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INSTITUTIONAL SUPPORT FOR FARMERS OF DEVELOPING COUNTRIES: SUGGESTED FORMS AND PLAN OF ACTION

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ABSTRACT:

Beside financial problems, farmers of developing countries commonly suffer poor technical extension and lack of perfect marketing information. Performance of supporting governmental institutions is weakened by bureaucracy and impotent organizational practices on one hand, and on the other, low profit expectations hinder participation of the private sector. In view of these respects, the study suggests a certain channel and basis of performance to provide farmers with required both production and marketing technical support and information, principally supervised by a governmental single corps, the ministry of agriculture or a relevant institution, which would be able to retrieve a substantial proportion of expenses through sharing with farmers a percent of the excess revenue over conventional pre-extension levels. The study showed that promoting extension in production and marketing in Egypt could raise farmers' revenues by a range of 22-30%, especially for highly perishable agricultural products, such as vegetables, fruits, poultry and dairy products.

A master agricultural authority or organization, most likely governmental, would act as liaison between small producers and all institutions providing production and marketing services; technical support, marketing information and financial aid. Resulted production improvement, and hence farm income increase, is shared between the go-between organization and the producers. All expenses are covered as such, beside encouraging strategic crops production, as well as carrying out plans for infrastructure development.

INTRODUCTION:

Conversion of the centrally planned economy which has for several decades governed agriculture and other economic sectors in many developing countries was hardly coupled with comprehensive institutions structural adjustments. Despite governmental withdrawal, most leftover formal assisting and supervising corps maintained their obsolete structures and performance techniques. For example, the agricultural units affiliated to the ministry of agriculture in Egypt still maintain their structure and performance despite the massive change of their job description. As such, under governmental withdrawal from agribusiness beside the prevalent tenure system dominant by small farms of limited resources, new proper forms of supporting institutions should take place, and their new missions fully described. In this respect, the study tends to suggest suitable forms of supporting institutions and their jobs description in the agricultural sector of Egypt, as a principal economic sector in a typical developing country.

RESULTS:

Areas of support for small farmers:

1. Finance: most farmers of developing countries are short in capital. As such, they mostly seek cost effective cropping patterns rather than profit maximization. They are also subject to middlemen exploitation. For example, most small Egyptian producers of fruits and vegetables

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are funded by merchants to meet their production costs. In return, they are obliged to deliver their produce to their financiers at agreed upon prices prior to production in range of 45-55% of retail prices. Likewise, most farmers are unable to adopt integrated technological packages for production due to their relatively high costs, which is the principal factor obstructing agricultural production modernization.

2. Production and marketing technical extension: due to governmental withdrawal from interference in agribusiness, farmers have become in more need for guidance toward the most appropriate production patterns, farming practices, types and proportions of production requisites, marketing channels, and prices and competition conditions. That is particularly important where markets are flooded with variant kinds of production systems and requisites. Likewise, price changes for both inputs and outputs have become hard to follow and maintain perfect knowledge about.

3. Support in a cooperation system establishment: Where small farms prevail so does the absence of the economies of scale. Under privatization and minimum governmental interference a certain form of cooperation consolidating small farmers' efforts and resources is strongly advisable. In this respect, triggering agricultural cooperation and establishing efficient cooperatives is an area requiring full support.

FARMERS PREVALENT SUPPORTING INSTITUTIONS:

High official agricultural authority: a high agricultural governmental authority, mostly a ministry of agriculture, exists in all countries, but with some varied functions. For some countries, especially those newly converted to privatized economies, a general agricultural policy is set, but with variant methods of fulfillment. Some resort only to advisable actions, while others take more positive steps, such as setting specific guaranteed floor-prices for voluntary sales to governmental outlets for certain major crops, which is practiced in Egypt for wheat, maize, rice, cotton and sugarcane. While some expensive farming operations are partly governmentally subsidized, upper limits for other crops are targeted through taxation. In other countries, similar to fully developed states, the role of the highest agricultural authority is confined to conveyance of research recommendations as well as marketing full information.

In the Egyptian case, up to the early eighties, the governmental intervention involved provision of price-subsidized production requisites, mandatory deliveries of specific quotas of certain principal crops, partial funding of specific farming operations, interest subsidized credit, and infrastructure maintenance. However, with gradual governmental withdrawal, both requisites price subsidies and mandatory deliveries were abolished. Beside extension services, still guaranteed floor prices are set for strategic crops, as earlier mentioned. Certified seeds for specific crops are still distributed by the ministry, beside partial financial support for costly farming practices. Targeting rational water use, upper limits for land lots specified for rice, and fines are set for violation.

In these respects, performance points of weakness exist, even with the limited assignments. Above all, extension services are hardly efficient for production and almost absent for marketing. Available credit is of high interest rate and requiring collateral unavailable for most farmers. Farmers are left to face without sufficient experience a wide market of different brands for each production requisite, especially agrochemicals for which many are low in quality, poor in proportions of effective elements, long passed their expiring date, or even internationally prohibited. In some cases, guaranteed floor prices are lower than required to achieve their specific goals. This applies for deliveries of corn for the manufacture of the price subsidized bread of wheat-corn flour mix. Generally, despite an announced national plan for agricultural



production, measures for fulfillment are either vague, obsolete, or both. Even the penalties set for violation of rational irrigation rules are constantly cancelled, and hence, never seriously considered, permitting violation continuity.

Research institutions: In many cases. Research institutions may launch campaigns in direct contact with farmers. They are either governmental, implementing their research results and monitoring their impacts, or either affiliated to companies producing specific kinds of production requisites or facilities, seeking their sales promotion. To encourage use expansion, in developing countries, these institutions provide requisites, technical consultancy and training free of charge in the primal stages.

In most cases, these campaigns are constantly successful while they last. Yields increase by a range 22-30% in average. However, in multiple cases, whenever the research group withdraws and the farmer becomes entirely self reliant, he fails to maintain the same techniques. Reasons for such drawback are numerous. The farmer may have not been entirely convinced, but accepted the presented technique and aid since they were gratis. The recommended requisites may be hard for a single small farmer to acquire, or rather expensive. Training may not be satisfactory, or productivity promotion gained through the campaign was unsustainable. Analogous situations have been repeatedly observed in Latin America, Asia and Africa, Egypt included.

Agricultural cooperatives: consolidating farmers' resources in forms of voluntary cooperatives has shown great success in many developed countries. Nevertheless, the situation may differ for some developing countries. While cooperatives in India, Morocco and Tunisia have achieved fair levels of success, especially in marketing, agricultural cooperation is stagnant in other countries. In most cases, the problem lies in absence of a solid base and foundation for cooperatives.

For the Egyptian case, agricultural coops are actually established, and hence managed, by the government. After cutting down governmental intervention in agricultural production most of services originally provided by the so called "coops" ceased to continue. The current role of these institutions is confined to modest farming extension, distribution of certified seeds for specific crops, and short-run credit at almost commercial banks interest rates. It is true that some real cooperatives exist, for production and marketing of certain horticultural crops and potatoes, but they mostly involve relatively big producers and none of the small farmers who represent the majority.

In such and similar cases, a substantial period of time is required, along with massive efforts, for the farmers to acknowledge the benefits of voluntary team work and accept putting their limited resources in use within a collective system, i.e. farmers cooperatives.

Suggested system for farmers support:

Formation: A suggested system for small farmers support under a capitalistic regime should avoid most the problems farmers suffer, as well as providing efficient support. To avoid congestion, overlap and conflicting interests a single high organization or authority should master the whole operation and act as liaison between farmers and other involved parties. Most likely, the department or ministry of agriculture (MA) should undertake such position. As shown in fig. (1), required material should all flow, with feed back, from research institutions, statistical data and information collectors and financial corps to and from farmers via MA. The last would directly contact the farmers and provide them with needed guidance, follow up implementation and carry back their complaints or new needs to the respective institutions. MA should possess the experience and facilities to filter, interpret and coordinate the flow of information and

suggested innovative practices. As such, it would be also able to fulfill the state’s policies with respect to encouragement of principal crops production. This could happen through emphasizing R&D on production promotion and/or cost minimization for such crops, luring farmers to expand their production on expense of others which may be less important or intensive users of limited resources, e.g. irrigation water for the Egyptian agriculture.

Finance: MA would manage the funding operations of the suggested system. It would be responsible for covering the fees of the non-governmental institutions providing the different kinds of services. Such expenses would actually be covered by the additional income generated through the process.

A suggested method would be charging the farmers a certain percent of the additional income over traditional practices. Such additional income would most likely indicate yield and/or quality promotion resulted through technology transfer via MA. A percentage of about 40-60% of generated additional income for 3-5 successive seasons of production should cover most, if not all, costs. MA would evaluate the benefits of implementation; either yield increase, quality up gradation or price rise due to better marketing. Monitoring production practices among all producers in the beneficiaries’ area would be necessary for operation control and secure payments from even those who received information and guidance indirectly, i.e. via farmers on contract with MA, or via the demonstration effect.

MA should also supervise funding services needing direct contact between the producers and the research institutions, such as training required for new techniques application. On the other hand, to encourage farmers’ adoption of the new techniques, MA should insure a minimum level of net revenue at least equal to the expected conventional level, compensating farmers for any drop in profits. To insure wide adoption, MA could provide interest free credit at levels equal to the expected rise in production costs due to implementation.

It should be considered that percents of additional income retrieved by MA would vary according to the expected impact share in revenue promotion. Techniques strongly depending on farmers’ skills should have percents lower than otherwise, while providing farmers with interest free credit justifies higher percents. At any case, setting certain percents should be subject to negotiations with producers.

Example: Table (1) provides accounts for benefits and costs sharing for expanding research results of a project targeting maize yield promotion in area of Upper Egypt. Recommendations involved substituting the “Baladi” traditional variety by the new hybrid “Giza 2”, beside intensive farming. Accounts are for implementation in maize area in “Almenia” governorate reaching, 60 thousands hectares.

Table (1) - Benefits and cost sharing for maize production promotion

Earnings			Expenses	
Yield increase	(%)	55%	<u>Research:</u>	(L. E.)
Total revenue increase	(L.E./ha)	1650	wages and incentives	360000
Production cost increase	(%)	25%	travel	20000
Production cost increase	(L.E./ha)	425	requisites, material	<u>200000</u>
Net revenue increase	(L.E./ha)	1225	total	580000
Farmers' cost share (50%)	(L.E./ha)	612	Retrieved credit	25.50 million
Farmers total payments (60000ha) :			Gross total	31.08 million
	L.E.	36.7 million	Saved for MA mission	5.60 million



in “Almenia” governorate

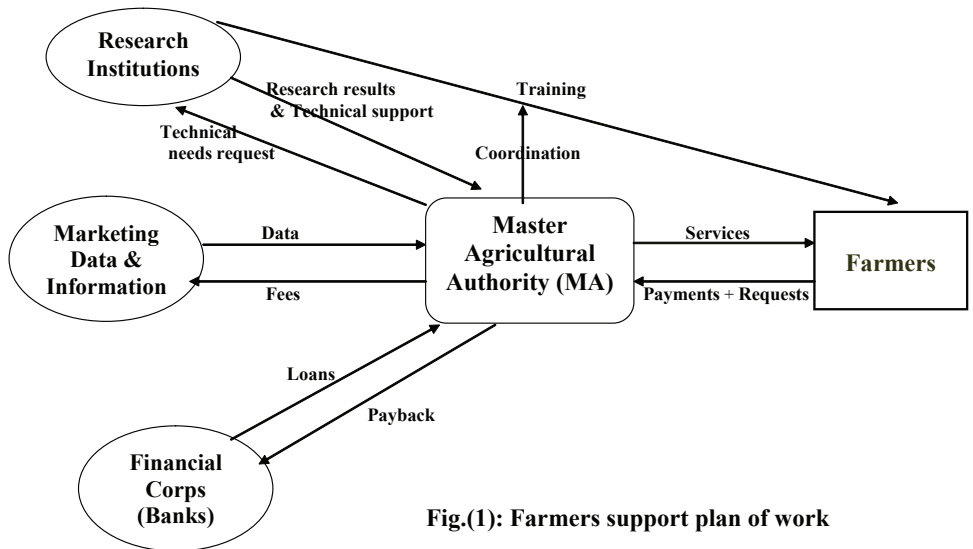


Fig.(1): Farmers support plan of work

Source: calculated using 2004 price levels from:

Agency of Egyptian Village Construction & Development / National Research Centre.

“Development of Maize Production in Upper Egypt”. Res. Project Report. Cairo. 1984.

As Shown in table (1), yields of both principal and byproduct have increased by an average of 55% in research experiments, while production costs have increased due to intensive farming and higher price seeds by about 25% which amounts almost L.E. 25.5 million for the total maize area reaching 60000 ha. Farmers payments, equal to half the income increase, would cover payback of loans and research fees beside nearly L.E. 5.6 million/season for MA to cover other expenses of extension, supervision, monitoring, training and infrastructure maintenance and development. Accordingly, MA will have to provide producers with short run interest-free credit at a rate of about L.E.425/ha paid back after 5 months (harvest time) with additional earnings of about 25%, while producers still benefit almost 28% increase in revenue without actually bearing additional costs.

CONCLUSIONS:

It was emphasized that under privatization and minimum governmental intervention, a single nonprofit organization should support small farmers with their extension needs, acting as a go between farmers and both technical and statistical data generators. It was found that the additional revenue gained through production and marketing improvement could be about equally shared among the responsible authority and the producers, covering all costs and allowing a substantial addition sufficient for infrastructure development. Some of the surplus over expenses could also be used to pay interest to banks providing short run credit to the farmers, which is needed to cover the production costs in excess of traditional cost levels prior to innovations application. The governing authority may withdraw after 3-5 successive seasons. Such period would be sufficient for farmers to gain adequate experience in implementation, and for any emerging problems to be dealt with. Likewise, the national plans for expansion of strategic

crops production and cutting down production of crops exhausting limited resources could be carried out through more concentration of production improvement and/or costs reduction research on the principal strategic crops.

SUMMARY:

Governmental withdrawal from intervention in the agricultural sector has left small farmers with many problems. The major problems are short capital, unawareness of the most proper cropping patterns, their technological packages and efficient applications, beside poor marketing information. Accordingly, the study suggested a system involving a non-profit agricultural organization acting as liaison between farmers and institutions providing services solving those problems. In addition to coordination, extension, training, monitoring and follow up, the master agricultural authority may provide small producers with interest-free credit covering any rise in production costs. The authority's share of the production increment due to implementation was found sufficient for covering all expenses, beside allowance for agricultural infrastructure maintenance and amelioration, which in turn supports the effectiveness of developed technology application.

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