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ACCELERATING AGRICULTURAL DEVELOPMENT THROUGH CO-OPERATIVES*

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ABSTRACT

A successful co-operative movement has been shown to be one of the ways of transforming subsistence-orientated agriculture into commercial agriculture. It should not be inferred from this that the formation of agricultural co-operatives alone will achieve the goals of agricultural development. However, they may act as catalysts in the process of agricultural development.

The co-operative movement in the national states of Southern Africa has not yet, with some rare exceptions, played a significant role in the upgrading of agricultural performance. The aim of this paper is to provide a framework for the upgrading of the performance of the co-operative movement in agriculture in the less developed national states. Proposals are made as to -

- (a) the functional role of the co-operatives in agricultural development; and
- (b) the institutionalisation of co-operative action in the national states.

1. INTRODUCTION

Agricultural co-operatives have an important role to play in agricultural development. This is confirmed by experience both in certain developed countries and in less developed countries (Meyer, 1974). It should, however, be realised that agricultural development is not a process that can be achieved by the employment of a single factor, nor can it take place overnight (Buse and Helmberger, 1969, p. 199).

The hypothesis advanced in this article is that co-operatives can contribute to agricultural development. An attempt will be made to explain how co-operatives may function as tools for the economic development of the agricultural sector. Reference will be made to the national states where appropriate.

2. NEED FOR AGRICULTURAL DEVELOPMENT

The majority of the people in less developed countries (LDCs) live and find their livelihood in

the rural areas (Chambers, 1974, p. 12). According to Lele (1975) between 85 and 95 per cent of the population of sub-Saharan Africa live in these areas. These people have low incomes and earn their means of subsistence mainly from agriculture. In the national states approximately 84 per cent reside in the rural areas (Benso, 1978). It is not surprising, therefore, that theories of development place much emphasis on the role of agriculture (see Coetzee, 1977, p. 1 and Vink, 1981, p. 37 for summaries of such theories).

It is necessary to increase agricultural productivity in LDCs in order to produce enough for domestic consumption and export to earn foreign exchange and to improve the welfare of the rural people via participation in the process of development (Mellor, 1980).

In the commercial agricultural sector of South Africa, co-operatives have played a major role in transforming subsistence agriculture into commercial agriculture (Meyer, 1974). However, co-operation among the small farmers in the national states has not yet played a similar role because "it is a new concept among the Blacks and requires a certain measure of effective administration" (Benbo, 1976, p. 80). Formal co-operatives were formed in these states during the late 1960s and today there are a significant number of them in operation. This can be seen from Table 1.

3. THE CO-OPERATIVE MOVEMENT IN LESS DEVELOPED AGRICULTURAL SYSTEMS

Mellor (1980) indicates that various categories of institutions may be regarded as scarce resources in the process of agricultural development. Among these institutions some importance is attached to co-operatives. Co-operatives are important institutions in agricultural and rural development in that they perform the following important functions:

3.1 Provision of credit

Credit is commonly believed to be a key factor in agricultural development (Bottrall, 1976). Some of the essential features of sound agricultural credit are that it should be productive, integrated, cheap and self-sustaining (Padmanabham, 1982, p. 21). Credit is usually expensive in LDCs (Bates,

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1979; Love, 1976). It was established in the Amatole Basin, Ciskei, that cash credit was made available by the local trader to small farmers at the rate of 180% per annum (Machethe, 1981).

TABLE 1 - Co-operatives in operation in some national states and the dates on which the first formal co-operatives were formed

National state	Date	Level of co-operative	
		Primary	Secondary
Ciskei*	-	145	3
Transkei*	1968	14	16
Venda*	1973	6	0
KwaZulu	1965	10	0
KaNgwane	1973	3	0
Gazankulu	1972	4	0
Qwaqwa	-	0	0
Lebowa	1973	31	0
Total		213	19

*Independent national states

Source: Departments of Agriculture in the national states, 1981. Unpublished data

Notwithstanding the fact that the demand for credit is interest-inelastic,¹ provision of credit at lower rates is conceived as a means of increasing farmer productivity (Johnson and Johnson, 1966, p. 960). Co-operatives may therefore be considered appropriate tools for providing cheap institutional credit to the rural farmer.

It has been observed that in many instances in LDCs the larger farmers bargain away the scarce production factors such as credit from the small farmers (Bottrall, 1976; pp. 356-357; Farmer, 1977). This observation underlines the need for co-operatives as providers of credit because small and large farmers benefit from the credit programme of their co-operative.

It must also be emphasised that the provision of cheap credit alone will not remove all the obstacles to agricultural development. It takes a package of factors to achieve the desired growth in agriculture.

Some of these factors are what Mosher (1971, p. 23) has called "elements of a Progressive Rural Structure". They are markets for farm products, retail outlets for farm inputs, production credit, extension services, local verification trials, and farm-to-market roads. These factors, of which credit is just one, are complementary and the isolation of any of them may not bring about the desired results in agricultural development. It has been stated that "unless overall economic policies represent a cohesive approach, credit in itself will remain less effective and may even be counterproductive" (Padmanabham, 1982, p. 21).

The importance of co-operatives in agricultural development through the provision of credit is evidenced by the role they have played in commercial agriculture in South Africa.

¹...the demand for credit is interest-inelastic; and therefore it is the profitability of the proposed investment rather than the interest rate, which influences the demand for credit (Norman and Krishnaswamy, 1977, p. 428)

Co-operatives receive credit from the Land Bank at competitive interest rates and this has helped farmers to avail themselves of the necessary production inputs. Co-operatives in the national states, however, do not have such an organisation and do not qualify for loans from this institution. In Bophuthatswana, it has become necessary to consider the establishment of a bank which would work on similar lines to the Land Bank. A similar step should be considered by the other national states.

Agriculture in many LDCs has not reached the stage of development where small farmers can make proper use of the credit facilities extended to them. Therefore, for credit programmes to achieve the desired goals, they should be accompanied by extension education. Extension education will initially have to be provided by the government since co-operatives in the early stages of development will not have the necessary manpower and other resources. The importance of extension education is summed up in the following statement: "The expansion of credit without the provision of an adequate amount of extension education is a medicine which may be worse than the disease" (FAO, 1966).

3.2 Guaranteed market

It is of no use to increase production if no market for the products can be found. There have been instances in some countries where produce was left to rot in the fields because it could not be sold (Mosher, 1970, p. 7). Co-operatives can be of assistance in this respect by providing a guaranteed market for the products of the members. Gaitskill (1966, p. 417) emphasises the importance of this factor by contending that "the greatest stimulus to increased production is the existence of a guaranteed market offering a remunerative price".

3.3 Storage facilities

Storage facilities in the LDCs are generally inadequate and this leads to unnecessary losses in respect of the product itself. Estimates of losses in storage caused by rodents, insects and other sources amount to as much as a third of the crop harvested in LDCs (Mellor, 1980, p. 328). The prevention of these losses would increase the supply available for consumption, just as much as an increase in production. The high storage losses in LDCs have led to the conclusion that the food problem could be solved if only improved storage facilities were constructed (Lele, 1977, p. 506).

Co-operatives in LDCs should be assisted to enable them to construct storage facilities. This assistance, in the form of credit and expertise, could come from the government or other sources.

3.4 Incentives

The adoption of any new technology will be strongly resisted if it is not profitable, i.e. if the relationship between prices of inputs and products

is unfavourable. In most LDCs the price of farm products in relation to the cost of inputs is low, so that it becomes uneconomic to use new production techniques and inputs (Christensen, 1970, p. 43). Co-operatives may serve to improve this relationship by taking advantage of economies of scale in the input markets and thereby obtaining lower prices for inputs. By improving the bargaining power of farmers in LDCs, co-operatives may also enable their members to obtain higher prices for their products. Furthermore, the implementation of the principle of operation at cost will lead to reduced production costs for farmer members.

The improved relationship between product and input prices will facilitate the adoption of new technology which could serve to increase productivity in agriculture.

3.5 Management techniques

Co-operatives may be seen as appropriate tools for the diffusion of modern business techniques among the small farmers in the rural areas. The productivity of farmers in the LDCs may be increased by the introduction of these techniques (Mather, 1969, p. 23). It is for this reason that co-operatives are often referred to as "schools of management". Members may be taught how to manage their farms efficiently, especially where the introduction of new techniques is tied in with the administrative systems used for the extension of credit and for marketing. Farmers can be influenced more effectively by discussion on those occasions when they come for credit and marketing of their products.

For a co-operative to execute this function, it will have to be staffed with well-trained personnel and this poses a problem in LDCs. There is a shortage of skilled manpower. The Government could assist in solving this problem by, for example, subsidising the salaries of co-operative personnel and providing in-service-training facilities.

3.6 Production inputs

Production inputs of the right kind should be made available to the farmer in the right quality and quantity, at the right time and place and at fair prices (FAO, 1966; Norman and Krishnaswamy, 1977, p. 430). Farmers are often heard to complain that inputs, such as fertiliser and seed, arrive late. This can have harmful effects on production and the establishment of a well-organised co-operative may help to alleviate such problems.

In places where there are no co-operatives, farmers depend for their input supplies on local traders, who may charge high prices. In certain cases the wrong types of inputs are sold to the farmers, especially in the case of seed.

4. THE INSTITUTIONALISATION OF THE CO-OPERATIVE MOVEMENT

Many authors on the promotion of co-operatives in traditional rural societies warn against premature institutionalisation of the co-operative movement (Leistner, 1970; Texier, 1976; Thimm, 1979). Establishing productive activities in small groups rather than proceeding to establish full-fledged co-operatives at too early a stage in rural development is encouraged as a viable strategy. This "start small" approach is strongly advocated by Draheim (according to Beck, 1960) as one of the prerequisites for successful co-operation.

The time sequence of a successful co-operative movement is of particular relevance for appropriate institutionalisation. Leading contributors in the field of co-operation underline the importance of a business-orientated foundation for a successful co-operative movement of the conventional type. This type of foundation requires a formalised institution. Individual member accounts must be kept, surplus income must be calculated and allocated to members on the basis of business done with the co-operative, administrative costs must be calculated, reserve funds established, etc.

In some traditionally orientated rural societies where this foundation is still lacking or is present in such a weak form that it would hardly withstand some initial "teething" problems, the point of departure should rather be based on customary activity already in operation within these societies. Such activities could be community saving and aid², agricultural production or harvesting activities³.

These non-formal institutionalised forms can be seen as a pre-cooperative phase playing a transitory role en route to more conventional and productive co-operation. The strong cohesion and loyalties characteristic of these societies and the capacity to mobilise collective action can be utilised to establish a base for more conventional and formal action.

Differences in economic growth potential within farming communities in LDCs should be taken cognisance of (Mosher, 1971). In some communities most of the basic prerequisites for a successful conventional co-operative movement exist. In others, usually the majority of communities, these prerequisites are lacking and conditions favour the establishment and encouragement of pre-cooperative movements (Van Rooyen, 1981). In view of the urgent need for productive action in agriculture these growth differences call for the rural areas to be demarcated into immediate, future and low growth potential areas (IGP, FGP and LGP, respectively) (Mosher, 1971, pp. 23 - 24). A further requirement is a

² In the Ciskei a community saving and aid programme known as "Stokvel" is in operation in many communities

³ A well known example all over Africa is that of communal "doing together" during ploughing time - Ulima in Ciskei, Transkei and KwaZulu and Ujima in Tanzania and Kenya

stratified approach to agricultural and rural development in general and specifically to the promotion, establishment and organisation of co-operative activities and movements based on the identified growth potential of each area.

In IGP areas the establishment of conventional co-operatives should form part of the agri-support infrastructure. In FGP areas the establishment of pre-cooperative societies should be encouraged. These pre-cooperative societies along with other developments could be the first steps towards the IGP situation required by a co-operative movement in its conventional form. Initial progress towards a business-orientated co-operative could also be along the lines of a consumer-orientated movement. The selling of consumer goods, attractively displayed, might be a way to arouse enthusiasm and mobilise capital reserves. This stratified approach to development should cater for the immediate need for production (in IGP areas) as well as for the development of the production and socio-economic infrastructure still lacking in FGP areas. The establishment of agricultural co-operatives in LGP areas is not recommended since there is little hope of growth in agriculture there. Instead, ways of developing non-agricultural areas of employment should be sought.

5. GOVERNMENT SUPPORT

Government initiative and aid in building co-operative movements in most LDCs are an indispensable instrument (Engelmann, 1968). This is also true for co-operatives in the national states. The governments of these states need to encourage and support the development of co-operatives. They should take the initiative, where necessary, and provide financial as well as administrative aid, but the objective should be to make the co-operatives self-sustaining. Co-operatives should not become statutory organisations, not only because this is a violation of the principles of co-operation but also because the government might eventually use them as tools for implementing its own policies, which may be in conflict with the final objectives of the co-operatives and, therefore, the needs and objectives of the members.

6. BILATERAL CO-OPERATIVE LINKING IN THE SOUTH AFRICAN CONTEXT

A dualistic situation exists in South African agriculture. A modern commercialised and productive farming sector served by a strong co-operative movement operates alongside a substantially subsistence orientated agriculture. In line with regional development realities and principles, much can be achieved by linking the strong commercially orientated co-operative movement to the co-operatives in the rural areas of the national states where the potential exists for conventional co-operatives to operate successfully. A representative from the South African

Agricultural Union has recently put forward a proposal that co-operatives in each national state should form a central co-operative which would liaise with the commercially orientated co-operative movement in South Africa (Van Rooyen, 1982). Such links could provide the co-operatives in the national states with the opportunity to utilise marketing facilities, input provision, management training, technical assistance and other services provided by the commercially orientated co-operatives for their members.

Bilateral linking seems to be an important and viable proposal and one that should be considered by the national states. Possibilities in terms of the rapid utilisation of natural and human potential may emerge from such bilateral co-operative links. Successful links could lead to increased production and could be expected to trigger off agricultural and rural development in the national states.⁴

7. CONCLUDING REMARKS

If more attention could be given to the development of viable co-operative movements in the national states, the performance of their agricultural sectors could be significantly improved. Perhaps the concept of Organised Agriculture as it exists in the Republic of South Africa should be adopted and the importance of the role of co-operatives in agricultural development should be recognised in the same way.

The core principle behind the success of any co-operative is to "start small" and LDCs should never attempt to achieve agricultural growth through revolutionary changes. Co-operatives should not be overburdened with tasks which they are not ready to perform since this might constitute a further setback for the co-operative movement.

Adequate trained manpower forms a crucial link in the development of a viable co-operative movement. Attempts should be made to attract people of the right calibre to manage co-operatives in the national states, possibly by co-opting specialists from outside.

REFERENCES

- BATES, R.F., 1979. Capital - a missing link in the agricultural development of KwaZulu. Durban: Urban Foundation Workshop
- BECK, O., 1960. Die Genossenschaft als Objekt der wirtschaftswissenschaftlichen Theorie, eine systematisch-dogmengeschichtliche Untersuchung. Münster
- BENBO, 1976. Black development in South Africa. Pretoria
- BENSO, 1978. Statistical survey of Black development. Pretoria
- BOTTRALL, A.F., 1976. Financing small farmers: A range of strategies. In: *Policy and practice in rural development*. Hunter, G.; Bunting, A.H. and Bottrall, A. (eds). London: Croom Helm Ltd
- BUSE, C.R. & HELMBERGER, P.G., 1969. Potential and feasibility of co-operatives as instruments of market reform. In: *Agricultural co-operatives and markets in*

⁴ Such links have already been established between the Sheila-Mooifontein Project in Bophuthatswana and the Noordwes Co-operative in South Africa

- developing countries. Anshel, K.R.; Brannon, R.H. and Smith, E.D. (eds). New York: Praeger Publishers
- CHAMBERS, R., 1974. Managing rural development - ideas and experience from East Africa. Uppsala: The Scandinavian Institute for African Studies.
- CHRISTENSEN, R.P., 1970. Agricultural progress in Less Developed Countries. In: *Economic development of agriculture*. Iowa State University Centre. Ames, Iowa: Iowa State University Press
- COETZEE, D.F., 1977. Kulturele faktore wat doeltreffende landboupraktijk in Lebowa bepaal met spesifieke verwysing na die gebied van die Bantwane. Pretoria, University of Pretoria. Unpublished D.Phil.-thesis
- DEPARTMENTS of Agriculture in the National States, 1981. Unpublished data
- ENGELMANN, K., 1968. Building co-operative movements in developing countries. New York: Praeger Publishers
- FAO, 1966. Agricultural credit through co-operatives and other institutions. In: *Getting agriculture moving*. Vol. II. Borton, R.E. (ed.). New York: Agricultural Development Council
- FARMER, B.H., 1977. Green revolution? London: Macmillan
- GAITSKELL, A., 1966. Agricultural credit. In: *Getting agriculture moving*. Vol. I. Borton, R.E. (ed.) New York: Agricultural Development Council, Inc.
- LEISTNER, G.M.E., 1970. Aspects of European research on peasant agriculture in Africa. *Agrekon*, Vol. 9, No. 2
- LELE, U., 1975. The design of rural development: Lessons from Africa. Baltimore: John Hopkins
- LELE, U., 1977. Considerations related to optimum pricing and marketing strategies in rural development. In: *Decision-making and agriculture*. Oxford: Institute of Agricultural Economics
- LOVE, H.C., 1976. Cost of agricultural credit in developing countries and leading criteria. Oxford University: Institute of Agricultural Economics
- MACHETTE, C.L., 1981. Identifying some obstacles to agricultural development in the Amatole Basin, Ciskei. University of Fort Hare. Unpublished seminar
- MATHER, L.L., 1969. The principles, functions and benefits of co-operation. The traditional model. In: *Agricultural co-operatives and markets in developing countries*. Anshel, K.R.; Brannon, R.H. and Smith, E.D. (eds.). New York: Praeger Publishers
- MELLOR, J.W., 1980. The economics of agricultural development. Ithaca and New York: Cornell University Press
- MEYER, A.S., 1974. Moderne landboukoöperasie in ekonomiese perspektief. Cape Town: Nasionale Boekdrukkery Bpk
- MOSHER, A.T., 1970. The development problems of subsistence farmers. In: *Subsistence agriculture and economic development*. Wharton, C.R. (Jr) (ed.). Chicago: Aldine Publishing Co.
- MOSHER, A.T., 1971. To create a modern agriculture. New York: Agricultural Development Council, Inc.
- NORMAN, D.W. and KRISHNASWAMY, M.S., 1977. The adoption of improved technology by the small farmer. In: *Food enough or starvation for millions*. Ersminger, D. (ed.). New Delhi: Tata McGraw-Hill Publishing Co.
- PADMANABHAM, K.P., 1982. New concepts for rural credit. Ceres, January-February
- TEXIER, J.M., 1976. The promotion of co-operatives in traditional rural societies. In: *Policy and practice in rural development*. Hunter, G., Bunting, A.H. and Bottrall, A. (eds). London: Croom Helm Ltd
- THIMM, U.H., 1979. Report in ADRINEWS. University of Fort Hare
- VAN ROOYEN, C.J., 1981. The establishment of a successful co-operative movement in less developed agriculture. University of Fort Hare, ARDRI bulletin
- VAN ROOYEN, I.M., 1982. Personal communication
- VINK, N., 1981. Micro-level development strategies for the Grootfontein and Success irrigation schemes in Lebowa. University of Stellenbosch. Unpublished M.Sc. Agric thesis