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**AGRICULTURAL DEVELOPMENT SYSTEMS
EGYPT PROJECT**

UNIVERSITY OF CALIFORNIA, DAVIS

AGRICULTURAL TRADE POLICY IN CONTEMPORARY EGYPT

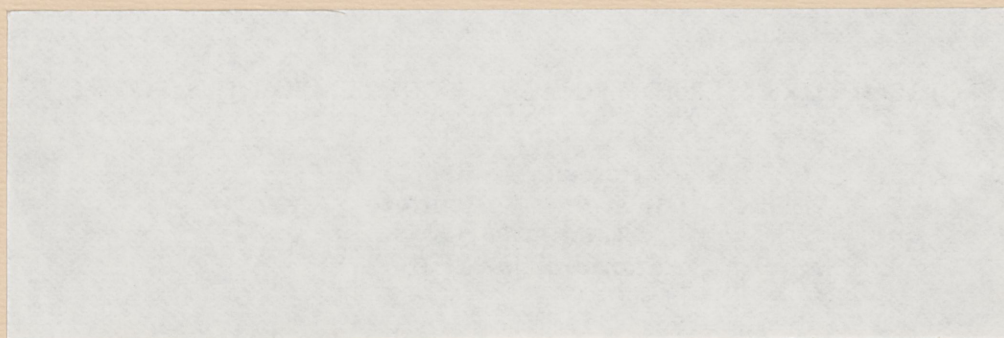
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AGRICULTURAL TRADE POLICY IN CONTEMPORARY EGYPT

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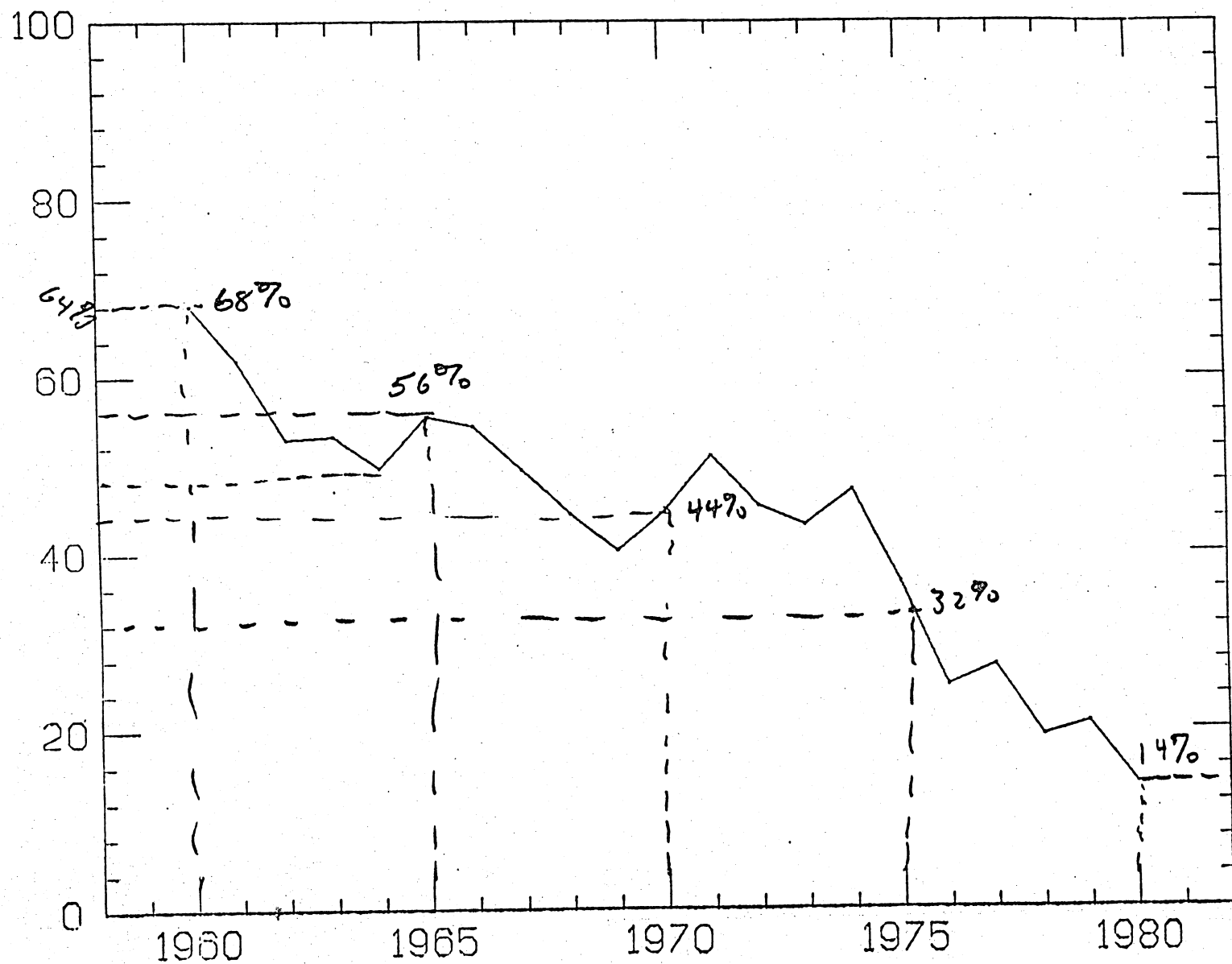
September 1982

The role of agriculture in Egyptian international trade has changed dramatically over the last two decades. In the 1950s and early 1960s Egypt had only a relatively small trade sector, dominated by cotton and rice exports. Since then, Egypt's international trade has grown in size and complexity. The accompanying chart documents the declining relative importance of cotton in Egypt's total exports. Far from being the dominant source of foreign exchange it once was, cotton is now only one of several exchange-earning activities including the Suez Canal, oil sales, tourism, and remittances from Egyptians working abroad.

The decline of cotton is absolute. Using IMS data and giving 1975 a base value of 100, the export volumes of cotton for 1960, 1965, 1970, and 1980 were 202, 178, 154, and 89 respectively. The trend in rice volumes has been even more dramatic. The reason for these trends is very clear. Increasing domestic consumption has pushed up demand, and policy has consciously promoted domestic processing. Secular shifts in agricultural land use have not allowed production of these crops to grow sufficiently to maintain export levels.

The difficulty with these trends is that they are happening in the face of growing trade deficits. This paper will address some of the key issues that affect trade policy in agriculture, and how competing priorities

COTTON'S SHARE IN EGYPT'S TOTAL EXPORTS



may best be evaluated. Since other members of the project have given considerable effort to examining food security issues, little space will be given here to food imports issues, directly. Instead the emphasis will be on the traditional and new crop exports of Egypt. I will address three main themes: comparative advantage, international market composition, and the structure and policy of Egyptian agricultural exports.

Comparative advantage is key to directing the future of agricultural exports. Should Egypt move away from traditional export crops like cotton toward more food crops for domestic consumption, or toward horticultural crops for export? To begin to answer this question requires a careful analysis of the returns available. Domestic resource cost (DRC) analysis examines crop budgets to identify the comparative advantages of competing activities. If a crop is found to have a DRC of 1, that says it takes a dollar's worth of resources to produce output that could be purchased internationally for one dollar. Consequently, DRCs less than 1 identify activities in which Egypt has an international comparative advantage.

DRC analysis has been performed by our project on both the production of ginned cotton and for finished textile products. The findings are striking in that there is a strong comparative advantage in producing ginned cotton (DRCs around .3) but no such advantage exists for textiles. This says very simply that during the past 20 years, Egypt has been moving away from its traditional strength by planting fewer acres of cotton and consuming more of it domestically. Another important finding is evident from the DRC analysis on different staple lengths of cotton. Long staple

cotton (Giza 75) is preferable on a returns basis to either medium (MLS) or extra long staple (ELS) varieties. This fact has been exploited in the policy of shifting toward more acres of LS at the expense of ELS and MLS cotton.

Any long-term acreage policy for cotton must be linked to the plant-breeding program. Currently Giza 75 has a significant yield advantage over ELS varieties that more than makes up for the international price premium paid for ELS. If Giza 75 and its successors can maintain these impressive yields, and the ELS varieties do not show great yield improvement, it may be improvident to continue to produce ELS cotton in significant quantities. Total cotton output could expand considerably on the same acreage if ELS cotton were eliminated. Foreign exchange from cotton could grow dramatically if total acreage to cotton reversed its decline and LS specialization occurred.

The effect of this policy of specialization on domestic spinning and weaving should be minor, since only a small fraction of the ELS crop is spun domestically. Several policies should be considered, however, that would have a considerable impact on the domestic textile sector. Part of the inefficiency of the Egyptian spinning industry stems from the gap between the quality of the raw cotton and the quality of the spun yarn. International spinners achieve thread counts of 60 to 80 from Egyptian LS varieties, but the typical domestic product rarely exceeds a 30-thread count.

There are some technological reasons for this inefficiency, but economic forces should not be overlooked. The limited resources of most

Egyptian consumers do not allow them to buy fine cotton products similar to those produced by European and Japanese spinners. Coarser Egyptian textiles are appropriate for the domestic market, but it would be much more efficient if these yarns were spun from shorter staple length cottons. There is absolutely no incentive to do so, however, since the international price of short staple cotton usually exceeds the farm-gate price of Egyptian long staple cottons, prices very near to those paid by the domestic spinners. If transaction prices could be kept to a minimum, arbitrage opportunities should exist to export long staple cottons and import short staples for domestic uses. The implicit subsidies given to spinners in the form of low product prices could be maintained. The biggest change would be that domestic spinners would be forced to draw the full potential from the raw fibers, something they have not done for many years.

The issue of comparative advantage for horticultural export crops is more difficult to assess. Since Egypt has only recently begun to exploit these markets, there is some question as to how quickly production may be expanded without having an adverse market impact. Here one of the key issues involves the elasticity of demand for these products facing Egypt. At the current scale of operation, these horticultural exports seem to have a promising future, but expansion should be deliberate to ensure that the export market can absorb Egypt's output. There seems little question that if significant expansion of these crops is to occur it should not be at the expense of cotton, which has a great untapped potential to generate foreign exchange.

The final important trade policy related to comparative advantage

concerns the importing of fertilizer and pesticides. It is an obvious and false economy to restrict their use on profitable crops like cotton, which could more than pay for the foreign exchange demands made by these inputs.

The structure of the international markets for Egypt's agricultural products plays an important role in shaping export policy. Even though Egypt is the dominant producer of long staple cottons, only a small fraction of total world trade originates in Egypt. Linking this with the fact that consumers of raw cotton can substitute readily between nearby staple lengths, one concludes that Egypt has very limited market power to set prices for its cotton exports. The positive side of this picture is that Egypt could expand its cotton exports to exploit its comparative advantage without dramatically affecting the world price of cotton.

For horticultural crops, the market structure issue is not as well understood. As previously mentioned, knowledge of the elasticity of demand facing Egypt for these products is very important in evaluating the rate at which these exports should be expanded. Identifying equal and potential competing producers is the first step in evaluating the market structure. Beyond this there are numerous institutional factors, which will be considered below.

The institutional structure of cotton exports begins with the government monopoly in ginning and works its way to the export docks in Alexandria. The mechanics for exporting cotton are well developed and efficient. Ex-

perience in this area is extensive and is a resource that should be exploited fully.

The problems in this area stem largely from the export pricing policy. Prior to picking time, representatives of the Alexandria trading firms canvass their customers to assess their demands for the coming crop year. This information is added to whatever other market facts can be gleaned from sources like the New York Futures Market to form an opinion of the international price conditions. At this point a committee comprised of representatives from government, farm, spinning, and export interests comes together to set the season's export price.

The rigid price structure allows no downward price adjustments once the season has begun. In fact, price increases are built in after several months to reflect the cost of storage. If the international market shifts against Egypt, or the price that is set is out of line with other international prices, the Alexandria traders are at the mercy of the market. Stock accumulations that occur because of these pricing errors have been misinterpreted to be the result of overproduction. Consequently there has been a misdirected drive to reduce cotton acreage even further. This rigid pricing policy may be rooted in the idea that Egypt has sufficient market power to set cotton prices internationally, but this has been shown to be clearly false. If the Alexandria traders were given the flexibility to adjust prices up or down, generating foreign exchange with cotton would be much smoother.

The issue of export pricing for horticultural crops can be formed into

an interesting parallel. Suppose, by committee, the price of cotton is set too high and stocks begin to accumulate. Quality will deteriorate to some extent through time, but basically stocks can be disposed of. If the export crop, however, is fresh tomatoes, the story is much different. The experience of the United States with fresh fruits and vegetables shows that great flexibility is needed to maintain profitability in these areas, and a government pricing committee may not have this flexibility. Avoiding this problem by moving into processed fruits and vegetables takes the country out of the highly profitable fresh market and into the troublesome arena of competing with protected European processing firms.

The comparative advantage discussion is important here because the returns seemingly available to horticultural crops may be subject to many qualifiers. The riskiness of return is something that does not enter into the DRC calculations. Selling fresh tomatoes may be on average highly profitable, but for a significant fraction of the time there may be no return at all. Comparing cotton with the horticultural crops shows that in virtually every dimension cotton is less risky. First of all it is a durable crop. Errors in time of picking, transportation or export pricing may be costly, but not disastrous. For horticultural crops this is not the case, and a risk is added of failure to meet quality standards of the foreign customers. The price discounts associated with lower quality goods can be very large and make the difference between profitable and losing ventures.

Not only are errors in horticultural crops often more costly than

those in cotton, they are more likely to occur. The marketing channels for cotton exports are well established, but those for the horticultural crops are still in their infancy. The risks associated with horticultural crops are great and need to be weighed. Those responsible for agricultural export policy should try to blend high-payoff, high-risk crops with others like cotton that have steadier returns. A full-blown policy of moving away from cotton to these horticultural crops would expose Egypt to a great trade risk.

The best policy available now seems to be one of steady growth and learning. As cotton traders have known for years, it takes a great deal of time to develop international market contacts and smooth marketing channels. The horticultural crops would do well to tap the expertise of the cotton traders who have built their human capital over generations.

The last institutional aspect of trade I want to address concerns foreign exchange transactions. Since all of the cotton trade is on a hard-currency basis, careful foreign exchange planning is crucial. One policy that should be considered is hedging on international currency futures markets against variation in foreign exchange rates. Any time there is a significant lag between setting the purchase price and payment, such a hedge would ensure a balance in the foreign exchange reserve holdings. Recent movements in the dollar have lowered the price of European products, but history is full of costly counter examples.

The major points of policy addressed in this paper deal with the

composition and size of agricultural exports. Traditional agricultural exports like cotton and rice have declined in importance, and this trend can and should be reversed. With a growing trade deficit, profitable sources of foreign exchange should not be discouraged. Cotton acreage expansion should be against crops where Egypt has a disadvantage. At a minimum, the composition of cotton acreage should continue to be revised in favor of high-yielding LS varieties.

The future of horticultural exports looks bright, but the difficulties should not be understated. A concerted policy of developing marketing institutions should be implemented. From the level of production, through packaging and transportation, it is critical that no bottlenecks develop that could destroy the profitability of the venture. The trade must be flexible in its pricing, and it must work hard to provide the high quality of product the market demands.

Between traditional agricultural exports and new ventures, agricultural products can play a stronger role in Egypt's trade picture. It might take a significant revision of farm-level prices to bring about the kind of growth discussed in this paper, and this must be considered. From the level of the farmers to that of the traders, policy should be geared to encourage the productivity of the agricultural trade sector. If this means loosening the constraints at every level, then this should be the dominant policy. Traditional agricultural exports would then begin to bring forward some of their untapped potential, and the stage would be set for a healthy, steady growth in the horticultural area.

