AGRICULTURAL COOPERATIVES AS AN INSTRUMENT OF AGRICULTURAL POLICY — EXPERIENCE WITH COOPERATIVE PROMOTION OF PRODUCTION IN EGYPT

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I. Introduction and Approach

The world-wide interest accorded to Egypt's agrarian experiments has been largely due to the introduction of cooperative promotion of agricultural production. Cooperatives have been the essential executive organs of this experimental policy and the cooperative movement, in return, has been greatly influenced by this fact. The latest decisions in Egyptian agriculture policy are however markedly anti-cooperative and suggest that the great expectations the government, in particular, had of cooperatives as instruments of agriculture policy have failed to materialise to its satisfaction. These decisions give new significance to the critical voices regarding the Egyptian experiment, audible from the very beginning despite the general chorus of approval. The most pressing question in Egypt is whether the government, after having initiated a cooperative development in the face of an absence of spontaneous action and used the cooperatives as an extension of its own agriculture policy, now has any justifiable reason to be disappointed that the cooperatives have not grown into vital self-help organisations.

This problem of state-initiated cooperatives is not peculiar to Egypt, it is a feature of many developing countries². What marks out Egypt as a special case is that here the government has staked everything on cooperative promotion of production and the prospect of swift economic successes as a compensation for loss of individual freedom of decision. This course dictates visible success at whatever the cost.

The following is an attempt to present an overall view of the various phases of implementation of cooperative promotion of production and also to place cooperative development in the general context of economic and, above all, agricultural development in Egypt. In conclusion, an examination of whether the Egyptian model can be transposed to other countries is undertaken individually for the various kinds of cooperative and settlement.

1 Publication of the Research Centre for International Agrarian Development, Heidelberg, sponsored by the Goethe-Institute, Alexandria.

2 KIRSCH, O. C.: The Problem of State Aid or Independent Initiative in Founding Cooperative Societies in Developing Countries, in: BODENSTEDT, A. A. (ed.): Self-Help: Instrument or Objective in Rural Development, Saarbrücken 1976.

II. Phases of Re-Structuring Agriculture in Egypt and the Role of Cooperatives

1. The Target Groups of the Agricultural Cooperatives after 1952

Up to 1952, cooperative development in Egypt was largely geared to serving the interests of large landowners. Thoroughgoing change was however brought about by the Agrarian Reform Law of 1952 and somewhat later the 1956 Cooperative Law as well as a number of presidential decrees and Law No. 267 of 1960³. For the first time in the history of the modern cooperative movement in Egypt, smallholders were the target group for the activities of the cooperative organisations, thus becoming an integral part of the agricultural reform measures. At the same time, the whole rural cooperative system was given a certain amount of uniformity.

2. Cooperative Promotion of Production as a New Feature of the Land Reform Policy

In the initial stages of the reform period, the so-called Agrarian Reform Cooperatives were formed. Owner farmers and those tenants benefiting in any way whatsoever from the land reform were instructed to join together to form these cooperatives. In addition, land reclamation cooperatives were established. In both these types of society, agricultural extension service and cropping planning were added as cooperative services *sui generis* to the traditional cooperative services such as marketing, supply and credit. This led to the emergence of the so-called Cooperatives for the Promotion of Agricultural Production (SCHILLER). Later, this kind of cooperation in the sphere of agricultural production, characterised by unrestricted individual land use, was also to find application in all the remaining Egyptian villages with the old property structures. These villages were, on account of the smallness of their holdings, unaffected by the redistribution of land. This development in the old lands was accelerated by the introduction of controlled uniform crop rotation, the placing of local cooperatives under the supervision and management of government officials, the intervention of these Ministry of Agriculture officials in the control and supervision of cultivation and the cementing of what amounted to a monopoly for the cooperatives with regard to the purchasing and marketing of certain products. This phase of cooperative development in Egypt, characterised by the emergence of the cooperative promotion of production, is well documented in the literature on the subject, particularly that in German. Mention must here be made above all of the work of WÖRZ⁴, who has analysed the agricultural reforms based on cooperative structures by carrying out comparative studies of a number of

3 Cf.: TIBI, B.: *Agrarreform und Genossenschaftswesen in einem Entwicklungsland: Ägypten*, in: VRÜ, 5th year (1972), No. 1, p. 57, cf. also: ULE, W. and WÖRZ, J.G.F.: *Development and State of the Rural Cooperative System with Special Reference to Cooperative Production Promotion in Egypt*, in: THEYDTE and ULE (eds.): *Agriculture in the Near East*, Publications of the Research Centre for International Agrarian Development, No. 2, Bonn-Bad Godesberg 1973.

4 WÖRZ, J.G.F.: *Die genossenschaftliche Produktionsförderung in Ägypten als Folgeerscheinung der Agrarreform und als neues Element der genossenschaftlichen Entwicklung*, Arbeit aus der Forschungsstelle für Agrarstruktur und Agrargenossenschaften der Entwicklungsländer e.V., Heidelberg, Stuttgart 1967.

villages. A similar report based on three case-studies by EL-SHAGI⁵ also merits attention. Further, the work of MURALT⁶ and TREYDTE⁷ must be mentioned. Here, on the basis of their experience at that time, the authors quite rightly point to the importance of the Egyptian agricultural experiment as a model for other developing countries. What is model and unique here is not so much the introduction of cooperative promotion of agricultural production in the villages and new settlements affected by the Land Reform but in all the old settlement areas. The cooperative measures designed to promote agricultural production can be seen as a first serious attempt to overcome the consequences of the fragmentation of farmland into a multitude of tiny holdings and plots of land occasioned by gavelkind and high rural population density. At the same time, the detrimental effects of the lack of education and know-how among the small farmers as well as their chronic insolvency lost much of their impact.

Despite the sympathy for the Egyptian experiment apparent in the publications just mentioned, the German authors are by no means uncritical of the Egyptian reform methods. This fact weighs the more heavily if one bears in mind that most of these authors recorded their impressions during field research carried out immediately after the introduction phase for uniform crop rotation (1963) had run its course.

WÖRZ is at pains to point out that in Egypt too it is crucial to promote local initiative, provide stimuli at this level and convince the local population of the necessity of the steps to be taken. Cooperative promotion of production is, he says, doomed to failure in Egypt, as elsewhere, if it is based on mere commandeering and statutory measures; whether the trend towards integration in the field of agricultural production and state influence will increase or whether work will continue on the basis of the present partial integration and restricted state control depends on future political developments. Both possibilities are equally conceivable and likely. Nor does WÖRZ rule out the possibility that later circumstances may combine to bring about a reduction of state influence in favour of cooperative controlling organs run by member-officials.

v. MURALT is convinced that the patriarchal attitude of the legislators and state authorities towards the farmers shows that they are in no way interested in the emancipation of the farmers.

Only EL-SHAGI is fully in accord with the Nasser regime that the main aim of reform is the abolition of feudalism and the promotion of small-scale owner-operated farms and protected tenant holdings. For this reason, he is in favour of the state keeping the farmers in a state of tutelage if it helps achieve these aims.

Other Egyptian authors too, such as RADY⁸, ARAFA⁹ etc. overrate the role of the cooperatives in rural development in general and in boosting productivity and realising planned output in particular. RADY, for instance, concludes quite uncritically that the cooperatives had played a substantial role in boosting agricultural

5 EL-SHAGI, E.-S.: Neuordnung der Bodennutzung in Ägypten, drei Fallstudien, München 1969.

6 MURALT, J. v.: Entwicklung und Struktur des Genossenschaftswesens in Ägypten unter besonderer Berücksichtigung der landwirtschaftlichen Genossenschaften, Marburg/Lahn 1964.

7 TREYDTE, K.-P.: Genossenschaften in der VAR (Ägypten), Entwicklungsstand und Struktur des ägyptischen Genossenschaftswesens, Hannover 1971.

8 RADY, A.M.A.I.: The Role of Cooperative Organisations in Economic Planning, Diss. Syracuse University 1967.

9 ARAFA, N.: Die sozialen und ökonomischen Folgen der Agrarreform in Ägypten, Diss. Bonn 1973, S. 87, (field research on former landless peasants in 1969).

production during the Five Year Plan 1960/1—1964/5. What he overlooks is that the coordinated use of the whole package of instruments for agricultural promotion — agricultural cooperatives being one of many — was the sole reason why the productivity of Egyptian agriculture showed above-average improvement up to the mid-sixties¹⁰. In contrast to RADY, EL TOBGY is prepared to concede the effectiveness of political measures like land reform and the consolidation of fragmented holdings by introducing uniform crop rotation. But he ascribes the productivity success to the complementary efforts to improve production techniques. Without doubt, such an assessment of the causes, avoiding as it does the overestimation of one sole component, is realistic and less likely to lead to false conclusions and thus misguided follow-up measures. As we hope to show, past overrating of the agricultural cooperatives has more recently in its turn swung round and caused an unjustified underestimation of this institution as an effective instrument for present day needs.

3. Re-Structuring of Agriculture, Planned Economy and the Agricultural Cooperatives

The preceding section contains a more or less exact description of the agricultural sector in Egypt in the mid-sixties.

Subsequently — up to the beginning of the seventies — the trend towards centralised administration grew stronger and more marked in all spheres of the economy. After Nasser's demise, a certain liberalisation did set in, but this has to this day been of little consequence for the agricultural sector. It is for this reason that far more critical voices on the Egyptian agricultural experiment were heard at the end of the phase of introduction of planned economy than in the reports listed above.

Chief among these critics are ABDEL-MALEK¹¹ and BASSAM TIBI¹². They point out that the Nasser regime's agricultural policy did no more than increase yields per land unit and, instead of bringing about the emancipation of the farmers, merely replaced old dependencies by new ones. Both authors are above all concerned to show that, given the present ruling structures, a thoroughgoing structural transformation of agriculture is impossible as long as these very ruling structures and the socio-economic conditions are not in toto substantially changed. For our considerations, the following criticisms are significant:

- (1) it is established that neither the laws on agrarian reform nor the decrees on cooperative societies brought Egypt's rural population liberty or any fundamental improvement in their life conditions, and
- (2) it is stressed that the creation of an integrated cooperative sector dominated by military-bureaucratic rule can by no means be classed as a token of a progressive restructuring of agriculture in Egypt.

Both authors proceed from the assumption that the agricultural policy they are criticising at least accelerated the growth rate of the increase in yields per land

10 EL-TOBGY, H.A.: Contemporary Egyptian Agriculture, Report of the Regional Agricultural Adviser (Middle East) of the Ford-Foundation, Beirut 1974.

11 ABDEL-MALEK, A.: Ägypten: Militärgesellschaft. Das Armeeregime, die Linke und der soziale Wandel unter Nasser, Frankfurt/Main 1971.

12 TIBI, BASSAM: VRÜ 1972, p. 57 Sq.

unit. It has now however transpired that these were little more than initial flukes¹³. It is interesting to conjecture how much more acid their criticisms would have been if, at the time of their analyses, it had already started becoming apparent that the realisation of planned-economy ideas was helping to seriously impair the efficiency of the agricultural sector.

In contrast to the mid and late sixties, where criticism was more or less the preserve of foreigners, the more recent past has found Egyptian authors¹⁴ taking up an increasingly critical stance with regard to agriculture policy in Egypt, some remarkably enough in official and semi-official documents. Conspicuous here, alongside a World Bank Report in 1976 on Egyptian agriculture, is a joint study by the Egyptian Ministry of Agriculture and the US Department of Agriculture¹⁵. The latter also includes an analysis of the role of cooperative organisations in the development of Egypt's agriculture.

The report concedes that, at first glance, the cooperatives look to have a prominent position in the agricultural sector. All tillers of the soil are members of at least one cooperative and in the villages the cooperatives also act as social institutions. Supply and marketing of certain inputs and outputs as well as credit are in many places entirely in the hands of the cooperatives.

These activities must however be seen in relation to government intervention in cooperative promotion and price policy. Many production inputs and products have fixed prices well below those obtainable on the world market. Some of the inputs are available solely from state-controlled sources; here, the cooperatives take over the final distribution on a credit basis, acting however all the time as agencies of the government-controlled Agricultural and Cooperative Bank. The farmers are forced to sell many of the products to public sector organisations via the cooperatives, with fixed prices applying.

4. The Consequences of Planned Economy

The above remarks make it obvious that the cooperatives in Egypt are nothing more than an extension of the state and that membership is more or less obligatory. Most cooperatives are not formed in an attempt to better the economic status of their members but because the government wants to ensure that, via uniform crop rotation, given areas are planted with certain specific crops needed to guarantee adequate supplies for the domestic and export markets. These observations of the authors quoted earlier continue to be borne out in that the members of the cooperatives are hardly if ever consulted with regard to the decisions taken by the cooperative managements. Furthermore, the cooperatives themselves have too little scope for economic decision-making.

With the exception of the fruit, vegetable, flax and livestock markets, it has been policy for the free market mechanisms on the remaining markets for products and production inputs to be suspended in favour of state monopolies. The

13 FATHY, AMR: *Der Beitrag der Landwirtschaft und der Agrarreform zur sozio-ökonomischen Entwicklung des ländlichen Ägyptens*, Diss. Bonn, 1975, p. 84 et seq. — See also Chap. III. 4.

14 ABDEL-FADIL, M.: *Development, Income Distribution and Social Change in Rural Egypt, 1952—1970*, Cambridge 1975. Ibid.: ABEL-MALEK, op. cit. and FATHY, op. cit.

15 U.S. Department of Agriculture cooperating with U.S. Agency for International Development and the Egyptian Ministry of Agriculture: *Egypt, Major Constraints to Increasing Agricultural Productivity*, Foreign Agricultural Economic Report No. 120, Washington 1976.

consequences are that black markets flourish, subsidised resources are deviated from their original purpose and enforced crop rotation is circumvented. In connection with the latter case, there are remarkable examples of sound economic thinking on the part of the farmers. Their sales returns from the production of competitively marketable vegetables, fruit and livestock pursued to the detriment of export crops have shown improvement rather than deterioration. Nor is the contribution of agriculture to the gross domestic product necessarily any the worse for this reason. What are detrimental are the effects on the state's finances and the trade balance, as a reduction in agricultural exports cut down the chances of state "skimming" and also sensibly curbs foreign exchange earning. The upshot of this is that the government finds it more difficult to import and subsidise agricultural inputs and, in the final consequence, to freeze the prices of agricultural products at a low level. On the other hand, wildcat strikes and general unrest in early 1977 in Cairo and other large cities against state decontrol of previously fixed prices have shown that Egypt with almost a quarter of her population concentrated in big cities cannot afford price decontrol for foodstuffs overnight.

Misguided price policy is clearly reflected in the statistics. According to the General Authority for Supply Commodities, the following wheat-price developments have taken place (LE per t):

	1969/70	1975
average import prices	23.7	100,3
domestic buying prices	33.3	46.7
selling prices	29.5	28.2

Pricing of this kind on the home market, taking no account whatsoever of price developments on the world market, is bound to put the subsidising authority in the red. The Supply Authority had net losses of LE 11 million in 1972 and LE 493 million in 1975. Despite this, food prices rose by 60 percent between 1966/67 and 1974, with the non-state-controlled prices (especially vegetable and livestock production) increasing by 100 percent. As already mentioned, the farmers took to concentrating on this kind of production, thus forcing the government to import more basic foodstuffs. This and the simultaneous neglect of export crop production is reflected in the 1976 trade balance with its deficit of LE 1, 200 million.

The consequences of a planned economy for the agricultural sector and in particular for the agricultural cooperatives are made more acute by the fact that too many ministries and state institutions have a hand in determining price policy. There are often conflicting interests here. The Ministry of Agriculture is not always involved in the fixing of prices for agricultural inputs and products. The decisions on the price of fertilisers and cotton lie with the Ministry of Industry, of wheat with the Ministry of Economy and of feed concentrates with the Ministry of Supply.

5. The Reaction of the Farmers

The problems involved in the question of cotton cultivation can be seen as a cautionary example of bungled agriculture policy. Due to the fact that it was possible to obtain satisfactory prices on the intact fruit, vegetable and livestock markets, the farmers lost all interest in cultivating the crops stipulated by the Ministry of Agriculture. Controlled uniform crop rotation however forced them to plant cotton on a certain proportion of their farming area. As they were forced to observe this regulation, they had to find other ways of restricting cotton production so as to leave more area for the cultivation of free-market crops. Their policy was to sow cotton late, thus enabling them to have two or three cuttings of the catch-crop clover instead of the one cutting that was standard until recently, thereby reducing cotton yields. This increased livestock production on the holdings. Subsidised fertilisers too, which the farmers were entitled to because of the areas given over to cotton cultivation, were also used for entirely different crops in the main. The alternative ploy for avoiding cotton cultivation over a long period of time was to plant orchards. Although these moves on the part of the farmers were entirely justifiable from a micro-economic point of view and had little or no adverse effect on the long term value added from agriculture, they had devastating consequences for the much needed current foreign exchange earning of the country.

The neglect of cotton production in favour of livestock and vegetables left quite obvious traces in agricultural statistics. According to the Ministry of Agriculture, the contribution of cotton production to overall agricultural production (on the basis of farm-gate prices) fell from 15.6 to 12.2 percent while that of Egyptian clover increased from 10.5 to 14.0 percent. In the same period, the position of field crops fell from 48.4 to 45.2 percent, to the advantage chiefly of vegetable, fruit and livestock production.

Nor is it in all cases equally true that the actions of the farmers had no adverse effects on the contribution of agriculture to the gross domestic product. The use of fertilisers with specific nutrient combinations on crops other than those they were intended for frequently means that the optimum input/output relation is not achieved. The farmers producing for the black market are automatically excluded from supply with certain imported agricultural inputs, chief among them cheap starchy animal feed. Instead, they give their animals local products or fodder from their own production which often contains more protein than is necessary. This means wastage of valuable protein-rich feedstuff such as clover and oilcake.

These reactions on the part of the farmers show the direction in which Egypt's future problems in the field of agriculture policy will lie. If the present growth of the agricultural production continue to lag behind the growth of the population, there will be a further aggravation of the conflict of objectives in agricultural and economic policy, i.e. "production of local foodstuffs to reduce imports and to economise on foreign exchange" versus "cotton production to earn foreign exchange¹⁶".

¹⁶ FATHMY, AMR, *op. cit.*, p. 110.

6. The Reaction of the Cooperative Apex Organisations

There is no uniform promotion policy for the cooperative sector. The Agrarian Reform and Land Reclamation Cooperatives are controlled more or less completely by the Agrarian Reform Organisation of the Ministry of Agriculture. The Cooperatives for the promotion of production in old lands had up till recently a central organisation of their own. A national agricultural cooperative union acted as a federation for all agricultural cooperatives but unfortunately did not consider itself a lobby for the local cooperatives and the small agricultural producers. Instead of representing the interests of the smallholders and thus making up for the absence of a farmers' association or the like, it was, in the proper sense of the term, a sinecure for representatives of the former large land-owning class. Corruption and embezzlement in this union, where a major part of the net profits of the cooperatives had accumulated, as well as the attempt at fraudulent allocation of Swedish development aid contributions, led to the liquidation of this national cooperative union in late 1976. As there was no-one to represent the interests of the smallholders, the government officials supervising the cooperatives became less and less concerned with the peasants' interests. In many places they pursued their own interests, often in collusion with influential cooperative committee members.

7. Government Cooperative Policy Revised

These abuses, and above all the scandal in the national cooperative union, prompted the Egyptian government to rethink its hitherto pro-cooperative policy in a way that can only be explained by recalling the initial overestimation of the cooperatives as an instrument of policy. At the end of 1976, the cooperatives for the promotion of production in old lands were also placed directly under the control of a department of the Ministry of Agriculture. These cooperatives were dispossessed of all their traditional functions, such as agricultural credit, supply and marketing of the price-controlled products. All these activities were entrusted to the state Rural Development Bank, an offshoot of the Agricultural and Cooperative Bank. Furthermore, the planning of controlled uniform crop rotation will in future be passed over to agricultural extension services independent of the cooperatives. The point of these steps is to deprive the cooperatives of those activities where their position was equivalent to a monopoly, making membership almost obligatory for the farmers in the past. The question is, however, what tasks, in other words what chances of survival remain to the cooperatives.

An astonishing testimony to the repeated overrating of the cooperatives is the policy of giving cooperatives in future a greater say in partial mechanisation. This is a matter of cardinal importance as Egypt's over-population and, in particular, her high agricultural population-density has occasioned a situation which is tantamount to competition between man and animal as far as food is concerned (here draught animals in particular). Mechanisation or motorisation can only help increase further what are already relatively high yields per land unit; but this

implies stepping up energy input¹⁷. Motorisation, which would have to be on a shared basis in view of the holdings structure in Egypt, would not only lead to increased yields but also to increased performance in livestock production. On the extra forage areas thus available, it would be possible to maintain higher-performance single- and dual-purpose species instead of the robust, late maturing draught cattle with their low milk and meat production¹⁸.

Cooperative organisation of shared mechanisation would be a substantially more difficult undertaking than the activities which the cooperatives have failed to master up to now. To what extent these activities or the consequences of planned economy were responsible for the failure of cooperative policy remains to be judged. Nor are the difficulties already apparent in cooperative tractor stations — difficulties that will become more intractable as the programme is stepped up (inadequate possibilities for technical maintenance and repair and insufficient supplies of spare parts) — to be laid exclusively at the door of cooperative organisation.

III. Conclusions from Previous Developments

1. The Problem of the Bureaucratically Administered Cooperative and Cooperative Promotion of Production

The development of Egyptian agriculture policy and the latest policy decisions have thrown up various questions of scientific interest for the complex of cooperative development and cooperative production promotion.

- The basic problem is how, in a society with centralised rule, here a species of “hydraulic” society (WITTFOGEL), cooperative development can be brought about at all. The question is to decide whether in such an environment development is not doomed to end up in the cul-de-sac of the bureaucratically run cooperative, or whether the state-controlled cooperative is perhaps a necessary transitional form. It is essential to establish the prerequisites for preventing the centrally administered cooperative from representing a dead-end on the path of development.
- It is necessary to examine the complex of cooperative promotion of agricultural production in detail, taking the problems of the bureaucratically administered cooperative society as a starting point. Here too, the question arises whether the model of cooperative production promotion is a dead-end or a transitional form. The question also requires investigation whether the Egyptian form is still in accord with SCHILLER’s Cooperative Promotion of Agricultural Production¹⁹, or whether pressure, control and intervention

17 LORENZ, F.: Landtechnik und Arbeitslosenproblem in den Entwicklungsländern, in: *Der Tropenlandwirt*, 76th year, Oct. 1975, p. 76.

18 EL HOSSARY, A. M.: Case Study on the Effect of Mechanization on Productivity and Employment in Egypt, Expert Panel on the Effects of Farm Mechanization on Production and Employment, AGS: MPE/75/4, FAO, Rome, Jan. 1975. Cf. also: ABDEL RAOUF, M.M.: Zur Planung der landwirtschaftlichen Mechanisierung in der AR Ägypten, in: *Beiträge zur tropischen Landwirtschaft und Veterinärmedizin*, Leipzig, 12th year (1975), No. 2.

19 SCHILLER, O.: Die landwirtschaftliche Produktionsförderungsgenossenschaft als neue Genossenschaftsform: Versuch einer Begriffsbestimmung, in: *Zeitschrift für ausländische Landwirtschaft*, Frankfurt/Main, 4th year (1965), No. 2.

from above have transformed the original scheme of cooperative production promotion into Production under Close Supervision (after RUTHENBERG)^{20 21}.

At the moment it is only possible to give a partial answer to these questions, and a distinction must in any case be made between cooperatives on re-distributed land or reclaimed land and those in old settlement areas unaffected by land redistribution.

2. Developments in the Old Lands

As yet, the Egyptian experiment has furnished no evidence that in old lands the consequences of fragmentation of holdings for agricultural production can be lastingly and effectively dealt with along cooperative lines. Despite certain initial successes, the experiment has foundered on the rock of government bureaucracy concerned less and less to provide assistance towards self-help and more and more to promote state interests. The Egyptian state, based for centuries on the principle of centralised rule with "hydraulic" characteristics has been unable to use its influence to prevent the possibility of eventual cooperative democracy from being prejudiced²². The promotion of a cooperative democracy parallel to that of cooperative production promotion, the latter in the given circumstances (immediate introduction of controlled uniform crop rotation in all old lands) only feasible along the lines of a dirigistic policy aiming at production under close supervision, was bound to fail. The same people were responsible for cooperative promotion and productivity promotion of agricultural production, and the way priorities were set — boosting production all-important so as to keep up to planned output — cooperative promotion was bound to go by the board. Voluntary membership and individual initiative, the basic principles of cooperative democracy, were entirely ignored.

It is true that, by separating cooperative promotion and promotion of agricultural production, the state then effected a change of course and gave evidence of interest in the development of viable cooperatives on a voluntary basis. But the question remains whether it was a wise decision to deprive the cooperatives of their traditional activities and hence of the possibility of having revenue of their own. This policy can certainly not be considered the golden mean.

3. Developments in the Land Reform and Land Reclamation Areas

Developments in the land reform and new settlement areas have been different. As the participation of the members in redistribution was dependent on membership of the cooperatives, the danger of not taking the element of voluntariness sufficiently into account never arose, this voluntariness having been

20 RUTHENBERG, H.: Produktion unter genauer Aufsicht, ein Ansatz zur landwirtschaftlichen Entwicklung, dargestellt an Beispielen in Ostafrika und in dem Sudan, in: Schmollers Jahrbuch, Berlin, Vol. 83 (1963), No. 6.

21 EL-SHAGI, op. cit., p. 144.

22 BERGMANN, Th.: Funktionen und Wirkungsgrenzen von Produktionsgenossenschaften in Entwicklungsländern, Frankfurt/Main 1947, p. 43.

ruled out from the very beginning. Discipline in observing cooperative planning could at least be reckoned with for the duration of the loans awarded for basic acquisitions; and in those cooperatives where land was granted to members on a tenancy basis only, discipline presented no problems at all. In addition, the members entered the cooperatives as equal partners after the redistribution of land. All these facts indicate that the agrarian reform cooperatives and the land reclamation cooperatives must be considered a case apart, a form of cooperative promotion of agricultural production which it is relatively easy to control from above.

4. Consequences for Future Agricultural Promotion

This situation — failure of the cooperative promotion of production in the old lands and comparative success of this form of cooperative in the new settlement and reform areas — represents a danger for Egyptian agriculture policy. It makes it tempting to overrate the significance and potential of the newly reclaimed areas. As a result, the latest development plans still show a marked preference for the spectacular but expensive new settlement projects, while at the same time neglecting the development of old lands. A land inventory shows that land reclamation is not just a question of irrigation but also of the quality of the soil. Flat, fine-silt alluvial soil for reclamation purposes has become a rarity. The potential yield of the newly cultivated areas is, on average, nothing like as good as in old lands²³.

The plight of the old lands on alluvial soil stems from the fact that, after the re-structuring of agricultural production and the construction of the Aswan high dam with its promise of constant and reliable water supply over the whole year, it was possible for them to show a considerable improvement in yield. Between 1950 and 1972 cultivation intensity rose by 15 percent to a 190 percent cropping intensity, i.e. almost two harvests a year since 1972²⁴. In the same period yield per unit area rose substantially, for some crops by more than 40 percent (maize, wheat, rice, sorghum, beans, sesame, cotton)²⁵.

In the face of these successes, the dangers involved in such a change of cultivation methods were underestimated. The ground water level rose faster than expected and today large areas of alluvial soil are lost to production because of the lack of drainage systems. The only expedient here would be a crash programme to drain the soil, but it must be remembered that the present state of irrigation technique and water management will mean that, in the next ten years, 80 percent of all land will need draining.

Close individual scrutiny of the various rates of production increase shows the first defects of water management. The Ministry of Agriculture's data reveal that the annual growth rates in agricultural production in the sixties was 4 percent, but after 1970 only 2 percent²⁶. The present rate is below the annual population growth rate (2.5 percent)! These figures leave no doubt that the government must

²³ US-Department of Agriculture . . . , op. cit., p. 36.

²⁴ Cf. EL-TOBGY, op. cit., p. 152.

²⁵ Ibid., p. 43.

²⁶ Cf. also: FAO Production Yearbook 1974.

act quickly and energetically. If one bears in mind that the old lands represent 90 percent of agricultural production area in Egypt, it becomes obvious that the solution can only lie in stepping up promotion of these areas.

Although this problem has been recognised as such, it is obvious from the economic Plans that in future land reclamation will continue to have priority over restoration of the old settlement areas. It will take some years for all parties involved to realise that, with the building of the Aswan high dam, the modern era caught up with Egyptian agriculture and that here spectacular successes will have to be bought at the price of increased risk. Since Aswan, the timeless Egyptian agriculture with the mud of the Nile each year automatically righting the errors of the previous year, belongs irrevocably to the past.

IV. Concluding Remarks

Egypt's initiation of cooperative production promotion is a prime instance of the way in which such intervention in the decision-making latitude of the agricultural smallholder-cum-cooperative member can have unexpected results for the initiator (here, the Egyptian government), in this case, circumvention of enforced crop rotation in the old lands, production of free-market food crops to the detriment of cash crops for export and the catastrophic effect on the finances of the state. Cooperative promotion of production has, on paper, better chances of success in irrigated agriculture, which practically enforces cooperation, than in rainfed agriculture. Yet, despite this favourable basis, it must be considered to have failed in the old lands.

What share the various factors — consequences of planned economy and state pricing policy, consequences of authoritarian attitudes on the part of administration and extension services, consequences of inefficient water management — had in this failure is impossible to state conclusively here. Taken together, these factors must certainly take responsibility for the failure of the cooperative policy. What is not true, however, is to suggest that, vice versa, promotion of agricultural production failed because it did not do its share towards the realisation of a new structure for agriculture. This would be too much to expect of the cooperatives.

It is a moot point whether production under close supervision, which has now replaced cooperative promotion of production, will come up with better results in future. Certainly, the Rural Development Bank, with its previous experience with credit and marketing, will be better equipped to deal with this side of things than the cooperatives. In many respects, cooperation will be replaced by subordination, but this will not have any serious repercussions as democracy and self-administration have never been part of the Egyptian cooperatives' make-up anyway.

Production under close supervision requires certain conditions to be fulfilled if it is to function successfully, chief among them enforcements that cannot be circumvented, like the cultivation of cash crops that either have to be processed on the spot or are hard to market, supervised loan repayments in settlement projects and pressure based on tenancy relations with the project farmers. The pressure exertable by cultivating cotton is however, as we have seen, not great enough for production under supervision to come to full fruition. The remaining

points mentioned apply to the Agrarian Reform Cooperatives and Land Reclamation Cooperatives and this explains why these are the very societies where cooperative promotion of production will run without a hitch. This must be regarded as a special case both in relation to cooperative promotion of production and to production under close supervision.

The setbacks in the old lands and the relative successes of cooperative promotion of production in the land reclamation areas are misleading those vested with decision-making powers on agriculture policy in Egypt into overrating the potential of land reclamation as a solution of Egypt's economic problems. Not by stepping up land reclamation but only by restoring old-land holdings can the present fundamental problem be solved, this being that the growth rate of agricultural production has dropped below that of population increase.

established in 1971, however, have not been more successful than all earlier attempts to help and assist the weaker sections in the frame of the agrarian sector. The immanent barriers and the built-in bias against the poor are analyzed. Criticism has led to new proposals to merge this special social program with other, regional promotion schemes, which would even diminish the already weak social component. An analysis of selected basic issues of agrarian development proves, that the smallholdings are too small to adopt innovations, not creditworthy for any banking agency. Actual official economic policies are criticized. Inequality has become a negative incentive for the poor toiling masses. Institutional change is necessary, if technical innovations shall accelerate economic growth. But radical agrarian reform will be successful only in combination with industrial development. A solution of the agrarian problems inside this sector alone seems unfeasible. The paternalist approach of administration towards the "weaker sections" is integral part of the caste-system and one of the instruments for its internal consolidation. Economic mobilization of the marginal masses, however, is interlinked with socio-cultural and political mobilization and autonomous organization.

Agricultural Cooperatives as an Instrument of Agricultural Policy — Experience with Cooperative Promotion of Production in Egypt

By OTTFRIED C. KIRSCH

The interest accorded to Egypt's agrarian reforms after 1952 has been largely due to the introduction of cooperative promotion of agricultural production. Cooperatives have been the essential executive organs of the reform policy and the cooperative movement, in return, has been greatly influenced by this fact. The latest decisions to convert the cooperative functions into functions of the Rural Development Bank are however markedly anti-cooperative and suggest that the great expectations the government had of cooperatives as instruments of agriculture policy have failed to materialise. What share the various factors — planned economy and state pricing policy, authoritarian attitudes on the part of administration and extension services, inefficient water management — had in the failure of the cooperative promotion of production is impossible to state conclusively here. Taken together, all these factors must certainly take responsibility for the failure of the cooperative policy especially in the old lands.

The development of cooperative production promotion in Egypt is a prime instance of the way in which such intervention in the decision-making latitude of the agricultural smallholder-cum-cooperative member can have unexpected results for the initiating Egyptian government, in this case, circumvention of enforced crop rotation in the old lands, production of free-market food crops to the detriment of cash crops for export and the catastrophic effect on the finances of the state. But the setbacks in the old lands and the relative successes of cooperative promotion of production in new settlements and redistributed villages are misleading those vested with decision-making powers on agriculture policy in Egypt into overrating the potential of land reclamation as a solution of Egypt's economic problems. Not by stepping up land reclamation but only by utilizing the old-land agricultural potential the present fundamental problem of the growing dispersion

between the rates of increase of agricultural production and of population can be solved.

The Decision Making Process in the Farmers' Associations in Taiwan

By AKSEL DE LASSON

This article is an attempt to ascertain the decision-making in the Taiwan Farmers' Associations in respect to its consequences for rural development. The Farmers' Associations in Taiwan are a kind of multipurpose cooperatives. They are organized in a tri-level federated structure. The local organizations of the Farmers' Associations are those at the township level. The township farmers' association form the main body of the farmers' associations. They are 325 in number and have about seventy per cent of the Taiwanese farmers as members, as well as many rural town inhabitants who use the FAs as banking services. The farmers association serve multiple functions, namely the four functions of: Agricultural extension, agricultural credit, farm supplies and farm marketing. The FAs are electoral organizations with equal rights for each member, according to the formal decision-rules of the FAs.

The elected policy-makers employ a general manager to execute the policies agreed upon. Among the informal organizations in the FAs, the factions are strong, and sometimes play a dominating role in the FAs.

An open decision model was used to analyse the decision process in the FAs. This is considered as one of the processes in a sytem-theoretical approach to the tudies of the FAs. The open decision model works on the assumption that full information on the decision variables is not available, and the decision-makers try to satisfy in a situation of uncertainty.

The FA decision-making is heavily influenced by environmental factors. The government has issued a "restrictive" FA law and many regulations which set limits to the decisions in the FAs. The area of autonomy left for the FAs in making decisons is rather limited due to this policy of the government. Still some room is left for the FAs to enforce their will.

The FA members can not be said to be very motivated in respect to their decision-maker role and are aware that they have only a limited influence on the decisions made in the FAs. Still their participation in actual decision-making is considerable. The elites which govern the FAs are recruited from among the "ordinary" farm population. The directors are, in any case, people much better socioeconomically situated than the members in general, which indicates that the FA leadership is in the hands of the traditional local elite. Another group of FA formal leaders are the faction core leaders. These faction leaders use all available means to achieve their own ends. The consequence of this decison situation in the FAs is that there is a considerable discrepancy between the formally established, and probably desirable, decision-rules and the actual decision-making, with a negative effect on their performance as rural development agencies.

The FAs are still able to provide farm services, at least in the form of a "minimum" packet, whereby the farm service goals of the government and the FA personnel receive higher priority than those of the members.