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# PROSPECTS FOR AGRICULTURE GIVEN POSSIBLE DEREGULATION OF MARKETING BOARDS AND LAND REFORM POLICIES

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## Introduction

The South African agricultural economy is in the middle of its third major restructuring in the period since the turn of the century. The first phase up to World War II saw a series of measures being implemented which had the effect of engineering an almost complete territorial segregation between White and Black farmers. This was accompanied by state intervention in areas such as the marketing of farm products and agricultural co-operatives which were aimed at supporting White farmers. Another result of this period was the abolition of various forms of tenancy arrangements which gave Black farmers at least tenuous access to land outside the homelands. During this period, there was a large-scale conversion of Black peasant farmers into farm labourers.

The second phase took place in the period after World War II, and consisted of the increased mechanisation of commercial farming on the one hand, and increased pressure on food production in the homelands on the other. The introduction of tractors occurred on a large scale after the War, while combine harvesters were introduced during the late 1960s and early 1970s. Capital and labour were complementary factors of production before mechanical harvesting was adopted on a large scale, but became substitutes around 1970 (Van Zyl, Fényes & Vink, 1987a). The change in the capital/labour ratio in favour of capital was accompanied by a decrease in the permanent labour force on farms and an increasing use of temporary/seasonal labour, consisting mostly of women and children. White farmers also

received increased assistance from the state through a wide variety of direct and implicit subsidies. Increased population pressure and the lack of a consistent development policy in the homelands brought about an increased marginalisation of the people in these areas.

The third phase of restructuring started in the 1980s. This consisted of a stronger emphasis on market-related farm policy, including the redirection of subsidy policy and in some cases the removal of subsidies; exposure of the farmers to market-related interest and exchange rates; and extensive deregulation of controlled marketing schemes. The latter half of the 1980s also saw a shift in the policy approach to agriculture in the homelands. The most visible symptom of this process has been the scrapping of the Land Acts which created the territorial segregation between White and Black farmers in 1991, and the application of labour legislation to farm workers. A further change has been the shift in emphasis away from large-scale projects as the primary instrument of development in the homelands to an approach called the *Farmer Support Programme*, to be described below.

The current dualism between White and Black farmers in South Africa is a direct result of past agricultural policy. It can be argued, with substantial evidence (for example Vink & Van Zyl, 1989; Vink & Kassier, 1991), that the "two agricultures" phenomenon in South Africa should be viewed as the consequence of historical events and policies restricting fair access to resources and markets, and in particular of legislation biased against Black

smallholders as part of the "apartheid" policy. Since the third phase of restructuring will result in a reversal of past policy, it is evident that the degree of dualism in South African agriculture will be affected by these changes.

## **Views on Change in South Africa Agriculture**

### **Values, economic reform and agriculture**

The present debate about land reform and agricultural restructuring revolves around a broad set of ethical, juridical, social, technical, ecological and economic considerations. It would seem that, very broadly stated, a fair amount of consensus has been reached on the ethical question, i.e. that the "new" South Africa should be democratic, non-racist, non-sexist, and should broaden opportunities for all South Africans. Specifically, it is broadly accepted that all people have equal claims on social services, public goods, and equal access to economic opportunities (Eckert, 1991).

There is, however, a need to qualify the concept of equality to give due recognition to the need for the economically optimal allocation of scarce production factors in order to produce sustainable levels of welfare. In principle the market as institution which links demand and supply, provides an effective mechanism to allocate scarce resources according to need and utility, while differentiating on the basis of performance (Eckert, 1991; Van Rooyen *et al.*, 1990).

The principle of equal opportunity raises a derivative concern. Enormous differentials in ability to enter and compete effectively in the South African market exist today as the result of a legacy of a structured process of unequal access and opportunities and social discrimination. Simply ensuring an equal access opportunity in the future to compete in market processes must be viewed as insufficient, when the ability to compete and contribute optimally by the majority of South Africans has been constrained by the past. This implies that the market mechanism needs to be supported and complemented to bring about fairness in the economic processes.

In the present South African situation it is

argued therefore that one must supplement equal opportunity with the right to an "equal start". This cannot, of course, be achieved easily, or quickly, as it implies massive education and training and the creation of opportunities for those previously kept out of the mainstream. The practical value, but at the same time the cost of "learning by doing" experiences, should also not be underestimated. People must be afforded the opportunity to be successful or make mistakes and at the same time accept responsibility for their actions. Adopting this ethic would give direction to future economic restructuring programmes.

Turning to the farming sector the argument is therefore that efficient resource allocation can only occur within a sustainable system if all prospective participants have fair access to the relative scarce resources, inputs and product markets. Important also is access to the political market, i.e. the ability to lobby effectively for governmental support. These in turn require entitlements (the level ability to act) and empowerment to act effectively. The 1913 and 1936 Land Acts (and a plethora of related acts and regulations) constituted a major impediment to fair access to farming opportunities. The attainment of equal rights through the scrapping of these acts and other legislation will enable some black persons to acquire agricultural land for farming purposes.

However, this will not be sufficient to ensure that all people interested in farming, including small farmers, part-time farmers, women farmers, etc., will have a fair chance of access to farm land and to practice economically viable farming. The present skew distribution of wealth and farm size structure will inhibit many potential farmers, especially black smallholders, from obtaining land through outright purchase with own funds. Apart from land purchase, the right of access to the other farmer support services will also not necessarily be self evident for smallholders, black farmers and other categories of farmers who have been discriminated against in the past.

This means that access through entitlement will have to be supplemented by specific measures aimed at empowering these farmers to be able to put these rights to use. Such a programme of entitlement and empowerment can be

termed an **Economic Affirmative Action** approach. These programmes will have to attempt to identify and then support those farmers who can emerge towards a position of competing in the agricultural resource, input, commodity and political markets, on a par with other farmers elsewhere in South Africa. Absence of such an approach will render any land reform unsustainable, unfair and politically unacceptable.

### **Agriculture in South Africa**

An overriding characteristic of the South African agricultural economy is the skewed distribution of income and wealth. This pattern is particularly noticeable in the Black rural areas, which have the added characteristic of widespread poverty (Wilson & Ramphele, 1989). It has been argued (Fényes *et al.*, 1988a) that the principal cause of this inequality in agriculture is the skewed distribution of access to resources, markets and power. This differential access as determined by instruments such as the 1913 and 1936 Land Acts, which established the racial division of farm land, and a host of other measures. The net effect of this discrimination has been that Black farmers are at present confined to farming in the homelands, which constitute 13 per cent of the total available land. In contrast to White farmers, they are also not served by a comprehensive agri-support system, including physical infrastructure, extension, financing, co-operatives, marketing support and political lobbying power. Operational guidelines for translating the entitlement and empowerment ethic discussed above into an Economic Affirmative Action approach require a sound understanding of the existing South African agricultural economy. For this purpose it is necessary to review certain aspects of agricultural policy and the effects of policy on the farm sector:

#### **(i) Changing agricultural policy and agricultural development models in South Africa**

South African agriculture was subjected to two phases of restructuring in the period up to the early 1980s (*cf.* Marcus, 1989; Vink & Kassier, 1991). The first phase consisted of the initial steps aimed at the territorial segregation of white and black farmers. The second phase of restructuring took place after World War II, and saw the increased mechanisation of commer-

cial farming (Van Zyl *et al.*, 1987a) and the introduction of high yielding genetic technology (*i.e.* hybrid seeds, pesticides, etc.). These innovations were mainly directed towards increased production in white commercial farming. However, since 1970, efforts were also directed towards increased agricultural production in the homelands (Simkins, 1981).

The Tomlinson Commission of 1955 argued that a comprehensive farmer support approach based on economic incentives were required to upgrade agricultural productivity in the "homeland" areas. These recommendations were, however, not accepted by the Government. The early 1970's Government intervention in homeland agriculture was directed rather towards providing physical/technical planning through "betterment planning" and administrative control. This policy failed to achieve its objectives of raising welfare, largely due to its failure to provide economic incentives either for commercial farmers, smallholder producers or the non-farming rural population, and the neglect of the social, cultural and political components of rural development.

The absence of commercial agriculture in the homelands was officially attributed to the perception that it was caused by the lack of entrepreneurial and managerial ability amongst black farmers. This, combined with the philosophy of "optimal resource use", a cornerstone of "white" agricultural policy, dictated that expatriate management should be introduced in order to develop agriculture. This resulted in an approach which emphasised large scale, centrally managed, estate project farming, with little or no community participation. In a later adaptation, schemes were adjusted to settle selected participants and project labourers as "project farmers" under the control of central management. This so-called farmer settlement approach became the mainstay of agricultural development efforts in the late 1970s and early 1980s. These settlement projects also failed to generate sustainable development processes (Vink, 1981; Van Rooyen *et al.*, 1987), although surpluses were produced. The projects were expensive to maintain, often requiring Government subsidisation to sustain production levels. Employment was provided at a high cost, while labour productivity remained low. Project farmers also restrained from accepting

accountability due to the central control nature of these schemes. Limited linkages with the local environment resulted in such projects becoming "islands of prosperity in oceans of poverty". State-subsidised project farming furthermore increasingly competed with local (non-project) farmers and with farmers in the commercial areas for the production and marketing of cash crops.

**T**he period since the beginning of the 1980s introduced the start of a new phase of restructuring of agriculture, again as a result of a change in farm policy, mainly phasing the agricultural sector away from regulations and Government subsidisation and towards a more competitive market based on freer market principles. Positive real interest rates, the devaluation of the Rand, and declining real product prices had and still have dramatic implications for farmers. Farmers, producing on marginal land in especially the grain producing areas, were increasingly pressurised by the price cost squeeze. Repayments on farms, acquired at above agricultural production values, severely jeopardised the cash flow position of many farmers. The widespread droughts of these years severely aggravated matters (cf. Van Zyl *et al.*, 1987b; Van Zyl *et al.*, 1987c). A further interesting observation relates to the productivity of farming in South Africa. An analysis by Van Zyl (1990) of the commercial grain production sector, indicated that whereas labour and machinery productivity increased substantially since 1960, the decreasing productivity of intermediate input use (fertilizer, seed, pesticides, etc.) resulted in decreasing levels of overall productivity - from an index value of 100 in 1960 to an index value of 88 in 1990. This analysis, although not representative for South African commercial agriculture, draws attention to a serious problem within a major farming sector.

In developing agriculture a shift away from settlement schemes as the major instrument of agricultural development in the homelands in favour of a farmer support approach (Van Rooyen *et al.*, 1987) became apparent. This shift, strongly supported by institutions such as the Development Bank of Southern Africa (DBSA) and various development corporations, was based on two assumptions, namely: (a) farmers are in general economic rational deci-

sion makers who operate in an environment constrained by lack of access to agricultural support service and incentives; and (b) to be operationally successful, the provision of access to the support services would have to accommodate all producers of agricultural commodities, regardless of whether they are full or part-time farmers, men or women, etc. The farmer support programme (FSP) is a comprehensive programme aimed at providing institutional support and incentives for farmers in the less developed areas, in order that they utilize their available resources more efficiently. In the long run, with the development of local entrepreneurial abilities and management skills and the operation of economic forces, it is hoped that the FSP will create conditions for the commercialization of the developing agricultural sector. To assist in adequately addressing the constraints to agricultural development identified in the developing areas or homelands, six elements are provided as part of a comprehensive FSP for both crop and livestock activities, namely: (1) the supply and funding of inputs and production assets to farmers; (2) mechanization services; (3) marketing services; (4) extension services, demonstration and research; (5) training and education; and (6) policy formulation. This approach is much more cost effective than the settlement approach, reaches more farmers and maximises the linkages with other sectors of the economy through multiplier effects (Van Rooyen *et al.*, 1987).

However, the arguments presented above do not mean that the smallholder farming sector (in the homelands) should be replicated through South Africa. What these arguments do show is that the FSP approach has highlighted the contribution that black smallholder farmers can make in the mainstream agriculture in South Africa and that they are efficient food producers if provided with an appropriate support package.

The changes in farm policy since the early 1980s have had significant effects on the agricultural sector, while it is important to note that different farming regions have experienced very different circumstances. Aggregated data show that the sector is becoming more flexible in at least some parts of the country. This is highlighted by the improved aggregate debt

service ratio along with financial difficulties for some groups of farmers; increasing land use intensity in high potential regions and "over-cropping" in more marginal regions; the aggregate decline in farm size; shifts in the cropping pattern; and the relative absence of yield effects in agriculture (Brand *et al.*, 1991).

There are also more recent changes in farm and general policy which will have an effect on the agricultural sector in the future. The scrapping of the Land Acts of 1913 and 1936 and related legislation, the application of certain parts of South Africa's labour legislation to agriculture and the reorganisation and re-orientation of public sector institutions which serve agriculture, are cases in point.

**(ii) Farm land-use patterns and farm size**

Current data sources make comparisons of land use patterns between the white farming areas and black farming in the homelands difficult. As has been shown, Black farmers are presently confined to the homelands, which constitute only 13 percent of the total available land. Recent findings indicate that the homelands possess only 11,1 per cent of South Africa's arable land, taking into account rainfall, slope and soil (McKenzie & Louw, 1990).

Due to more market related policies, shifts in crop production to the higher potential areas and livestock farming to the dryer areas can be expected in the commercial areas. A shift to planted pastures is most evident in the marginal commercial cropping region. There is also a widely held view that the average size of farmers has been increasing as the number of farmers decreases. However, recent surveys show that the number of commercial farming units in South Africa has increased from 59 960 in 1983 to 67 010 in 1988. It is thus no longer possible to assume that the farms are getting bigger throughout the country. A movement towards part-time farming and supplementing incomes from non-farming sources, will further render farm sizes flexible.

The occurrence of a large number of small-holdings (in homeland areas) relatively far removed from urban concentrations constitutes an abnormal economic spatial location pattern. This pattern can partly be viewed as the legacy

of apartheid legislation. Where economic forces are allowed to dictate land-use patterns the accommodation of a large number of small farmers around urban concentrations producing for lucrative high value urban markets can be predicted. Farming in South Africa will increasingly occur within a more flexible market orientated approach, and in view of proposed land reforms, one could expect a differentiation representing a wide continuum in farm size, from large numbers of small farms to fewer large farms.

**(iii) Food security and food self-sufficiency**

Total production and consumption of selected agricultural commodities for the period 1980 to 1990, show that in aggregate, total production has outstripped total consumption. Self-sufficiency indices for the various commodity groups show grain production to have an index value of 130, horticultural production 142 and livestock production 96, where an index value of 100 represents national food self-sufficiency (Van Zyl & Van Rooyen, 1991). However, national food self-sufficiency does not imply national food security, especially given the skew distribution of resources, access and income in South Africa. Despite food self-sufficiency, the "food equation" relating food supply to consumption is not balanced. This is especially observed in the occurrence of hunger and malnutrition in South Africa. Most rural households and most farmers are also net consumers of staples. Marketed sales are highly concentrated, with a small minority of households accounting for more than 80 per cent of the developing sector's sales (Van Zyl & Coetzee, 1990). This puts the "food-price dilemma" on centre stage in land reform: food should be affordable, but prices also serve as incentive to producers. In this respect international trends, as well as local circumstances, i.e. relative prices, inflation rates, protection, etc. are important. Taking this into account two factors should be considered: (a) a longer term view is necessary, and (b) given South Africa's relative isolation through transport costs, self-sufficiency in staples seems desirable at this stage.

**Conclusions**

The present farming position in South Africa does not seem sustainable from economic,

financial, technical and environmental perspectives (Van Rooyen *et al.*, 1990). Certain aspects of this argument have been highlighted. The restructuring of the agricultural sector can thus be predicted with a large degree of certainty. Political requirements will further demand changes towards a greater participation of blacks in the agricultural economy of South Africa. Land reform programmes will be viewed as an important instrument to promote reconstruction in the agricultural sector.

## **Promoting Productive Agricultural Land Use through Land Reform Programmes**

### **Introduction**

Land Reform is defined as Government action to induce substantial transfers of land rights to, and consequent rises in real income or power for, the rural poor. This includes ownership ceilings, laws against tenancy, restrictions on tenancy, titling or freehold rights, partialization, state or collective farming, privatization or parcelling of State land and market incentives to land reform (Lipton, 1992). All these issues are relevant in the South African case.

Farmers in the commercial world, also in developing agriculture, are used to land acquirement using market mechanisms such as buying and selling, renting and leasing, share cropping, etc. As farm land acquisition is motivated by returns from farming it also stands to reason that these activities should be left in the hands of the farmers, with minimum interference from the bureaucrats and commissions, except of course to ensure equal protection in law for all parties to land transactions. This may even take the form of special legislation to protect tenant rights, or to ensure productive and sustainable use of agricultural land (Van Rooyen & Van Zyl, 1990).

In general, the demand for land should therefore be accommodated through **market action** while government should play an important facilitating role strengthening markets to enable Black farmers, through economic affirmative action programmes, to obtain legal entry into farming and eventually compete on par with all other farmers within South Africa.

### **Affirmative Action Programmes**

It has been argued that the South African agricultural structure is changing and there are signs that the sector itself is becoming more flexible due to economic, financial and technical factors. Further changes are, however, required due to changes in the political and social milieu to give effect to the principle of equality of opportunity - and in agriculture in order to structure a sustainable and efficient utilization of the production potential of the sector and to maximise the forward and backward linkages. Proposals for incorporating these desired changes into a comprehensive land reform programme include the following (see Brand *et al.*, 1991 for a comprehensive discussion of economic affirmative action policy proposals):

#### **(i) Entitlement actions**

Three principle methods of providing entitlement to farming resources as an element of an affirmative action programme can be identified. The first was that of removing the various laws which control access to land, including the Black Land Act (No 38 of 1927) and the Group Areas Act (No 36 of 1966), as contained in the White Paper. Other legislation, such as the Sub-division of Agricultural Land Act (No 70 of 1970), will also have to be studied in terms of their effect on access to land. The second proposed mechanism, namely legislation which will facilitate various forms of land-use security and exchange land rental and tenancy agreements complementing land ownership and the reduction of transaction costs of disputes over land rights, should receive major attention (De Klerk, 1990; Budlender, 1990). The third legislative instrument which would have to be accommodated is the extension of labour relations legislation to the agricultural sector, a matter which is currently being investigated. The relevant laws will probably have to be adapted to the special circumstances of agriculture, i.e. timeliness of certain production activities, etc.

#### **(ii) Policy instruments and empowerment actions**

There are a wide range of policy instruments available which could serve to empower prospective farmers:

a) *Access to land through purchase*

Improved access to land by people historically deprived of this right will be especially important in the future agricultural system. It will be of cardinal importance to show that the market mechanism can make a meaningful contribution in this respect. Many proposals have been made for state-supported land purchase schemes, for example via the Land Bank (e.g., Urban Foundation, 1990). While there is merit in such arguments, a number of lessons can be learned from the extensive experience with the process of Trust Land transfer to the homeland areas (Brand, 1990b) and the resettlement programme in Zimbabwe (Vink & Louw, 1990). The principle lessons are that such land transfer programmes are lengthy and difficult, and therefore costly processes, and that they increase land prices considerably. The extension of the financing facilities of the Land Bank and the Agricultural Credit Board to include black farmers, probably represents the soundest approach to affirmative action for those who wish to buy land. Experience has shown that the constraint lies in the access to finance for land purchase rather than in its costs. If any subsidy is considered, it should rather be directed at reducing the transaction cost of access, than to subsidising the interest rate. Examples of these transaction costs are deposit requirements, conveyance costs and loan administration costs.

(b) *Other forms of access to land use rights*

Security and exchange of land usage is important to ensure optimal development and investment in land. The purchasing of land should not be the only form of access to land use rights. The opening up of land rights should be supplemented by legal measures that enable the leasing of land on a just basis and provide for alternative land use agreements. The obtaining of security of land use rights (purchasing, leasing, etc.) by people who up to now did not have access to the land market due to restrictive legislation and its economic and other effects, will require special measures. These measures should be characterised by appropriate terms and interest rates and should be aimed at the reduction of transaction costs linked to access. Access to land should also be supplemented by measures aimed at access to all other resources and agricultural services. In

this respect it is important that the land use rights should be transferable so that this resource can be utilised by the most competent user. It is thus also necessary to review legislation such as the Act on the Sub-division of Agricultural Land, especially because the economic utilisation of agricultural land resides in the operator and cannot be determined by law. Ecological and environmental factors are important in the correct use of land resources. It is therefore important to take cognisance of the relative scarcity of high potential agricultural land in South Africa. This high potential land should be zoned for agricultural purposes only, while there should be strict guidelines for the ecological conservation and correct utilisation of this resource.

(c) *Equalising access to lobbying power*

Political influence is an important mechanism for gaining access to resources, input and product markets for farmers. The present agricultural milieu has to a large degree been influenced by political lobby groups in terms of both direct and indirect intervention in the agricultural sector (Hagedorn *et al.*, 1990). Historically, white commercial farmers have had a disproportionate amount of political influence, as reflected in the electoral system and in the amount of the budget spent on them. A non-discriminatory policy by the state towards representation by commercial, part-time, tenant and other lobby groups, however they wish to be represented, would be required to structure land reform programmes.

(d) *Infrastructure*

The physical infrastructure which serves farmers is not evenly distributed as regards either quantity or quality. Roads, dams, railways, electricity and communication links, for example, do not reflect regional comparative advantages in physical potential for farm production. It will therefore be necessary to have a range of innovative adaptations to existing and new infrastructure to serve the needs of different types of farming systems in which, for example, small and part-time farmers will particularly need to be accommodated. The issues would be to reduce the transaction costs to participate in the market by introducing appropriate technologies and not hesitating to phase projects when fiscal constraints are being experienced. It is to be expected that

most infrastructure funding will come from the public sector.

*(e) Farm credit*

Farmers require credit for the purchase of intermediate and production inputs as well as for land purchase. Given the current institutional structure, the sources of such credit will include co-operatives and the commercial banking sector. These institutions are, however, not always properly geared to providing credit to emerging farmers and part-time farmers. The requirement here will again be for innovative strategies of affirmative action which account for factors such as rural savings mobilisation, the transaction costs inherent in rural financial markets, methods of credit extension, group credit schemes and interest rate policy.

*(f) Extension, research and training*

Research to address technology problems in South African agriculture has largely been geared to the needs of large scale full time owner-operator farmers, given existing commodity policies (Vink & Van Zyl, 1989). South Africa has much to learn in terms of technology development for new farming systems in order to make such affirmative action programmes relevant. The experience with technology development and transfer for smallholder farmers in Zimbabwe could provide a fruitful sphere of lessons from experience (Brand, 1990a). A further example of affirmative action in this sphere refers to the training of (black) farm managers. A substantial proportion of farms in the current commercial farming areas are not permanently occupied, and are often under the effective management control of black farm managers. Such a programme would also include the extension of share ownership schemes to farm workers by farmers who are looking for alternative ways of accommodating farm labour into the entrepreneurial development process. The accommodation of interested returning refugees and jobless people interested in farming through training and settlement programmes will provide productive socio-economic upliftment actions.

*(g) Marketing policy*

Some 70 per cent of South Africa's agricultural production by value is marketed through Marketing Boards constituted in terms of the Marketing Act. In addition to these products,

other monopolistic mechanisms provide effective control over a whole range of products, with the control firmly vested in the hands of white commercial farmers. It is evident that the representation of a wider range of interest groups on the Marketing Boards will form an important component of an affirmative action strategy, as will representation as full members of agricultural co-operatives. Adjusting agricultural marketing policy to encourage an acceleration of the current trend of declining real land prices should continue. The single channel fixed priced marketing schemes operated by the Maize and Wheat Boards for example caused land prices to be 41 and 43 per cent higher in the commercial summer and winter rainfall cropping areas, respectively (Howcroft, 1990). A movement towards a freer market for agricultural products will thus decrease land prices substantially, which will lead to land prices being more compatible with production potential. This will increase access to land considerably.

*(h) Production/marketing rights*

Many of the Marketing Boards and other control bodies restrict access to markets through the use of quotas or permit systems (e.g. sugar, wine, red meat). These are usually motivated in terms of the need for orderly marketing. Much can be said for or against the use of such instruments for this purpose. They can however also be used to discriminate against certain types of farmers. Here again it is evident that access to land is by itself not a sufficient condition for restructuring South African agriculture. Recent changes in the allocation of sugar quotas, where the position of small farmers in KwaZulu and KaNgwane has been specifically accounted for, are instructive examples of what can be achieved with affirmative action programmes. As has been shown, the Marketing Boards have in most cases contributed to land prices being substantially higher than production values, thereby further limiting access to the poor.

*(i) Agricultural land tax*

Although the revenue potential of a tax on agricultural land in South Africa is relatively low, it has some possibilities in providing an income source to local government and contributing towards changing land-use patterns. However, an important point is that it will have to be used



as part of a comprehensive policy package. Several questions need to be addressed before a land tax can be created: the nature and form of local government authority that will be created in rural areas; rates of taxation; tax-relief, if any; etc. (Strasma, 1992). All of these will have an impact on the effects of a land tax on land-use.

### Structuring Land Reform

In answering the questions of where, when, how and under which conditions land reform programmes are expected to have the biggest impact, some realities need to be accounted for. **First** is the skew distribution of current land ownership, unproductive farming practices and unsustainable agricultural situation. **Second** is the reality that land reform is viewed as one of the (if not the) major determinants of political change in South Africa. This perspective implies that it would be naive to expect that the sector can be restructured without specific account of the need to redress past injustices or of the need to maintain and strengthen the production of agriculture. **Third**, it will be necessary to introduce specific legal recognition of the principle of equity onto land law, specifically to ensure fairness in the interpretation and resolution of disputes over land rights. The common law as it stands does not afford effective protection of tenants in disputes with land-owners (Budlender, 1990). **Fourth**, all parties in the debate attach a value to land which is far in excess of its value in production. The debate is an emotional one, and will remain so. **Fifth**, past discrimination has not been to the detriment only of blacks. Although black farmers have been relatively more disadvantaged than other farmers, there has also been discrimination against small farmers, women farmers, tenant farmers and part-time farmers in general. **Sixth**, experience with state-controlled (non-market) land transfers in South Africa, principally the Trust Land Transfer programme, shows this to be a costly and unproductive mechanism. The land market, supplemented by economic affirmative action programmes, will have to be the major instrument for structural reform in a strategy for providing fair access to land.

The removal of racial barriers to land ownership means that blacks are going to purchase farms

as participants in the existing land markets. Some will be able to arrange finance for themselves through normal commercial channels, while others will qualify under the existing funding programmes of the Land Bank and the Agricultural Credit Board. There are at present no racial barriers to access to these financing institutions other than the Land Acts themselves. There are those who believe that this is the only "land reform" required in South Africa. However, it should be clear from the arguments presented in this article that far more is required in terms of the restructuring of agriculture. With respect to financing, this will include looking at the collateral requirements of such institutions, such as land ownership, and also at their risk exposure in cases where they lend to emerging farmers.

A further reality with respect to the more market related state policy is that a larger percentage of land will become available on the land market. The state could, with innovative mechanisms, for example release the debt constraint on land, thereby allowing a more flexible land market to operate. Such mechanisms could include a programme of writing off that portion of the debt in excess of the production value of the land. This proposes a far less costly alternative to a programme where the state will buy up land for land reform purposes. This increased supply will enable new entrants to farming to purchase land.

### Food Security

In recent years food security has come to be defined as **"the ability of a country or region to assure, on a long-term basis, that its food system provides the total population access to a timely, reliable and nutritionally adequate supply of food"** (Eicher & Staatz, 1986; World Bank, 1986). Food security thus involves assuring both an adequate supply of food and access of the population to that supply, usually through generating effective demand via income growth or transfers. Food security is therefore influenced by both micro- and macro-factors, ranging from the technology and support institutions available to small farmers and merchants, to monetary, fiscal and trade policies that affect the overall rate of growth and distribution of income.

Over the past number of years, there has been growing empirical and policy support for two fundamental premises about the linkages between food availability, poverty and the access to food (Eicher, 1988). These premises can be described as the two sides of the hunger equation, namely supply and demand for food. The first premise is that increasing food production, storage and trade can ensure food availability, but this will not automatically ensure that all people have enough to eat, and end hunger. The second premise is that, because poverty is a central cause of hunger and malnutrition, special efforts are needed to help increase the access and entitlement to food. Today specialists on both poles of the hunger equation are advocating legitimate, but partial solutions to conquering hunger (Borlaugh, 1986; 1988; Sen, 1981; 1987; Rukuni & Eicher, 1987, 1988; Singer *et al.*, 1987).

Because insufficient income is a major source of food insecurity, there is considerable complementarity between structural adjustment, which aims at increasing long-term growth of income and employment, and measures to increase food security. Structural adjustments are often needed to get African economies on a path of broad-based growth that will help assure long-term access to food (World Bank, 1988). Effective food security policies aimed at improving the supply of and access to food therefore serve as strategic inputs into sustainable structural adjustment. A key to designing effective food security policies is gaining an empirical understanding of how these various actions affect the constraints and incentives facing various groups in the economy, and hence influence their behaviour (Weber *et al.*, 1988).

Food prices play a dual role in developing countries and regions: they act as incentives to agricultural producers and as major determinants of the real income of consumers. Higher prices may be necessary, at least in the short run, to induce increased food production, yet this imposes a heavy cost on low-income consumers. Timmer *et al.* (1983) termed this "the food price dilemma". Food prices thus play a central role in the hunger or food equation.

Two empirical issues are critical in dealing with

this dilemma (Weber *et al.*, 1988). First, who are the net producers and consumers of food? A policy to raise the relative price of food, benefits net sellers of food and hurts net purchasers, at least in the short run. In arguing for higher food prices, most policy-makers and analysts have assumed that the vast majority of rural Africans are net sellers of food, so that raising prices would benefit the rural majority at the expense of the urban minority. The food price dilemma is seen as less severe in Africa than in other parts of the world, largely because most of the food-insecure live in rural areas where access to land is thought to be more egalitarian than in many areas of Asia and Latin America (Eicher & Staatz, 1986; Hyden, 1983). Higher food prices, it is argued, would be a relatively easy way to raise the incomes of the vast majority of the rural poor by increasing the prices they receive for their products.

A second key empirical question regarding the food price dilemma is the magnitude of supply response to higher food prices. If the supply elasticities for food staples are relatively high, higher food prices will not only increase the income of subsistence farmers substantially, but will also increase the supply of food. Both the demand and the supply side of the food equation are thus influenced positively. Although there is evidence to the contrary in some Sub-Saharan countries (Scandizzo & Bruce, 1980; Martin, 1988), the Zimbabwean case is often used to illustrate a relatively elastic supply of maize (Eicher, 1986; Van Rooyen *et al.*, 1987).

Table 1 shows the market participation profile of rural households for selected products in some of the homelands. Data were obtained from Coetzee (1988) and Lyne (1989). Although the data cover only some of the homelands in South Africa, indications are that the situation is confirmed in other areas of Bophuthatswana (Stacey, 1989) and Lebowa (Vink & Van Zyl, 1989) and for other regions (Graaff, 1986; Fényes *et al.*, 1988b). This clearly illustrates that production is highly concentrated and skewly distributed. A high percentage of rural households are net consumers of especially staples even though many of them are engaged in food-crop agriculture. Sales are also highly concentrated

with a small minority of households accounting for more than 80 percent of the sector's sales.

Supply response to higher prices in these areas is also limited. It seems that complementary factors such as availability and prices for inputs, labour and appropriate technology are probably more important in stimulating food production than price alone.

These findings have important effects on both sides of the hunger equation, namely the

supply and demand for food. It also places the food price dilemma on the central stage in South Africa. Higher food prices act as determinants of the real income of consumers. The dominance of the commercial white agricultural sector in South Africa often results in higher food prices for developing agriculture without taking their specific needs and circumstances into account. This emphasises the food price dilemma in South Africa's rural developing regions.

**TABLE 1. Market participation profile for rural households in KaNgwane (1987) and KwaZulu (1989) in percentage of households**

Crop	Market involvement indicator			Percent of total production marketed	Sales concentration indicator				
					Percent of total market sales				
	Net buyers	No net sales or purchases	Net sellers		50%	70%	80%		
					(% of households)			(%)	(% of households)
KaNgwane (N = 394)									
Maize	68,7	7,4	23,9	62	2,8	7,4	11,2		
Groundnuts	81,7	4,6	13,7	52	3,0	6,1	8,6		
Dry beans	96,1	0,3	3,6	-	0,1	1,3	1,5		
Yuco beans	95,9	0,0	4,1	66	1,0	1,8	2,5		
KwaZulu (N = 193)									
Maize	95,2	0,1	4,7	49	0,5	1,3	2,4		
Beans	84,0	6,2	9,8	54	3,0	6,0	9,2		
Potatoes	93,6	3,3	3,1	40	1,6	2,6	3,6		

Source: KaNgwane - Coetzee, 1988; KwaZulu - calculated from data gathered by D.A. Stewart and M.C. Lyne (Lyne, 1989).

## International Considerations

The changing agricultural policies in South Africa towards food security instead of total food self-sufficiency also means that international considerations such as world prices and international availability of food (especially staples such as grain) become important. Since the seventies government intervention in the agricultural sector has been pervasive in almost every country in the world. This intervention included policy measures, such as price and income supports, supply controls, and barriers to trade or export incentives. These distortionary measures and technological improvements increased the imbalances with respect to international trade so that prices were distorted and various commodities piled up on the international agricultural markets. These distortions were worsened with the indifference of government policies with respect to their agricultural trade.

However, in September 1986 a meeting of the General Agreement on Tariffs and Trade (GATT) held in Punta del Este, Uruguay, resulted in an agreement to give agriculture the highest priority in the next round of multilateral trade negotiations. This resulted in the so-called Uruguay Round emphasising the *urgent need to bring more discipline and predictability to world agricultural trade by correcting and preventing restrictions and distortions ... so as to reduce the uncertainty, imbalances, and instability in world agricultural markets.*

Generally, GATT principles had proven to be less successful in liberalizing trade and resolving disputes in agriculture than they have in manufactures. These poor performances can be traced to its explicit allowances for certain trade practices, including the use of quantitative import restrictions and export subsidies (Paarlberg, 1988) and deficiencies of GATT rules and dispute settlement mechanisms on agriculture which had been increasingly a source of dissatisfaction. However, after more than four decades of experience with GATT rules written and interpreted to fit domestic policies, a growing consensus was that domestic programmes should be adjusted to fit a common set of rules regarding trade in agricultural products. The latter underlies the negotiations in the Uruguay Round. However,

negotiations in agriculture are difficult and acrimonious (Roningen & Dixit, 1989), which make the implementation of the major policy reforms difficult.

These proposed changes lead to various studies indicating and quantifying the effects of trade imbalances of past and of future international agricultural trade. Of these studies, the model developed by Roningen and Dixit (1989) is of importance in evaluating the effect of trade liberalization. According to this model, liberalizing agricultural policies in all industrial economies would, on average, increase the world agricultural prices by 22 percent (Table 2).

The rise in world prices would be the greatest for dairy products (65 percent), followed by sugar prices (53 percent). These large price increases would occur because levels of assistance to both dairy products and sugar in industrial market economies are relatively high, and industrial market economy trade is a major part of world trade. World prices for wheat (37 percent), rice (26 percent), coarse grains (26 percent), and ruminant meat (21 percent) would also increase noticeably for the same reasons. By contrast, world prices for oilseeds and products (6 percent) would increase only slightly, indicating that agricultural policies pursued by industrial market economies have only modestly depressed prices for those commodities.

Negotiations in the Uruguay Round under GATT have changed policy perceptions with respect to international trade. This will eventually phase out government supports to agriculture that distort production, consumption and trade. If a complete multilateral policy reform occurs for all commodities, almost all product prices will raise considerably, and patterns of production and consumption will also change.

The elimination of all subsidies to agriculture in the industrial market economies under the 1986/87 market conditions would rise world prices and agricultural trade for most commodities and would be more than under the 1984/85 conditions. The EC and the USA contribute most to the world price changes and thus are major players in liberalization international trade. Multilateral elimination of support would reduce production of most agricultural

commodities in the industrial countries. The total welfare implications for the developing countries are complex. The developing exporters such as Brazil, Argentina and South Africa would benefit from the rising world prices, while the developing importers would experience welfare losses because of the import costs, and bigger losses to consumers as gains to the producers.

Trade liberalization is likely to benefit South Africa, especially in coarse grain production. The total volume of coarse grain produced in the world is unlikely to change substantially but relative positions will change. South Africa will become more important in terms of wheat and coarse grains.

**TABLE 2. World price effects of liberalization**

Commodity group	Unilateral liberalization <sup>1</sup>							Multilateral liberalization by industrial market economies <sup>2</sup>
	USA	Canada	EC	Other Western Europe	Japan	Australia	New Zealand	
Ruminant meat	3,8	0,4	13,5	1,5	1,8	0,2	0,2	21,0
Nonruminant meat	3,0	0,5	5,8	1,0	2,3	0,1	0,0	12,4
Dairy products	23,5	4,1	31,6	6,2	4,5	0,7	0,5	65,3
Wheat	10,6	4,1	19,1	1,6	2,5	1,6	0,0	36,7
Coarse grain	11,6	2,2	11,5	1,5	0,6	0,2	0,0	26,3
Rice	2,9	0,4	3,2	0,2	19,6	0,2	0,0	26,2
Oilseeds and products	-2,6	0,5	7,9	0,2	0,4	0,0	0,0	6,4
Sugar	22,8	0,4	18,6	3,3	6,4	1,1	0,0	52,7
Other crops	4,0	0,0	3,3	0,1	0,7	-0,1	0,0	7,7
Aggregate	5,9	1,2	10,6	1,4	3,6	0,3	0,1	22,0

Source: SWOPSIM (ST86)

<sup>1</sup>Unilateral liberalization means that each country removed its support while others maintained theirs.

<sup>2</sup>Multilateral liberalization means that all industrial market economies simultaneously removed their agricultural support.

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