

MARKET-BASED OPTIONS FOR LAND REFORM

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Introduction

The rights to own and occupy land in South Africa have, at least for the greater part of this century, been circumscribed on the basis of race. This has been a cornerstone of the set of policies which has come to be known as 'apartheid'. The removal of this cornerstone in more than just the letter of the law will be of cardinal importance for the legitimacy of a government claiming to be non-racial and democratic. Needless to say, bringing about effective change to what have become firmly entrenched patterns of ownership and occupation, without at the same time seriously impairing the productive capacity of agriculture, will be no easy undertaking. This paper examines some of the options for 'opening access' to agricultural land in the present commercial farming or 'white rural' areas.

The options are discussed in terms of their practical content and expected impact. In respect of the latter, I have tried to simplify the discussion by assessing the impact, in most cases, in terms of only three dimensions:

- agricultural output, or what is often referred to loosely as 'food security'
- redressing historical dispossession
- and the cost to the state.

Very roughly, these correspond respectively to the 'efficiency' and 'equity' criteria and the 'budget constraint' employed in most conventional economic analyses. The list of options is in no sense exhaustive, and there are many other criteria, such as the impact on employment and income distribution, which could equally well be brought to bear. The selection of options and implication categories reflects only what seemed most important at the time of writing.

In similar vein, I have tried to make as few starting assumptions as possible. These are, firstly, that government will in future be non-racially and democratically constituted (without attempting to define these terms) and secondly, that in all other respects the status quo prevails initially.

Present Characteristics Of Agriculture

Any policy of reform starts from the status quo, the characteristics of which constitute both the resources and the constraints of the reform process.

Amongst the most relevant characteristics of the present state of agriculture in South Africa are:

- that 'the country feeds itself' and earns a substantial proportion of its foreign exchange from agricultural exports (of the order of 20 per cent, directly or indirectly, in the early 80s). Though this is done at the cost of substantial subsidies and protection, leaving a good deal of room for improvements in efficiency, and though food is exported in the face of widespread malnutrition (Wilson and Ramphela, 1989: 100), leaving still more room for improvements in equity, this capacity is one which any government would want to maintain. The overwhelming bulk of this output is produced on a relatively small 'core' of farms - 30 per cent of farmers produced 75 per cent of gross farm income in 1985 (Hattingh, 1986: 12);
- that the average capital requirement of commercial farming units, including the value of land, was in excess of R700 000 in 1988 (RSA Department of Agricultural Economics and Marketing, 1989: 6, 81);
- that only about 13.5 per cent of agricultural land is suitable for cultivation (Scotney, 1988: 317);
- that access to agricultural resources outside the present 'independent' and 'self-governing black states' and the 'coloured reserve areas' is almost completely exclusive to whites. Practically all of the land in 'white rural areas' is owned on a freehold basis;
- that a demand for rural land is articulated at many levels by the black community - from expressions of 'land hunger' by residents of black rural areas especially by those who own livestock, to those of individual communities dispossessed by the state's population relocation programme in recent years, to the broad political demands laid out in the Freedom Charter;
- but that, given the multiple requirements and risks of agriculture and the current and projected returns, agriculture cannot be seen as an easy way to make a living, particularly for resource-poor people. More specifically, rural incomes are in general well below urban incomes and the fact that agriculture produces only about 5 or 6 per cent of the gross domestic product, while employing about 13 per cent of the economically active population, suggests that the proportion of the population seeking to earn their living from agriculture will diminish still further in years to come;
- that central government expenditure on agriculture (average R1 494m in 1987/88 and 1988/89) constitutes only a small and declining part of the total state budget (average 3 per cent in the same two years) (RSA Department of Finance, 1988: 31, 41), and that the

potential for a significant real increase in this aspect of state spending is limited (Standard Bank, 1990: 4).

Options For Land Reform

The discussion in this paper is confined to options for land reform which I have called 'market-based', ie which involve the retention of private, though not necessarily individual initiative as the basis of agricultural production, whatever the structure of ownership, and which rely on adjustments to and the augmentation of existing market processes by the state to right past wrongs.

In roughly increasing order of state intervention, the major options would appear to be:

- repealing only those sections of the Land Acts of 1913 and 1936, and of the Group Areas Act which effectively reserve access to rural land outside the (so-called) 'homelands' and 'coloured reserve areas' to whites, and 'leaving the rest to the market' as it presently operates;

- adding state assistance ('affirmative action') for those previously disadvantaged by legislation, institutions or practices which have been overtly or covertly racially discriminatory. This assistance could, inter alia, take the form of:

- the reallocation of 'released' land already owned by the state but either unoccupied or currently being leased to white commercial farming interests;
- additional reforms to laws which directly affect land access or tenure, such as, the Subdivision of Agricultural Land Act of 1970, and provisions governing the various forms of tenancy;
- additional state expenditure on programmes or projects which would directly or indirectly assist resource-poor small farmers or farming communities, such as the type of 'farmer support programme' (FSP) being mounted by the Development Bank of Southern Africa; research and development programmes on 'appropriate technology'; state purchase of agricultural land on the open market for use in such projects or programmes; infrastructural development, in particular of rural schools,
- reforms to policies which currently favour larger farmers in respect of the pricing and marketing of agricultural produce, the exclusion of part-time farmers from many categories of state assistance, and tax relief for the purchase of machines.

- State expropriation, with compensation, of certain categories of land for settlement by resource-poor individual farmers or farming communities or for non-agricultural use. A range of possible criteria exists for the identifica-

tion of such land, some based on the claims of dispossessed individuals and communities. Relevant considerations would clearly include occupation, present and past, and productive use. Examples of land categories involved might be land occupied for long periods by labour tenants or squatters; 'black spot' land expropriated in terms of the present government's population relocation programme; 'underutilized' or 'abandoned' land; and land farmed by 'monopolies' or 'absentee landlords';

- a similar, limited programme of expropriation, but carried out without compensation;

- the effective nationalization of all agricultural land by the introduction of a land tax equivalent to the market rental payable on land. Relief could be offered for selected categories of land-user (not land), whom the state wished to assist, without deviating from the principle of nationalization.

IMPLICATIONS FOR HISTORICAL DISPOSSESSION, OUTPUT AND STATE SPENDING

Repealing (relevant parts of) Land Acts, Group Areas Act and 'leaving the rest to the market'

The removal of formal restrictions on land access can be expected to lead to the purchase by presently disqualified buyers of a number of existing commercial farms. Anecdotal evidence suggests that, as in urban areas, this may already be taking place informally.

Research by two agencies indicates that, despite the comparatively low returns of agriculture, the demand for existing commercial farms by black, 'coloured' and Asian buyers is likely to be significant (Urban Foundation, 1989: 49, 84). Racial attitudes may make potential sellers reluctant to sell to such buyers in some areas initially, but this might be an accelerating factor once transactions of this nature become a reality. And even to the most politically conservative of sellers, the crude but apposite maxim, 'money talks', will have considerable meaning.

Of more substance, though are the findings of a survey conducted in 1986: firstly, that white farmers in general are as much concerned about the maintenance of 'high farming standards' as about the race of their neighbours per se; and, secondly, that about one-third of the white farmers questioned in the small but geographically diverse survey would not object to non-racial land access (Harnson, 1986: 3, 7, 17). This is a substantially greater proportion of farmers than the 5 per cent reported in the recent survey by the Transvaal Agricultural Union (*Farmers' Weekly*, 13 July 1990: 75). (The discrepancy casts doubts on the credibility of the two surveys, but may be a reflection primarily of the difference in their geographical confines.) While

this leaves in question the significance of the barrier of racial prejudice, it also raises the very valid concern that farmers, regardless of race or class, should be environmentally conservative. This is discussed further below.

However, for a government concerned about redressing historical dispossession, the number of relatively large-scale commercial farms passing from whites to others on the open market, is likely to be of secondary importance. For most individuals, the sheer scale of inputs required (see Section 2) - particularly capital inputs, both physical and human - and the lack of access to such inputs, will make the purchase of such farms impossible. Subdivision for purchase, while not absolutely prohibited, is certainly seriously inhibited by the Subdivision of Agricultural Land Act as it presently stands. The effect of the Act is to bar any subdivision of existing farming units for sale without Ministerial permission. To become a credible political option, the 'free market solution' will need to offer concrete gains in respect of land access to the resource-poor majority. What possibilities of this are there?

One possibility is that farming communities will combine to purchase land on the open market. Many such communities have, of course, existed and some still do in spite of the state's population relocation programme (Claasens, 1990: 13). Most 'black spots' effectively are, or have been, owned by whole communities. So it would seem that there is considerable potential for the re-emergence of this form of tenure. One uncertainty, at this stage, is whether the Subdivision of Agricultural Land Act would impose a constraint on the purchase of land on this basis.

A second possibility is that individual farmers will circumvent the need to purchase land by hiring, ie by becoming tenants. Very roughly, one can identify three basic categories of tenant, according to the basis of rental payment: fixed rent tenants (who pay a pre-determined cash rental), sharecroppers (who pay a proportion of output) and labour tenants (who supply certain labour services - *their own* or *others* - free of charge). To these one could add squatters - legally unauthorized tenants whose form of payment, if any, is undefined. Again, all three categories were common in South Africa earlier this century. Keegan (1983, 1988), Morris (1977) and others have examined the processes by which, with the exception of labour tenancy (Transvaal Rural Action Committee, 1988), they have all but been eliminated (for blacks). Given no changes, other than the removal of formal racial barriers to entering the land market, what is the likelihood of their re-emergence or expansion?

Economic theory suggests that an increase in the demand for rental land could, even on its own, be expected to increase the incidence of tenancy, unless the supply of rental land was perfectly inelastic. An increase in the

supply of rental land could be expected to do the same. A simultaneous increase in both would have the greatest impact.

In practical terms, the removal of racial barriers on land access should increase the demand for rental land. Over the last decade and a half, a number of developments have generated a growing core of actual and potential black small farmers, for whom tenancy in one form or another would offer the possibility of climbing onto or moving up what is often referred to as 'the farming ladder' (Binswanger and Rosenzweig, 1984: 18). It is helpful to examine these developments briefly.

In the sugar industry, the millers' and cane-growers' associations have for some years been encouraging small producers, mainly in neighbouring Kwa-Zulu, to enter cane farming. Though broad political-economic motives may have played a part, the immediate impetus appears to have come from the falling volumes produced by traditional suppliers - white family farms - for whom other avenues, notably timber-growing, have become more attractive. The rising volumes produced by new small growers have become essential for millers to maintain an acceptable level of throughput (Vaughan, forthcoming).

The devolution has been remarkably successful: by 1984/85 small farmers were already producing more than 12 per cent of the crop (Fairall, 1988: 68, 71), and in 1989 the nearly 30 000 small farmers were responsible for an output of about 2 million tons (Vaughan, forthcoming). The industry is at present expanding in KwaZulu, Kangwane, Transkei and the Eastern Transvaal (*Farmers' Weekly*, 6 July 1990: 67) and expects this to lead to the emergence of a further 8 000 small growers (*Farmers' Weekly*, 6 July 1990: 70).

Among the main constraints experienced by small farmers are shortage of household labour (see below) and lack of access to land (Vaughan, forthcoming). When racial restrictions go, one can expect black small producers to expand into some presently white areas as an extension of the process just described. As it is likely to be beyond the resources of most small farmers to purchase land - even were the Subdivision Act to permit it - some form of tenancy is the most likely form of tenure. It is also not impossible that large estates will turn over some land to small contract farmers: Binswanger and Elgin note that arrangements of this nature are particularly suitable for sugar production (1989: 10). Again, and for the same reasons, some form of tenancy would be the most likely form of tenure.

In other subsectors, where the unique geographical farming and processing structures of the sugar industry are not to be found, and industry support for small producers has not been as great, farmers' responses to unfavourable

circumstances have been different. While the core of financially sound producers - mostly larger farmers - has continued to expand their operations, many financially marginal farmers have turned to part-time farming to spread risk and generate additional income and liquidity - a pattern that is firmly established in more developed economies. In the United States, no less than 70 per cent of the income of the farming community is now derived from off-farm sources, and 45 per cent of farmers are part-timers. In the European Community one third of farmers operate on a part-time basis and in Japan the figure is as high as 87 per cent (Reeves, 1987: 401; Van Zyl, 1989d: 185). Van Zyl estimates that a minimum of 20 per cent (or about 12 000) of South Africa's commercial farmers fall into the same category and projects a steady increase in their relative and absolute numbers (1989d: 188, 200).

This trend has two consequences which are of direct importance in the present context: first, responsibility for day-to-day production activities is in many instances being taken over by what are effectively black farm managers, leading to the transfer of higher levels of skills. (More than 70 per cent of part-time farmers visit their farms a maximum of twice weekly (Van Zyl, 1989d: 187).) This is adding to the body of potential black commercial farmers. And second, because supervision is difficult for part-time farmers (Van Zyl, 1989d: 205), there is a growing need - at least from the farmer's point of view - to replace direct supervision with productivity incentives, and, closely related, to share risks. Under these circumstances, it is logical for profit-sharing arrangements to emerge. These would not be identical to what one might call 'classical share tenancy' - where the landlord merely owns the land and has little further involvement in production other than taking his share of the crop - but they would constitute an important, if indirect, route for blacks with farming skills but without adequate resources to farm independently, to gain a form of access to land. This would certainly qualify as a rung on the farming ladder.

Two further relevant developments can be surmised, which are hard to trace on the ground - although they are supported by anecdotal evidence - but which the logic of current circumstances suggests should be happening. One is that some marginal and sub-marginal commercial farmland is probably being rented covertly to black tenants. Gcabashe and Mabin report recent evidence of this in the Lydenburg district (1990: 65). Where an owner cannot use land profitably for commercial production and it is unattractive to other (legal) tenants for the same reason, but he does not want to sell the land - for example, because it is being held for tax-loss purposes, a common practice - renting it out to (illegal) black tenants for other uses may provide a useful alternative source of income. In some instances, notably where land

is adjacent to a 'homeland' boundary, this might involve significant levels of production, but in many others it would amount to little more than residential squatting. As Claassens points out (1990: 11), it is probably no accident that there has been pressure in certain quarters for more stringent rural anti-squatter legislation. With the abolition of the Land Acts, this form of tenancy could be expected to multiply, although from a resource conservation point of view it would not be welcomed: short-term occupants have the least incentive to conserve natural resources. But welcome or not, for many rural residents, this will probably open the most ready channel of access to land, unless government takes a very strong stance against squatting.

The other surmised development concerns labour tenancy. Farmers who have cash-flow problems - typical where annual crops predominate - are likely to want to pay a smaller proportion of wages in cash. When the emphasis is on maximising output rather than efficiency - as it was in the summer grain areas for much of the 1970s and early 1980s - the opportunity cost of offering access to land in lieu of wages is high. But when the reverse is the case - as it is at present - then the opportunity cost falls and, especially for marginal farmers, it may be cheaper to revert to this traditional form of payment. Workers whose remuneration package includes land access are, of course, partly labour tenants. So it is not unlikely that this form of tenancy will have increased over the last seven or eight years - Gcabashe and Mabin provide corroboration (1990: 65) - and it is possible that this influenced the repeal in 1986 of the provisions of the 1936 Land Act, which imposed stringent controls on labour tenancy, along with other provisions which made up the machinery of influx control. On the other hand, attacks on what one might call 'independent' labour tenants of long standing have continued in the Eastern Transvaal and Northern Natal (Transvaal Rural Action Committee, 1988). While the repeal of most of the remaining chapters of the 1936 Land Act, the 1913 Land Act and the Group Areas Act should have little direct bearing on this form of tenancy, indirectly it could prompt demands from farm workers for a right to have access to land as part of the remuneration package - something that should be considered when labour relations legislation is being revised. Certainly, too, the high level of unemployment in the economy, particularly among less skilled work-seekers, and the accompanying general absence of 'labour shortage' in commercial agriculture will make it easier for forms of labour tenancy to re-emerge.

The discussion so far has simply identified processes without attempting to predict rates of change, and has concerned factors which are likely to stimulate the demand for and supply of rental land. Some other factors are likely to have an inhibiting effect.

When last estimated, in the 1970s, only about 18 per cent of agricultural land in the 'white rural areas' was occupied by fixed rent tenants, and only a negligible percentage by sharecroppers (Viljoen, 1988: 26). Several commentators (Joubert and Groenewald, 1974, 1975; Hattingh and Herzberg, 1980; Viljoen, 1988) have analyzed the reasons for the comparative insignificance of tenancy. To some extent, it would appear that existing legislation is prejudicial to tenants, and to some extent market factors - chiefly that the capital appreciation of land accrues to land-owners while the costs of maintaining the land are borne by tenants - are responsible. Other possible influences, some related to white 'culture' and 'traditions' (Joubert and Groenewald, 1975: 8) are also cited, but the common factor, if one can be identified, is that most appear to disadvantage tenants rather than land-owners. In other words, they have tended to inhibit demand. Given the choice of buying or renting, most whites have preferred to buy. While 'emerging' black small farmers will be faced with many of the same constraints for financial reasons, most will probably not have the privilege of this choice, at least initially.

Potential tenants of whatever colour also have to take into account the relatively low income and high risks inherent in agriculture. Bembridge refers to this as an important cause of his findings, from surveys conducted in Transkei in 1984 and Ciskei in 1987 that 'only (about) 15 per cent of farmers (in these areas) had ambitions to have sufficient arable land (more than 4 ha) to become commercially-orientated farmers in terms (even) of the Tomlinson Commission recommendations' (Bembridge, 1987: 8). This, of course, says nothing about the demand for arable land by workers resident on white farms - or, for that matter, by people currently resident in urban areas - nor does it include the demand for pastoral land. So, while, on the one hand, it does illustrate the inhibiting effect of low farm incomes, even if it is an overestimate, it also confirms the pressure of a substantial unsatisfied demand for arable land which will inevitably lead many small farmers to look for land in the present 'white rural areas' once the racial barriers are dropped.

However, there is a second important way in which low earnings from farming may inhibit the demand for land by small farmers. The major advantage that small farmers usually have over their larger counterparts, lies in the farmer being able to employ family labour which is seldom, if ever, remunerated (explicitly) at the market wage rate (Binswanger and Elgin, 1989: 4). But this assumes the presence of 'surplus labour' in the household and it is by no means clear, in the presence of a large and highly developed urban sector in South Africa, that the average rural household could call on

such resources. Certainly, small cane-growers in KwaZulu find this a constraint (Vaughan, forthcoming). On the contrary, the degree of dependence on migrant remittances of families in black rural areas is well known (Cobbett, 1987), and even for black households resident on 'white' farms, there are indications of a growing reliance on off-farm income (De Klerk, 1984; Seleane, 1984).

This raises the important issue of economies of scale. It is beyond the scope of this paper to review the complexities of this debate. Moll (1989), McKenzie (1989) and Van Zyl (1989a) have done so most recently in a South African context, and aspects of the issue are raised again below.

Its relevance here arises from the possible shortage of family labour noted in the previous paragraph. Although the hire of machinery or traditional reciprocal household labour-sharing arrangements could, in principle, alleviate such a shortage (Binswanger and Elgin, 1989: 5-6), it is probably only small farmers who *can* call on family labour that will be able to compensate for their inability to use machinery to reap economies of scale. This may reduce the demand for rental land considerably.

Finally, on the demand side, for historical reasons tenancy will be burdened by a negative image in the eyes of many potential small farmers. As was pointed out earlier, all three basic forms of tenancy were common in South Africa in the earlier years of this century. But more often than not, the relationship was weighted heavily in favour of landowners, and the security of tenants was progressively eroded either to make more land available for expanding large-scale commercial production or to increase the supply of wage labour or both. Memories of this will surely have been passed on to succeeding generations and will make many people reluctant to rent land.

On the supply side, the most obvious constraint on the availability of land for rent to small farmers, the Subdivision of Agricultural Land Act, is more apparent than real. While subdivision for sale is restricted, subdivision for lease - whether for cash or for a share of output - is permitted provided the duration of the lease is less than 10 years, and labour tenants - who have the legal status of employees - are not subject to the Act at all (Budlender and Latsky, 1990: 32-33). Racial prejudice on the part of white land-owners might also be a significant supply constraint. To some extent, this is likely to be irrational and difficult to change by any means short of expropriation. But, as was pointed out earlier, in many cases it is based on fear of misuse of land by tenure, which is not entirely unjustified, because as Hattingh and Herzberg note (1980: 6), tenants tend to have a poor record of maintaining land. Effective conservation measures should help increase the supply of rental land.

Finally, on the supply side, it is important to bear in mind that land with the greatest potential - whether for arable or for pastoral farming - is least likely to be available to small tenants. Almost by definition, most land that is available will be in areas that are financially marginal as presently farmed. Income from external sources will, therefore, be as important for black tenants as it has been for many white land-owners. In some cases, this will mean retaining existing employment on nearby 'white farms', and in others retaining links with urban areas through remittances from migrant family members. These external sources of income may, paradoxically, help increase the supply of rental land, if the present restrictions on subdivision are relaxed.

In summary then, on its own, but without overt racial restrictions the market will create opportunities to purchase or rent land - perhaps more than might first be imagined - not only for blacks, 'coloureds' and Asians with ready access to capital, but also for smaller farmers with fewer resources. Market and, to a limited extent, political forces are already generating a core of actual and potential black small farmers and, one suspects, are also leading to the informal erosion of racial barriers in certain areas, though the rate at which these developments are taking place is uncertain. And, as I have argued elsewhere, the essential direction of these forces appears likely to remain the same in the foreseeable future (De Klerk, 1990). But without the release of additional constraints - in particular on access to resources complementary to land and on the subdivision of land - opportunities for small farmers will remain limited. Beyond this, the survival of existing labour tenants and squatters will remain precarious and the claims of dispossessed communities unaddressed. An unaugmented 'free market approach' will not score well on 'equity' - as measured by actual access to land - in the eyes of most rural people.

The relatively minor changes in land occupancy could be expected to have a correspondingly minor impact on agricultural output. The present capacity to 'feed the nation' and produce a substantial export surplus would be retained and, if anything, increased.

In general, one would expect the removal of 'market imperfections' to improve efficiency. But in some quarters, doubts will certainly be expressed about the efficiency of black farmers, especially black small farmers (Harrison, 1986: 22). To some extent, these would be based on irrational race prejudice: there is enough evidence both historically and currently from South Africa (McKenzie et al, 1990: 15-18) and other parts of Southern Africa, notably Zimbabwe (Davies, 1986), to disprove notions of the inherent inability of blacks to farm efficiently. And there is ample evidence from

around the world that small farmers can produce as efficiently, if not more efficiently, than larger farmers. Van Rooyen et al (1987) review the literature.

However, what such an attitude does draw attention to is the lack of access to resources complementary to land that almost all black small farmers in South Africa (including the 'homelands') have had to suffer. Some aspects of this disability, for example access to public transport, would fall away automatically for black farmers who manage to gain access to land in the present 'white rural areas', but others, for example access to capital, would remain and need to be addressed if the potential of small farmers to produce efficiently is to be fulfilled.

It used also to be assumed that tenancy was necessarily a less efficient form of tenure than freehold (Drake, 1952: 549), but this is no longer accepted. Both theoretical and empirical reappraisal indicate that there is no single optimum tenure system from the point of view of efficiency (Hayami and Ruttan, 1971: 261), a conclusion which government appears to have accepted (RSA White Paper on the Agricultural Policy of the Republic of South Africa, 1984: 6). In fact, by reducing cash-flow constraints (Budlender and Latsky, 1990: 34), by reducing and sharing risk and by offering access to resources available to land-owners, some categories of tenant, particularly sharecroppers, may find themselves at an advantage in relation to some small freeholders (De Klerk, 1989b: 13-15).

Against this, it could be argued that there will be an increased likelihood either of the over-utilization and degradation of land - which the Subdivision Act was intended to prevent - or of its under-utilization for agriculture and reallocation for residence (De Klerk, 1989b 15-16). In an overall context, though, the loss of output on these accounts ought to be negligible.

In the final analysis, the characteristic of the 'free market approach' - and of all reform programmes that rely essentially on the continued operation of a market for land - that is of greatest significance for output and efficiency, at least in the medium term, is the relative security of tenure that it offers to existing farmers. The withdrawal or erosion of this security is almost always a major disincentive to produce, or an incentive to extract the maximum possible profit in the remaining period of tenure, regardless of the consequences for the natural resource base - what is often referred to as 'soil mining'.

This is not to proclaim that the present market-based system, as ameliorated in various ways by the removal of obstacles to and the active assistance of those previously excluded, is unambiguously more efficient than any non-market-based alternative. But there can be no doubt that the transition to any such alternative would be accompanied, at least for an

extended period, by very substantial costs of dislocation - payable in terms of lost output (Elliott, 1984). And in an economy already highly urbanized, it is not clear that such costs would be acceptable to the majority, even if, in the long term, they were to result in a net increase in efficiency and output.

One other characteristic of market-based reforms is also worth mentioning: that is, the process of self-selection by which farmers are chosen. This will almost always result in greater efficiency than settlement programmes based primarily on equity or political considerations, such as compensation for services rendered during the liberation struggle (Davies, 1986). Once again, this is not to say that the selection process should be left to the market. Rather, that if not, the probable loss of efficiency should be appreciated.

On its own, the repeal of (the relevant sections of) the Land Acts and the Group Areas Act would appear to involve few changes to the existing state agricultural budget. Only in respect of law enforcement - of resource conservation regulations and perhaps of the Subdivision Act - might the repeal carry with it a significant increase in state spending. This is clearly an advantage.

Overall, then, an approach based on minimal state intervention would probably perform well in terms of output and the ability to meet a tight budget constraint. On redressing historical dispossession, the gains in the short term are likely to be limited, primarily because of the lack of access of most potential farmers to the capital required to purchase land. Tenancy appears, in principle, to offer both a way round this constraint, and a compromise to the conflicting needs, on the one hand, to provide security of tenure to existing commercial farmers (to ensure production) and, on the other, to open channels of access for small black producers to land that would then initially remain mainly white-owned.

Affirmative Action Options

The free market approach could be supplemented in a number of ways to redress the past imbalance of state support and to extend the effective access of resource-poor farmers to land without eroding the security of tenure of existing land-owners. This could be done by additional expenditure and by altering present laws and procedures. Some possibilities are as follows.

Reallocating 'released' land: Some tracts of land 'released' in terms of the 1936 Land Act or purchased by the National Party government in terms of its 'homeland consolidation' policy, remain unoccupied or have been leased to white farming interests or semi-state bodies. The reallocation of these areas for use by resource-poor individual farmers or farming communities

would seem to be a logical first step in a programme of active support for such groups. The South African Development Trust owns nearly 1.5 million hectares of land outside the 'homelands', on parts of which the Department of Development Aid reports having settled small numbers of former farm-workers on small farming units (1990: 61-62). While insufficient information is publicly available about the location, occupancy, present use and agricultural potential of the land to allow an assessment of the number of homelands who could hope to gain access to land via this route, the sheer size of the Trust's holdings indicates that this could be substantial.

The impact on agricultural output would be negligible on a national scale. On a local level, reallocation would obviously improve efficiency where land is un- or under-utilized, though where it involves the break-up of a going commercial concern, it might, at least temporarily, lead to a reduction.

From a budgetary point of view, a major advantage would be that the state would not have to pay to acquire the land and fixed improvements. However, it would in most cases be necessary to provide adequate support services, ranging from physical infrastructure through access to complementary inputs to ongoing agricultural extension services. Even for the relatively small areas involved, these could be substantial.

Reforms to other laws governing land tenure: Beyond the Land Acts and the Group Areas Act, the laws of most direct relevance in the present 'white rural areas' are the Agricultural Credit Act of 1966, the Subdivision of Agricultural Land Act of 1970 and the body of mainly common law affecting agreements between land-owners and tenants.

The Agricultural Credit Act deals with the settlement of farmers on state land, such as in the Vaal-Harts irrigation area. As it stands, the law appears to be intended to apply only to white farmers, because, as Joubert and Groenewald explain, '[it is] basically aimed at making lessees into farm owners...[and] little provision is made for permanent leasing' (1974: 15). A future government may wish to change this, if private freehold is not seen to be the optimal form of tenure. However, once the present racial barriers have been removed, this Act would not appear likely to inhibit black farmers' access to state land.

The Subdivision Act, on the other hand, would have a material inhibiting influence. The substance of the Act, as has already been explained, is to prohibit subdivision of existing farming units for sale or for long lease, except with ministerial permission. Although leases of less than ten years are permitted, no land reform policy that does not allow the purchase (or long lease) of small farming units without special ministerial consent is likely to

achieve credibility in the eyes of blacks, 'coloureds' and Asians. If land is to become freely available to resource-poor farmers or farming communities through the market, there does not seem to be any practical alternative to revoking the Act.

This will be one of the most contentious initial issues that a reforming government will have to face, because as the survey of white farmers' opinions conducted for the Urban Foundation in 1986 shows, it would meet almost unanimous opposition from the white farming community (Harrison, 1986: 4, 24). The Subdivision Act was passed primarily as a conservation measure, because of the weight of evidence that poor agricultural practices are associated with 'sub-economic' units from which farmers are attempting to extract a living income (RSA Select Committee on Subdivision of Agricultural Land, 1964: 1965).

As already acknowledged, the concern with resource conservation is entirely valid and would be ignored by any government at its own long-term cost. But it is not clear that the retention of the Subdivision Act is necessary for this. Certainly, it is not sufficient, because, as Scotney, writing nearly two decades after the passing of the Act, remarks:

it is disconcerting to find that the main causes of degradation identified and conservation strategies recommended in all reports submitted to Government have remained more or less the same over a period of almost a century (Scotney, 1988: 327).

The causes of soil degradation are complex (Ervin and Ervin, 1982; McKenzie and De Klerk, 1989), and it is difficult to determine a priori whether one group of farmers would be more likely to abuse natural resources than others. It is generally thought that poorer farmers have shorter time horizons than those who are more well-to-do, and so would be less concerned about resource conservation. Or to put it in economists' terms, the divergence between social and private discount rates is likely to be greater for poorer people. But as Ervin and Ervin's study shows, a host of other factors is involved, any of which may be more important. Experience of settlement schemes in Zimbabwe over the last decade has been that standard 5ha arable plots tend to be under- rather than over-utilized, as has been the communal grazing that accompanies these plots (Cusworth and Walker, 1988: 24-25).

Arguably, the best approach is to combine sound settlement planning with preventative legislation and education. Some principles of settlement planning are discussed later. South Africa already has a comprehensive, sound body of legislation on agricultural resource conservation, but the political will to enforce it effectively has been lacking. Similarly, agricultural extension, particularly amongst black farmers, has been given a low priority. If the Subdivision Act is to be scrapped, as would appear essential, then it will be

equally essential to accompany it by a determined programme, adequately funded, both to enforce existing conservation measures and to improve extension services. In the political environment of a newly liberated society, this may not be easy.

A third area for legislative review is the body of provisions governing contracts of tenancy. It was noted that tenancy is comparatively infrequent amongst white commercial farmers; that this may in part be due to legal and market arrangements which tend to favour landlords; and that, for historical reasons, tenancy is probably regarded unfavourably by many blacks who might wish to farm. Furthermore, Joubert and Groenewald note (1974: 15) that there is very little statute legislation relating to agricultural tenancy in South Africa. In these circumstances, there is clearly a valid case for investigating whether legislative reforms - in particular reforms strengthening the position of tenants - would help to make tenancy a more effective channel of access to land for resource-poor farmers.

Accepting this, it is important not to prejudge the issue. Binswanger and Elgin (1989: 8) cite instances in Latin America where 'well-meaning but perverse' tenancy reforms have achieved the opposite: by making renting out so unattractive to land-owners, tenancy has steadily been reduced. Joubert and Groenewald conclude from their survey of European and North American practices, that 'legislation is not a cause of leasing, but rather a result of it' (1975: 7). If so, the best way of encouraging tenancy may be to allow the market to operate reasonably freely, and assist prospective tenants in other ways. Equitable contract which will promote tenancy are most likely to be negotiated where both parties are well-informed and have similar bargaining strength. While the latter cannot easily be engineered, state extension services and credit-advancing bodies, such as the Development Bank of Southern Africa through its 'farmer support' programmes, could play a constructive role in overcoming the information constraint for tenants by assisting them in drawing up a satisfactory lease and by investigating the commercial viability of ventures before advising tenants to sign. Assistance of this nature would, of course, be in the self-interest of lending institutions.

If this relatively unregulated approach to tenancy were to be taken, at least one important category of exception would need to be made. The insecurity of labour tenants in South Africa is acute, despite the fact that many such households have occupied their land for generations (Transvaal Rural Action Committee, 1988). A government wishing to prevent further dispossession would almost certainly want to increase the legal security of labour tenants, though this would probably be at the cost of discouraging the emergence through the market of new labour tenancy contracts.

In all three cases, while the effects on production for individual households or groups of households might be significant, in relation to total production the effects are difficult to predict, but are almost certainly no more than marginal. Little can be said about the consequences for output of possible changes to the Agricultural Credit Act. The scrapping of the Subdivision Act would chiefly affect farms that fall outside the 'productive core' referred to above, unless accompanied by other reforms. Average commercial farm sizes have been rising steadily since well before the passing of the Act, and have just less than doubled since 1950 (RSA Department of Agricultural Economics and Marketing, 1989: 6). In the 'productive core', the Act has become more or less redundant, making its withdrawal of little significance. And this, of course, is where the bulk of agricultural production occurs. Outside this sector, where more changes of tenure could be expected to occur, it is arguable - but far from certain - that the removal of market constraints would lead to production increases (Van Rooyen, 1989: 1, 7), but these would probably be small, relative to 'core' production. Much the same conclusions apply in the case of tenancy reforms, however undertaken.

If the Agricultural Credit Act were changed to preclude the possibility of sale of state land, this would tie up potentially 'recyclable' capital resources, although it might also generate a limited flow of recurrent rental income. No estimate of the potential amounts involved could be made at the time of writing. In respect of subdivision reforms, the main implications are the recurrent costs of staffing expanded conservation and extension services. State spending on agricultural, forestry and marine conservation averaged R118 million per year between 1985 and 1987 (Abedian, 1989) - about 8 per cent of the total agricultural budget. No information on the cost of extension services had been traced at the time of writing. If this was of the same order and the two were to double, it would add about 16 per cent to the budget. Additional survey and deeds registry expenses would be involved as well. These are not negligible increases, but should certainly not be beyond the resources of a government sincerely committed to reform.

In summary then these affirmative action options could, if undertaken with discretion, significantly facilitate access to land, with little negative impact on total output, but with a more noticeable impact on recurrent state expenditure.

Additional state expenditure on assistance: One of the most obvious and direct ways for the state to assist the emergence of small farmers is for it to make funds available for the purchase of land and equipment and for making fixed improvements. This could be done by way of grants or subsidised loans.

Either way, to make a significant impact, very substantial funding would be required and this is unlikely to be forthcoming in the face of so many other competing demands on the state budget.

Moreover, a range of lending institutions already exists for these purposes, the most important of which are the Land Bank - either directly or through co-operatives - and commercial banks. Given the lifting of legislative restrictions on land access, black, 'coloured' and Asian farmers should qualify in the normal way for loan finance, that is, provided they are able to put down the required deposit and the bank concerned assesses them to be credit-worthy. But most small farmers will not be able to meet these requirements, precluding them from their source of finance in spite of the likelihood that many would be able to service and repay loans.

Perhaps the most constructive and economical way for the state - or a foreign donor - to assist in lowering this barrier would be for it to shoulder part of the risk that a bank would otherwise be obliged to carry on its own. This could be done by setting up a 'guarantee fund' for underwriting loans made by banks to small farmers, thereby multiplying the effective amount set aside by the state several times over. It would be good practice for the fund to cover no more than a part - even if the greater part - of loans, to discourage the indiscriminate extension of credit. A further form of assistance would be to subsidise the interest payable and/or the deposit. Operating through existing credit institutions would also take maximum advantage of available expertise and reduce the need to create additional civil service posts.

However, access to land on its own is generally not sufficient to create the conditions for successful commercial agriculture. As Knipe observes, 'it would be senseless to undertake an expensive cosmetic resettlement programme that results in large numbers of people being shifted onto agriculturally unviable land' (1988: 81). It is investment in supporting infrastructure that has made the rate of return on the Zimbabwean settlement programme so high (21 per cent) and that has transformed a political programme of land redistribution into an economic programme of rural development (Cusworth and Walker, 1988: 183, 201). What has to a large extent, made 'white' commercial agriculture viable is the support services - that is, the provision of the many inputs complementary to land - that have been lavished on it by successive governments, to the point where it can be argued that there is now a degree of uneconomic over-investment in the sector (De Klerk, 1990: 16).

To just as large an extent, these support services have, of course, been lacking in the present black rural areas, and this is one of the reasons for the comparatively small output of these areas. Recently, the Development Bank

of Southern Africa has instituted its own 'farmer support programmes' to try to provide some of the non-infrastructure support services for farmers in these areas (Van Rooyen et al, 1987). Black farmers gaining access to land in the present white rural areas will not be faced by the same set of constraints: most of the necessary physical infrastructure and the network of co-operatives, with the access to reasonably-priced inputs, marketing services and working capital that they offer, should automatically become available. (The Co-operatives Act of 1981 contains no racially exclusive clauses.) Share-tenants may find themselves in a particularly fortunate position: landlords in such a relationship have more incentive to make available their expertise and equipment, while credit institutions may use share contracts as an indication of the creditworthiness of tenants.

Co-operatives' services are, however, geared primarily towards the needs of large land-owning farmers and would, inevitably, require some adaptation and augmentation to become appropriate for small farmers. This will probably require the representation of small farmers on the boards of co-operatives, for which legislation may be necessary.

All of the above refer to broad programmes of assistance. In addition, the state may undertake specific projects, such as irrigation schemes, for the benefit of disadvantaged farmers. While such projects may validly form part of a development strategy, the emphasis in recent years has shifted far more towards the programme approach, both internationally and locally. An analysis by the Development Bank outlines the reasons clearly: in essence, projects such as irrigation schemes are expensive, benefit relatively few people and are seldom self-supporting (DBSA, 1986: 3-5). The 'results' - in terms of physical infrastructure - are nevertheless usually easier to see than those of broad programmes, and there is therefore a strong temptation for a government wishing to demonstrate its commitment to assist resource-poor farmers to undertake such projects. Careful prior assessment is needed.

Expenditure on the assistance programmes and projects outlined above could, of course, be expected to raise the output of recipient farmers. But to all such expenditure, there is an opportunity cost. Needless to say, this is seldom easy to calculate.

One recent attempt of note in a closely-related field, is Van Zyl's model of the effects on the maize industry of a farmer support programme which succeeds in transforming subsistence maize production into commercial production. The result, if area under cultivation is taken as an index of output, is that there would probably be a net reduction in maize output, the size of which would be directly related to the success of the programme (Van Zyl, 1989b: 209). Consumers, surprisingly enough, should benefit (van Zyl, 1989c:

345) - which shows up the weakness of using crude total output as one of the three criteria for evaluating alternatives for reform.

Out of this emerges perhaps the most important finding of Van Zyl's analysis - the complexity of designing successful reform. He concludes:

the above does not mean that development and redistribution are not desirable, especially in Southern Africa with its extremely unequal distribution of income, wealth, power, rights, privileges and opportunities among race groups....The inequitable distribution of these factors calls for redistribution. However, it is a plea for taking into account relevant interrelationships that may exist when designing development policy and redistributive programmes. Only then is there some probability that objective and positive results will be obtained with any policy at the lowest possible social cost' (1989c: 347-8).

To complicate matters further, Van Zyl (understandably) assumes a constant macroeconomic and international environment. As Tweeten (1987) points out, changes in these spheres are often more important for agricultural production than directly-targetted macro-policy. To take just one example, the outcome of the current GATT Uruguay Round has far-reaching potential consequences for the South African maize industry (Reeves, 1987). An agreement to lower the level of production/export subsidies and protection for agriculture, particularly in the most industrialized countries, would create a noticeably more favourable environment for expanding small farmers' output of maize.

Even though the cost of establishing a loan guarantee fund would be substantial, the 'savings' in terms of demands on the state agricultural budget would more than justify such a scheme. To take some illustrative figures: suppose the state wished to facilitate the purchase of land to the value of R100m per annum by small farmers, agreed to stand surety for 70 per cent of this amount and felt it prudent to allow for a bad debt rate of 35 per cent, given the risks involved. The recurrent yearly addition to the agricultural budget would then be about R25m, which represents an addition of less than 2 per cent to the present total. In contrast, an interest subsidy would grow cumulatively with purchases in terms of the scheme so that, say, a 5 per cent subsidy, would, within 5 years, amount to the same as the guarantee provision. Relative to the improvement in the opportunity to purchase land that this would generate for small farmers, these amounts do not appear inordinate. It is also not unlikely that the loan guarantee scheme would be attractive to foreign governments wanting to assist the restructuring process.

The costs of adapting and expanding existing co-operative services or of

extending the Development Bank's farmer support programmes could be quite moderate. The Bank's comments about projects also stress the need to bring other criteria, such as the number of beneficiaries, to bear, while Van Zyl stresses the need to include a disconcertingly wide range of effects, before any very reliable cost can be calculated.

Reforms to policies favouring large farmers: Most measures discussed so far have addressed the question 'how can land reform be brought about in a market-based economy?'. Just as important is the question 'how can land redistribution be made to last in a market environment?'. 'If a land reform is introduced into a distorted environment which favours large farms, one would expect the recipients - small farmers - to sell out to large farmers. The purposes of a land reform are therefore defeated....a precondition for a land reform is the prior elimination of...distortions favouring large farms' (Binswanger and Elgin, 1989: 11).

Larger farmers tend to be favoured in most countries and South Africa is no exception. Some manifestations of this, that are significant in South Africa, include the basis of input subsidization, some marketing and output pricing structures and the orientation of research and development.

Referring to input subsidies, the Du Plessis Commission found that 'in terms of the broader policy of state aid to agriculture, programmes are often introduced which are basically aimed at assisting...(the) 40 per cent of...producers, whose contribution to the total value of agricultural production is only 5 per cent. Obviously, such relief measures are not applied on a differential basis, with the result that many producers receive benefits, whose effects over the long term are of doubtful value. What really happens is that those who are supposed to benefit...do not benefit very much in comparison with the more prosperous producers who benefit greatly owing to the extent of their production activities' (RSA Commission of Enquiry into Agriculture, 1972: 102). Little has changed in the nearly 20 years since the Report, and the problem is compounded by the way in which the expectation of recurrent subsidy income is capitalized into proportionately increased land values.

It is once again beyond the scope of this paper to discuss alternatives in any depth. Clearly, alternatives to sharpen the rather blunt, expensive policy instrument that the subsidy system is, will have to be sought, but experience elsewhere suggests that finding a practical, cost-effective replacement may not be easy (Ritson, 1980: 354). One aspect of present policy that would appear readily amenable to correction is to allow part-time farmers to qualify for the full range of subsidy assistance, from which in certain respects they are excluded, not being regarded as 'bona fide' farmers. This clearly dis-

criminate against smaller farmers (Van Zyl, 1989,).

Until very recently, another form of subsidy that favoured larger farmers and helped increase the average size of farming units was the tax assistance given to mechanization. Purchases of equipment could be fully written off against income in the year of acquisition. Following the Margo Commission's recommendation, this has now been withdrawn.

On the output pricing and marketing side, some subsectors, particularly the red meat industry, have set what appear to be excessively high standards (Groenewald, 1987: 233), which tend to disadvantage outlying and small producers. Where quotas are necessary to be able to market output, these tend - again as in the red meat industry - to be granted more readily to larger producers. (The sugar industry has, for various reasons, been an exception.) Farmers entering the industry after the initial distribution of quotas often find it difficult to gain access to the market. The red meat industry is of particular importance for the future, because so many black small farmers will be producing livestock products. And, though government has been able to resist pressures to allow them in recent years, quotas are likely to remain on the agendas of producers' organizations in sectors which are unable to compete unassisted on the international market as long as the present high rate of inflation lasts.

In respect of output prices, it would be incorrect to argue that, where prices are set by marketing boards, there has been discrimination against small producers. But, as Cooper (1988: 134) has suggested, the payment of a higher price for the first n tons /m head of livestock delivered by a producer per year, could in many instances be used to assist small farmers.

Most research and development effort of course occurs in the private sector. Insofar as state agricultural bodies, such as the engineering division of the Department of Agriculture and Water Affairs, undertake work of this nature, small farming systems have not been a priority to date. Because, at least initially, small farming will probably not be a high profit area for input suppliers, the private sector is unlikely to redirect its research and development programmes towards the needs of this sector. This is the classic justification for the state to do so instead. It is to be hoped that the Agricultural Research Council now being formed will take note of this.

It is difficult to say much about the net effect on output other than that the present capacity of the country to feed itself and export in substantial quantities should remain intact. If anything, one would expect production to become more efficient, though that could mean either an increase or a decrease in output.

A similar conclusion is in order for the budgetary implications. In some

instances - perhaps on subsidies and the adjustment of depreciation allowances on machinery - there might be a net saving or gain for the treasury; in others - extending assistance to part-time farmers enabling a higher unit price to be paid for the first part of deliveries, and research and development - a net cost; and in still others - such as removing some of the distortions in the marketing of red meat - little change. Overall, the combined net effect on state spending should not be very substantial.

State expropriation, with compensation, of limited categories of land: Few of the options discussed above create more than limited scope for accommodating the flood of claims for land that can be expected, once channels for articulating such claims are established. Whether limited or extensive, a non-racial government will almost certainly feel obliged to undertake some programme of expropriation. This raises at least three fundamental and difficult issues, namely, how to identify land for expropriation, how to undertake settlement and how to finance the acquisition of land. This discussion can do no more than expand a little on the nature of these issues.

Deciding on which categories and tracts of land to expropriate involves, crucially, having access to detailed information about the nature of claims, and having a well-defined and generally accepted basis for adjudicating between conflicting claims. Neither is a simple matter and neither has yet received more than scant attention.

Gathering the information calls for a truly enormous research effort, only certain aspects of which could credibly be carried out by agents of the present government. These would include the claims of present land owners. Dispossessed claimants would in many cases not perceive these agents as neutral and would probably be reluctant to file claims through them. The newly-established National Land Committee, a body incorporating several rural research and support groups for dispossessed communities, such as the National Committee Against Removals and the Surplus People Project, is planning to undertake extensive research on land claims and would appear well placed to do so from the point of view of both expertise and credibility. Political organizations such as the ANC and PAC can be expected to mount their own campaigns too.

How to determine the veracity of claims and to mediate between them poses further sets of problems which will, presumably, involve legal processes. If existing property rights are not to be held as inviolable, then a wide range of alternative criteria opens up: Claassens (1990 ; 14) refers to 'notions of land rights which are as central to Afrikaner as to African culture - birthright, right of inheritance, rights that flow from productive usage, and

the rights created by decades of occupation and security of tenure'. To an economist, at least, it is not clear how to determine an order of precedence. What is clear is that, if it is not to be chaotic, the land claims process will, in most instances, be prolonged, bringing with it frustration and uncertainty.

On one or more of the grounds just mentioned, the state may, for example, wish to expropriate the following limited categories of land, with what it considers to be appropriate compensation:

- land occupied for an extended period, perhaps for generations, by labour tenants (Transvaal Rural Action Committee, 1988: 31);
- 'black spot' land expropriated by the present government in the course of its 'population relocation' programme;
- 'underutilized' or 'abandoned' farm land (Cooper, 1988: 131);
- company-owned land or land owned by 'absentee landlords'.

Of the four, the first two perhaps present the most easily argued cases. Both labour tenant land and 'black spot' land would be expropriated from their present owners, primarily for equity reasons, and the answer to the question of to whom to grant access after expropriation would be clear-cut - to the occupying labour tenants and the recently-removed community (if it was still more or less intact) respectively. Two unintended negative spinoffs might arise: if land-owners anticipate expropriation, they may increase pressure on sitting tenants in the interim and they may become reluctant to grant employees access to land as part of their remuneration.

About 16 per cent of agricultural land was owned by companies in 1983, most of it (about 13 per cent) by private companies (RSA Central Statistical Service, 1983: 2), most of which, in turn, would probably be individuals or small groups of individuals who have formed companies for tax purposes or to disperse risk, rather than unquoted subsidiaries of large companies. If the object of the exercise was to displace 'monopoly capital' from agriculture, presumably it would (mostly) only be publicly-owned companies that would be involved.

Whereas in the case of the two previous categories it was clear that the land should be made available to those either occupying it or recently relocated against their will, in the case of company-owned land the question of occupancy would be more difficult, and the benefit of land gained would need to be weighed against the cost of jobs lost. More generally, this raises the second fundamental issue of how to undertake settlement. Claassens emphasizes the need for flexibility and for taking into account the preferences of the community concerned. Communities in different areas have fought for widely differing goals, including in some instances better wages and working conditions in preference to self-management (Claassens, 1990: 13).

An across-the-board policy of expropriating company-owned land would be a blunt and even perverse instrument for achieving greater equity.

The equity of the case for expropriating land owned by 'absentee landlords' - of which company-owned farms would constitute a particular sub-category - would seem to rest either on the argument that the landlord contributes little or nothing to the production process and simply pockets the income or on the argument that individual land holdings should not exceed a certain size.

A very large proportion of farms and farming units in the present 'white rural areas' is involved - though, of course, absentee 'ownership' also occurs widely in the 'homelands' for different reasons. As was noted earlier, more than one third of white farmers are part-timers and a survey conducted in a limited number of districts, mainly in the Transvaal, Orange Free State and Natal, in 1986, showed a high incidence of farms - not farming units - occupied on a permanent basis only by blacks. In the Free State, the province reporting the highest incidence, 80 per cent of the farms in Thaba Nchu fall into this category, 70 per cent in Heilbron, 50 per cent in Bethlehem, 40-50 per cent in Wesselsbron and 30 per cent in Bloemfontein in the 5 districts investigated (Fenyés and Van Zyl, forthcoming).

The phenomenon of 'absentee landlords' reflects the farm consolidation process that has gone on unabated in the 'white rural areas' for the past 40 years, in consonance with agriculture in most other industrialized and developing countries. The pressures bringing about this process have been referred to above and will not be discussed here. Suffice it to say that after extensive analysis, Moll concluded that 'expansion is undertaken for rational economic reasons' and that 'scale economies have driven farm growth' (1989: 345, 355). The integration of separate, often non-contiguous, farms into a single farming unit in no way implies either that the owner is an inactive participant in production on the sections of the unit on which he/she does not reside, or that that land is underutilized. The same farmers who reported that so many farms were unoccupied by whites also reported almost no underutilization of land on these farms (Fenyés and Van Zyl, forthcoming), although underutilization is difficult both to define and to detect (see below). Not only the existing system of property rights, but also the rights created by productive usage, referred to by Claassens, would therefore need to be taken into account both for land owned by 'absentee landlords' and for company-owned land in considering expropriation. This is taken up below.

'Underutilized' or 'abandoned' farmland could be expropriated on the grounds of either equity or efficiency. A considerable area of commercial farmland was abandoned as unsafe during the pre-independence war in

Zimbabwe, but the conflict in South Africa has mainly been in urban areas. So it would almost entirely be land underutilized for economic reasons that would fall into this category. If commercial farming was still the object, there would be little gain in equity in expropriating such land, without the additional input of supporting services needed to make commercial farming possible. Alternatives would be to rezone the land for residential use or for communal grazing, from which relatively little marketed output would be expected.

Though there is an environmental risk to the latter, it is important to consider for a number of reasons: as noted above, much underutilized farmland in white rural areas is not suitable for small-scale arable or intensive livestock farming and has potential only for extensive pastoral or, at most, mixed farming.

Land of this nature could be allocated for individual tenure, but the number of 'small farmers' who could be settled on 'economic plots' would be relatively small: the Department of Development Aid refers to settling such farmers in the Marico-Rustenburg area on units varying between 2000 and 3000 hectares (1990: 61-62). On the other hand, granting access to 'homeland' or other communities for communal grazing would increase the number of beneficiaries and contribute towards alleviating the 'land hunger' expressed by them. The simultaneous underutilization of arable land and overutilization of pastoral land in many parts of the 'homelands' suggests that this need is felt primarily in respect of grazing land. This would also accord with the almost unanimous opinion found in Bembridge's surveys of households in Transkei and Ciskei, that, in contrast to arable land, the basis of access to pastoral land should continue to be communal (1987: 9-10).

Clearly, the environmental risk would also need to be taken into account. Though the debate about the inherent tendency of commons to be overgrazed is far from settled (Vink and Kassier, 1987: 1988; Ault and Rutman, 1988; Lyne, 1990), there is certainly no lack of evidence of the association between communal access and overgrazing. Detailed discussion of the best means to overcome this - if it is possible - are beyond the scope of this paper (see Vink, 1986). But it is worth noting that in resettlement areas in Zimbabwe incorporating communal grazing ('Model A' settlements), overgrazing has not yet been a problem, although warnings have been issued about its likelihood if rights of access are not adequately defined (Cusworth and Walker, 1988: 24, 32-33).

The effect on production of expropriating land occupied for a long period by labour tenants for allocation to sitting tenants would probably be minimal. Nor would this create many problems in regard to the identification of land

and the settlement model to be applied.

In respect of the restitution of former 'black spot' land, identification should also not pose too many difficulties. The selection of an appropriate settlement model seems best left to the community concerned. Claassens notes that 'people tend to choose systems that are familiar to them and proven to be viable', and that these have ranged from 'individual cultivation with communal grazing (much like the Zimbabwean 'Model A')...in the South-Eastern Transvaal...(to) big shared farming units with a complex division of labour...informed partly by Tswana custom and partly by the efficiency of large units farmed by neighbouring whites...in the Western Transvaal' (1990: 13). The principle of allowing the community or individuals to be settled a major hand in deciding on the form of settlement would appear to apply generally. This is not merely a question of democracy but is essential if schemes are to gain sufficient popular support to stick. The effect on production of restoring 'black spot' communities to their land depends to a large extent on the use made of the land in the interim, but, at worst, any drop in production would be small in an overall context.

The three remaining illustrative categories - underutilized land, company-owned land and 'absentee landlord' land - present considerably greater difficulties. In terms of identification, underutilized land would be most problematic. As pointed out, most commercial farmers would contest the existence of more than a minimal degree of underutilization, but a study of arable potential utilization rates in magisterial districts throughout the commercial farming areas carried out recently by the Development Bank indicates substantial underutilization, particularly in Natal and in the Eastern and Southern Transvaal, where only about half of the potential was being used (McKenzie et al, 1990: 19, Appendix 2).

It is not clear whether this would be sufficient information to put a policy of expropriation on the basis of underutilization into operation. While the state would probably have to acquire blocks of land rather than scattered farms, even magisterial districts are large enough to make it difficult to know where to expropriate blocks. Other considerations such as proximity to the community to whom access would be granted might be used to make the choice. The best method - at least on paper - might be to allow the present occupants to identify underutilization themselves, by imposing a land tax graduated on the basis of agricultural potential. But this, in turn, requires detailed, accurate information of the sort that is not generally available if it is not to end in perverse results. Satellite photography may offer the cheapest means of acquiring this information yet.

Still more difficult than the problem of identification is the problem of

trying to ensure that higher utilization rates and greater output are achieved after expropriation and settlement. As Claassens has shown, it should not automatically be assumed that resettlement will involve small farming units, but if experience in Zimbabwe is anything to go by, much the most popular 'model' will be the one traditional in most of Southern Africa, namely small private arable allotments with settlers living in nucleated villages and sharing communal grazing (Cusworth and Walker, 1988: 6).

The relative efficiency of small and large farms is still the subject of extensive debate. Perhaps the most widely held view at present is that while small, low input-intensity farming units are often more efficient than their large, high input-intensity counterparts on the basis of input-output ratios, output per hectare on large farms is generally considerably greater (McKenzie et al, 1990: 18). It follows that, unless the land utilization rate of small producers is very much higher than that of large producers and/or the output per hectare of small units can be raised without a disproportionate fall in the efficiency of input use, total output will fall.

In both respects, the evidence is less than encouraging. Having to allocate large areas for communal grazing usually leads to poor utilization of arable land (Cusworth and Walker 1988, 30). On average, only 10 per cent of land on 'Model A' Schemes in Zimbabwe is used in any year (Cusworth and Walker, 1988: 195) - well below even the relatively low present utilization rates in the southern and eastern Transvaal and Natal. If the rate of cultivation is to be raised significantly, tractors will almost certainly have to be substituted for cattle as a source of draught power, changing the settlement model fundamentally.

In respect of raising the output per hectare of small farmers, the experience has also often not been good. McKenzie et al report a marked drop in input:output efficiency accompanied by rising debt levels on most schemes tried in South Africa to date (McKenzie et al, 1990: 18), though better results have been achieved elsewhere.

Perhaps the greatest single concern is that commercial farmers in general might interpret the expropriation of some categories of land as being the thin end of the wedge. If so, the insecurity induced could be expected to cause both a rapid slide in land values and an increase in the incidence of 'soil mining'. Though the net impact on output in the short-term would be unpredictable, the consequences over a slightly longer period would almost certainly be strongly negative. There is, of course, no certainty that the white farming community as a whole would perceive 'limited expropriation' in this light, even with compensation, but the risk of this should not be ignored.

If compensation were to be merely token, the impact on output would be

disastrous, at least in the medium-term. On the other hand, if it were to be anything like market-related, the implications for state spending or borrowing would be considerable, even for the limited categories of land involved here.

Binswanger and Elgin identify three basic sources of funds for meeting compensation payments: income derived from the land by recipient farmers; foreign (or domestic) grants; and state revenue (1989: 10-11). The 'expropriation price' can be paid either in cash, or, more usually by a series of deferred payments. Either way, the state or foreign funders are likely to have to play at least a temporary financing role. If payment is in cash, most, if not all, of the funds will have to be borrowed by the state - domestically or abroad - the capacity to fund capital payments out of current state revenue being very limited. The interest and capital repayments could, in theory, be paid by the recipient farmers, but in practice, as is explained below, this is most improbable. Almost certainly, the state would have to service and redeem loans and recover a proportion over time from the newly-established farmers. If payment of the 'expropriation price' was made in the form of 'land reform bonds', payable over a period of time, the repayment procedure would be much the same, only, in this instance, it would be the outgoing farmers, not major lending institutions, that would be having to advance the capital funds.

The difficulty with expecting recipient farmers to pay even the interest due on loans, is that the market value of agricultural land almost always substantially exceeds the capitalized value of the agricultural income stream. Binswanger and Elgin outline the reasons for this (1988: 9), and remark: 'Agricultural economists are familiar with this problem. When they try to compute the overall rate of return on capital invested in agriculture, they usually find that the opportunity cost exceeds the rate of return in agriculture' (1988: 10). The position in commercial farming in South Africa is no exception (De Klerk, 1989). 'Given this situation,' Binswanger and Elgin continue, 'the productivity advantage of small farmers would have to be immense to enable the assetless poor to finance land purchases out of agricultural profits'. Of course, the same would be true of compensation payments. The difference would have to be made up either by foreign (or domestic) grants or by recurrent government expenditure.

There are various possibilities for reducing the burden on the state budget. First is that many farms are, in practice, partly owned by the state already. The Land Bank is the largest single advancer of agricultural mortgage loans, and to the extent that its mortgages were still outstanding on expropriated properties, the need to raise other funds would be reduced.

A second is to attract foreign grants. For this, at least three conditions would appear necessary: first that full market value be paid for land acquired - purchases on the open market may even be stipulated; second that adequate planning for resettlement be undertaken - it is notable that in Zimbabwe substantial tracts of land were acquired which so far have proved unseizable and that British assistance was suspended for this reason (Cusworth and Walker, 1988: 8, 9); and third that foreign assistance will probably require a matching domestic commitment.

A third possible route is to reduce the market value of land prior to expropriation by imposing a land tax, from which recipient farmers could then be given relief.

State expropriation, without compensation, of the same categories of land:

The implication for redressing historical dispossession would, at first sight, appear to be the same as if the land were acquired with compensation. However, the effect of even limited expropriation, without compensation, on the confidence of the white farming community, would probably be such as to induce widespread capital and skills flight. That is, land prices would probably fall dramatically, enabling the state, if it wished, to acquire other land at a commensurately reduced cost. This might advance a redistribution programme.

The real cost of expropriation without compensation would come in the form of reduced agricultural output, if not immediately, then within a short period. As pointed out earlier, the extent of this is hard to gauge and would depend on the degree to which other farmers anticipated the expropriation of their own properties. But the expropriation without compensation, even on the limited basis concerned, would certainly be seen by the rest of the white farming community as a hostile policy.

Elliott (1984: 3) foresees a 'J' effect on production - a reduction in the short run, but an increase in the longer run. This is a possibility not to be dismissed but is beyond the scope of this paper. What does seem clear is that embarking, even in a limited way, on a policy of expropriation without compensation, raises the possibility of a period of severe economic dislocation, during which the domestic production of food and fibre both for export and for the urban population would be curtailed. This would have negative consequences for food prices, inflation, the balance of payments and economic growth that would have to be taken into account, before putting a policy of this nature into effect.

While expropriation without compensation would certainly 'save' on the cost of acquiring land for redistribution, this might be more than outweighed

by the loss of tax revenue following a decline of output in commercial agriculture and in the economy at large.

Nationalization by means of a land tax: Land taxes have already been mentioned as a possible instrument for identifying underutilized land or raising the rate of utilization and for reducing the market value of land to assist a policy of expropriation with compensation. A land tax could also be used to bring about an effective nationalization of land.

Gaffney begins his discussion of land taxes by observing that 'taxation is the form of socialization used in market economies...(and that) choosing what to tax is choosing what to socialize' (1987: 122). Taxing away the entire income from a productive resource therefore amounts to socializing - or nationalizing - the entire resource, even though ownership resides with the individual. For it to be worth the while of the owner to retain ownership, it is obviously necessary both for that resource to be an inescapable complement to the use of other resources, and for the owner to be able to derive income from the other resources.

Agricultural land is, of course, used in combination with labour and capital, is an inescapable complement to them, but is not mobile and therefore not as susceptible to 'flight' if heavily taxed. Both for these reasons, and because there are grounds for regarding it as a 'God-given' endowment to society as a whole rather than as a parcelable item for private ownership, a further option would be for the state, in effect, to nationalize agricultural land by taxing away the entire portion of farmers' income attributable to land ownership. The issue of whether this would leave farmers with an 'acceptable' income is dealt with below.

While this approach may have ideological appeal, perhaps the major shortcoming in the present context is that it would probably not go very far towards redistributing land. The tax would reduce farmers' expected net flow of income and this would, in turn, reduce land prices in a once-off adjustment, with an accompanying capital loss for existing owners. This could be expected to cause some farmers to sell. But by and large, land would probably stay in the hands of existing owners, and even with the reduction in price, purchase on the open market would remain beyond the reach of most resource-poor farmers (Binswanger and Elgin, 1989: 10).

Various indirect equity gains would however accrue: aggregate income shares would shift in favour of labour (as well as capital); a source of revenue would be created for investment in, say, rural housing and schools; tax avoidance is difficult; and the tax falls directly on the wealthy (Nieuwoudt, 1987: 13). Being a fixed cost, it cannot readily be passed on to consumers.

But these consequences might be seen as insignificant by a government wishing to effect concrete transfers of land.

Because of the rise in average costs, a number of financially marginal farmers could be expected to sell up. A rough calculation suggests that the number could be quite large. Nieuwoudt notes that a tax of 4 or 5 per cent per annum on the value of land would probably tax away all of the imputed income from owning land in South African agriculture (1987: 11). While this may sound almost insignificant, if one translates this cost into a percentage of the net profit of the farming sector in 1988, it amounts to between 20 and 25 per cent. This represents a very substantial drop in the average farmer's income. Those much below the average - in terms of the efficiency of land use - would not be able to sustain the loss. The state, on the other hand, might see the resultant increase in the fluidity of ownership as an advantage, the more so because only those owning land at the time of the imposition of the tax would bear the cost. Thereafter, the lower net income would be balanced by the lower prices payable for land.

Land taxes have been suggested as a mechanism for reform in Zimbabwe and the Philippines, and Brazil actually has a land tax in operation (Binswanger and Elgin, 1989: 11). But few countries appear to have effective land taxes of any sort (Nieuwoudt, 1987: 11). To some extent this could be ascribed to the political power of landowners, but it also appears to be a consequence of practical difficulties inherent in the system. It is not easy to assess accurately the value of property that is not often sold in the market. Nieuwoudt argues that it would involve the use of more resources than most countries have felt it worth allocating, although techniques such as aerial photography and, most recently, remote sensing, could help reduce costs. Failing this, he argues, the administration of the tax 'would in all likelihood be so poor...that it would produce neither equity, nor efficiency, nor revenue' (Nieuwoudt, 1987: 11).

A major advantage of land taxes is that they ought not to have a negative effect on output. As Nieuwoudt points out (1987: 12), there should be no disincentive to effort (such as is introduced by progressive income tax), there should be no distortion to resource allocation (such as is introduced by input subsidies), and there should be no increase in food prices. All of this follows because the cost to farmers would be fixed and would not affect marginal costs, the main determinant of supply.

Budget-wise, at best, a land tax could produce a significant source of revenue for rural restructuring. At worst, a limited net cost. Most important from a fiscal point of view, it ought not to cause a major loss of revenue from the economy at large by inducing a widespread loss of business confidence.

Conclusion

History demands that land be redistributed in South Africa. No less, the present and future demand that output from the land be maintained and increased. The challenge is to reconcile these demands.

The emphasis on the need for output growth is notable in the memorandum issued after the ANC/COSATU conference on economic policy in Harare earlier this year. Commenting on this, Kaplan, a member of the Economic Trends Group who participated in the conference explains: 'What we are intending to redistribute primarily...are resources that will facilitate the expansion of employment and output....This is not a policy of income redistribution or even...of wealth redistribution although...it will, if successful reduce the income and wealth inequalities' (Kaplan, 1990: 2). This provides the touchstone for reconciling the two demands.

The basic principles are clear: efficient existing producers should be protected, and, whatever the mechanism for adjudicating between land claims, awards should - with limited exceptions - be made only to those who are likely to use land productively. There is more than sufficient evidence that small farmers and farming communities can achieve this, given the necessary assistance. Those who are not likely to fulfil this requirement should not be given access to productive land.

This identifies a further reason for emphasizing growth. Even if a substantial percentage of rural land is redistributed and settled, agriculture cannot productively accommodate more than a relatively small and declining proportion of the population. It will not be possible to satisfy many land claims through land reform. Arguably, it will be industrial, not agricultural, growth - or land reform - that will be the most important determinant of the state's capacity to tackle 'land hunger'.

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