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## LAND REFORM IN THE TRIBAL AREAS OF SOUTH AFRICA

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### Abstract

Despite intense population pressure, arable land is often underutilised in tribal areas. Conversely, grazing resources are often over-utilised. Supply response to price incentives is inelastic as the potential gains to farmers are limited by small farm sizes. A land rental market could improve efficiency in farming and also has equity advantages. Institutional changes are needed to encourage land rental. Overstocking occurs primarily because grazing land is a common property resource. Unlike most solutions to overstocking (e.g., cattle taxes and quotas), privatisation of grazing land would also improve the incentive to upgrade herd and pasture quality. It is recommended that private access to grazing be encouraged in areas where it is more acceptable to households.

### 1. Introduction

This paper explores the anomaly that arable land resources are underutilised in tribal areas despite intense population pressure and sincere efforts to assist farmers. Attention is also focused on the overutilisation of grazing resources. It is contended that these inefficiencies are largely the result of tenure arrangements which inhibit land rental.

### 2. Arable land

Estimates compiled by Lyne (1989:7-11) suggest that rural households in KwaZulu use 393 000 hectares of land for arable purposes (cultivated and fallow). Considering that rural households numbered approximately 412 000 in 1985, it is clear that farm sizes are extremely small. Data recorded in six separate household surveys between 1980 and 1986 also indicate that farms are very uniform in size and that some 22 per cent of the arable land is left fallow. The latter finding, coupled with the fact that crop yields are extremely low (Lyne, 1989:9), suggests that cropland is underutilised in KwaZulu. Underutilised arable land is a prominent feature of all less developed countries in Southern Africa (Low, 1986:119-123).

Under the tribal tenure system land is not owned by individuals. In practice, it is usually the district chiefs and their headmen who allocate land to households and who settle boundary disputes. Land allocations provide households with usufruct rights. For example the right to reside, crop, graze livestock and gather natural resources. These rights produce a stream of economic benefits including (a) security during times of unemployment, ill health and old age, and (b) access to building materials, grazing, fuel and water for which the private costs are low. However, households are not entitled to sell land. Another important aspect of tribal land tenure is that land allocated to a household which is not used for dwellings or crop production serves as grazing and is available to other households for this purpose only. In some areas even the cultivated lands are opened to stockowners for grazing during the winter months (Naledzani et al., 1989). In effect, grazing is a common property resource.

There is a perception amongst rural households that land rights may be lost through prolonged failure to use the land (Lenta, 1982). Lyster (1987:121) found that 84 per cent of 326 households sampled in the Usuthu district of KwaZulu viewed their land allotments as belonging to the tribal authority and that 75 per cent believed that their land would be reallocated to other households if they appeared not to use it. Similar perceptions have been recorded in other parts of KwaZulu (Thomson and Lyne, 1991). Households therefore have an incentive to retain their rural land rights even if they derive virtually all of their income from wage employment because (a) the benefits

can be procured by members whose opportunity cost of time in cultivation is low, and (b) the benefits are elsewhere unobtainable or more expensive.

As a result, population growth in the less developed rural areas of Southern Africa has effectively reduced farm sizes (Low, 1986:50-53). At the same time, improvements in expected off-farm wage rates, education and transport raised the opportunity cost of household labour in farm activities so that the full cost of producing a unit of food increased relative to its purchase price. Low concludes that the net outcome has been (a) real growth in the number of wage workers, (b) increased food importation, and (c) underutilization of arable land despite high population pressure.

Similar trends are also evident in the tribal areas of South Africa (for example, see Lyne, 1989:9-26). However this evidence does not imply that Low's analysis is entirely correct: Firstly, a transfer of household time from farm to off-farm work need not result in reduced farm output as labour used in crop production has close substitutes. Increased off-farm earnings could also alleviate on-farm liquidity constraints. Studies in KwaZulu show that wage remittances are positively correlated with production of surpluses (Nieuwoudt and Vink, 1989; Lyster, 1987:135;) and the adoption of farm technology (Kleynhans and Lyne, 1984). Secondly, and more importantly, the underutilization of arable land is not fully explained by Low's analysis. His household model merely draws attention to the fact that many rural households do not have an incentive to farm their arable land intensively. Arable land is underutilised because these households cannot rent land to others who would farm it. In short, there is no penalty (sacrificed rental) for non-use.

The incentive to retain land rights has virtually precluded a rental market for arable land because lessors could lose their right to land farmed by tenants. In the absence of enforceable contracts the tenant also bears risk as the lessor might claim the crop when it is ready for harvesting. According to Khumalo (1989) rental arrangements tend to be resisted by stockowners whose access to grazing is reduced when uncultivated land is hired and either cultivated or used as private grazing by the lessee (Khumalo, 1989). Thomson (1991) has also observed peer resistance to tenants who appear to be 'farming too much land'. Only two of 79 rural households in a representative sample drawn from the Vulindlela district in KwaZulu (Lyster, 1987:59) hired land although 50 indicated a land shortage. Similar findings are reported by Thomson and Lyne (1991) and Lyne (1989:20).

An efficient land market requires security of property rights and low transaction costs (Nieuwoudt, 1990). Whilst security may not be an issue under tribal tenure, transaction costs are high owing to the risks borne by lessors and tenants. In a

sample of 308 households in rural KwaZulu, 155 indicated that they would like to rent more land yet only 19 engaged in some form of land transaction. Eighty per cent of the observed transactions were between family relatives and close friends, or where the government acted as lessor (Thomson and Lyne, 1991). It is clear that transaction costs were relatively low in the observed cases as friends and relatives are unlikely to claim rented land, and claims against the government are unlikely to succeed. In sum, the land market is incomplete and land does not transfer to the most efficient users.

To activate the rental market perceived risks will have to be reduced. This implies institutional change. For example, written contracts between tenants and lessors endorsed by the local chief and held in trust by an independent arbitrator have facilitated rental transactions on irrigated land in the Umzumbi district of KwaZulu (Stewart, 1988). Existing government institutions could assume responsibility for holding and enforcing land rental contracts, and should take a more active role in disseminating information about procedures. Tribal authorities could be encouraged to endorse rental contracts by allowing them to tax rentals. Institutional credit currently advanced for other inputs should be extended to include financing of land rental.

The cost of maintaining an efficient market is not trivial, but without this expenditure other farmer support programmes may not be effective. Current debate on methods of promoting agricultural output in sub-Saharan Africa has produced two schools of thought: Pricists advocate removal of policies that have effectively lowered farm product prices while Structuralists argue that other transformations (e.g. investment in research and communications) must precede or accompany higher product prices. In support of their approach, Structuralists emphasise the results of empirical research indicating that aggregate farm output is not responsive to price incentives in less developed countries. They contend that structural transformations will alleviate constraints faced by small-scale farmers thereby raising output and improving output responses to price incentives. In essence, many of the programmes recommended by Structuralists serve merely to reduce unit production costs on farms. Consequently, responses to structural programmes may be no better than responses to higher farm product prices - both approaches involve an increase in profit per unit output. Of importance is that the potential gains to farmers generated by either higher product prices or lower unit production costs are scale dependent. The greater is the volume of output the larger are the potential gains. This is why large-scale farmers are more responsive to price incentives and farmer support programmes than small-scale farmers (Welch, 1978).

When farm sizes are small and the land market is incomplete, the potential gains from farming are also small and most households are able to procure food and income at lower cost by allocating better educated members to off-farm employment. Today the vast majority of farm households in the tribal areas are net consumers of food. Higher food prices would therefore leave most households worse off and would do little to raise farm output. It is estimated that a ten per cent increase in the producer and retail price of cereals would reduce mean household welfare by two per cent and raise cereal output by only 8,6 per cent in rural KwaZulu (Lyne, 1989:108). Reducing unit production costs would benefit all producers but owing to small farm sizes the benefits and output response are expected to be small. A ten per cent reduction in input prices is expected to raise mean household welfare by just one per cent and cereal production by only 7,1 per cent in rural KwaZulu (Lyne, 1989:112).

One way of increasing the volume of output on small farms is by providing irrigation. It has been observed in several less developed countries that output is more responsive to price incentives on irrigated farms than on dryland farms (Beynon, 1989). Alternatively, farm scale could be increased by increasing farm sizes. The question is whether farm sizes can be in-

creased without detracting from equity. Although a land market would enable consolidation of farms it is argued that a minority of elite families able to mobilise cash are likely to capture the benefits of a land market while poorer households could be forced into tenancy or urban poverty. This is a valid argument if permanent usufruct rights are traded on the land market. However, the 'landless class' problem does not arise in a rental market.

In fact, a case for land rental can be argued not only in terms of improved efficiency but also in terms of improved equity as rental arrangements are voluntary. Households short of land for subsistence or commercial cropping purposes (particularly those with limited off-farm wage earning capacity) would be able to access additional land without diverting working capital into land purchase, and lessors would gain rental income. A rental market for land would bring unutilised arable land into production as non-use would incur opportunity costs. Furthermore, the incentive to crop land more intensively would strengthen as average fixed costs associated with lumpy management and information inputs decline and potential returns to innovation increase. Possible losers would be stock-owners whose access to common grazing is reduced when unutilised arable land is hired and cultivated. There would be no need to survey and register titles to land but zoning may be necessary to prevent 'shack farming' on high quality agricultural land.

Empirical studies based on sample survey data gathered in various parts of KwaZulu indicate that both the adoption of farm technology and production of surpluses are positively correlated with farm size and the renting or borrowing of land (Kleynhans and Lyne, 1984; Nieuwoudt and Vink, 1989; Thomson and Lyne, 1991). In the Vulindlela district, 70 per cent of all farmers known to sell produce either rented or borrowed additional land (Lyne, 1987:59).

### 3. Grazing land

Overstocking is a well documented feature of grazing land in the tribal areas of South Africa. High stocking rates have resulted in poor calving and high herd mortality rates (Lyne and Nieuwoudt, 1990). One reason for high stocking rates is that grazing land, unlike arable land, is a common property resource. When access to a common grazing resource is unrestricted, the stocking rate always exceeds the economic optimum stocking rate. However, this does not imply that stocking rates will always exceed the maximum biological stocking rate. When access to common grazing is unrestricted, stocking rates are determined not only by the pasture's carrying capacity but also by the private cost of keeping cattle on the common ( $P_c$ ) and the perceived value of keeping cattle ( $P_y$ ). This relationship is supported by empirical evidence from KwaZulu (Lyne and Nieuwoudt, 1990).

Although access to communal grazing is generally confined to a particular group of users, these groups are often large and there is little evidence of any tribal rules restricting the number of livestock that users can graze on the commons. Privatisation of grazing land (even in the limited sense of removing open access to land allocated to, but not cultivated by, other households) would ultimately reduce stocking rates as future losses in output caused by overstocking would be internalised; i.e.  $P_c$  increases relative to  $P_y$ . It is also possible that land may replace cattle as the desired store of wealth if privatisation involved freehold titles that could be sold or inherited. Other solutions to overstocking include cattle taxes and quotas. In open access situations, taxes and quotas would have to be imposed and enforced by an external agent. Where access to common grazing is not unrestricted it is possible that users will impose their own institutional rules to prevent overgrazing (Runge, 1981). Popkin (1979:253), however, questions this outcome when the group is larger than a family.

Unfortunately, overstocking is not the only problem associated with common grazing resources. The real tragedy of the commons is that a stockowner has little incentive to invest time and money improving the pasture or the quality of his herd because other stockowners (free-riders) stand to benefit from his efforts. Whereas reductions in stocking rate are achieved by internalising the cost of resource degradation (reduced future income), improvements in incentive are achieved by internalising benefits. Sample survey results indicate that bulls comprise more than 20 per cent of cattle herds in KwaZulu (Tapson, 1985). Poor herd composition and the virtual absence of improved pastures on tribal commonage highlight the low incentive problem. Private access to grazing land could solve both the overstocking and low incentive problems but cattle taxes and quotas can only solve the overstocking problem. Private access is also a necessary (but not a sufficient) condition for the existence of a land market and a rental market in grazing land would have certain equity advantages. For instance, (wealthier) stockowners would be obliged to rent grazing land from (poorer) non-stockowners.

#### 4. Conclusions

Firstly, it is contended that arable land would be farmed more efficiently in KwaZulu if land could be rented. A land rental market also has equity advantages and avoids the 'landless class' problem. Institutional changes are required to facilitate land rental arrangements. Secondly, it is contended that stockowners would be less inclined to overutilise grazing and more inclined to improve pasture and herd quality if they had private access to grazing land. Cattle taxes and quotas could also reduce overstocking but would not encourage stockowners to improve pasture and herd quality. Private access will penalise stockowners but other (less fortunate) households stand to gain if grazing resources are rented. Again, institutional change is required.

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