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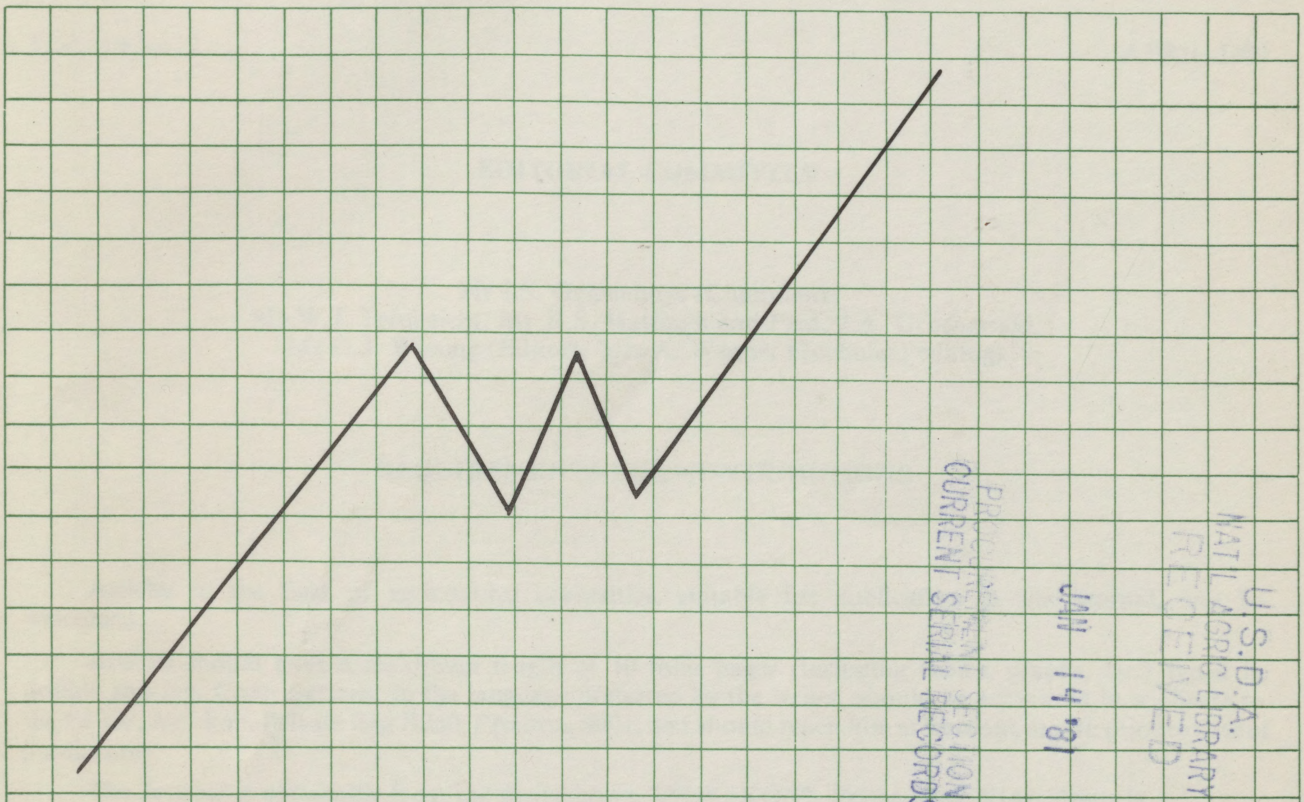

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THE CO-EXISTENCE OF A LAND MARKET AND THE COMMUNITY OCCUPATION OF LAND

by
H.I. BEHRMANN
University of Natal

A LAND MARKET

A land market exists where land itself or the rights to land may be exchanged by occupiers for money or other considerations. In this broad sense even the community occupation of land represents a primitive market, because land is seldom completely free, without some due having to be paid to the tribal authority, either chief or headman. Yet exchange of rights to land in a tribal or community situation is so rudimentary that it is clearly distinguished from a situation where land has a money value, and where price changes reflect a supply and demand situation.

Conditions for an open market for land exist when the units are reasonably homogeneous and can be measured in a standardised form such as hectare, acre or morgen, when there are a large number of buyers and sellers and no individual can exert an undue influence on the price, and where full knowledge of prices and sales is available to buyers and sellers. Land is not mobile and its value is influenced by its location, through the effect of costs of inputs and the prices of products. Agricultural land that is bought and sold in the white farming areas of South Africa is exchanged under conditions approaching those of an open market and sales are advertised and officially recorded, and it is possible to compile statistical records.

The first free burgers that were granted land by the Dutch East India Company were given freehold title to all the land that they were able to cultivate after three years. They were granted loan tenure to grazing land. The system of loan tenure for livestock farming was the prevailing form of land tenure, alongside a limited amount of freehold occupation, when authority at the Cape passed to the British in 1806. Various Acts of the Cape Parliament enabled farmers to gain greater title to land, and in the Orange Free State and Transvaal Republics farmers were able to obtain land at relatively low costs, which enabled the majority of farmers to become landowners. This situation prevails at the present time when approximately 80 per cent of white farms are owner-occupied.

A broad distinction may be made between the different types of land tenure. Historically, land occupation has been according to traditional, feudal, quitrent or freehold conditions. Many variations are of course distinguishable amongst those four categories. Freehold conditions tend to prevail in the more highly developed economies and traditional tenure is more characteristic of less developed economies. Gras (1946) has referred to traditional tenure as allodial tenure whereby families in a community or tribe are allocated areas for cropping land, and grazing land is held in common. This type of land tenure survives among tribal peoples in South Africa today. Feudal tenure exists when tenants pay for their land by rendering labour services to the landlord, a form of tenure that is at present being phased out in parts of Natal and the Northern Transvaal. Where labour services are commuted into money rents a quitrent is paid in cash, indicating that the tenant is quit or free of his services to the lord. Quitrent may also take the form of sharecropping or livestock share leasing.

In that a land market is associated with more highly developed agricultural economies and that less developed agriculture takes place in the absence of the conditions for an open market for land, the question that is posed is: can a land market be developed from a traditional situation, thereby promoting a more modernized agriculture with a higher productivity and welfare for producers? A further question is whether the operation of the land market itself is indicative of any necessary change in the agricultural industry.

WHITE AGRICULTURE

It is well known that the numbers of commercially operated, mainly white-owned, farms has declined drastically from 106 000 in 1960 to about 73 000 at the present time. The average size of farm that each entrepreneur has to manage has increased and the capital value of farms has been going up because of the larger farms that come on to the market. At the same time some farms have been abandoned altogether adding to the problem that was first disclosed by the Commission of Enquiry into the European Occupation of Rural Areas (1960), which expressed its concern at the number of farms occupied by black squatters, and not adequately managed by absentee owners.

With a growing population and increasing demands for food the agricultural industry must at least double its output in the last quarter of the century. The larger farms demand more of management and Tarr (1975) has shown in his input-output study of South African agriculture that management is likely to be a limiting factor.

Cross-section production function studies have measured the marginal productivity of resources in South African farming. In a macro study based on the 1960 agricultural census Nieuwoudt has shown that the marginal productivity of farm land in South Africa was 59 per cent of the opportunity cost of land. This finding has been confirmed by other smaller scale studies by Kassier (1966) and Le Clus (1969), in East Griqualand, Du Toit (1972) and Van Heerden (1974) in Northern Natal and the writer (1977) in respect of Eastern Highveld farms. Some studies have shown high marginal productivity on cropping land, Joubert and Kassier (1970) and Behrmann (1968), but cropping land is a relatively scarce resource particularly in certain areas, and Behrmann's study on sugar-cane was done at a time when quota restrictions were being imposed on the sugar industry. Studies have generally shown high marginal productivities on capital inputs. Labour inputs have also tended to have high marginal productivities, except in the case of sugar-cane farms where large numbers of labourers have been used in a plantation-type system.

The effects of the low marginal productivity of land resources may be seen in a calculation done by the writer (1975). The net income accruing to the agriculture sector, as determined by the Department of Agricultural Economics and Marketing, and deflated by the retail price index grew at an annual compound rate of increase of 5,9 per cent over the 9 year period 1964/65 to 1973/74. Over the same period the real price of land rose at a slower rate than real net farm incomes, 3,7 per cent per annum. Per farm, the upward trend in net farm income would be at a higher rate because the number of farms has been declining. If land, because of its lower marginal productivity, has not been contributing to farm output, the increase must largely be attributed to other factors of production. This supports the conclusion of Ruttan (1974) that human capital and technical inputs have become the dominant sources of output growth in agriculture, and that the natural resource base has been accounting for an increasingly less significant share of the increase in agricultural productivity.

Black workers on white-owned farms are there either as migrant workers or as labourers resident with their families, or as labour tenants. As laws stand at present they may not rent land from white owners nor purchase land. This restriction on the land market may well assist in keeping the price of land lower than it might otherwise be, and apart from the sale of white-owned farms for homeland expansion and consolidation, there may be no alternative over time than to allow potential black farmers to hire or purchase land from white owners who have either abandoned their farms completely or who use them only as a reservoir for labour.

TENURE OF BLACK AGRICULTURE

The occupation of most farming land in the black areas of South Africa is according to traditional tenure. Authority over the land is vested in the Chief acting on behalf of the tribe. Each family is allocated a kraal site, an area of cropping land for subsistence use, and has the right to graze stock on the communal grazing. Magistrates play a role in the allocation of land and in the settling of disputes.

While the land is held as a right, a new occupier of land, such as a newly married man, is required to pay a traditional fee to the Chief or headman. Erasmus (1978) reports that in the Abakwamkhwanazi tribe in Natal the Chief is paid approximately R40, plus gifts, such as drink, while the induna receives about R10 plus gifts. Jeppe (1978 p. 72) also mentions that the rights to land may be sold or leased amongst tribespeople, although not on credit or mortgage.

Generally, however, land may not be exchanged and the amount of land that any family may hold is strictly limited. The fact that grazing is free contributes to overstocking because any family that does not keep up its stock numbers is liable to surrender available grazing to other families. Even the right to cropping land may be divisible. While crops are growing a cultivator has full right to his land, but once the crops are removed the land may be thrown open to common grazing.

Under such a system of tenure, incentives to improve agricultural standards are lacking, for there is no provision for compensation for improvements, crop rotations and the production of winter feed are difficult, and there is no incentive for stock improvement on the common grazing. Any capable farmer is unable to exercise initiative and the sizes of farms are approximately the same, with 2 to 4 hectares of cropping land.

The necessity for land reform and the improvement of agriculture has long been recognised. Although it may not be looked upon as a measure to introduce land reform in itself the Native Trust and Land Act of 1936 set out to make more land available to the black areas of South Africa through the purchase of approximately 7 million hectares of white-owned land. These purchases are still proceeding, and the possibilities of incorporating further purchases in such a manner that homeland areas may be consolidated are at present being investigated.

Land purchased under the 1936 Act referred to as Trust Land in Released Areas is leased in small units of cropping land although these are larger than in tribal areas, while grazing is still held in common. Rental rates are nominal, and they have not been changed over time. Farmers who sold land to the Development Trust had been engaged in commercial agriculture and were paid the full market price of their land. There is no evidence to suggest that black farmers who have gained succession to the land have farmed more productively, nor have the rents charged been at competitive rates. The question may be asked whether there has been a social loss through land reverting to a semi-subsistence level of production. While the former farmer as landowner had been the beneficiary in realising the capital value of the farm, has there been any gain in sustained productivity of the land or in return on the capital outlay being returned to any government authority?

The Tomlinson Commission (1955) investigated the size of farms, and defined an economic unit at the time as one which yielded a net income of R120 at 1952 prices, with existing techniques of production. With improved techniques net income could be considerably raised. Applied to Natal and Zululand the standard income of R120 on land planned by 1959 required a holding of 32 hectares of all arable and grazing land, double the 16 hectares of land that was available per kraalhead (Behrmann, 1965). In order to have farmed all the land in economic units it would have been possible to accommodate only 31 per cent of the total number of families, and 69 per cent of the population would have been required to obtain employment elsewhere.

While it was clearly not possible to have applied the Tomlinson Commission criteria to existing tribal land, the Commission did recommend that economic units on newly acquired Trust Land should be sold to black settlers. It is a matter of regret that this recommendation was not accepted by the Government at that time, because it would have been possible to create a land market, and to experiment with this alternative in a pragmatic way.

DEVELOPING A LAND MARKET

Parsons (1975) has traced the evolution of an institutional basis of an agricultural market economy, through the emergence of feudalism, the development of the common law and individual freedom and democracy. Examining the different ways in which agriculture becomes integrated into a market economy he identifies the first kind of market participation as that of sale of surplus farm products. The second is the purchase of "produced goods to be used in further production in agriculture", the capital inputs. The third entails the market procedures for allocating the use of land through the emergence of a land market, where land becomes a saleable commodity, alienable (usually within limits) and subject to mortgage.

Black tribal agriculture in South Africa barely meets the first criterion of a market economy and without a surplus of products for sale land can hardly acquire a value to be exchanged in the market for commercial farming purposes. The farm units are, moreover, too small to produce much beyond the immediate subsistence needs of families. Lack of employment opportunity on subsistence farms is such that heads of families and male workers seek employment outside the tribal areas.

An increasing portion of the family incomes in black homelands has been coming from wages earned away from the land (Stadler, 1970). For KwaZulu, Nattrass (1976) determined that by 1970 migrant remittances had grown to the equivalent of 88 per cent of subsistence income and 142 per cent of the agricultural output of KwaZulu. The masculinity ratio amongst the age cohort 19-64 years in the rural areas was extremely low, being 1:3. Homeland families consequently lack sufficient masculine influence and the women besides shouldering the burden of raising a family alone, must attend to most of the agricultural work on the subsistence plots.

The sizes of farms are obviously too small to employ an able-bodied man and if a man is to earn the equivalent wage of an unskilled worker in town a larger farm will be required, about 25 hectares for the production of maize, for example. Jeppe (1978 p. 284) refers to an acceptable net income of R2 500 per year, on individual farms of not less than 30 hectares in certain parts of Bophuthatswana.

On small farms the possibilities of commercial production are greater where labour intensive crops may be grown such as vegetables and fruit and intensive livestock enterprises such as pigs. Similarly, various irrigation schemes are offering opportunities for the intensive exploitation of limited land resources.

In order to meet the second criterion laid down by Parsons sufficient credit facilities are needed where homeland farming shows commercial possibilities. What little study has been done of the marginal productivity of resources in a homeland context, for example by Bates (1978), indicates that the marginal productivity of capital resources such as fertilizer are extremely high. Investments of this nature are more likely to produce a surplus. Although Bates has shown that the marginal productivity of land is high, in the absence of greater areas of available land, credit advances for land investment would be inadvisable. The Financial Aid Fund of the South African Sugar Association is enabling KwaZulu farmers to produce surpluses from relatively small areas of land. The multiplier effect of the income generated in the areas is promoting infrastructural development through the construction of better roads, and the availability of transport services.

There is scope for the development of the credit needs of homeland agriculture. The Sugar Association scheme is easy to administer as all cane is sold through mills and the mills recover the loans before payments are made to farmers. In other areas where sugar-cane is not grown a viable co-operative movement would seem to be an essential ingredient for the administration of the short-term credit. Whatever authority administers credit, whether bank or co-operative, it is more likely to identify the better, more diligent farmers, who are likely to produce a surplus from their land. Because the land can accommodate relatively few farms on a commercial basis, compared to the large numbers of subsistence farmers, only the more capable farmers should receive credit.

The KwaZulu Government (1975) has accepted the principle of developing a land market, and has recommended a diversity of tenure systems including freehold, co-operatives, in the form of the Israeli Moshav system, and in certain areas the retention of the traditional tribal system.

Jeppe (1978) has also made comprehensive recommendations to the Bophuthatswana Government regarding the improvement of the land tenure situation and the creation of a market for land.

The final point to be made is that any recommendations regarding a land market should be flexible because a rigid system is likely to impede the flow of resources. To illustrate, the most highly developed and competitive agricultural economy, the United States, owes farms operating with cash, crop share and livestock share leases, (Reiss, 1979). The market value of the leases bears a competitive relationship to the value of the land, and many farmers operate with more than one kind of tenure. An open market for land, plus legal safeguards, is the best protection against a doctrinaire Marxist approach which removes all land from the reach of the market forces.

REFERENCES

Bates, R.F. 1978. Aspects of sugarcane production in Natal and KwaZulu with specific reference to agriculture in reserve 9, Ongoye district. A socio-economic survey. Univ. of Natal. Unpublished M.S. (Agric.) thesis.

Behrmann, H.I. 1965. Technique and tenure in South African agriculture. Inaugural lecture. Pietermaritzburg. Univ. of Natal Press.

Behrmann, H.I. 1968. Memorandum to the Commission of Enquiry into the Sugar Industry. Unpublished.

Behrmann, H.I. 1975. The development lag in South African agriculture. Unpublished.

Behrmann, H.I. 1977. The trend towards large-scale farming in South Africa. Unpublished.

Commission of Inquiry into European Occupancy of Rural Areas. 1960. Report. Pretoria. Government Printer.

Commission (Tomlinson) for the Socio-economic Development of the Bantu Areas within the Union of South Africa. 1955. Pretoria. Government Printer. U.G.61/1955.

Du Toit, D.J. 1972. 'n Ekonomiese ontleding van die boerdery-organisasie in die Paulpietersburgstreek. Unpublished M.Sc. thesis. Univ. of Natal.

Erasmus, J.C. 1978. 'n Ekonomies-antropologiese studie van die Abakwamkhwanazi van Natal. Unpublished M.A. thesis. Univ. of Stellenbosch.

Gras, N.S.B. 1946. A history of agriculture. New York, F.S. Crofts and Co.

Jeppe, W.J.O. 1978. Bophuthatswana: regte op grond en ontwikkeling. Unpublished report. Univ. of Stellenbosch.

Joubert, J.S.G. and W.E. Kassier. 1970. A production function analysis to determine marginal value products and optimum intensity of farms in the Swartland. Agrekon. 9(4) 5-8.

Le Clus, C.F. 1969. Die ekonomie van Griekwaland-Oos met besondere verwysing na die landbou. Unpublished M.Sc. (Agric.) thesis. Univ. O.F.S.

Nattrass, Jill. 1976. The migrant labour system and the under-development of the African homelands - A case study of KwaZulu. Unpublished.

Nieuwoudt, W.L. 1970. Demand for resources and supply of output in South African agriculture. Unpublished Ph.D. thesis. Univ. of Natal.

Parsons, K.H. 1975. The institutional basis of an agricultural market economy. Univ. of Wisconsin Land Tenure Centre.

Ruttan, V.W. 1974. Induced technical and institutional change and the future of agriculture. Fifteenth Intern. Conf. of Agric. Economists. Oxford. Agric. Econ. Inst. 35-52.

Reiss, F.J. 1979. Landlord and tenant shares 1978. Univ. of Illinois. AERR 163.

Stadler, J.J. 1970. Economic and demographic characteristics of the South African Bantu areas. Agrekon 9(1). 20-28.

Tarr, M.A. 1975. An input-output study of labour requirements in South African agriculture.

Van Heerden, M.B.R. 1974. An economic analysis of farming in five bioclimatic groups in the Natal Region. Unpublished M.Sc. (Agric.) thesis. Univ. of Natal.