

SECOND CARNEGIE INQUIRY INTO POVERTY
AND DEVELOPMENT IN SOUTHERN AFRICA

Food production in the homelands:
Constraints and remedial policies
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FOOD PRODUCTION IN THE HOMELANDS: CONSTRAINTS
AND REMEDIAL POLICIES

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The drought of the early-1980s has brought into sharp focus the parlous state of agriculture in the African 'homelands' of South Africa. However, it is not only during droughts that food production in many parts of these homelands falls short of the food requirements of the inhabitants, and today's concern with food shortages in these areas is not something new. Since the 1920s there has been a considerable volume of writing devoted to identifying the causes of the economic decline in general (and of deteriorating food production in particular) of what were once self-contained, subsistence communities. The aims of this paper are to examine the factors constraining food production and then briefly to discuss remedial policies.

The paper commences by surveying the relevant literature in an attempt to establish to what extent circumstances, interpretations and policy recommendations have changed in the last half-century. The remainder of the paper - dealing with the causes of low output and alternative policies - is based on the proceedings of a workshop convened under the auspices of the Carnegie Inquiry and attended mainly by individuals engaged in the agricultural sector. (1)

Has Food Production Declined?

Severe limitations in the quality, quantity or consistency of data, make it very difficult to measure food production in the homelands over time. In spite of this, attempts have been made to produce estimates for various periods. Knight and Lenta, for example, have found that between 1918-74 the rate of growth of food production in the homelands failed to match population growth in those areas. (2) During these years, the de facto population of the homelands grew by 230 per cent. Cereal production fluctuated and per capita production fell from 2,0 bags in 1918-23 to 0,55 bags in 1971-74. The fluctuations were considerable but the trend was clearly downwards. The livestock population remained practically constant after 1924-26, and per capita ownership of livestock (measured in 'large stock units') therefore fell to barely more than one-third of its level 50 years previously. Per capita income from livestock probably declined in a similar fashion.

Another study (3), focussing on the food requirements/food production balance between 1867-1977 in KwaZulu, showed that cereal production increased on average at an annual rate of just below 1 per cent while population increased at a rate of 2,04 per cent per annum, with the result that per capita output declined at an average rate of just over 1 per cent per annum. At a more detailed level it was found that during most of the second half of the nineteenth century, food output increased two-and-a-half fold and average output per head of population rose from 1,6 bags to nearly 3 bags. Production outstripped the needs of the rising

population and a surplus emerged which reached a maximum of 65 per cent over needs in the early 1890s. Around the turn of the century, an abrupt change in patterns of agriculture occurred; in the early 1900s only 73 per cent of grain requirements could be satisfied by local production, and half a century later the proportion had dropped to 50 per cent and cereals per head from 1,25 bags in the early 1900s to less than one bag. This process of decline accelerated in the 1950s when a static balance was reached and at least temporarily maintained between rising population and output in the period 1960-1977. The production/requirement ratio steadied at 30 per cent and output at 0,5 bags per person, or 25 per cent of what it was a century earlier.

Past Interpretations of Decline

Between the 1920s and the 1970s there was a considerable volume of writings devoted to the investigation of the economic decline of the homelands in general, and of the growing inability of those regions to support their populations.

From economic historians to economists and from official commissions of enquiry to social scientists, all attempted to identify the causes of the impoverishment of the homeland population in search of suitable corrective policy measures. Their most relevant comments are given here for purposes of comparison: to what extent are today's views on the causes of inadequate food production in the homelands different from those of the past?

Two main causes were perceived to be responsible for the deterioration of production levels in agriculture. The first was the shortage of land in the face of a growing population; this, it was alleged, resulted in a serious degree of overcrowding, with its attendant problems of overgrazing, use of poor and barren land, erosion, denuding of land resources and ultimately declining yields. Before they came into contact with the outside world, tribal economies depended for their successful operation on the use of unlimited land. Loss of land would have meant the destruction of the base upon which the economies existed.

The alternative which might have prevented growing poverty - the adoption of more intensive methods of farming aimed at economising in the use of land - was not adopted when the effects of land spoliation came to be felt. This lack of initiative was seen to be the second most important cause of the economic retrogression that was taking place. When land became exhausted and it was no longer possible to move to new land, "most peasants did not practice new methods of rotation and fertilising which alone could have maintained communities with fixed, as opposed to shifting, cultivation". (5) Instead, "by their primitive and wasteful husbandry, they ruined poor land beyond repair; the rich land became steadily poorer". (6) "African peasants have failed to adapt their farming practice to modern requirements. General conservation, the system of land tenure, and certain social customs...combine to perpetuate obsolete methods of farming in spite of the visual evidence of modern methods". (7) More

specifically, "their (African's) conception of cattle has become, under present-day conditions, one of the most far-reaching anti-economic inheritances of the Natives".(8) In general, "fertilisation is not practiced, rotation is unknown, depth of ploughing inadequate, the use of deteriorated seeds is the rule and weeding unsatisfactory.... The improved methods learnt and practiced by the Native on European farms are soon shed when he returns to his reserve". (9) The result is a "state of affairs in which, with the exception of a few favoured parts, a Native area can be distinguished at sight by its bareness". (10)

Unable, then, to feed a growing population to satisfy newly acquired wants and to pay new taxes, Africans resorted to the only alternative open to them: the sale of labour to the "White" economy.

On the whole, commentators tended to dismiss possible beneficial effects of migration on agriculture. Instead, the concept of a 'vicious circle' was accepted, by which labour migration became at the same time a result and a cause of low productivity in African agriculture. As one historian put it, "the departure of each man robbed the native land of his labour and threw the burden of production on the shoulders of women and boys. Too poor to stay at home, their going surrendered their land still more to inefficiency and 'ignorance'" (11). Nor were the remittances of migrants seen to have any great significance on the productivity of rural agriculture: "The money earned by the sweat and toil of labourers in mines and factories is continuously being poured into the bottomless pit created by

their cattle complex" (12).

In short, "the congestion of the reserves, the backwardness of their methods, the exhaustion of their resources, accounted for many things. They accounted for chronic undernourishment, for the shrunken enterprise, and for the tightened hand of tribalism".(13) And van der Horst writes, "the smallness of individual land-holdings, lack of capital, and failure generally to adopt more productive techniques, continued to restrict their (African's) efforts as independent producers and to force them out to work under European supervision". (14)

The view that social factors were responsible for the failure of Black peasants to produce adequate food for the homeland population, has been dismissed by revisionist writers as at best inadequate and in general a distortion. They reject the view that traditional agriculture failed to respond rationally to market stimuli. For instance, reluctance to innovate and the desire for cattle holding might represent rational behaviour given the high risk-aversion to be found at near-starvation income levels. Rejection of social constraints as an explanation of rural decline causes radical writers to stress the discriminatory and coercive means used by those with political power to the disadvantage of the African peasantry. This leads to the strong conclusion that the decline in productivity and profitability of African agriculture is in an important sense the outcome of the nature of capitalist development in South Africa. (15)

In spite of differences in interpretations and emphasis, radical and orthodox writers alike seem to agree on the more broad fundamental issues; responsible for the decline of homeland agriculture was a series of political measures taken by those with political power, which had the effect and in many cases also the intention, of extracting labour from the reserves. These measures included land appropriation through conquest and legislation, the imposition of compulsory payments, government neglect of agriculture in the reserves and overt discrimination in favour of White farmers.

New Interpretation of Decline

Factors which are seen today to be responsible for the unsatisfactory levels of food production in the homelands can be discussed under two broad categories: the 'proximate' or farm level factors which depend upon the decisions and performance of individual farm operators, and the 'conditioning' factors which are determined by government measures and other outside influences that effect the nature of the production possibilities available to farmers. (16).

Proximate or Farm Level Factors

Four factors may be distinguished under this heading.

(1) Availability and Use of Land: It is wellknown that the allocation of land to the homelands is determined largely by the Native Trust and Land Act of 1936. It is conceded by many that the allocation is inadequate to sustain the area's population as

conditions have changed drastically since the 1930s. Population has increased rapidly over the intervening years and the extension of influx control in the early 1950s has reduced the rate of emigration from the homelands which has further exacerbated the situation and resulted in tremendous overcrowding. It is the inadequacy of land which has produced plots too small for full-time farming to be able to compete with wage employment, and which therefore deprives the land of able-bodied males. Given the system of land tenure, it is the inadequacy of land which results in the use of arable land for grazing, and which makes draught animals too weak for ploughing. Change in tenurial arrangements is itself made difficult by land shortage.

It is also contended, however, that at fault is not the quantity of land but the intensity with which land is used. Predictions of productive capacity are made from time to time; it is claimed by some that in view of the low productivity that prevails in homeland farming at present, the regions are capable, given an adequate input of capital and skills, of producing sufficient food to support a much greater population than resides there. In the very recent past the manager of the KwaZulu Development Corporation remarked: "The rural areas are capable of accommodating far more people than they do at present. It is not necessary to remove hundreds of thousands of people from the land. What needs to be done, is to elevate the productivity of the peasant farmer". (17) Yet fairly recently the Buthelezi Commission estimated that in the case of KwaZulu, even if existing productivity levels were to be increased by

450-500 per cent (implying annual real growth rates in output of 10 per cent for the next 15 years), agriculture would only generate a volume of income adequate to support 1,25 million persons. Adding to this figure the number of people who would be living and working in villages and towns serving the rural areas - approximately 250 000 - more or less 1,5 million people could reside in rural KwaZulu. At present, there are 2,34 million persons. "Thus", the Commission concludes, "the full development of the agricultural potential of the area will employ only 66 per cent of the present population and there will have to be an outward migration of 830 000 people together with any further increase in the remaining rural population". (18)

It should be noted that the situation in KwaZulu is by no means representative of all homelands. These political entities, which together comprise almost 14 per cent of the land area of South Africa, contain wide variations in rainfall, soil types, natural resources, etc., and hence wide differences in agricultural potential. Before the drought of the early 1980s, for example, Bophuthatswana was a grain exporter, while Venda has the potential to be self-sufficient in food.

(2) Labour Supplies: It is generally believed that a vast pool of surplus labour exists in the homelands in the form of overt or disguised unemployment. However, there is evidence that, concomitant with unemployment, there exists labour-scarcity on the land, particularly at peak seasons. At times, unemployed migrants return to the rural areas but this does not necessarily coincide with the peak agricultural season.

The abnormal demographic composition of the average family in the homelands - a result of migration - creates a situation whereby a large number of households is headed by women. Consequently, agricultural activities must be limited by the time that a housewife, who is in all probability the only resident parent of a family of young children, is able to spend on cultivation. Water and fuel collection involve walking great distances, and this keeps part of the labour force tied up in non-agricultural activities. Most domestic chores are labour-intensive which also reduces the labour available for agriculture. As it happens, the most labour-intensive agricultural period coincides with school examinations and so the rate of absenteeism rises.

(3) Availability of Capital: It is obvious that some degree of agricultural financing is necessary for the expansion and diversification of farm output. A type of capital investment which merits special mention here and which is in very short supply in the homelands, is what one could call 'high-risk, speculative' capital, which is often associated with agricultural development projects. The point in question is illustrated by the experience of Taiwan. In that country a development corporation was formed - the Agricultural Research and Development Council -- with the objective of providing financial backing to farming enterprises. The Council places money at risk, undertakes development projects, ascertains the viability of a project and then turns it over to private enterprise without itself expecting financial returns. A similar corporation

should be created for the homelands: the introduction of new and risky food and cash crops cannot be left to the initiative of individual peasants.

Whilst on the subject of capital, a further point is that small-scale African producers are at a disadvantage compared to large-scale White farmers with regard to taking advantage of fertiliser subsidies, drought relief, tax and railage rebates, etc.

In this discussion on aspects relating to factors of production, reference must be made to a paradoxical situation which exists in homeland agriculture and which is bound to have a detrimental effect on food production. On the one hand, many of the homelands are starved of land and, as has already been mentioned, population is well in excess of the carrying capacity of the land. On the other hand, by no means all of the land classified as arable is cultivated in any one year. In all homelands a comparatively large proportion of arable land (20-30 per cent) is left uncultivated every year. A survey was conducted in KwaZulu in 1980 for the purpose of explaining, as far as possible, this puzzling matter of land unused.(19) The findings of the survey are worth summarising briefly because they clearly indicate some of the major problems facing homeland farmers today.

Three main reasons were given for the failure to cultivate, all of which indicated a situation whereby the proportions in which supply factors are often combined are economically

undesirable: households with land lack capital or labour; households possessed of capital or labour, or even both, often have insufficient or no land.

The first and by far the most important reason for under-cultivation, was shortage of finance to purchase intermediate inputs, e.g., means of ploughing, seeds, fertilizer, etc. In this connection, many of those interviewed appeared to display a rather curious attitude towards agricultural activities. They regarded themselves not simply as part-time cultivators but as people whose ability or willingness to cultivate depended on there being sufficient income from other sources in the family to provide some capital for farming. Lack of earnings from non-agricultural sources inhibits the acquisition of inputs, which in turn discourages cultivation. This produces a paradoxical situation in which unemployment outside agriculture, instead of stimulating the full use of land, in fact leads to land wastage since the individual lacks the income necessary for the acquisition of essential inputs.

Secondly, the physical impossibility of obtaining the means of ploughing the land. Of all householders interviewed, 22 per cent offered this as their reason for non-cultivation. Plough-oxen or tractors are either seasonally unobtainable, or else it is considered that the expense of hiring them is too great. It may be thought paradoxical that cultivation may be prevented by a lack of draught animals in a land where overstocking has for generations been considered an obstacle to development, but there are several reasons why this is so. The first is that only one-

half of all households own livestock, and stock-owners are not necessarily holders of arable land. Secondly, the phenomenon of overstocking acts to weaken the draught animals available and, hence, to reduce the use of beasts weakened by underfeeding, making them less adequate to the agricultural needs of their owners.

Finally, imbalances between rights to arable land and availability of labour with which to cultivate the land further contributed to wastages in arable farming. In the case of 18 per cent of households interviewed, it was reported that failure to cultivate occurred because cultivation rights belonged to individuals who were too old or infirm, or to widows without adequate labour for ploughing and weeding, who act as caretakers of land rights for their children. A further 12 per cent of representatives of households said that either the head of the family or both husband and wife had migrated to town to work, or that although still resident, they were engaged in full-time non-agricultural work.

This land/labour disequilibrium is particularly disturbing. Not only does it reveal fundamental weaknesses in the present system of land tenure, but it highlights most vividly the negative effects of migration on agricultural practices.

(4) Traditional Customs /Conservatism/Resistance to Change

The question of taboos restricting food production is today regarded as relatively insignificant. Traditionally chiefs

enjoyed a position of respect in their communities and they were always people who commanded the greatest wealth. The idea that a commoner could be more progressive than a chief was not in accordance with the institution of chieftainship. This has had in the past some practical effects on agricultural practices. For instance, the planting season always began after certain rainmaking ceremonies had been held shortly before the expected commencement of the rainy season. No individual dared start planting before the chief's announcement for fear of having his cattle confiscated.

There are certain areas where extreme pressures exist against acquiring wealth and being successful. In Swaziland, at one time, home improvements were seen as one man being wealthier than his neighbours and he was therefore labelled as a witch. However, as roads made markets more accessible, people became eager to improve their houses. The demonstration effect of the outside world helped in changing the views of the rural community. It is difficult to believe that today the existence of taboos would still be strong enough to act as a constraint on agricultural production.

There is, however, one aspect of farm management which still seems to represent adherence to past practices which impede development: livestock holding. For many decades, observers of African agriculture have been critical of the attitude of peasants towards cattle: their apparent reluctance to maximise economic returns in a manner prevalent among White farmers contributed to their being labelled as 'irrational operators',

obsessed with a 'cattle complex' that led them towards the destruction of valuable land resources and contributed, in all probability, towards a lower level of income from farming.

Today, the attitude of observers and commentators has changed somewhat; the general feeling is that homeland residents are not inherently conservative but that the options offered to them are unattractive. In fact we are a long way off devising options which represent viable choices to them and so put them in a position where they can be conservative or resistant to change.

The cattle issue is very important in this discussion on food production in the homelands. Firstly, there is a great deal of wealth locked up in the herd. There are said to be approximately 1,7 million cattle in the national KwaZulu herd which would be worth slightly more than the whole of the local sugar industry in capital values.

Secondly, from this huge stock of capital, a flow of food and income in general should materialise. Yet, in spite of the sympathetic and benevolent views of today's analysts, it must be admitted that extremely little income is derived from livestock in the homelands. To what extent this may be ascribed to customs and traditions, or to faults in the structural relations in the economy, cannot be said. The fact remains that there are instances that seem to point to survival of the old customs and practices. A good illustration of this is provided by what occurred during the 1980 drought. An effort was made to open up a number of feedlots on the basis that the pressures that the

drought had put on individual cattle-owners would increase sales rather than deaths of cattle. For the area concerned, no cattle were used for draught and none were milked. The feedlot operation offered three options:

- (a) put all the cattle over a scale and pay on weight;
- (b) take in cattle and keep them on a charge per day at a pre-determined rate; or
- (c) sell individual cattle to pay for the cost of food or market direct to the butcher.

All participants opted for the second course and eventually took their cattle back, so cattle that arrived in an emaciated condition were returned in a more marketable state. The cattle owners then refused to sell any in order to pay for costs incurred, and the individual who had tended the cattle during the drought in most cases had to wait for his money, sometimes for as long as 6-7 months, and also had to accept payment in instalments. The most logical option - selling either all or some cattle - was not favoured by any individual. This particular example serves as a good illustration of the reluctance on the part of rural cattle-owners to dispose of their livestock.

In general, turnover in the livestock industry in the homelands is low. In Transkei, for example, the cattle offtake figure is only 5-6 per cent as against 15-20 per cent in commercial farming. Yet, the current number of cattle in Transkei is double what it should be for long-term productivity.

Chronic malnutrition is relieved only when it rains, while factors such as starvation from birth, the failure to castrate poor quality or dip stock, etc., exacerbate the situation.

A similar situation has been found in KwaZulu. On average, between 1957-73, for every animal that was sold or slaughtered, two died of natural causes. For the same period, the rate of turnover (the number of cattle marketed or consumed as a percentage of the herd) in KwaZulu averaged 5 per cent per annum, which was approximately one-third of the rate on White farms. Sales remained constant at about 2 per cent of the cattle population, notwithstanding an active government drive to promote sales and an inflation in cattle prices during this period of 7 per cent per annum. (20)

The attitude of Black formers to cattle holding is understandable. There are tremendous advantages to be gained from possessing cattle. The institution of communal grazing produces a conflict between private and social interests. Given free communal grazing, the private incentive is to expand one's cattle irrespective of the effects on the quality of the land or on the cattle owned by others. If grazing land is scarce, certain theoretical implications can be drawn. The cattle stock is expanded until, in equilibrium, the land reaches its maximum carrying capacity: the addition of a beast cannot add to the weight of the herd as a whole, and each beast is at the minimum subsistence weight. Consequent land deterioration reduces the equilibrium size of the herd over time. Tenurial reform does not

occur because it is against the interests of the chiefs and larger owners of cattle. Furthermore, as Rutman and Werner have argued with respect to Transkei, even in the overstocking equilibrium, cattle ownership represents rational economic behaviour and provides the highest rate of return available. The return arises from the use of cattle as draught animals. Ploughing with a team of two oxen, as opposed to hoeing, enables a family to cultivate a much larger area; indeed, the authors claim a seven-fold increase. On plausible assumptions it is shown that the return on investing in two oxen exceeds the return on the best alternative asset available to rural households, which is likely to be a post office account yielding a low rate of interest. In addition, cattle serve as a convenient form of wealth. (21)

It is common to find that young male migrants will still use all their surplus money to buy cattle even when they are aware of the effect that this would have on the rural environment. This is not irrational behaviour under the circumstances as there are no other investment alternatives available in the homelands. As long as the beast stays alive, its value will inflate as the value of money decreases. In this way, it provides some sense of security.

In more recent years there have been encouraging instances of peasants making a better use of this wealth in the form of higher sales and greater consumption. It is, felt, therefore, that the apparent conservatism with respect to cattle, reflects

the options available to the community or the individual. The latter does have other options and voluntarily selects not to take them. There is a considerable amount of capital locked up in homeland areas and the potential to generate income is large. It is important therefore to establish why this is not happening and then to endeavour to isolate the extent to which this is a result of traditional customs or particular constraints individuals feel in relation to their environment (which they feel unable to change).

A question to be asked is: are there alternatives? The store-of-wealth aspect of cattle ownership is surely mainly due to the lack of alternative savings opportunities available - banks, post offices, building societies. Investment in cattle is undoubtedly an inefficient store of wealth as generally cattle are not growing, do not produce calves and seldom produce milk, due to the deteriorating environment.

Conditioning Factors

Six factors may be identified here.

(1) Migration/Urbanisation: The degree of urbanisation of the African population in South Africa is relatively low. When one compares South Africa to a country like Argentina which has similar Gross National Product (GNP) and population (Argentina 27 million; South Africa 29 million), one finds that 90 per cent of Argentines are urban-based as against only 40 per cent in South Africa.

High rates of population growth and political impositions

retarding urbanisation increase population pressure on limited land. Unable to find local employment, a large proportion of homeland inhabitants are forced to become migrant workers.

It is not necessary here to enter into a discussion of the negative and positive economic effects of migration on the homelands. The age and education selectivity of the migrant-labour system, its impact on the pattern and size of capital accumulation in the supplying region, the inequities in the distribution of the burden of social overhead investment between homelands and the rest of South Africa - all these characteristics of the migration process have been aptly described elsewhere. It is sufficient to indicate here a few of the more negative effects of migration on agricultural practices.

The abnormal role played by women in farming, to which we have referred earlier on, is likely to have the effect of retarding and distorting capital accumulation. A study on the development of rural life and poverty in the Pongola flood plain, illustrates that even educated women who had never lived in the city, offered stereotyped answers on what sort of development they would like to see and what they would do if they produced more and became rich. Of the women interviewed (in 65 homesteads), only one moved for some type of self-investment, i.e., investment outside of consumer products). On the other hand, 99 per cent of the migrant males interviewed said that if they did have funds they would devote them to buying tractors or setting up stalls - activities that would generate further

wealth. Women tended to emphasise consumption while men emphasised investment.

A further result of migration is the effect it has on the allocation and utilisation of land. There are a number of people in the homelands who have little or no interest in agricultural production and are merely looking to secure rent-free accommodation for their families. This behaviour pattern arises because they are either unable to secure a home in the urban area or else have extreme insecurity there and are thus reluctant to sever ties with the homeland. Until conditions of urban security exist and the urban environment is improved, there will be a demand by many rural dwellers for rent-free accommodation for most or part of their families.

This phenomenon is not peculiar to South Africa. Even outside this country where there is no influx control, people have urban security and yet the vast majority are keen on maintaining a foothold in both camps. In Swaziland, for example, every Swazi is obliged to retain his rural land and be under the control of the chief. Even Whites applying for citizenship have to report to the Chief; it all forms part of the political structure. Another example of ties with the rural areas is apparent in Transkei. There is an exodus from the towns into the rural areas on Friday afternoons, apparently because urban dwellers with a rural background enjoy the rural environment. The continued ties with the rural areas depend on the ease and expense of maintaining these ties. Sometimes the

family obligations stretch further than the immediate family and so it is not easy to cut the ties.

This tendency places an undue burden on limited land, exacerbates the overcrowding problem and is likely to lead to sub-optimal use of land resources by those whose economic centre of interest is in the town but still retain claims on pieces of land in which they have no concern as a factor of production.

(2) Land Tenure: The essential features of land tenure in most African societies, are well known: traditionally, the concept of property in land does not exist as all land is at the disposal of the chief who acts as representative of the community as a whole. In him is vested the power of allocating land to his subjects. Land is always assigned gratuitously, but no individual may consider himself a landowner since he has no power to sell it or to use it in negotiations with others. What is granted to individuals is the usufruct of both arable and residential land, and land not designated as arable or residential is regarded as communal.

Four conditions attached to this system of land tenure are particularly detrimental to the full utilisation of land and ultimately to food production. The first of these is unwritten, but is visibly applied throughout the homelands: it is that land is not sequestered from the current holder unless it has been left completely unused over a considerable period of years. Land cannot change hands and from a production point of view, the mere fact that one cannot transfer land from idle hands to active

hands, represents a severe economic impediment.

The second condition implicitly present in the system of land tenure is that, even when obliged to allow their land to remain uncultivated, landholders are unwilling to allow the use of it to someone else, even on a temporary basis, for fear that they may lose permanent usufruct.

Thirdly, and paradoxically in the light of what has just been said, the system does not offer the right kind of security of tenure on which working capital can be raised and which would encourage holders to apply capital to their land. The mere fact of not owning land detracts from the credit-worthiness necessary to enter into the market and borrow funds. The White farmer, in contrast, is able to buy tractors, fuel, seed, fertiliser, etc., without any capital outlay by virtue of owning the land. Moreover, communally-owned land brings about desires by a rational population to exploit such land as much as possible without any investment to sustain development.

Finally, under the present system land is divided into small units for allocation, so that the desire of as many households as possible to hold land might be satisfied. This fragmentation of farming land makes the emergence of a category of full-time farmers impossible.

An important component of any successful development strategy for the tribal areas must be a policy of land reform. It is necessary to develop a strategy that will encourage both an increase in agricultural productivity and the economic

utilisation of the areas' grazing resources. This would, of course, presuppose a change in the rural peoples' attitude towards cattle so that they are seen as a productive resource rather than as a store of value. Moreover, specific crop pilot projects, pastures and grazing schemes should be initiated in a few select areas with the object of showing what can be achieved by a proper management of land and pastures.

The traditional system of land tenure was adapted to the environment in which Africans found themselves but, because of changes in this environment, this system does not satisfy the needs of the modern community. It must be stressed that reform should be part of an integrated rural development strategy and that it should take forms adapted to local natural, economic, psychological and sociological conditions.

In this connection, a proposal put forward by a select committee appointed by the KwaZulu government to investigate the land-tenure system in that region, is of great relevance. (24) The committee proposed that in order to improve the use of available land, all existing land rights should be investigated and, if found valid, given formal recognition. From this point, a rental should be charged on all land and should be assessed in terms of the probable market value of the land since the system of freehold tenure, which is to be the ultimate result of these changes, will have the effect of creating a market for land which will function on economically realistic terms. It is assumed that the imposition of rental for land, as opposed to the present

system of free usage by those to whom it is allocated, would have the advantage that it would oblige landholders to make productive use of their land, or else relinquish it. In addition, the collection of rent would provide Land Boards with an opportunity to check on the cultivation of plots and, if necessary, to encourage or oblige a holder who failed to cultivate to give up his holdings which would thus become available for lease to active farmers.

(3) Marketing Problems: One of the major constraints to agricultural development is the lack of inputs and of marketing outlets. Producing a surplus after the necessary finance has been provided is relatively easy, but the necessary markets must be available to distribute the surplus. Generally, the marketing system in South Africa is good but it is geared to White commercial agriculture; a modified version for homeland agriculture should be devised. The use of improved varieties of seed, fertiliser and insecticides would spread only if these current inputs could be made readily available to the small farmer. Lack of transport facilities and, only too often, lack of adequate supplies due to the almost total absence of marketing facilities for this type of input, are to a great extent responsible for the relatively slow pace of progress. In addition, no credit facility of any significance, or subsidy grant, has ever been made available to the homeland farmer for the acquisition of current inputs. The willingness of the farmer to adopt new production techniques, to bear new risks and to implement what the extension officer demonstrates as something

more profitable, is dampened by factors often beyond the control of farmer and advisor alike.

(4) Organisational Problems: There is a multiplicity of bureaucratic institutions dealing with the development of agriculture in the homelands - the central government departments, newly-created homeland departments, and development corporations. Within this structure it is not uncommon to find animosity between the government departments and the agricultural section of a development corporation. The former are concerned mainly with extension services and the latter with funding of projects. In some areas this has been overcome and a good working relationship has been established (as in Transkei). Unfortunately, this is not so in some of the other homelands and obviously this means a waste of resources as two groups are pulling in two different directions. At times the situation is worsened when agricultural planners impose on the local communities ideas which do not take into account vital local conditions. Perceptual differences between agricultural planners and farmers often abort projects which in themselves would have merits.

If progress is to be made, it is imperative that all development agencies be invited to participate in drawing up coordinated programmes in order that agencies be compatible with each other in clearly-defined areas of operation.

In KwaZulu, for example, the KwaZulu Development Corporation (KDC) works closely with Africa Cooperative Action Trust (ACAT)

and to date has had no problems. ACAT assists the KDC in identifying the people who have the potential to become successful small farmers and then the KDC helps with the provision of inputs (fertiliser, seed, chemicals) at reasonable prices. A similar role could be played by the existing agricultural control boards. As the Buthelezi Commission pointed out with particular reference to KwaZulu, control boards should extend their sphere of operation into the homelands and farmers in those areas should have equal access to the protection offered by these boards to other farmers in the country.

(5) Education: Success stories in developing countries have shown that attempts at reforming agricultural practices begin early in the life of future farmers - in the classroom. Too often, however, school curricula in rural areas do not provide for any form of training in crop production and animal husbandry. Non-academic subjects have often been rejected by parents who feel that unless their children learn Latin and Greek, they are getting an inferior education and would end up with inferior jobs. It would seem that the aim of the education structure in the homelands is to prepare young people to be better migrants rather than better farmers. Even in the case of extension officers, the emphasis is often on academic subjects at the expense of a more practically oriented training. But, although a man may be theoretically qualified, he may not be able to do the job properly as his qualifications do not provide him with the practical knowledge. He must possess a full understanding of practical aspects of production so that he can extend this

knowledge and provide the necessary advice to farmers.

An effective method of disseminating new ideas within the community is the establishment of training centres, particularly in those areas where arable agricultural projects have been identified. These centres could be used as a base for extension services, as nuclei around which producer-cooperatives would be formed, where production supplies could be obtained and certain types of output processed.

Related to the issues of education and training, is the important aspect of choosing suitable techniques of production. Agricultural technology needs to be appropriate to the environment and cannot always be transferred from an area where it is successful to another. Technology specifically developed for areas with scarce, highly-skilled and expensive labour and abundant, relatively cheap capital, as is the case in the developed regions of the world, will not necessarily be appropriate in less-developed regions. When new technology heightens competition for access to scarce resources, poorer cultivators are liable to be forced into greater dependence on their wealthier neighbours.

A question that has often been asked in development literature and which is increasingly being asked by people concerned with agrarian change in the homelands, is: should improvements be brought about with or without the tractor? There appears to be general consensus that the tractor has made its way into the homelands and is there to stay, regardless of the merits

of more labour-intensive techniques of production. The problem is that if peoples' perceptions are that they want a tractor because it is a modern form of technology, it may be difficult to persuade them otherwise. Even if there is something cheaper that does the same task, it may be regarded as being inferior. Farmers therefore must be assisted in making the best possible use of the tractor.

It is important that the emphasis should be not on individually-owned tractors as this involves unnecessary cost. It is dangerous when one is dealing with small units of production, as is the case here, to talk about something as large as a tractor for individual ownership. Rather, tractors should be owned and used on a cooperative basis. This reduces the cost of production to individual farmers and enhances chances of ploughing the land at the right time.

(6) Problems of Physical Infrastructure: Infrastructural development in the homelands is generally poor with regard both to physical and social aspects. Roads and other means of communication are often inadequate. They are mostly gravel and tend to deteriorate markedly during rains and also in periods of prolonged drought. Vehicle failure and accidents are commonplace occurrences, and village communities can find themselves cut off from mobile clinic services for long periods of time.

Provisioning centres for farm inputs are typically underdeveloped or almost non-existent and the same applies to centres where consumer items can be bought. This lack of

infrastructure acts to increase the economic distance from markets, and reduces or even destroys, incentive. Too often innovations are introduced which simply cannot be implemented because of the complete absence of other essential supporting services. Water, for instance, is of paramount importance and the provision of this resource should take priority. Agricultural production and residential areas should be planned around access to water. Densely-populated areas appear to be an ideal location for improving infrastructure as presumably some facilities are already provided, e.g., water. Individual communities do not always have the necessary resources to improve physical infrastructure. For this reason, financial assistance and technical expertise becomes essential.

A Development Strategy: The Case of Lebowa

At various times in all homelands, attempts have been made at implementing development policies aimed at reversing the prevalent trend of a declining per capita output. A development plan has been introduced recently in Lebowa which is worth mentioning here as it is amenable to implementation in other homelands. The plan rests on a set of premises - the system of communal land tenure should be retained as far as possible; occupation of agricultural land, however, should be limited to full-time farmers; and, where land is not used advantageously, the right of the farmers should be terminated. Agricultural marketing services should be in the hands of Africans and so cooperatives are adapted to local needs. Mechanisation of

agriculture should be introduced where technological and economic conditions render it desirable. Where possible, expensive equipment and machinery should be owned jointly by farmers, or possibly by a cooperative. The structure of the plan includes the following features:

- (a) Bona fide farmers must be identified and selected for placement at agricultural production growth points. They must be supported by an integrated agricultural infrastructure. These supporting services must be provided in such a way as to stimulate production, yet without restricting private initiative.
- (b) Every effort must be taken to make high-potential agricultural land available for agricultural growth points.
- (c) The next target group are those people with land rights, yet not engaged in full-time farming operations due to employment opportunities elsewhere.
- (d) The third target group are the people dependent for a full livelihood on the rural sector yet without any land rights.

Conclusion

It would appear that policies with regard to food production in the homelands may best be divided into two categories.

First, there are those which are capable of implementation in the short run and of stimulating productivity and output but without realising the full potential of homeland agriculture.

These measures include the provision of (i) credit for the purchase of inputs, (ii) a marketing infrastructure (especially for livestock and perishables), and (iii) extension services. Another important measure which could be implemented relatively quickly is an improved land-tenure system along the lines suggested by the KwaZulu Commission of Inquiry, making it possible for those who wish to sub-let their land, to do so.

The second category consists of essentially long-term policies for the creation of full-time, commercial farming aimed at producing a surplus. This would require the removal of some families from the land but might encourage males who would ordinarily migrate to remain in agriculture, thereby ensuring that food production would no longer rest on the efforts of females and children. Those who are removed from the land would either move to the cities and towns or be absorbed in activities in country towns and rural service centres which are linked with the agricultural sector.

These views do not deviate markedly from those of the Tomlinson Commission whose report was presented in 1954. It is instructive, 30 years later, to consider the proposals of this Commission and the reactions thereto.

The Commission's plan for agricultural reforms was based on four cardinal points: (i) the urgent implementation of policies aimed at preventing further deterioration of the soil, (ii) radical changes in the land-tenure system which, through the abolition of the one-man-one-lot system and the resettlement of

population, would encourage the emergence of economic farming units and of self-supporting, full-time farmers, (iii) extension and improvement of marketing and credit facilities, and (iv) extension of irrigation schemes, the establishment of fibre projects and the exploitation of the sugar-production potential of the homelands. The reaction of government has been to concentrate on (i) and (iv), and little attempt has been made to implement (ii) and (iii).

The reforms in the land-tenure system as proposed by the Commission were considered by the government to be too radical. What is surprising, however, is that so little attention has been paid to investigating the land-utilisation question or to seeking an alternative solution to the problem of reconciling the present land-tenure system with the requirements of modern agriculture. It is not advocated here that the traditional system of ownership be abolished in favour of individual ownership, nor is it claimed that such a change would be a prerequisite for agricultural development. What is contended, however, is that government must seek reform in a way which, while still compatible with social needs, will guarantee a more efficient utilisation of land and adequate security of tenure to those who are seriously interested in producing a surplus. Such a system, could, for example, consist of the introduction of measures to commercialise the right to use land by placing a monetary value on the use of land and by empowering tribal authorities to expropriate an inefficient farmer. Such a system could increase awareness among

farmers of the economic value of land and encourage its more efficient utilisation.

It is even more surprising that hardly any attempt has been made to implement those proposals relating to the improvement of marketing and the introduction of credit facilities. As has been repeatedly stated, production yields are low because, among other factors, the use of current inputs is inadequate; the acquisition of such inputs is precluded by the low level of income generated by low output. The provision of credit to break this vicious circle in the production cycle should therefore form an integral part of any agricultural development plan. But, as Molathwa points out, (23) the mere availability of credit facilities is no guarantee of success. On the contrary, the injudicious extension of credit could encourage the small farmer to accumulate an unbearable load of debt. Safety measures should therefore be incorporated in a system of agricultural credit. Credit could be canalised to the farmer through agricultural cooperatives, not in the form of cash handouts but in the form of goods. Credit could be made subject to the acceptance by the farmer of conditions which would embrace the whole production process: the farmer who obtains credit from his cooperative should enter into an agreement to follow an approved production programme. No doubt, however, most of the details of such schemes are best left to the competent bodies to organise. What is emphasised here is the urgent need for such schemes to come into existence.

Increased government investment in homeland agriculture in

the last decade or so has led to increased food output (at least before the drought), but only on an absolute, not a per capita, basis. This suggests that improvements are possible but that the scale of government programmes is not large enough. Paradoxically, however, agricultural departments do not have the ability fully to spend their annual budgets. One reason for this is the shortage of trained manpower, e.g., extension officers and veterinary surgeons. An intensive programme of training key agricultural personnel therefore is as crucial an element in an overall policy as are measures relating to marketing, credit and land tenure. But, in the final analysis, the stimulation of homeland food production and the encouragement of full-time, commercial farming, depends upon an improvement too in the living environment in these neglected areas of South Africa.

FOOTNOTES

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1. In order to facilitate the production of this chapter in the report of the Food and Nutrition Working Group of the Carnegie Inquiry, a brainstorming session was held in the Economic Research Unit on 4 February 1983. The participants were: Professor G.G. Maasdorp (Director, Economic Research Unit) (Chairman), Mr. A.J. Ardington (South African Cane Grower's Association) (co-Convenor), Mr. R. Bates (South African Sugar Association), Mr. A. Bisschoff (Secretary, Natal Agricultural Union, Pietermaritzburg), Mr. P. Derman (Department of Social Anthropology, University of Natal, Durban), Mr. J. Ellis-Jones (Transkei Agricultural Corporation, Umtata), Dr. I.B. Friedman (Valley Trust, Bothas Hill), Mr. J.P. le Roux (KwaZulu Development Corporation, Empangeni), Mr. M. Lyne (Department of Agricultural Economics, University of Natal, Pietermaritzburg), (Professor J. Natrass (Director, Development Studies Unit, University of Natal, Durban), Mr. J. Pape (St. Mary's Mission, Lobamba, Swaziland), Mr. G. Steyn (Lebowa Development Corporation, Pietersburg), and Professor D. Tapson (Agricultural and Rural Development Research Institute, University of Fort Hare, Alice). Mrs. C. Yates of the Economic Research Unit acted as rapporteur, produced a summary of the discussions which was circulated to the participants in March 1983 for comment, and coordinated the comments. The authors are grateful to Mrs. Yates for her efforts and to the participants for the perspectives they provided.
 2. J.B. Knight and G. Lenta, "Has Capitalism Underdeveloped the Labour Reserves of South Africa?" Oxford Bulletin of Economics and Statistics, 42(3), August 1980.
 3. G. Lenta, "Reserved Land in South Africa: A Century of Declining Productivity". Perspectives in Economic History, 2, 1983.
 4. See C.W. de Kiewiet, A History of South Africa - Social and Economic. Oxford: Oxford University Press, 1941, p79.
 5. M. Wilson, "The Growth of Peasant Communities" in M. Wilson and L. Thompson (eds.) The Oxford History of South Africa, Vol. 2. Oxford: Oxford University Press, 1971, p56.
 6. de Kiewiet, op cit., p80.
 7. D.H. Houghton, The South African Economy. Cape Town: Oxford University Press, 1973, (3rd ed.), p73.

8. Native Economic Commission (1932), para 34.
9. Ibid., para 75.
10. Ibid., para 70.
11. de Kiewiet, op cit., p201.
12. Houghton, op cit., p74.
13. de Kiewiet, op cit., p200.
14. S.T. van der Horst, Native Labour in South Africa. London: Frank Cass and Company, 1942, p316.
15. See, for example, G. Arrighi, "Labour Supplies in Historical Perspective : A Study of the Proletarianisation of the African Peasantry in Rhodesia". Journal of Development Studies, 6(3), April 1970.
16. For a discussion on the nature of these factors see B. Johnston and S. Nielsen, "Agriculture and Structural Information in a Developing Economy". Economic Development and Cultural Change, 14(3), April 1966, pp257-278.
17. KwaZulu Development Corporation, Development Action, No.3, 1981, p32.
18. The Buthelezi Commission Report, Vol. 2, pp173-174.
19. G. Lenta, "Land, Labour and Capital in KwaZulu: Some Failures in Coincidence". Journal of Contemporary African Studies, 1(2) 1982, pp307-327.
20. G. Lenta, Development or Stagnation? Agriculture in KwaZulu. Occasional Paper No. 7, Durban: Department of Economics, University of Natal, 1978, p19.
21. G.L. Rutman and D.J. Werner, "A Test of the Uneconomic Culture Thesis: an Economic Rationale for the 'Sacred Cow'". Journal of Development Studies, 9(4), July 1973, pp574-577.
22. KwaZulu, Select Committee on Land Tenure in KwaZulu, Interim Report (1975) and Final Report (1976), unpublished.
23. T.M. Molatlhwa, "Agriculture in Bophuthatswana", in J. Barratt et al (eds.), Strategy for Development, London: Macmillan, 1976, pp73-89.

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