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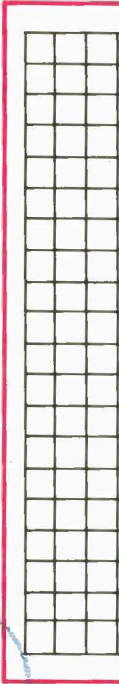
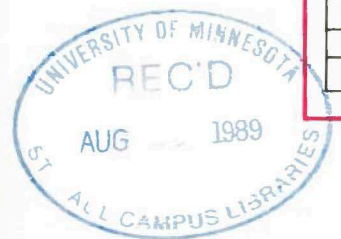
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# STRUCTURAL OF OWNERSHIP OF LAND IN COMMERCIAL PRODUCTION UNITS AND INFLUENCES

## ABSTRACT

In this article the focus is on the structural changes that have occurred recently in South Africa in respect of ownership and the right of use of land in commercial agricultural production units. The article is devoted more specifically to changes in the number of farmers and farms, farm size, type of enterprise, the lease of land and the nature of farming. An effort was made to answer the following questions in respect of every structural component:

- What changes have recently occurred?
- What were the most important socio-economic forces behind these changes?
- What socio-economic forces should be expected to have an important influence on these changes in the near future?
- What are the effects of these changes on the various structural components likely to be?
- Is the direction which the changes are taking desirable from the point of view of social welfare?

Briefly, the finding was that important changes have been caused by a variety of factors, are taking place in respect of every structural component and that the direction which these structural changes are taking is not very desirable from the point of view of social welfare. Possible courses of action to deal with the problem are discussed.

## DISCUSSION OF CONCEPTS AND APPROACH

In this fast-changing world the structure of commercial agricultural production units is changing continuously, although relatively slowly (Groenewald, 1974, p.12). The structure of agricultural production units refers, according to Scholtz (1987, p.14) to the number of enterprises, the size of an enterprise and the ratio of the various production factors such as natural resources, capital and labour are applied by the entrepreneur in the context of the farm and the industry. The changes are the result of a variety of factors acting together. Put in another way, the structural changes are the result of a variety of factors acting together.

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Article submitted: August 1987

Article received back from author: March 1988



structural components in perspective in the context of welfare. After reviewing the welfare model, the first four questions will be answered in respect of each of the structural components. (A methodological approach will have to be followed, owing to limited data, instead of the more desirable regional approach (Kotzé, 1968, p.28).) The last question will then be answered by bringing expected changes in the structural components into relation with the model for social welfare.

## THE SOCIAL WELFARE MODEL

The theory of economic welfare has a comprehensive and generally acceptable argument on the effect of (optimum) application of resources (Spies and Bester, 1975, p.26) and also provides the fundamental logic for the model proposed here.

Beginning with the assumptions that are necessary in a free-market economy for its successful operation, the conditions for optimum effect are set out first in the theory. These conditions consist of three sets of necessary and one set of sufficient conditions. The necessary conditions refer to certain marginal equalities which have to apply in order to obtain successive optimums in the production sphere and the consumer sphere and between production and the consumer sphere. If these conditions are fulfilled, what is known as a Pareto optimum situation is obtained. Since, depending on the allocation of inputs and outputs to the production of particular goods and services and the allocation of goods and services to persons in the community, it is possible to obtain an infinite number of Pareto optimum situations for an economic system. It is consequently necessary to find the sufficient condition for the maximisation of prosperity, in order to select the best of the Pareto optimum situations. The sufficient condition is contained in the idea of a social welfare function. This function is, according to Spies and Bester (1975, p.28), an order of preference in the authority of the decision-maker in a community, containing a complex series of moral-ethical arguments and values, which the nature and type of function in a democratic community are determined by the aspirations and values of the community participating in the decision-making process.

By bringing the social welfare function (sufficient condition for maximising welfare) represented by the social curves of indifference (Figure 1) into relation with the Pareto optimum situations (necessary conditions for maximising welfare represented by the general marginal utility curve), the point of general satisfaction can be achieved. This point will automatically be reached in the economic system, provided that the assumptions of the free-market system are complied with, and readjustments will also automatically take place as the relevant variables change.

Although a variety of valid arguments can be put forward for welfare-economic theory, it is not working in practice as it stands (this argument revolves mainly around the assumptions of



Social  
welfare  
objectives

Conservation of  
natural  
resources

Alternative  
use right and  
ownership right  
possibilities of  
land

Farms of various  
sizes

1. Small farmers
2. Medium-sized farmers
3. Large farmers

FIG. 2 - Model for social welfare

which promotes the various policy objectives in an ideal balance with one another in order to achieve social welfare intertemporally. Before the model is applied, it is necessary to indicate characteristics of the relevant structural components.

## THE NUMBER OF FARMERS AND FARMS

When considering the statistics concerning the number of farmers and farms, a significant characteristic is that the number of farmers and farms has decreased steadily and that the rate of decrease is continuing to accelerate. (The farmer is described as the person who runs the farm or any other person who runs the farm.) Table 1 indicates that the number of farms has decreased in direct proportion to the number of farmers. (Hattingh, 1986, p.3), decreased for the reasons indicated in the table, at an increasing rate of 1,5 per cent per annum during the fifties, 1,8 per cent per annum during the sixties and 2,4 per cent per annum during the seventies to 2,9 per cent per annum during the first half of the eighties.

The total area devoted to farming has decreased to the same extent (the area increased from 1960 before beginning to decrease), however, the average size of farms continued to increase. Table 2 indicates that the average size of farms increased from 744 ha in 1950 to 1 193 ha in 1978, with the greatest increase of 2,73 per cent per annum during the period 1970 to 1978. The relative number of farms larger than 1 000 ha in the total number of farms increased from 20,4 per cent in 1950 to 25,4 per cent in 1978.

TABLE 2 - Average size of farms in White areas and the change in the course of time

| Year | Average size (ha) | Change |                    |
|------|-------------------|--------|--------------------|
|      |                   | ha     | Average % per year |
| 1950 | 744               | 123    | +1,65              |
| 1960 | 867               | 112    | +1,29              |
| 1971 | 979               | 214    | +2,73              |
| 1978 | 1 193             |        |                    |

Abstract of Agricultural Statistics, 1987, p.6

agricultural means of production weakened from 0,77 in 1975 to 0,77 in 1986 (Scholtz, 1987, p.4). The proportional weakening in the prices of agricultural products to pay for means of production, which has been taking place for a long time and tends to worsen with time, has resulted in many farmers being forced to leave their farms since they can no longer make a living from them.

Before a forecast of the future number of farmers and farms can be made, it is necessary to form an opinion on the nature and scope of forces in favour of and against a further reduction. Forces which will favour this are predominantly economic ones. The expectation is that the terms of trade will not improve within the foreseeable future. Various factors contribute to the fact that prices of agricultural products should not rise fast, such as increasing surpluses of agricultural products, the steadiness of the increase in the domestic demand for agricultural products, among other things as a result of low income and price elasticities of demand, limited export opportunities for most products and low international prices. Input prices, on the other hand, should continue to increase at a relatively high rate as a result of the expected high domestic inflation. With the cost-price pressure increasing in this way ever more farmers will be required to leave farming or to enlarge farming units.

Opposing the economic forces, there are certain social forces at work, which may be classified as short-term, medium-term and long-term, which are aimed at reducing the number of farmers leaving farming. Short- and medium-term forces refer to the measures launched by the Government to improve the financial position of farmers affected by natural disasters. Long-term forces include measures that should be introduced as a result of a variety of new policies announced during the eighties. The White Paper on the Agricultural Policy (1984), for example, sets out two objectives in this field: the pursuit of a maximum number of well trained and financially sound owner-occupant farmers and the promotion of regional development. The White Paper (p.10), among other things, explains in regard to the latter, that: "...rural development is based on agriculture as basis" and further that "secondary industries which process primary agricultural products represent an indirect contribution to agriculture to regional development, and the establishment of such industries in rural areas is a matter of high priority". In an information document on the White Paper the promotion of industrial development as an element of a coherent regional

of credit, the acquisition of land as an land speculation and Government policy.

The question of what the future w may now be asked against the backgro above. Hattingh (1986, p.12) in t predicates the following: "Owing to d management and methods by which land a wide range of farm sizes will always ex one another in a free economy. Research are available indicate, however, tha productivity point of view, as well as fro of view of food production, farming un too small or excessively large are usually to the community".

With regard to the diminution of are, in addition to the economic facto this, certain social (community) factors been in operation for a long time. One this respect to the Subdivision of Agric Act, 1970 (Act 70 of 1970) and the Credit Act 1966, (Act 28 of 1966), w among their objectives consolidating small farming units into viable units. C success has been achieved with these m drought, an increased debt burden and rates have recently contributed, howev many units that would otherwise still economic becoming uneconomic.

In contrast with this, little has b reduce the possession of excessively la land, in spite of the recommendations commissions (Hattingh, 1986, p.20 information on the establishment companies (these are relatively few, wh as a percentage of the total number of e to serve as an indication of the exte excessively large enterprises are being number increased by approximately 3 between 1976 and 1981. Owing to the d inherent in such a situation from the poi the security of the country and from r agricultural and regional developmen greater emphasis placed by the commun factors, ever greater pressure may be direct measures such as compulsory and/or the implementation of a progress

TABLE 3 - Types of farms in White areas, 1971 to

| Type                   |           | 71/        |
|------------------------|-----------|------------|
| One-man businesses     | 1         |            |
| Partnerships           | 2         |            |
| 1 + 2                  | 3         | 834        |
| Companies              | 4         | 22         |
| Public companies       | 5         |            |
| Private companies      | 6         |            |
| Co-operatives          | 7         |            |
| 5 + 6 + 7              | 8         |            |
| Public corporations    | 9         |            |
| Municipalities         | 10        |            |
| Government enterprises | 11        | 1          |
| 10 + 11                | 12        |            |
| Other                  | 13        | 1          |
| <b>Total</b>           | <b>14</b> | <b>860</b> |

Source: Central Statistical Service, Pretoria, teleph



important reason for a change from one-man businesses and partnerships to private companies was, according to Jordaan (1987), the income tax benefit. (Other reasons such as continuity, avoidance of estate duty on and limited liability were of lesser importance.) The income tax benefit, which was originally large, decreased with time and even in 1979, when there was a particularly large increase in the number of private companies (the number of private companies increased from 2 599 to 5 180 between 1978 and 1979), the income tax benefit dropped from 18 per cent to 13 per cent the following year, as against the marginal tax rate of one-man businesses. This benefit has since then meanwhile disappeared completely, so that the income tax rate of private companies is at present 10 per cent higher than the marginal rate of individuals.

A reduction in the number of private companies in favour of close corporations is expected for the future. The advantages of the latter are of such a nature that this type of enterprise should become very popular. In addition to distributed ownership, limited liability and income tax duty benefits, these offer an income tax solution to the hanging tax burden on accumulated income reserves in companies (a fixed rate of 10 per cent on conversion, in contrast with a maximum rate on dividends of  $33\frac{1}{3}$  per cent if it were to remain in the company). It is further also expected that the establishment of public companies will continue to increase as a result of the benefits inherent in this type of enterprise and in accordance with the trend towards amalgamation and agglomeration which exists in the non-agricultural sectors (Spiering and Bester, 1985, p.32). The rate of increase should, however, be fairly slow, on the one hand because space for such companies may be fairly limited and on the other hand because the risk-yield ratio is more unfavourable than before.

## LEASING AS OPPOSED TO OWNING

Leasing as a method of using land remains relatively unimportant in the RSA, in contrast with other countries overseas. Analysis of the data shows that land leased as a percentage of the total area owned by Whites in the Republic stabilised at approximately 18 per cent for the decade up to 1979. Both the commission of enquiry into agriculture and the commission of enquiry into rural development recommended "that the system of leasing of agricultural land be encouraged and that more consideration be given to methods promoting land leasing" (Hattingh and Herzberg, 1980, p.3) (translation of most recent information with regard to the leasing of land indicates that there has been no significant change in this respect since then. It seems that a trend towards where owner farmers lease additional land for the purpose of view to enlarging their own farming enterprises has taken root in some areas over a period of time. The leasing of land without actually owning some of it too only occurs on a small scale, however. The most important causes (socio-economic forces) giving rise to the fact that the leasing of land has not increased significantly are the following:

- Present legislation in South Africa is not

programme of constitutional reform and on the other hand may also help to solve surplus production problems.

- Fourthly, greater pressure for the consolidation of self-governing territories, where agricultural land is being bought, will create the opportunity for more Whites to lease land during the bridging period.

The net consequences of the forces working for and against the extension of lease farming suggest that leasing of agricultural land will increase in the future.

## PART-TIME FARMING

Particulars on the extent of part-time farming in the RSA are limited and it is also not possible to determine from the official sources to what extent part-time farming has changed with time. Odendaal (1980, p.20) state that 17,3 per cent of the farmers in the Eastern Cape in 1974 could be described as part-time farmers, while they produced 19,2 per cent of the area, (therefore not smallholders) and actually produced more than 19,2 per cent of the gross value of the agricultural production in the area. These data suggest that, according to them, "that part-time farmers in the areas of the Eastern Cape play a significant role in the agricultural sector and even produce more effectively than the average farmer. The reason why the same trend should not be found in most other farming areas of South Africa is particularly in areas that offer more opportunities outside agriculture."

A study carried out by Lombard and Odendaal (1985) in the Stellenbosch-Paarl-Wellington area shows, however, that although the level of efficiency of part-time farmers seemed to be reasonable, the efficiency based on net agricultural income was low. R100 of capital investment is unsatisfactory because of the limited size of the part-time agricultural holdings, regarded as a great problem, since it led to high unit cost. Although the income and yield varied with great variation, they nevertheless compared well to well with the norm.

The dissertation of Nel (1986), however, shows that an efficiency comparison was made between part-time and full-time farmers on the Transvaal farms. He drew the distinction between three types of part-time farmers: potential entrants to full-time farming, potentially permanent part-time farmers and potential leavers. The survey found that the three groups constituted 56,4 per cent, 41,3 per cent and 2,3 per cent respectively of the total number of part-time farmers. Full-time farmers were more efficient than part-time farmers, while the group of part-time farmers, according to Nel, should be singled out for extra encouragement. More than 75 per cent of the part-time farmers were farming on their own land, and the main types of farming practised by part-time farmers were mixed farming (37,7 per cent), followed by extensive farming (25,4 per cent).

The extent to which part-time farming has increased or decreased in the Republic in the last decade is initially at an acceptable level.



| Land-ownership rights and use-rights arrangements | Welfare objectives | Con<br>natu |
|---------------------------------------------------|--------------------|-------------|
| Size of enterprises and number of farmers         |                    |             |
| Land use rights                                   |                    |             |
| Types of enterprise                               |                    |             |

FIG. 4 - Social welfare impact matrix

eighties. The diverse trends accompanying namely the appearance of farms which either too small or too large, should continue. The inviably small farms may a relatively faster than the exceedingly farms in the short term, but the patt expected to change later.

- The number of full-time and owner farm expected to decrease in favour of part-time and lease farms respect Part-time farming may increase at a faster than lease farming.
- As regards types of enterprise, the num one-man businesses, companies and companies should decrease, while corporations, commercial trusts and companies may increase.

Figure 3, which comprehensively demon the above change, also indicates that the course of the structural changes (the reduction number of farms and famers, and the accomp substitution of land use rights and typ enterprise) is the result of economic and forces. Whereas it may be expected th economic forces will be relatively stronger th social over the short and medium term, the should become ever stronger over the long term.

A first approach to determine the influ the expected course of structural changes on welfare is to relate the changes of every str component to each of the three relevant welfare objectives. This may be done with the a social welfare impact matrix (Figure 4). A p in the matix indicates progress, a minus (-) i regression and an asterisk (\*), indifference in of a certain objective. The indicators in the are based on the following views:

- The effect of the changes in respect of of enterprises and the number of should be to promote the conserva natural resources, since farmers wh larger pieces of land are in a better pos apply conservation measures. On th hand, a reduction in the number of farm oppose the objective of establish maximum number of owner-occupant and promoting regional development.
- A change in land use rights in the dire a larger percentage of part-time farm lessees may have a negative effect



## POSSIBLE COURSES OF ACTION

The following possible courses of action are suggested in the light of the above findings. In the first place, it has been decided to allow the expected changes to take place without doing anything effective about them. The main motivation for this decision would be that structural changes are unavoidable in the process of economic growth and development and must therefore be accepted.

Secondly, the changes could be regarded as undesirable and it could be argued that the Government should itself, through co-operative action, set out a system by which full-time owner-occupant farmers are retained in agriculture. There is much prospect of success for this, particularly over the short and medium term, for example, to the domination of individual farmer interest above group interest in this matter, as well as the lack of funds for the purpose within the co-operative system. The method could have some merit in the long term if farmers could acquire a significant share in the marketing chain of their products through co-operative action, and if the productivity of the agricultural sector could be considerably increased.

Thirdly, certain measures could be taken by the Government to check the move of owner-occupant farmers from agriculture. This alternative is not possible over the short and medium term, owing to the funds that would be required (given the present financial condition of the Government and the variety of other commitments), and the relatively low probability of success traditionally experienced by Government measures in this respect. By accompanying structural changes taking place by purposeful measures, the potential that the changes have in the welfare context. A primary example is the support of certain types of part-time farming by the Government by making them available in which farmers, known as *bona fide* farmers, are applicable to these groups too, for example. A further example is the establishment of a leasehold, in which the Government takes possession of the land that becomes available from farmers who have to give up their farms, and makes it available to deserving farmers at an appropriate potential-based lease value. As long as the farmer then looks after the land and pays the applicable rent, he remains in effect the owner of the land, which his children may then also inherit.

The examples above imply, therefore, certain adaptations in welfare norms and therefore in the welfare model which has served as the basis for the analyses and in the present agricultural

## CONCLUSION

Significant changes are occurring in all the components discussed as a result of the operation of a variety of socio-economic factors. The following changes are expected to occur.

- The average size of farms is expected to continue to increase and the number of small farms to decrease - initially at an accelerated rate.

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