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EGYPT: EMPLOYMENT ISSUES

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EGYPT: EMPLOYMENT ISSUES

The current position of Egypt's labor force is relatively favorable despite low incomes and some unemployment. It is the longer run prospects that are worrisome and it is to the latter that AID policy should, to the degree possible, be addressed.

The Current Situation

As of late 1980, Egypt was experiencing the benefits and strains of an economic boom in a society and economy beset by poverty, low productivity, and grossly inadequate infrastructure. The boom has been due to government and private construction activity, a high level of government consumption, and rising personal consumption due to an inflow of emigrants' remittances and the income effects of the other elements of final demand. It has been made possible and has been sustained by an easy foreign exchange position due to Suez Canal receipts, petroleum exports, foreign aid, an inflow of private capital, and the same inflow of emigrants' remittances. The emigration of workers to the oil producing countries and to other higher-income Arab countries, which generates the remittances, has drastically reduced the excess supply of Egyptian labor by absorbing manpower mainly out of agriculture and other rural activities but also from the cities whence the emigration has siphoned off skilled workers and others from manufacturing, construction, and the service industries. The strains are reflected in upward pressures on building costs and the prices of consumption goods, and in widespread complaints of "labor shortage" among employers. The latter phrase should be interpreted as

a temporary tightening of the labor market which results from a buoyant level of demand for some types of labor and a relative reduction in supply of skilled and to some extent of unskilled labor, and is reflected in some upward pressure on wages. In the current situation, open unemployment is limited, partly because of buoyant demand, partly because of extensive over-staffing in the public sector, and partly because of emigration. The incidence of open unemployment is felt mostly by new entrants to the labor market - young people (many of them 6-12 years of age) with no previous work experience. Underemployment is a more widespread phenomenon, but that is simply another way of describing low productivity and consequent low incomes.

Overstaffing in the government and in the public enterprises stems from a perhaps inherent tendency toward bureaucratization which was strongly reinforced by nationalization and sequestration of private enterprises and property during the period of Arab socialism in the early 1960s. In 1961/62, working hours in public enterprises were officially reduced from 48 to 42 week and new employees were hired considerably beyond replacement needs. Because labor legislation makes it virtually impossible to dismiss workers, a substantial carryover of redundant workers remains from the period of the employment drive. In addition, the government (and until recently the public enterprises) have been used since 1959 to guarantee employment to university graduates (two years after graduation) and to intermediate level graduates (three years after graduation). A similar guarantee for demobilized military

Conscripts was introduced in the early 1960s but abrogated in 1978.

Emigration has temporarily removed one million workers from Egypt's labor force, which in 1976 came to 11.1 million persons aged 6 years and over (see Table 1); 700,000 of the emigrants came from agriculture which in 1976 occupied 4.9 million persons. The resulting shortage of agricultural labor has been acute enough for the government to attempt to ban emigration of agricultural laborers.

There has been an absolute decline in the size of the agricultural force since 1972 when it reached its secular peak. One consequence is that rural women (whose participation in the rural labor force is under-reported in population censuses and labor force sample surveys) and children have taken on additional employment in agriculture. The labor force participation rate has risen among boys 6-12 years of age and school attendance rates among rural school age children have declined.

Despite the evident shortage of agricultural laborers, the males in households on family farms of less than 5 feddans appear to be under-employed. "Locked in" on very small holdings, the men get enough income to subsist and do not seek work outside. The women and children on these very small holdings are fully employed in animal husbandry, weeding, and growing vegetables.

Table 1. Labor force in Egypt by branch of economic activity, 1960 and 1976

Branch of economic activity	Thousands		Average annual growth rate (%)	Percent	
	1960	1976		1960	1976
1. Agriculture, fisheries	4,406.3	4,881.0	0.6	56.3	43.8
2. Mining, quarrying	21.2	33.8	3.0	0.3	0.3
3. Manufacturing	647.2	1,369.5	4.7	8.3	12.3
4. Electricity, gas, water	16.9	61.8	8.3	0.2	0.6
5. Construction	158.9	425.1	6.3	2.0	3.8
6. Trade, hotels, restaurants	690.8	861.3	1.4	8.8	7.7
7. Transport, storage, communications	260.2	482.3	3.9	3.3	4.3
8. Finance, insurance, real estate, business services	72.5	88.4	1.2	0.9	0.8
9. Public, social and personal services	1,333.3	1,868.4	2.1	17.0	16.8
10. Unstated, including unemployed	224.7	1,060.2	10.1	2.9	9.5
Total	7,832.0	11,131.6	2.2	100.0	100.0

Source: 1960 and 1976 Censuses of Population, adjusted for comparability by A. Nassef.

Agricultural wage rates doubled between 1975 and 1980 in real terms but aggregate wages have nevertheless lagged behind total value added in agriculture, perhaps because of increased mechanization. Ploughing and threshing are now fully mechanized, which may make the decline in agricultural employment irreversible.

Employment trends in manufacturing in Egypt must be assessed rather carefully because of the role played by the public sector. As derived from the population census estimates, the average annual rate of growth in the manufacturing labor was 4.7 percent from 1960 to 1976 (see Table 1) according to Ministry of Planning figures, the average annual rate of growth in the number of workers in manufacturing was 5.3 percent over the same period while the average annual rate of growth in gross value added in manufacturing was 6.8 percent, indicating an average annual growth rate for productivity of labor of only 1.4 percent. This is in sharp contrast with the experience of many other developing countries where the rate of growth of value added in manufacturing has been much higher than that of employment because of marked productivity increases. In Egypt's case, employment in public sector manufacturing enterprises was increased as a politically motivated social welfare program whose result was redundancy of labor rather than increased production. In 1976, public sector enterprises accounted for 55 percent of employment in formal sector manufacturing (establishments employing 10 +) and for 41 percent of total employment in manufacturing as estimated below:

<u>Sector of manufacturing</u>	<u>Employment, 1976</u> <u>('000)</u>
Public sector employing 10 +	565
Private sector employing 10 +	<u>452</u>
Subtotal: Formal sector manufacturing	1,017
Informal sector, employing 1-9	<u>350</u>
Total manufacturing	1,367

Despite the easing of government restrictions on the private sector with initiation of the "open Door" policy announced in 1973, the rate of increase in manufacturing employment continues to be higher in the public sector than in the private sector: in establishments employing 10 +, the growth rate in manufacturing employment from 1974 to 1979 was 8.3 percent for public sector enterprises and 6.2 percent for private sector enterprises. The key legislation for the "Open Door" is Law 43 of 1974 which provides for the establishment of joint ventures financed by foreign and Egyptian capital and enjoying special tax concessions and other advantages. It is to be expected that projects under Law 43 will tend to be dominated by foreign capital and be oriented toward investment in relatively capital intensive processes so that direct employment effects will be modest.

Calculated from the following estimates of the Ministry of Planning (in thousands):

<u>Sector of manufacturing employment</u>	<u>1974</u>	<u>1979</u>
Public	526.3	787.4
Private	<u>389.2</u>	<u>525.9</u>
Total establishments employing 10 +	915.5	1,313.3

Construction has been one of the most dynamic branches of the economy in

recent years, in response to high levels of demand: from the government for infrastructure and housing throughout the country and for reconstruction in the Suez Canal area; and from the private sector for luxury housing, commercial buildings, and hotels. In addition, it has been estimated that close to half of the total value of investment in housing goes into "illegal" units constructed by small contractors without building permits on land not yet approved for subdivision. Part of the construction industry's dynamism is due to its relative freedom from price controls. Wages respond to market demand; much of public sector construction is subcontracted to private construction contractors; and even in public construction companies, much of the labor force consists of temporary labor hired in the open market at going rates. At the same time, the construction industry has shown a remarkable ability to train people quickly and to substitute unskilled labor for skilled labor lost through emigration.

Employment in services is dominated by formal sector activities in trade, transport, finance, government and social services (including religion). Informal sector activities, which are visible enough and often picturesque, probably account for less than 30 percent of total employment in these branches.

Future Prospects

It is clear that Egypt is faced with a big increase in its labor force over the next two decades whatever future fertility rates turn out to be. Assuming a continuation of the recent population growth rate of 2.8 percent per year (which implies some reduction in fertility) the population and labor force would reach the levels shown in Table 2 by the year 2000.

Labor force participation rates may be expected to rise because of increased participation of women outside of agriculture. (In agriculture, it is to be expected that women will continue to work while being reported, by their husbands and fathers to census takers and survey enumerators, as not working.

Table 2. Population and labor force projections to the year 2000

	<u>1976</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Population (million)=				
Total ^{a/}	36.6	40.9	53.9	71.0
Age 6 +				
Age 15 +				
Participation rate (%):				
Age 6 +				
Age 15 +				
Labor force (million):				
Age 6 +	11.0			
Age 15 +				

^{a/} Projected at constant 2.8 percent annual rate of growth.

[Table to be completed on the basis of projections of A. Nassef,
Institute for National Planning.]

Any reasonable set of labor force projections for Egypt implies impressive, indeed somewhat frightening, numbers of workers that the Egyptian economy will have to absorb, at higher or lower levels of productivity. The directions this absorption is likely to take are discussed below. What is needed is to increase the probability that the pattern of labor force use generated will be weighted toward the more productive and higher paying activities.

The emigration of Egyptian workers is of two-fold importance to Egypt's domestic employment situation, on one side by reducing the size of the labor force resident in Egypt (the supply of labor) and on the other side by raising internal demand through the income effect of remittances. A major uncertainty in any look into the future is the situation of the emigrants. It seems unlikely that there will be much of a net increase in the million or so workers now abroad. Assuming continuation of the oil boom in the oil-producing countries, the uncertainty lies in the vulnerability of the Egyptian emigrants to political changes in the countries where they are working. The odds are good that the emigrants will stay abroad and continue to make their double contribution to improving Egypt's employment situation; but there is enough volatility in the Arab Middle East to justify concern with the pessimistic possibility of their being unwillingly repatriated. There is little that can be done about adjusting in advance to their possible return in terms of absorbing them back into the Egyptian labor market. Where there is scope for action is on the foreign exchange earning side.

A comfortable foreign exchange position is essential to maintaining the relatively high levels of internal demand that now generate reasonable levels of employment. Of the various sources of foreign exchange, private investment from the Arab countries and foreign aid from all sources are vulnerable to political changes external to Egypt, even though the odds look good that both will continue at high levels. Suez Canal dues will increase with the volume of traffic through the Canal but that will eventually level off despite investments intended to double the carrying capacity of the Canal. Oil exports will decline, unless new fields are located ↓ in the Eastern or Western Deserts or offshore in the Red Sea. Tourism is a good bet but that also is partly dependent upon political relations with the other Arab countries. Attention should, therefore, be directed toward the development of new lines of production for export in agriculture, in mining, and in manufacturing, and toward the promotion and marketing of exports to the hard currency markets of the middle East and the western industrial countries. Turning to labor absorption in specific branches of economic activity, agriculture has traditionally played the role of employer of last resort with wage rates in agriculture fluctuating in a relatively free market fashion in response to the supply of labor. This role is becoming more limited in scope because of developments on both the demand and supply sides: on the demand side, as mentioned above, the increased degree of mechanization in response to present shortages of agricultural labor may be having an irreversible downward impact on demand for labor;



my personal prognosis would be optimistic on this score.

on the supply side, those who are in the urban labor force will be increasingly unwilling to shift to (or to return to) rural activities. Furthermore, the physical scope for expanding agriculture to absorb increases in the labor force is limited by the cost of reclaiming new lands for agricultural purposes even if water is available from the Nile. Despite limitations on the total extent arab land, however, the possibilities for developing production of pre-season and post-season high value crops for export to the European market should be actively explored and exploited.

Labor absorption in mining and quarrying will proceed at a comfortable pace so long as construction activity remains at a high level. The need for bricks and other construction materials will keep demand for labor high but it may call for (a) more rational use of the land surfaces in the Nile valley otherwise available for agriculture or for future urban uses which are now being chewed up to produce clay for bricks and (b) a partial shift to the more expensive, and more capital-intensive, exploitation of desert sands for brick-making. From the point of view of the economy's need for foreign exchange, more extensive exploration for mineral resources which can be exploited for export is called for.

To what extent high levels of construction activity can be maintained depends on the state of the public budget. Construction needs, for infrastructure and for housing, will continue to be enormous; but financial resources to satisfy these needs are limited. With a buoyant public budget and the political will to carry out government construction programs and to promote private housing construction the limitations may

be only indirect although still strong. The virtue of construction as an instrument for maintaining effective demand is that its direct material inputs are for the most part non-tradable indigenous construction materials; but spillovers into imports occur through the secondary effects of the spending out of the incomes generated in construction. Here again, a comfortable foreign exchange position will permit a high level of internal activity.

There are several tricky aspects to consideration of the role of manufacturing in the future absorption of labor in Egypt. One is that public sector manufacturing enterprises have used for almost two decades in part as quasi-welfare institutions whose function has been to provide jobs as much as to produce goods. At the same time investment decisions have not been taken in a on a cost - efficient basis but rather on the basis of purely technical and somewhat ideological considerations. The consequence has often been output which is expensive in terms of capital input but which would not appear to be capital intensive relative to the amount of labor used because the enterprises are saddled with a good deal of redundant labor. (Putting it another way, the output uses both capital and labor to an excessive degree.) One of the problems faced by the Egyptian economy is to reduce the degree of labor redundancy in the public sector manufacturing enterprises and to produce more efficiently. Implicitly, therefore, the public sector manufacturing enterprises ought to be releasing workers for some time on a net basis rather than absorbing additional labor.

The industrial planning process in Egypt itself leaves much to be desired, while its implementation is arbitrary and often erratic. Industrial investment is planned in terms of material balances, a "naive" input-output technique developed by Soviet planners in the 1930s and exported to India and Egypt through the influence of Charles Bettelheim, a French marxist economist at the Sorbonne, in the 1950s. Decisions on what commodities should be produced domestically are taken by filling in gaps in production of goods needed for final consumption or intermediate uses, but often without serious consideration of relative costs of alternative lines of production or of costs of domestic production relative to the cost of imports. Subsequent implementation of planning decisions is subject to ideological, political and personal interests. An interesting case in point is that of refrigerators. Domestic production is at present restricted to one public sector company called Ideal whose director several years ago was minister of Industry. Since domestic demand is far in excess of the production of Ideal, a number of proposals for expanding production were submitted to the ministry of Industry, which decided to expand production through a joint venture between Ideal and Thompson of France*, keeping Ideal (whose director was at the time minister of Industry) as the sole producer and rejecting joint-venture proposals by General Electric and others. The workers of Ideal then went on strike against the proposed joint venture, on the grounds that Ideal did not need foreign technical input and that Thompson was putting in only a minimal amount of capital; the strike forced abandonment of the joint venture. Consequently, after perhaps five years of discussion and negotiation, there has still been no

*

Federation of Egyptian Industries, Year Book 1978, Cairo, 1978, p.8 of section on "Engineering Industries."

expansion of the domestic production of refrigerators in Egypt. By way of contrast, the decision was taken in 1978 or 1979 to open up production of washing machines to the private sector, and there are now dozens of small producers designing and manufacturing a variety of washing machines (whose motors are imported).

Expansion of private sector manufacturing (in keeping with AID's ideological predilections) should improve the efficiency of Egypt's industrial output. If the expansion is rapid enough, it will more than compensate for the desired thinning out of the personnel employed in public sector manufacturing and will contribute to the absorption of increases in the labor force. With rising incomes, it will be necessary to satisfy increased requirements for basic consumption goods (textiles, clothing, footwear, standard household articles) as well as demand for the range of mechanical household appliances and other sophisticated consumer articles which are now primarily import goods. An easy foreign exchange situation is vital in this area to assure supplies of raw materials and intermediate goods. Although that may also imply sharpened competition from imports of the final goods, it is also obvious that additional investments in plant and equipment will be needed.

The question of the directions that industrial investment ought to be encouraged to take is a delicate one. In view of the likely plethora of manpower in Egypt in the medium to long run, it is clear that labor-using rather than labor-saving production techniques ought in general to be categoric when it comes to specifics. Consideration of the relative intensity of capital in the production process must distinguish between

(a) choice of technique for producing a given product and (b) choice of product in the light of the cost structure of different product lines.

Small scale private sector industrialists in Egypt are acutely aware relative factor prices in their own lines of production. They use mi technologies appropriate to the factor prices they face and do so on a rational basis, integrating labor-intensive steps into semi - autom production processes where low wage rates make the use of labor-inter techniques less costly. Two examples may be cited. One is the use o hard-operated silk screens at one step of the printing of fabrics and plastic materials where the relatively small quantities produced woul make overly automatic methods considerably more expensive. The other the lack of inhibitions about acquiring and using secon hand machine which is (a) often better adapted to the integration of semi-skilled labor into the production process than would be a more modern high-sp machine, and (b) labor-intensive in its maintenance. If the unit cos of labor stays low relative to the cost of capital, Egyptian entrepren will respond appropriately to such market signals.

What dominates the relative intensity picture, however, is product choice since some production processes are inherently more capital-intensive than others: production of plastics goods by extrusion is relatively capital intensive; garment making is relatively labor inter. Relative factor prices should, of course, affect the entrepreneur's choice of product as well as his choice of technique although with resp to completely new lines of investment other factors enter in, included amount of capital available to a given producer.

From the point of view of national comparative advantage, it seems reasonable to encourage labor intensive lines of production for exports. This should, however, be regarded primarily as a means of earning foreign exchange rather than as a direct solution to the employment problem. It is the availability of foreign exchange which will permit expansion of aggregate demand in other areas where labor absorption is likely to be greater.

The bulk of the labor force will continue to be absorbed into trade, transport, and services. In the commercial parts of these branches (that is, outside of public administration, education, religion, and the social services), the intensity of employment (or its other face, the incomes generated) will reflect the state of aggregate demand deriving from the level of activity in the goods producing branches.

Implications for AID Projects

Three aspects of actual or potential AID projects which relate to employment are commended upon below: the need for a comprehensive labor market study; industrial development; and urban policy.

A Study of the Labor Market

An obvious and necessary first step for AID to make its interest in Egypt's employment problem effective is to commission a comprehensive labor market study which would:

- (a) exploit existing but mostly unprocessed data available in the computer tape files at the Central Agency for Public Mobilization and Statistics (CAPMAS);
- (b) field additional surveys where needed. For example, the existing Labor Force Sample Survey, which is collected annually except for Census years, should be developed along two lines: by adding questions on wage-earnings; and by carrying out quarterly surveys of sub-sample of the annual survey sample. Another need is for an up-to-date enumeration of small scale enterprises in manufacturing and in service which could also be used as the statistical frame for a more detailed sample survey along the lines of the ILO's urban informal sector study. CAPMAS is willing and able to carry out new surveys and to process the data in its files, but it can do so only if it is provided with the necessary budgetary resources;
- (c) integrate into a broader framework the results of the Michigan State University rural non-farm survey and the micro studies that may eventually be generated by the proposed small scale Enterprises Credit and Advisors project of the USAID mission's Office of Finance

and Investment;

(d) produce an analysis of the functioning of the labor market and the impact of such factors as emigration, government policies, and inflation on wage determination. There are a number of competent Egyptian researchers who could participate in such a study but they would have to be paid enough to work on it as a full time job.

Industrial Development

A problem of direct concern to AID is how to get its projects affecting industry to contribute both to raising the efficiency of production and to increasing employment. Assuring the availability of raw materials through the Commodity Import Program does both. It is in relation to the expansion of industrial capacity through loans for new investment that a conflict can arise to the extent that relative factor prices are distorted by explicit or implicit subsidies to interest rates.

There is a general bias in favor of capital-using techniques implicit in the relatively low rates of interest at which the formal sector financial institutions in Egypt grant credit; indeed money interest rates are below the rate of inflation so that real interest rates are negative. On the other hand, the fact that an increasing number of enterprises are obtaining loan financing directly from a partly offsetting factor. In most such cases, the borrower is obligated to repay in foreign currency (e.g. Euro-dollars) and therefore bears the exchange risk implicit in having with LE. Since the exchange rate is likely to adjust to differences in rates of inflation, the real interest rate in

Egypt will be raised if domestic price inflation in Egypt is faster than world price inflation. If the government bears the exchange risk, as in the case of AID loans, the bias will remain.

AID can push for higher interest rates in general, but it is difficult to insist on higher rates for second stage lending only out of AID funds if other rates are not raised particularly when Egyptian foreign currency availabilities are as buoyant as they are at present. A possible short cut is to insist on shadow pricing of interest by the intermediacy lending institution when deciding which loan applications will be allocated funds, provided that the demand for loans exceeds the supply so that it makes sense to ration credit.

Urban Policy

Urban policy is intimately linked with employment trends, the location of new industry, and investment in infrastructure. The rapid pace of urbanization in Egypt makes it necessary to face up to both the future expansion of Cairo and the development of secondary urban centers.

Egypt's urbanization over the past decades has been dominated by the growth of metropolitan Cairo which in 1976 contained close to 50 percent of Egypt's urban population and over 20 percent of the country's total population. There is not the slightest doubt that Cairo will continue to expand, attracting additional population, labor force, and economic activity. The city's position as political capital, major market, primary industrial area, and educational and cultural center guarantee continuation of a "natural" tendency for rapid growth. The government efforts to channel more of urban growth away from Cairo by encouraging

the development of existing provincial urban centers, by rebuilding the Suez Canal cities, and by promoting new desert towns are to be applauded and should be supported; but they will not markedly diminish either the future growth or the primacy of the Cairo metropolitan area. Major resources for planning and the construction of infrastructure and housing will have to be devoted to the Cairo metropolitan area. Metropolitan Cairo will continue its expansion unless strong barriers are erected to stop industries from locating there-which is not at all likely.

In the context of decentralization, the Suez Canal cities are the most promising localities from the point of view of employment. The Canal cities have already pulled back many of the refugees of the 1967-1973 war years. Reconstruction absorbs a considerable labor force. The Free Zones in the Canal area should attract foreign industrial investment who will pull Egyptians into joint ventures. The Canal cities, particularly Ismailia, have the advantage of enough space for physical expansion and will inevitably attract subsidiary manufacturing enterprises as well as trade and services.

Alexandria's economic base will grow because of the relative sophistication of its population and its physical area will spread since there is plenty of room for expansion of industrial zones into the nearby fringe of the Western Desert. The latter will remain an integral part of a greater Alexandria metropolitan area, in the same way that Helwan and Shubra el Kheima are part of the greater Cairo metropolitan area.

Small scale enterprises tend to develop out of the social context of existing communities: resident entrepreneurs develop activities in the communities where they live; local markets are important, at least initially; and the labor force is composed of members of the local population or people from nearby areas. This is the case both for Cairo and for the smaller cities. Many the Delta towns have enough of a local resource base to develop urban economic activities in the coming years. What should be explored is the question of how to expand industrial activity in Upper Egypt.