necessary for sustained economic growth.

A restricted view of the Southern African agricultural context perpetuating the apparent dualism and isolating the developed from the developing sector, should be avoided in view of the inter-relatedness of agricultural activities and the importance to create a competitive milieu for agricultural producers. A "Declaration of Intent" on principles and guidelines of agricultural development policy and practise in Southern Africa is presently required.

References

- BEINART, W., DELIUS, P., TRAPIDO, S., 1986. Putting a plough to the ground. Johannesburg: Ravan Press.
- BEMBRIDGE, T.J., 1986. An overview of agricultural and rural development problems in the less developed areas of Southern Africa. *Proc. Symposium of Agric. Engng.* Vol. 1. Univ. of Pretoria.
- BRAND, S.S., 1986. Agricultural Outlook in the TBVC and self governing states. *Agricultural Outlook Conference*, Pretoria.
- BUNDY, C., 1979. The rise and fall of a South African peasantry. London.
- COBBETT, M.J., 1987. The land question in South Africa : A preliminary assessment. *SAJE* 55(1), 63-77.
- COETZEE, G.K., 1988. Die finansiering van landbou-produksie in die kleinboersektor van Suid-Afrika. Unpublished M.Sc. Thesis, Univ. of Stellenbosch.
- DEPARTMENT OF MANPOWER, 1987. Labour policy in South Africa. Pretoria.
- DE KLERK, M., 1986. Winds of change on the plateland : The need to reassess the land acts. *Proc. 24th AEASA Conf.*, Durban.
- DEVELOPMENT BANK OF SOUTHERN AFRICA (DBSA), 1988. Farm Systems Research Symposium (proceedings to be published shortly), Sandton.
- DEVELOPMENT BANK OF SOUTHERN AFRICA ANNUAL REPORTS.
- FENYES, T.I., & VAN ROOYEN, C.J., 1985. Migrant labour in South African agriculture. In Martin P.R. (ed). *Migrant labor agriculture: An international comparison*. Berkeley: Univ. of California Press.
- FENYES, T.I., VAN ROOYEN, C.J. & VINK, N., 1986. Reassessment of the Land Acts of 1913 and 1936. Unpublished report to the Private Sector Council.
- FENYES, T.I., VAN ROOYEN, C.J. & VINK, N., 1988. Budgetary implications of affirmative action in South African agriculture. Unpublished report to the Urban Foundation and Private Sector Council.
- GROENEWALD, J.A., 1985. The performance of past food, agricultural and trade policies. *Proc. 23rd AEASA Conf.* Bloemfontein.
- GROENEWALD, J.A., 1987. Agriculture: A perspective on medium term prospects. *Development Southern Africa*, Vol. 4, No. 2, May.
- MELLOR, J.W., 1979. New economics of growth. Ithaca, N.Y.: Cornell Univ. Press.
- MELLOR, J.W., 1966. The economics of agricultural development. Ithaca, N.Y.: Cornell Univ. Press.
- MELLOR, J.W., 1985. Agricultural change and rural poverty. *Int. Food Policy Research Inst.* No. 3.
- MELLOR, J.W., 1986. Agriculture on the road to industrialization. In "Development strategies reconsidered", J.P. Lewis and V. Kallab, (editors) US Third World Policy Perspectives No. 5. Transaction Books for the Overseas Development Council, New Brunswick, N.J.
- MOTSUENYANE, S.M., 1987. Presidential address : Farming in the 80's - Problems and solutions. Fifth NAFCOG South Africa Agric. Conf., Potgietersrust.
- MULLENS, D. & SCHEEPERS, C., 1980. A proposal methodology to quantify the possible impact of alternative sectoral economic development strategy on certain socio-economic objectives. *Finance and Trade Review*, 14, 13-30.
- NATRASS, J., 1981. The South African economy - it's growth and change. Cape Town, Oxford Univ. Press.
- NIEUWHOUT, W.L., 1989. The effect of increased real earnings in agriculture on the family household. Unpublished DBSA/University of Natal Research Report.
- ROSE, C.J. & TAPSON, D.R., 1984. Small-farm systems research in Ciskei. *Development Southern Africa*, Vol. 1, No. 2.
- SEN, A., 1986. Food, Economics and entitlements in "Agriculture in a turbulent world economy". (Eds) Maunder, A & Renborg, U., Inst. of Agric. Econ., Univ. of Oxford, Gower.
- STACEY, G.D., 1988. From migrant to mealie baron : a case study of a farmer in the Molopo region of Bophuthatswana. Contributed paper at the 25th AEASA Conf. Stellenbosch.
- VAN ROOYEN, C.J., 1984. Agricultural economic research in less developed countries : A farm systems approach. *Development South Africa*, Vol. 1, No. 1.
- VAN ROOYEN, C.J., VINK, N., & CHRISTODOULOU, N.T., 1987. Improving access to the agricultural market in Southern Africa : the Farmer Support Programme. *Development Southern Africa*, Vol. 4, No. 2.
- VAN ROOYEN, C.J., FENYES, T.I. & VAN ZYL, J.A., 1987. A comparison of the contribution and relative performance of agriculture in Southern Africa. *Development Southern Africa*, Vol. 4, No. 2.
- VAN ROOYEN, C.J., 1988. Presidential Address: Temas in die Landbou Ekonomie. 25th Conf. of the Agric. Econ. Assoc. of Southern Africa (AEASA), Stellenbosch.
- VAN ZYL, J.A. & VINK, N., 1988. Employment and Growth in South Africa : An Agricultural Perspective. *Development Southern Africa*, Vol. 5, No. 12.
- WEINER, D., MOYO, S., MUNSLOW, B. & O'KEEFE, P., 1985. Land use and agricultural productivity in Zimbabwe. *The Journal of Modern African Studies*, Vol. 23, No. 2.