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SOCIO-ECONOMIC PROFILE OF RURAL EGYPT

**The International Islamic Center for
Population Studies and Research**

and

**Rural Development Committee
Cornell University**

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Foreword

The Socio-Economic Profile of Rural Egypt has been carried out jointly by the International Islamic Center for Population Studies and Research of al Azhar University and the Rural Development Committee of Cornell University.¹ It is the product of team work from the two institutions plus other scholars and researchers who joined the working group.

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I. INTRODUCTION

Poverty persists in rural Egypt despite the great transformation which occurred in the fifties and sixties. In a way, the crux of the matter is quite simple and expressed by Egyptian peasants to this writer some twelve years ago: our cultivation area is not expanding and our numbers are increasing, where will our children go? Family planning has not made much progress in this country and the population continues to grow at a rapid pace. In many ways, this inquiry is an attempt to answer the question put by Egyptian peasants: where will the new generation of rural people go, and what will it do under conditions of limited growth? The inquiry into this question is made even more interesting by the fact that there are signs of better economic conditions in the countryside now than in few years past.

Industry, migration, improving productivity, land reclamation and other possible solutions are commonly repeated as the answer. Egypt, however, is a country where most of these propositions have been tried. It is, to start with, a country with an ancient tradition and knowledge of cultivation, and the productivity of the land is quite high. Under the Revolution of 1952, all the suggestions made above have been tried and more. In this country, agrarian reform was so comprehensive and effective to a degree that it changed totally the resource shares of rural people. Major institutional changes were made to introduce relative

equality in land holdings, fix land rents, give tenants security in their holdings, and provide agricultural inputs to peasants cooperatively, and extend social welfare services on a large scale. Moreover, water control and land consolidation contributed further to preventing a decline in agricultural productivity from occurring subsequent to land distribution measures.

For all practical purposes, land reform in Egypt seems to have been so comprehensive as to meet some of the more recent recommendations suggested for alleviating poverty in Third World countries.¹ Much has been written about land reform in developing countries, but not enough has appeared so far on assessing its successes and failure. It thus seems quite opportune to look at the Egyptian case to see how one of the most comprehensive agrarian reform programs fared over the years. We shall concentrate mainly on assessment of results of agrarian reform rather than the process itself. Thus, we shall look at the extent of equality in resources, income distribution, work conditions, employment and developments in rural resources. We shall not deal, however, with the political or administrative changes that have occurred recently in Egypt but keep our focus on the socio-economic conditions.

Since the scope of this study does not include conducting field work to generate data relevant to the questions raised above, we shall rely mainly on available data: official statistics, surveys conducted by various groups,

¹See Milton J. Esman, Landlessness and Near-Landlessness in Developing Countries, Cornell University, Center for International Studies, Rural Development Committee, 1978.

and published and unpublished studies. Most of the data we have been able to collect go up to 1976, and whatever is of a more recent origin has been obtained by the principal investigator of this research team as a result of his recent and extensive visits to rural Egypt.

We have also tried in the first chapter of this study to provide a summary of the two major works published recently on the subject of income distribution and poverty in contemporary Egypt. This was not intended to be a general examination of the literature, which is not within the scope of this inquiry, but an introduction to major contributions on the subject thus far.

Two books have recently focused on the question of income distribution in rural Egypt with special attention devoted to the lower income groups. These are respectively the studies by Mahmoud Abdel-Fadil, Development, Income Distribution and Social Change in Rural Egypt (1952-1970)¹ and the ILO study by Samir Radwan, Agrarian Reform and Rural Poverty: Egypt 1952-1975.² Both writers are economists of Egyptian background and have intimate understanding of Egyptian peasant life. Abdel-Fadil views rural Egypt as a society differentiated by socioeconomic classes and he tries to define a class position in terms of relations to the means of production. Such a relationship, according to him, could be determined by means of three criteria: extent and kind of employment, farm mechanization,

¹Cambridge University Press, 1975.

²International Labor Office, Geneva.

and crop-mixes. Both Abdel-Fadil and Radwan view land ownership as the major source of income and class differentiation. Abdel-Fadil takes note of the importance of ownership in conjunction with use of machinery, since this is a major economic asset in the countryside. Similarly interesting is his effort to differentiate or qualify land ownership by types of crops. For it is obvious that fruit trees and vegetable cultivation draw much higher income than traditional crops.

Abdel-Fadil relies primarily on 1961 data, and does not give a detailed account of farm labor, as one would expect, nor of mechanization. Suffice it to say that he found a steady growth in the use of machinery among medium and rich farmers, i.e., those who own more than five feddans. The figure he gives shows a jump from 5 percent in 1950 to 19 per cent in 1961. As for land distribution, both Abdel-Fadil and Radwan give a relatively more detailed account. Abdel-Fadil's data stop in 1961 and Radwan brings it up to 1965. Needless to say, both have confirmed the fact that there has been a distributive trend in land ownership since 1952 which swelled the numbers of small peasants of less than 5 feddans and eliminated the large owners who held more than 100. They both also maintain that land reform has given rise to what they call a new group of bourgeois land owners who are the main beneficiaries of agrarian reform.

Both writers underline the failure of agrarian reform to meaningfully improve the lot of agricultural laborers, especially the migrants among them (tarahil). Agrarian

reform provided land to small tenants and a small number of agricultural laborers but left most of the rural population landless. Abdel-Fadil devotes a lengthy and informative account to landless peasants, whom he identifies as those "unable to rent land and [who] can only sell their labour power for subsistence" (p. 42). He notes that Egypt witnessed a drop in the absolute number of landless families between 1952 and the mid-60s, then their numbers started to rise after 1965. He then identifies three categories of landless laborers: the permanent, the casual, and tarahil (migrant laborers). Permanent laborers he finds to be employed almost fully throughout the year and to enjoy a steady but variable income. Casual laborers are those who enter the job market for short periods of time, particularly during the peak agricultural season. He cites figures from the 1961 Agricultural Census which show that there were then 1.2 million¹ casual laborers, half of whom were in the age group 12 through 17, and one fourth of whom were women. He does not, however, give any figures for permanent or tarahil workers. He also notes that casual laborers tend to be concentrated in provinces where large landholdings are common, such as Beheira and Kafr-el-Sheikh. Abdel-Fadil for no obvious reason omits the age group 6 through 11 years from the casual labor force, though his source, the Agricultural Census, shows that in 1961 there were 618,865 casual workers

¹Should be 1.8. Abdel-Fadil leaves out workers in the 6-12 age group. It should also be noted here that some of Abdel-Fadil's figures which are supposed to have come from the Fourth Agricultural Census of 1961 do not always correspond to the original source.

in this age group (excluding unpaid family workers). The total figure for temporary or casual agricultural labor is thus 1.8, not 1.2, million. It can be noticed from these figures too that the younger the female the more likely she is to be in the casual labor force.

Tarahil workers are identified as the poorest of the rural poor and are recruited for 4 to 8 weeks for work away from their home villages. Labor contractors were the only recruiting agents until 1960 when the government tried to limit their power by creating public agencies to compete with them, though unsuccessfully. Abdel-Fadil describes the tarahil workers as exploited by the usury of the contractor and low paying employers. Contractors extract up to 12 percent of the laborer's daily wage, and often demand extra unpaid labor. He also points out that a social power structure binds the tarahil worker to the contractor. Laborers are often bound to contractors by kinship and community ties as well as by debt, since contractors advance money to laborers during the slack employment season. He identifies labor contractors as influential community persons who are shopkeepers, produce merchants, money lenders or landlords. A migrant worker lives most of his life in bondage to them.

Radwan covers similar ground on the subject of land distribution, keeping his focus on the impact of land distribution on the peasants and on the range of inequality that still remains. His findings confirm the preceding account on land distribution, and show that the Gini

coefficient which reflects the degree of concentration of land ownership has dropped from 0.611 before the 1952 reform to 0.492 in 1961 and 0.383 in 1965. Though Radwan does not feel that such progress "fundamentally" changes the land distribution pyramid, it does point to considerable equality in land distribution when viewed by itself and in comparison with most developing countries. Comparative data from the World Bank Report confirms the greater degree of equality in land distribution in Egypt in comparison to other countries (Table 1).

Radwan's main contribution is in his efforts to assess the impact of agrarian reform on income distribution among rural people and discussion of persisting poverty. He throws serious doubt on the reliability of Abdel-Fadil's data regarding income and on the latter's estimate of it. He also finds Abdel-Fadil's estimate of the landless to be low, but agrees with him that land distribution did contribute to raising the incomes of beneficiaries of land reform. However, he tends to dismiss such improvements as more apparent than real. He argues that by the late fifties money income per feddan increased 50 percent above the pre-reform period, 30 percent of which can be accounted for by the rise in land yields and about 20 percent by the recovery in the prices of agricultural crops. In terms of real prices, the net income per feddan rose by 44 percent according to Radwan. However, he goes on to maintain that even this "gain must have been totally wiped out during subsequent years," 1964-1974, due to the sharp rise in the cost of

Table 1

Distribution of Holdings by Size and Area in Selected Middle Income Countries

Country	Size of Holding					
	0-5 Hectares		5-50 Hectares		Over 50 Hectares	
	Percentage of Holdings	Percentage of Area	Percentage of Holdings	Percentage of Area	Percentage of Holdings	Percentage of Area
Brazil	28	1	52	13	20	86
Chile	38	1	30	5	32	94
Egypt ^a	97	67	3	27	--	6
Korea, Republic of	100	100	--	--	--	--
Turkey	79	27	20	59	1	14
Venezuela	36	1	43	7	21	92

Note: The data in this table are drawn from different official national sources. They are not strictly comparable and should be construed only as orders of magnitude.

^aThe categories used for this country are 0-4 hectares, 4-40 hectares, and over 40 hectares.

Source: IBRD, World Development Report, 1978.

living for rural areas, estimated at 80 percent. He also feels that cooperative expenses became exorbitant in later years to the extent that most peasants became indebted to the cooperative. It should be noted, however, that cooperative debts are incurred by the rich and the poor alike and are not related to cooperative expenses or poverty.¹ While most of Radwan's sources are reliable, some of his views on cooperatives and the poor are based on literature which tends to be polemical. Radwan also notes the improved income of tenants as a result of agrarian reform measures which reduced rents and prohibited owners from annulment of contracts. Radwan cautions, though, that recent legislation in the Peoples Assembly has again injected an element of insecurity into the status of tenants.

As for agricultural laborers, he notes government legislation giving them the right to unionize and the establishment of a minimum wage. He correctly notes, though, that excess in labor supply prevented observation of the minimum wage law by all concerned. His conclusion points to the abject poverty in which landless laborers live and to their income, which "has more or less remained unchanged over the last 25 years." Radwan calculates the consumption share of the bottom 40 percent and top 10 percent of the population to be 17 percent and 31 percent respectively in 1974-75. This is based on the preliminary family budget

¹For details on this question, see Harik, "Continuity and Change in Local Development Policies in Egypt," paper delivered at Conference on Strategies of Local Development in the Middle East, University of Maryland, September, 1978.

survey data for that period.¹ He notes on the basis of previous family budget surveys that there has been a slight improvement in the sixties in favor of the top 10's share, and a slight drop in the bottom 40's share. Compared with figures from other countries (thought for national not sector analysis), one finds that the average share of income received by the top 5 percent of the population is 30 percent.¹

Radwan's major contribution lies in his analysis of rural poverty, the first systematic study of the subject made for Egypt. His method of determining poverty has been to draw a poverty line based on family expenditure data available for 1958-59, 1964-65, and 1974-75 from studies carried out by the Central Agencies for Public Mobilization and Statistics (CAPMAS). The poverty line was constructed on the basis of the "least-cost diet which fulfills the minimum nutritional requirements for an Egyptian peasant" in these three benchmark years. Assuming that a rural family consists of five persons, he multiplies the per capita minimum diet cost by five to reach the value of the minimum diet per household. He then calculates the non-food cost per household and adds it to the cost of the minimum diet. His results show that the household income necessary to insure a minimum nutritional and basic consumption level, which defines the poverty line, amounts to 93, 125, and 270 pounds respectively for the three benchmark

¹The Arab Republic of Egypt, Central Agency for Public Mobilization and Statistics (CAPMAS), Bahth Mizaniyat al Usrah.

years.

Radwan's method enables him to reach the following conclusions: (1) that there was a noticeable decrease in poverty, both in absolute numbers and in relative terms, between 1958/59 and 1964/65, (2) a dramatic increase in poverty was registered in the following decade, and (3) the problem of poverty continues to be unsolved in rural Egypt. He shows that in the first decade under consideration there were three million people living below the poverty line and constituting 27 percent of rural families. The number went up to 5.8 million and 44 percent of rural families in 1974/75. Radwan attributes the sudden increase in poverty to inflation. If one is to measure inequality in rural Egypt by the Gini coefficient, which Radwan provides in his study, one again is struck by the relative equality in rural Egypt, with coefficients of 0.370, 0.353, 0.392 respectively for the three benchmark years.

Who are the poor? Radwan agrees with Abdel-Fadil that the poorest of the poor in Egypt are the landless peasants, especially the tarahil. The poor thus are agricultural laborers who are permanently or seasonally employed and the unemployed. Radwan goes further and considers "the majority of owner-cultivators operating small farms [5 feddans or less] as poor" (p. 48). Concerning the tarahil, he quotes a recent survey which shows their deplorable working conditions and their low income of about 28 pounds a year and temporary employment of nearly 100 days a year.

A number of remarks may be made here regarding these

studies:

1. There is a tendency on Abdel Fadil's part to use the term "class" loosely, often applied to landowning categories such as owners of 5 feddans as a separate class from owners of more or less. Similarly, those who hire laborers are considered to be in the class of capitalists, whereas those who depend on self and household labor are considered as belonging to a traditional system of economic production. This tends to be misleading, since there are some small owners who hire wage labor and all produce for a cash market.

2. There is practically a unanimous tendency to look at rural people as landowners and non-landowners, and to consider income as solely the function of land ownership. Hence, most classifications of rural people have been in terms of access to the land. Rural society, as we shall see, is much more complex than is thereby assumed.

3. Only Abdel-Fadil draws attention to the fact that the balance of trade between urban areas and the countryside is a source of impoverishment of rural areas. Others tend to think more in terms of more equality in land ownership, which, if carried to its full potential, would give each rural person 0.3 feddans and reduce them all to poverty. This is not to overlook the desirability and relevance of additional measures to reduce the ceiling on land ownership further in Egypt. The point, however, is to underline the impracticality of introducing absolute equality in access to land in overpopulated Egypt.

4. Some observations may be made here in reference to Radwan's work.

In the first place, poverty is a question of degree, and in the case of Egypt it is essential to distinguish between basic and extreme poverty.

Secondly, determining the number of poor households on the basis of an average household of five persons may not reflect demographic reality in rural Egypt. Size of households in various income brackets differ and this fact makes all the difference in tallying the numbers of the lower income groups below the poverty line.

Thirdly, the figure of 5 feddans as the minimum unit of land whose production is equal to the cost of living should not be taken at its face value. Here again, the question of classification in terms of ownership tends to be misleading, since the production units are not necessarily owned by the cultivator. We suggest the terms "farm operator" and "owner" be clearly distinguished.

Fourth, Radwan cautions against taking expenditure figures too seriously, and he is right in this. They constitute a reasonable estimate, not accurate information. The reason is that in rural areas one is not dealing with a perfect market of consumer goods.

In view of the complexity of the subject and the imperfection of the state of the data, it may be useful in identifying the poor and various rural income groups to resort to more than one criterion. The plan of this study is to examine the question from a number of angles. First,

we shall start with the most standard approach, that of population and access to the land, and bring the picture up to date. In discussing land, we shall focus on farm operators, not owners alone. However, going by land figures alone is not enough to determine the picture, for the variations in land quality, management and yield lead to varying levels of income. Variations in productivity per feddan are known to have a range sometimes of up to 60 percent. Landowners may support a small or a large family, and they may have other sources of income. Moreover, a large proportion of rural people now involved in non-agricultural occupations has to be taken into account. This brings us to the second criterion, occupation.

An examination of manpower and the labor force in rural areas will enable us to determine, or at least to gain an idea of, various income streams as well as help in gaining an understanding of the social composition of the population. Those who are partially employed in agriculture or are not in agricultural occupations will be assessed in the context of this study.

Finally, we shall discuss the question of incomes of the various occupational groups as well as the income generated by access to the land.

II. THE RURAL POPULATION AND ACCESS TO LAND

The rural population of Egypt has been growing in absolute numbers though its share of the total population has been decreasing. The total population in 1976 was 38 millions; 20.5 of them live in rural areas and make up 54 percent of the population, leaving out the Sinai population and those not living in Egypt at the time the census was taken. This may be considered something of an underestimate of the rural population, since the census considers capitals of provinces and markazes as urban centers. The line between urban and rural population in Egypt should not, however, be drawn sharply, as we fail to see significant differences. The Delta region and Giza are in some ways sprawling suburbs of Cairo. In relation to urban population, the rural population suffered a slight decline from the year 1960, although in absolute terms the countryside increased by 4.5 million persons.

The rural exodus to the cities in Egypt has not been as dramatic as one sometimes is led to understand. The population of the four major cities has remained constant at 21.5 percent of the total population since 1960, and that of provincial towns (including capitals of markazes) rose from 15 to 18 percent by 1966 (no figure is yet available for 1976).¹ However, it is of some significance that provincial towns are growing now more rapidly

¹CAPMAS, Yearbook, 1976, Cairo, 1978.

than the major cities. The implication for rural communities of the growth of provincial towns is significant in terms of new opportunities and linkages with urban communities.

Population growth in Egypt has not been accompanied by expansion of the cultivation area, and the land-man ratio continues to be on the decline. The individual's share of land for the rural population has declined from an average of 0.4 feddans in 1960 to 0.3 in 1976. This situation may have already been aggravated further by the shrinkage of cultivated area as a result of urban expansion and salinity. In view of the limited area of agricultural land, it is important to look at other sources of revenue by examining the occupational structure of rural Egypt. Thus we shall discuss, in addition to land distribution, the labor force, to see what the employment opportunities are for the increasing rural population and how they affect incomes and living conditions. First, we shall look at the question of land and those who benefit by it.

The cultivated land in Egypt in 1975 was 5,983,600 feddans, which is equal to or a little less than the area under cultivation in 1960.¹ First, it is to be clearly stated that this land area is the major source of income for the majority of the 20 plus million rural people, but not for all of them. Since 1960, the estimate of the rural non-agricultural population has ranged between 20 and 23

¹The Agricultural Census of 1961 gives a total area of 6,222,839, which includes building grounds.

percent, while the agricultural population of urban areas is estimated at 10 percent. ^{of the total population} The rural people who did not obtain their income directly from agriculture in 1976 were then about 4,500,000. This leaves 16 million rural inhabitants who are directly supported by the land or by working on it for private individuals or public agencies. Since the ratio of those in non-agricultural occupations to those in agriculture has slightly changed in the last two decades, we can safely assume that the land was burdened by an additional population of 3,500,000 persons to feed. Thus our task in this study is to account for the sources of income and opportunities for this excess population, and the impact they have on rural incomes in general.

The first step is to ask how the land, which is the main source of wealth in the countryside, is distributed and what shares the rural inhabitants receive from its limited bounty. It is necessary at the outset to clear up the confusion created by inadequately presented official data, which often seem contradictory. The tendency of the Ministry of Agrarian Reform and CAPMAS to equate the number of owners with the number of agricultural plots is misleading. It happens, however, that in Egyptian agriculture, an owner or operator often has plots spatially separated from each other. Consequently, the number of owners listed in these official statistics is highly inflated and reaches over 3 million owners, the majority of whom are owners of less than 5 feddans. Fortunately, the

fourth and reliable Agricultural Census (henceforth AC) of 1961¹ has carefully considered this matter, and made sure that no owner is counted more than once. Their reckoning has been by operational units (hiyazat, pl.). A farm operator (ha'iz) has been defined in the AC as a person who exploits a farm as owner, tenant, or both, and is responsible for the farm managerially, financially and technically. This definition, moreover, includes owners of livestock, even if they do not own land. An operator may be an individual, a company, or a public agency.

Since the AC of 1961 is the most reliable and detailed source of information available on agriculture in Egypt, we can start with its results as a benchmark against which to compare data for later periods. The total number of operational units, hiyazat, in 1961 was 1,642,160. When this figure is broken down into ownership and tenancies, the number of pure owners shrinks to 623,170, while the number of farmers who rent land amounts to 523,826. Farmers who own land and rent additional farms come to 495,164 (Table 2). This is a far cry from the over 3 million owners figure presented for the year 1961 in the Annual Year book of 1976 and in previous ones. Not only do we have far fewer owners, but fewer farm operators as well. The difference is whether the average operational unit is 1.08 feddans, as the data in the Yearbook indicate, or 3.65 feddans, as the AC statistics show.¹ Among farm operators, those

¹The total area of land here is a rounded figure to 6 millions. This is a rough adjustment of the figure given in the census to account for land occupied by buildings and other facilities. It is still a little high, but the difference should not be of much significance.

Table 2

The Patterns of Landholdings 1961

Land Owned		Land Rented		Mixed Ownership and Rental		
Number of Owners	Area	Number of Tenants	Area	Number of Operators	Area Owned	Area Rented
623,170	2,664,549	523,826	1,213,924	495,164	1,087,728	1,256,636
37.9	42.8	31.9	19.5	30.2	17.5	20.19

Source: Ministry of Agriculture, Fourth Agricultural Census, 1961, Vol. I, Part I, Section 2, Table 5.

who rent land in addition to the farms they own have the larger estates, 4.7 feddans per capita on the average. The average farm size of owners who do not rent additional land is 4.3 feddans on the average, and that of purely rented farms is 2.3 feddans. Not only do pure tenants have smaller resources, but the total area of land under their control is small, amounting to one fifth of the total land area (Table 2). The average size farm they operate is just under the minimum required for subsistence.

Having considered the average farm size as it was in 1961, let us now look at the actual distribution. Table 3 shows that there were 434,219 farm operators who managed tiny farms of less than one feddan, that is, on the average, half a feddan per farmer. This group naturally constituted the poorest segment of the farming population and deserves to be called the near-landless. Most individuals in this category work as wage laborers or in other occupations in addition to farming. The evidence from survey results, however, shows that they are the group receiving the least income among the farming population. Farm operators who managed 1 to less than 3 feddans were 672,700 managing an area of 1,153,230 feddans, with an average farm size of 1.7 feddans. As we shall see later, 2-3 feddans is the minimum farm size necessary for providing subsistence to an agricultural family.¹ This applies to farms with traditional crops; for fruits and

¹This estimate differs from Radwan's, who adopts the figure of 5 feddans.

Table 3
Land Distribution by Size of Farm in 1961

	Less than 1	1 - 2	3 - 4	5 - 9	10 and over	Total
Holdings	434,219	672,705	274,317	170,019	90,900	1,642,160
Percent	26.44	41.00	16.70	10.35	5.53	100.00
Land Area (feddans)	211,155	1,153,230	990,029	1,100,669	2,767,749	6,222,839
Percent	3.4	18.53	16.00	17.68	44.48	100.00

Source: 1961 Agricultural Census.

vegetables the minimum could be less than one feddan. There are also variations in yield from one region to another, and sometimes within the same region, depending on the quality of land and proper care.

If, however, we assume the minimum farm size that supports a family to be 2-3 feddans, then in 1961 there were some 820,000 farms of less than 2 feddans in size which did not provide minimum income for their operators and their families. Were land holding the only source of income, then one could easily state that over a million farmers, comprising 67 percent of all farmers, were living below the poverty line in 1961. Moreover, nearly half a million farmers cultivated farms of less than one feddan and those would have to be added to the landless. This suggests that a very large proportion of the rural population were living in poverty. However, we shall see later, when we consider streams of revenue, the income of these groups is not determined solely by farm size.

The inequality in access to the land in 1961 is demonstrated by the fact that 67 percent of farm operators controlled only 23 percent of the cultivated area. The farmers who operated 3 to 10 feddans may be considered stable well-to-do farmers. They constituted 27 percent of all operators, and managed 34 percent of the cultivated area with 5 feddans as the average farm size. In 1961, those who operated 10 feddans and over were still the smallest number of operators, 5.5 percent, who held the largest area of land, 2,767,749 feddans, amounting to

45 percent of the total land area. This figure, however, should be slightly scaled down to account for non-individual operators, i.e., companies and private agencies. The government, Agrarian Reform Agency, and companies together held 274,240 feddans in 1961, almost all over 10 feddans. When adjusted for public and commercial lands, the average farm size in this category drops from 30.4 feddans to 27.4.

Developments in Land Distribution. What are the changes in the distribution of land that have occurred since 1961? Since that period, two new land reform laws were passed with the express purpose of lowering the ceiling on large estates, which by 1969 was set at 50 feddans per person, not to exceed 100 per family.

The land area actually distributed since that law was passed is still unknown and the data given in the Yearbook¹ of 1976 include reclaimed land, not only those sequestered, if any. The land distributed according to this source since 1969 is 57,033 feddans undifferentiated between reclaimed and sequestered. In all, the land actually distributed since 1953 according to the Yearbook also was 1,046,217 feddans. The Annual Bulletin of Cooperatives in the Agricultural Sector published by CAPMAS shows that the land area held by members of Agrarian Reform cooperatives in 1974 was 692,242 feddans, a figure very close to the one given by the Land Distribution Census

¹Based on the data in the Yearbook of 1976, p. 57, and is consistent with other figures given in different periods.

of 1976 made by the Ministry of Agriculture. If the total land distributed since 1953 was 1,046,217 feddans, then the land reclaimed and actually distributed to peasants comes to 354,000 feddans. The rest of the reclaimed land was run as state farms.

However, the total picture of land distribution in 1976 shows that more land has changed hands than these figures already cited seem to indicate. For instance, the area controlled by holders of 10 feddans or more has dropped from 2,767,749 feddans in 1961 to 1,091,192 feddans in 1976 (Table 4), a loss of 1,676,557 feddans. Moreover, of the ^{one} million feddans still under their control, some 106,000 feddans belong to public agencies and companies, almost all in 100 or more feddans plots. The explanation for this is that land has changed hands rapidly since the first land reform law. The government gave owners the right to sell land or have it taken over at a compensation rate determined by the government. Many large holders therefore preferred to sell land at easy terms to peasants. Moreover, every time the government reduced the ceiling, large landholders felt nervous and started selling. In addition, one should remember that inheritance has also had its effects during this period.

A third important point to be noted with regard to the 1976 land distribution data is that the total cultivated area is given as 5,983,668 feddans, a small decline from the cultivation area for 1961. These figures are quite instructive and serious, for they show that the

Table 4

Land Distribution by Size of Farm in 1975

Area in Feddans	Less than 1	1 - < 3	3 - < 4	5 - < 10	10 - < 50	> 50	Total
Farm Operators	1,124,286	1,100,147	354,841	146,459	65,059	131	2,852,923
Percent	39.4	40.67	12.44	5.2	2.28	0.004	100.0
Area	739,028	2,023,456	1,185,581	944,411	985,508	105,684	5,983,668
Percent	12.351	33.816	19.814	15.783	16.50	1.76	100.0

Source: The Arab Republic of Egypt, Ministry of Agriculture.

courageous efforts in the fifties and sixties made by the Egyptian government to expand the cultivation area have not measured up to expectations, and have been offset by other losses. First, the reclaimed lands have not been of the same quality as the old lands, and second, a great deal of the old lands have been lost to salinity, urban expansion and exploitation of soil as raw material for construction. The estimates sometimes given for the erosion of the land wealth of Egypt are consistent with the figures given above, all of which show a non-expanding cultivation area.

Before making a systematic comparison between the census of 1961 and that of 1976, let us determine the extent to which they are comparable. We have already stated that the Fourth Agricultural Census of 1961 was comprehensive and carefully conducted to reduce the degree of double counting of holders. It was based on counting the various plots in each markaz operated by the same person as one holding, hiazah. In 1976, the Ministry of Agriculture took a new Census by counting registered landholdings and operators in cooperative societies, agrarian and regular cooperatives. Since all farmers in Egypt had to operate through the cooperatives, all land holdings are actually registered there. No actual field work was done, and the Ministry of Agriculture officials call their census hasr, i.e., a count.¹ They have also followed the

¹Interview with the chief official in charge of conducting the census, February, 1979.

same procedure as in 1961 of counting the various holdings of each operator in a markaz as one holding of one operator. Thus the 1976 census has also avoided double and triple counting of plots and operators.

The data provided by this census are therefore comparable to the data of 1961. Both censuses, however, are subject to a small error, estimated by the Ministry of Agriculture at about roughly 4 percent.¹ This is due to the fact that an operator may hold a plot in another markaz than the one in which most of his plots are to be found. Adjustments would be difficult to make, since there is no way of telling in which size categories these other plots fall. One may, however, adjust the total number of operators to the 4 percent level.

Given a cultivation area of 5.9 million feddans in 1976, how does its distribution compare with that of 1961? The poorest farm operators who manage less than one feddan have shown the largest increase in number, actually more than double their original number (see Table 4). The area under their control now has also increased to 739,028 feddans or 12 percent of the cultivated area in comparison to 3 percent in 1961.

The second smallest group of land operators of 1 to less than 3 feddans have increased by 487,442 new farmers to reach a total of 1,160,147 farmers. They have increased the area under their control by 870,226 feddans, but the average farm size has remained constant for them at 1.7

¹Ibid.

feddans.¹ Together, the holders of less than 3 feddans control now 46.16 percent of the total cultivation area of 5,983,668 feddans. This constitutes an improvement over the 23 percent of fifteen years earlier, and attests to the relative success of agrarian reform policies in narrowing the gap between the rich and the poor farmers. However, those who operate farms^{or} less than 3 feddans in size are over 2 millions and theoretically obtain less than the minimum income necessary for subsistence from their plots. As for the strong group which holds 3 to less than 10 feddans, they have slightly increased their numbers by 58,964 farmers, and their acreage by 39,300 feddans only.

On the whole, the distributive effect, direct and indirect, of agrarian reform laws has resulted in reducing the average farm size from 3.65 feddans in 1961 to 2.1 feddans in 1976.

The smaller acreage of land has been moderately compensated for by the increase in the cropped area as a result of shifting to perennial irrigation in Upper Egypt, where 847,600 feddans have been converted from basin to perennial irrigation. The World Bank shows the increase to be from 9.1 million cropped feddans in 1947 to 10.8 million at present. The Bank's document adds that "each feddan is now expected to support 3.5 persons, compared to 2.1 in 1947" (p. 2). However, the latest figures from the Ministry of Agriculture show a total of 11,198,000

¹Actually there is a slight change to 1.74 feddans.

cropped feddans.

Another recent development in favor of improvement in rural income is the moderate shift to vegetable and fruit cultivation. In 1961, the area cultivated fruits and vegetables did not add up to more than 761,000 cropped feddans¹ or 7 percent of the cropped area.² In 1976, the area planted vegetables and fruit trees came to 1,290,000 feddans, 977,000 of it for vegetables only.³ This constitutes an increase of 529,000 cropped feddans. Based on aggregate data from the Ministry of Agriculture, a feddan of vegetables yields 251 pounds and of fruits 307 pounds, whereas traditional crops yield 101 pounds per feddan.⁴ Since a feddan of vegetables or fruits yields an income more than two times that of the same acreage of traditional crops, the effect on incomes should be considerable. However, it has traditionally been the case the operators of medium and large holdings grow vegetables and fruits, and thus far we have no data on the breakdown by size of farm. However, as expected, most vegetables are grown in provinces close to the urban market: Beheira, Giza, Qaliyubia, Sharkia, and Minufia.

¹The average cropped feddan is equal to 1.6 feddans.

²Abdel-Fadil makes an error of calculation when he states that vegetables and fruits occupied 2 percent only of the cropped area. He gives a figure for cropped area as 10,669,000 feddans, 761,000 of which planted fruit trees and vegetables. This makes 7.13 percent of the cropped area. See Abdel-Fadil, *op. cit.*, p. 34.

³Based on data from the Ministry of Agriculture, 1976. CAPMAS Yearbook comes close to this figure too, 1,244,000.

⁴We divided the total value of vegetables by the number of feddans planted vegetables and have done the same for fruits. As we shall see in Chapter IV, the figures for vegetables and fruits are underestimated.

The market value of fruits rose 2.6 times and vegetables 2.4 times between 1968 and 1975, whereas the market value of traditional crops rose by 1.8 times. Similarly, the market value of animal products - meat, eggs and milk - rose by more than two and a half times during that same period.¹

Land Rent. The pattern of landholding in Egypt consists of pure ownership, pure rent and mixed rent and ownership. Thus a farm operator, ha'iz, manages an operational unit, hiyazah, which falls under one of these three categories. Figures given in Abdel-Fadil show that the land under rent has been declining since 1952 from 56 percent of the cultivated area to 51 in 1962.² The data in the AC, however, show that the area under rent came to 40 percent only (see Table 2), half in pure rent and another half in mixed rent and ownership. Official data from the Ministry of Agriculture show that in 1974/75 the area rented was 42.4 percent of the cultivated area, a slight gain of 2.4 percent. Recent data do not list the mixed category separately, so we are not sure how that category has changed, if at all. However, on the basis of the 1961 data, most of the pure leasing is done by the holders of less than 10 feddans, while most of the mixed operational units are in the 5 to 50 feddan range. Small holders of less than 3 feddans rent more than one third the area they operate. Cash rent was given at 88 percent of the

¹Based on data from Ministry of Agriculture, Ma'had Buhuth al Iqtisad al Zira'i, Gross National Product of Agriculture (internal bulletin), Table 1.

leased area in 1961, but went down to 81.5 in 1974/75.

Agrarian reform laws protected tenants by fixing the rents and giving tenants security in their tenure. Thus rent on land was fixed in the agrarian reform law of 1952 at seven times the land tax, and this remained unchanged until recently. Land tax has been raised as of the beginning of 1979, and this automatically raises land rents. In addition, the agrarian reform law contributed to the security of tenure by making it illegal for an owner to break the tenant's lease. Recent legislation has tried to relax this measure to give the owner a chance ^{to} of modify or end the renting arrangement, but it is still very difficult to legally expel a tenant.

The average rent value per feddan in 1975, according to official sources of the Ministry of Agriculture, was 24 pounds. There is, however, a regional variation, with rates being highest in Lower Egypt, 25 pounds, followed by 24.4 for Middle Egypt and 22 in Upper Egypt. Informal observation indicates that the rates were a little higher, especially in vegetable-growing areas. The largest area under rent is in Middle Egypt, 51 percent of the land, with Fayum holding a record in low rent values. The least rented area is in Lower Egypt, 38 percent, followed by Upper Egypt with 46 percent.

It is not really clear to what extent the fixed rent law has been observed. Generally it is believed that violations were not remarkable, at least until recently. Some specialists considered that the official

rate was close to the market value of rent, up to the end of the sixties. Recently, however, with the rising prices of crops and conversion to vegetables, owners have felt deprived. Their protests against the rent rates have born partial results when the government raised the land tax and ipso facto rent rates. Considerable disputation has been noted by researchers between owners and tenants. Abd-el-Basit Abd al Mu'ty has found in a study carried out in 1967-70¹ in three villages in Beni Suef that the widespread disputes between owners and tenants revolve around (a) refusal of the owner to give the tenant a written contract and (b) failure of the tenant to pay debts in arrears. He has shown the order of importance to be the following: (a) failure of the tenants to pay debts on rent, 50 percent, (b) demand by tenants for a written contract, 21 percent, and (c) demand by owner to expel tenant, 21 percent. A tenant now, however, would risk court action and eventual eviction if he fails to pay the rent on time. Moreover, many owners now prefer to change the cash arrangements into sharecropping because of the high price of agricultural products.

Adequacy of Land Resources. How adequate is this land resource for supporting the rural population of Egypt? We may recall that the rural population in 1976 was 20.5 millions and the number of farm operators was 218 millions. Again, we should remember that 22 percent

¹Abd al Basit Abd al Mu'ty, Al Sira' al Tabaqi fi al Qariyah al Misriyah, Cairo, 1977.

of the rural population are in non-agricultural occupations, and this leaves out 16,000,000 persons in the rural areas supported by agriculture. We may use a number of assumptions to figure out how well the land held by these 2.8 million farmers supports the population.

First, we may assume that the land is equally distributed on all the people engaged in agriculture, that is, the 16 millions, in which case each single person's share of land would be 0.37 feddan. This would be less than is necessary for subsistence, and would give the average family of 5.5 members a little over 2 feddans. Should the subsistence level be determined at 0.5 feddan per capita, then the cultivation area of Egypt would support about 12,000,000 only, leaving out 4 millions without land of their own. In short, the cultivation area of present day Egypt is not sufficient for adequately supporting the subsistence of the agricultural population. Unless something happens such as dramatic expansion in the cultivation area, changes in the price structures or a technological revolution, the land of Egypt cannot absorb any more people and the newcomers have to find employment in non-agricultural vocations or emigrate.

If we look at the land as it is actually distributed, leaving aside the perfect equality model, then it becomes clear that the land has been supporting more people than it potentially could. This means that some people engaged in agriculture survive below the subsistence level. Let

us examine the distribution data (Table 4) and see whether the acreage held by small farmers (less than 3 feddans) is sufficient. Table 5 shows the difference between what the acreage in each holder's category could support if every individual needs 0.5 feddan for subsistence, and the number of people it actually is supporting, if the average family size is 5.5 persons. The results show that landholdings of less than 3 feddans are supporting many more people than they potentially could. On farms of less than 3 feddans, there is an excess population of 7 millions, whereas larger farms are providing for less than one third the number of people those farms could support at the subsistence level. In other words, the over 3 feddans farms are creating a large surplus above the subsistence level for their operators.

A second scenario would be to figure out the number of dependents and providers in the rural areas. A CAPMAS study¹ shows that in 1960, independent providers constituted 16 percent of the rural population (96 percent of whom were males). The partial providers, that is, those who earn part of their upkeep, constituted 12.5 percent (again, mostly males, 87 percent), while the completely dependent constituted 71 percent of the rural population. We have no comparable estimates for 1976. However, if we assume that the same proportions still hold, then we would have 3,280,000 providers among the 20.5 million

¹CAPMAS, Ziadat al Sukkan, p. 41.

Table 5

The Land Basis of Support According to the Actual Distribution in 1976

Individuals	Feddans					
	1	1 - 3	3 - 4	5 - 10	10 and over	Total
The number of people the land held can support at subsistence level	1,478,056	4,046,912	2,371,162	1,888,822	2,182,384	11,967,000
The number of people it actually supports	6,183,573	6,380,808	1,159,625	816,524	358,545	15,691,000
Difference	-4,705,517	-2,333,896	1,211,537	1,072,298	1,823,839	-3,724,000

Based on Table 4. Row one has been reached by multiplying the number of feddans by 0.5 and row 2 by multiplying the number of holders by 5.5.

rural population, and 2,665,000 who earn part of their living. The remaining 14,555,000 persons are dependents. If we also assume that the partially dependent account each for one third the income generated by the full provider, then we can add 888,333 full providers to raise the number of this category to 4,168,333 individuals who provide for the rest of the rural population. Since rural unemployment has been considered by censuses and surveys to be negligible (one percent or less), we can presume that each independent provider supports 3.5 persons other than himself. However, we still do not know at this stage the wages or revenues of independent providers and the extent of underemployment which is supposed to be widespread in rural areas.

It should be clear from the preceding that we have to go beyond analysis of access to land and discuss participation in the labor force. The main reasons are the following. First, there is a fairly large sector of the rural population (over 20 percent) not involved in agriculture. These are not landless in the sense of being very poor and having no other source of income. Second, some farmers, mainly the ones who cultivate very small plots of land, hire out their services as laborers or pursue non-agricultural part-time jobs. Third, many of the people working in the countryside, farmers and others, are supposed to be underemployed, and in order to determine the nature of underemployment and its extent it is necessary to analyze the labor force. Finally, the

incidence of a large number of wage laborers in agriculture makes it necessary to examine the labor force in rural areas and nationally.

III. THE RURAL LABOR FORCE

In the preceding section on land distribution, we noted that to understand the economic situation of rural people, one has to go beyond the examination of land and farm operators. In this section on the rural labor force, we shall try to supplement the picture by analysis of the labor force in order to show the kinds of employment available in rural areas and the labor outlets of the ever increasing rural population. We shall demonstrate that the structure of agricultural production has changed and this has increased employment on the land rather than decreased it. Hence, it will be shown that the number of those employed in agriculture and related activities is much greater than is given in official statistics. This finding will have important implications regarding the distribution of incomes in the countryside.

Introduction. Much of the confusion about labor force statistics in Egypt is due to the vague use of terms. It is therefore necessary to explain how some of the terms are used by Egyptian census takers. First, the term "manpower" is used to include all individuals, males and females, able to work, between the ages of 6 and 65 years. The term "labor force," on the other hand, is defined as that section of the manpower which is actively working or seeking work. Sometimes, the statistics use

the minimum age of 12 rather than 6, but that would usually be noted. It is also often easy to gloss over the difference between agricultural labor force and the rural labor force, which gives rise to a great deal of confusion.

Just as we have done in the analysis of landholdings, we shall take the 1961 and 1975 results as a benchmark against which to measure changes and trends. Insofar as the agricultural labor force is concerned, we have a very valuable source in the Agricultural Census of 1961 on which to base the analysis. For 1975, our main source will be the Labor Force Sample Survey carried out by CAPMAS and available in their publications.¹ The survey selected randomly 113 villages, or 3.5 percent of the villages of each province. The unit of analysis in each village was the residence, not the population at large.

Basing its results on data from the 1960 population census, the Institute of National Planning put the figure for the total manpower in Egypt at 15.8 millions,² and estimated the labor force to be 6,589,000, or 26 percent of the total population. This, the study notes, is below the level common in industrialized countries, where the labor force constitutes 30-40 percent of the population. The small number of females is probably responsible for this low figure in Egypt. The percentage has not changed, however. Recent studies show the labor force (aged 6 to over

¹The Labor Force by Sample: May 1975, Cairo, 1977.

²Ages 6 to over 65. Institute of National Planning, Manpower Planning in the United Arab Republic, Cairo, November, 1966.

65) in 1975 to be 10,080,¹ which again makes 26 percent of the population. Female participation was 7.5 percent of the labor force, way below that in other Third World countries.

Taking a look at the distribution of the labor force in urban and rural areas would contribute to our understanding of the conditions of agricultural laborers. It has been the assumption of national planners in Egypt that potential industrial growth would be sufficient to absorb what was viewed as surplus labor in the countryside, and this view has been the main justification for diversion of resources generated in rural areas to industry in urban centers. However, growth in industry, though more rapid than in agriculture, has not been sufficiently great to absorb many of the rural workers in the sixties. In a situation where demand for agricultural laborers was not rising and very limited absorptive capacity for labor was to be found in the industrial and services sector, work opportunities for rural laborers were extremely limited and wages remained depressed through the sixties and well into 1974. Indeed, the whole question of rural out-migration so often cited as grave in Third World countries may have been exaggerated in the case of Egypt. This country has not, comparatively speaking, experienced serious rates of rural to urban migration and much more of the migration that occurred went to provincial towns than usually is accounted for.

¹CAPMAS, Labor Force by Sample, 1975 (heretofore LFS), p. 26.

Urban-Rural Divisions. In terms of urban-rural divisions, the majority of the labor force is still found in the rural areas. The urban labor force constituted 34 percent only of the total labor force in 1960, and nearly 9 percent of the total population.¹ In 1975, it came to 43 percent of the total labor force and 10.3 percent of the total population.² Thus the rural labor force is still larger, 57 percent of the labor force. However, the ratio of rural to urban labor is declining, but not nearly as fast as official data in the Yearbook 1976 show (Table 6).

Table 6

Presumed Changes Over Time in the Distribution of
Agricultural and Non-Agricultural Labor

Year	Non-Agricultural (Percent of Total Labor Force)	Agricultural (Percent of Total Labor Force)
1959/60	46	54
1964/65	48	52
1969/70	51	49
1975	55	45

Source: Rows 1 and 2 are based on data in CAPMAS, Ziadat al Sukkan, Table 81, p. 185. Rows 3 and 4 are based on data in CAPMAS, Yearbook, 1976, p. 216.

According to this source, non-agricultural labor rose from 48 percent in 1964/65 to 55 percent in 1975 (Table 6).

¹See Institute of National Planning, Manpower Planning in the United Arab Republic, Cairo, November, 1966, Table 2, Appendix I.

²Based on CAPMAS, Labor Force by Sample, 1975, p. 41.

However, the increase in absolute numbers over this period is not that great. It changed from 3,553,400 in 1964/65 to 5,212,400 in 1975, an increase of 1,659,000 over a ten-year period, or at the rate of 165,900 annually. Such an increase in the employment situation of all sectors of the economy except agriculture does not suggest a rapid growth. The reason the percentage shows a rapid growth in off-farm labor is due to the low estimate of the agricultural labor force. It was given as 4,048,300 in 1969/70, and as 4,217,900 in 1975, an increase of 169,600 in five years. Not only is this unrealistic, but the number of the total agricultural labor force in this source is grossly underestimated. Later, we shall show why this is the case. Suffice it here to say that agriculture, according to the LFS, still employs more than all other sectors combined.

The labor market in general did not show a marked increase in the number of jobs until 1975, when the figure for the total number of workers aged 12 - over 65 reached 9,430,300.¹ Small as it was, the growth in the non-agricultural sectors was not in industry but in construction plus finance and commerce. Between 1973 and 1975, the construction sector added 145,000 new jobs, the

¹CAPMAS, Yearbook, 1976, p. 216. The Labor Force Survey conducted also by CAPMAS shows a slightly smaller figure for the labor force of that year, 9,264,100, or a difference of 166,200. The Yearbook figure, we are informed, is based on the latest estimates of national planning, whereas the LFS is the result of a sample survey. Later on we shall use the LFS figure for consistency, since this data source is more detailed, and we shall base much of the analysis on it. It will also be noticed that both figures are smaller than the one listed earlier on page 41. This is due to the different age bracket included, not the result of error.

single largest increase in any sector. This spurt in construction followed a short period of decline from 1970 to 1973. Although no figures are available for 1978, all indications point to a continued growth in the construction sector. Commerce and finance created during the same period 102,100 jobs, while industry generated only 63,000 new jobs.¹

The increasing demand for construction workers in Egypt and oil-rich countries has left its impact on the labor force in rural areas in what has become known as a shortage of agricultural workers and inflated wages. In addition to the large demand generated within Egypt, a large number of Egyptian workers have been seeking work in oil-rich Arab countries. Figures regarding the size of the labor force abroad vary considerably and even less is said about its composition. In 1969, CAPMAS reported 13 percent of Egyptians working abroad had no educational qualifications.² However, there must be many more in this category since construction workers have been in demand by oil-rich countries.

The largest figure given for the number of Egyptians working abroad comes from the 1976 census, which shows a figure of 1,425,000 persons who live abroad without dependents, and should include students. One study group has concluded³ that the number of Egyptians working abroad in

¹Yearbook, p. 216.

²CAPMAS, Mu'ashirat al Tharwat al Bashariyah, 1970.

³International Migration Project, University of Durham, "Arab Republic of Egypt," co-editors and principal researchers J.S. Birks and C.A. Sinclair, March 1978 (mimeo.), p. 40.

1976 was 637,430 and that those in Arab countries come to 430,158. This is, of course, smaller than the 1976 Census figure - and it is not possible to reconcile in this context. The latter figure on Arab states is based on data from the host countries. The largest number of Egyptians are in Libya, Saudi Arabia and Kuwait. Though little is known about the origin and composition of the emigrant labor force, the data available show a high level of qualification. For instance, data from Kuwait indicate that only 23 percent of Egyptian workers in Kuwait are illiterate. This compares with 56 percent of the total Egyptian population at home.¹

In summary, the national picture regarding the growth of labor opportunities in the last fifteen years does not seem encouraging. The figures show low growth, with the productive sectors growing at a lower pace than services. Official aspirations that the development strategy adopted in the fifties is bound to absorb growing labor surplus from the countryside did not materialize. As we shall see later in this chapter, agriculture in Egypt may have reached the limit of its capacity to absorb new workers and other outlets would have to be found.

The Rural Labor Force

Not all of the rural labor force in Egypt is engaged in agriculture. In 1960, the non-agricultural labor force

¹Ibid., p. 46.

constituted 20.7 percent of the rural labor force, while agriculture accounted for about 80 percent.¹ Farming as an activity accounted for 78 percent. (The difference is explained by the fact that some agricultural work requires employment of people in skills other than farming.) Of the non-agricultural occupations, services and commerce accounted for 50 percent, while other activities such as manufacturing, construction, and government employment made up the rest.

These statistics should be clear: in 1960, non-agricultural activities occupied 21 percent of the rural labor force, while agricultural activities in urban areas accounted for 10 percent of the urban labor force. The relatively high figure of agricultural occupations in urban areas may be explained by the fact that capitals of provinces and markazes have been considered urban centers in the 1960 Population Census. The largest proportion of agriculturalists in urban areas are to be found in the following provinces: Kafr al Shaykh, Qena, Beni Suef, Minufiya, Sohag, Aslut, Fayum, and Minia, in the order listed.

Distribution According to Economic Sector. There has been a moderate change in this picture since 1960 in favor of the non-agricultural population in rural areas. By 1975 the share of the off-farm workers in the rural labor force came to 23 percent, while 77 percent were in agriculture. Those who are occupied in farming only came

¹INP, Manpower, see Table 3.

to 76 percent.¹ The total number of non-agriculturalists in the rural labor force came to 1,218,000. The distribution of this non-agricultural group across various economic sectors is very much like that in 1960, with one major difference: the number of persons occupied in manufacturing and energy increased markedly to 21.5 percent of the off-farm labor force in rural areas and ranked second to services only after having occupied fourth rank in 1960. This increase, however, stopped in 1970, and manufacturing lost a few jobs (see below).

It may be instructive to compare the various rural groups in the non-agricultural labor force in two periods: 1970 and then 1975 (see Table 7).² It will be noted that manufacturing lost the spurt of growth it enjoyed in the sixties; in net figures it lost 13,000 jobs. In absolute numbers, services registered the greatest growth in employment, increasing by some 51,900 jobs. This is partly because finance and insurance were added to this category. In all, it represents 13.5 percent growth over the 1970 figure. The most rapid growth since 1970 has been in the construction sector, which added over 26,000 jobs in five years, a growth of nearly 40 percent. Thus

¹These figures do not include workers under 12 years of age, but this should not make much difference since the number of wage laborers in the lowest age group is very small.

²The comparison cannot really be very exact because the 1970 data breakdown does not have a category of "unknown" as does the 1975 data.

Table 7

Non-Agricultural Labor Force in Rural Areas According to Economic Sector

Year	Manufacturing and Energy	Construction	Trade	Services	Transport	Unknown	Total
<u>1970</u>							
Number	275,200	41,000	229,000	384,000	106,000	--	1,035,200
Percent	25.26	3.85	21.52	36.09	10.9	--	100
<u>1975</u>							
Number	262,200	67,600	225,300	435,900	105,300	63,500	1,159,800
Percent	22.60	5.82	19.42	37.58	9.08	5.47	100
<u>Difference</u>	-13,000	+26,600	-3,700	+51,900	-700	63,500	124,600

Source: CAPMAS, Bahth al 'Amalah bi al 'Aynah May 1975, August 1977, and CAPMAS, Mu'ashirat al Tharwah al Bashariyat, 1970.

the increase in demand for construction workers has been experienced in urban as well as rural areas, and has made its contribution to the resulting shortage in agricultural labor.

In terms of occupations of the off-farm population in 1975, one finds a preponderance of laborers, professionals, clerks and people in the services sector (Table 8). By far the largest group is laborers who constitute 38 percent of the non-agriculturalist labor force. They are followed by individuals in the services sector, 23 percent. The large categories of administrators and executives, clerks and servicemen reflect the heavy government investment in welfare and management of agricultural production in the last two decades. People in commerce continue to constitute a large segment of the working non-agricultural population, despite restrictions on trade in the sixties. However, it is to be remembered that a large number of those in trade are small peddlers, not middle or large scale entrepreneurs.

The Number of Agricultural Workers. When it comes to determining the number of workers in agriculture, official figures tend to be biased downward. Not all those who work in agriculture are considered by census takers as part of the labor force. Left out are unpaid family workers, mostly children and females. Commenting on the census of 1960, the Institute of National Planning study of rural employment pointed out that the "counters of the Census did not receive complete information about the

Table 8

Distribution of Working Non-Agriculturalists According to Occupation, 1975

	Professionals	Managers and Executives	Clerks	Trades	Services	Workers*	Unknown	Total
Number	120,600	19,200	94,600	181,900	277,200	464,500	60,400	1,223,400
Percent	9.85	1.57	7.73	15.27	22.65	37.96	4.93	100
Permanently Employed	93.6	81.2	95.4	91.0	96.21	82.0	8.6	--

Source: Based on CAPMAS, The Labor Force by Sample, May 1975.

*Workers in manufacturing and transport.

-64-

participation of female household members in productive work."¹ The census also overestimates the number of employers because it was taken during a peak season. The problems of the 1960 census are complicated further by varying readings made by different users.

In any case, there seems to be agreement among some readers that the agricultural labor force ranges between 4,339,000 and 4,406,000 in the period between 1960 and 1970.² In CAPMAS there is a belief that the overall agricultural labor force is declining in numbers, and the figure given for 1975 is 4,217,900.³ This is below the figures just cited for the sixties. Indeed, the CAPMAS figures for the years 1969-1975⁴ are consistently below those we have for the year 1960. On the other hand, the World Bank Report on the Egyptian economy maintains that the agricultural labor force has been growing at one percent per annum.⁵ In all these figures, it should be clear, unpaid family labor is excluded, female workers are not fully counted, and casual labor figures have a wide margin of error. Beginning in the seventies, CAPMAS started to count unpaid family workers, and the LFS shows a rural labor force consisting of 5,302,100 (Table 8) for the year 1975. Even this figure, as we shall see, is an underestimate, It is clear, however,

¹INP, Research Report on Employment Problems in Rural Areas, Utilization of Manpower, August 1966, p. 39, heretofore, RREP.

²INP, Manpower Planning, Table 2, and Amr Mohie-Eldin, "Underemployment in Egyptian Agriculture," in ILO/ECWA, Manpower and Employment in Arab Countries: Some Critical Issues, Geneva: 1975.

³CAPMAS, Yearbook 1976, p. 216. This varies with LFS widely, because CAPMAS started to count unpaid family workers.

⁴Ibid. ⁵World Bank Report, p. 23

that the survey shows nearly a million workers more than the preceding estimates, and is accounted for by counting unpaid family workers. In the following section on different types of agricultural workers, we shall show the extent of low estimates.

Types of Agricultural Workers. In view of the fact that the 1961 Agricultural Census is the most comprehensive and reliable information source, we shall be guided by its results as we proceed to discuss recent data. The census takes account of all those who work in agriculture: holders who work on their own farms, unpaid family workers, permanent wage laborers and casual laborers. Table 9 shows the breakdown of the labor force according to these categories.

Unpaid Family Workers. It is obvious from these data that many more people are involved in agricultural work than are usually accounted for. The factor that makes the single most difference in the statistics has been that of unpaid family workers. These are usually left out, although according to the most reliable census they constituted 38 percent of the labor force in 1961 (Table 10). More recently, studies of the labor force by sample conducted by CAPMAS have taken note of unpaid family workers. The figure given by CAPMAS in the sample survey for 1971 is 1,463,600, or 29 percent of the rural labor force of 5,045,600.¹ The figure is far below the number of unpaid

¹CAPMAS, Population (Arabic), No. 10, January 1975, Tables 1 and 4.

Table 9

1975 Distribution of the Rural Labor Force (Ages 12-64)

	Wage Laborer	Self-Employed and Does Not Hire Labor	Self-Employed and Hires Labor	Unpaid Family Workers	Unemployed
No.	1,856,000	926,600	1,039,400	1,421,200	58,900
Percent	35.0	17.5	19.6	26.8	1.1

Total: 5,302,100

Source: Based on CAPMAS, Labor Force by Sample, May 1975, p. 41.

Table 10

The Agricultural Labor Force by Status of Workers 1961

	Farm Operators Working On Own Farms	Unpaid Family Workers	Permanent Wage Laborers	Casual Laborers	Total
Number	1,611,609	2,546,490	599,669	1,850,514	6,608,282
Percent	24.40	38.53	9.07	28.00	100

Source: The Fourth Agricultural Census, 1961, Vol. I, Part IV, Table 58 (in Arabic).

family workers given for 1961 (see Table 10). This may be partly because the LFS does not include child labor of ages 6 to 12, and leaves out those who work less than one-third full-time load. We cannot tell how many were considered to be working less than one-third time and were left out, but we can make adjustments to include child labor and to exclude non-agricultural workers. Since we know by that period the non-agricultural labor force in rural areas was not less than 22 percent of the rural labor force, the agricultural labor force of 1971 should come by this reckoning to 3,935,568. This means that unpaid family workers made up 37 percent of the agricultural labor force. When 346,900¹ child workers in the age bracket 6 to 12 are added, the total agricultural labor force would reach 4,282,400, and the percentage of unpaid family workers goes up to 42 percent. Since most child labor is to be found on family farms, it would be reasonable to include them all in the agricultural labor force. However, assuming that a small number of them, amounting to 10 percent, do not work in agriculture, unpaid family workers would still amount to 41.5 percent. This high figure, without commenting on its precision, is consistent with findings which we shall discuss later in this section to the effect that the numbers of unpaid family workers have risen considerably over the 1961 levels.

The question, however, is how long a time do these

¹ Figure is drawn from CAPMAS, Labor Force by Sample, May 1975, Table 1, p. 17.

family workers spend in agricultural activities. They may constitute one third the labor force in size, but not in manhours. Here again, opinions differ on the subject, and the difference ranges from estimates of 10 percent of the manhours put in by regular workers to estimates of 50 percent for children and 33 percent for women.¹ What makes this issue difficult to resolve is that many women and children work in agriculture-related activities at home, such as taking care of the farm animals and processing farm products. These activities consume long hours, and are often not included by census takers as farm labor, especially in the case of unpaid family members. To appreciate the magnitude of this kind of activity, it may be useful to consider the manhours spent in each type of activity according to INP data presented by Hansen (Table 11).

Table 11 shows that family members of farming households spend long hours working in farm and farm-related activities, a fact that supports the large figure shown by the AC. The incidence of a large proportion of unpaid family workers makes it difficult to understand economic conditions of rural population on the basis of wages alone. It may be observed in passing that not all persons in unpaid family service are available for full time work in the labor force, and secondly, the number of work hours for this group may be underestimated. Family members are engaged in year-round activities attending to

¹B. Hansen, "Employment and Wages in Rural Egypt," American Economic Review, June, 1969, p. 300.

Table 11

Average Annual Working Hours According to Sex-Age Groups,
Types of Households, and Types of Work

Type of Household	Sex-Age Group	Number of Hours Worked Annually	Percent of Annual Work Time Spent On:				
			Field Work	Animal Husbandry	Processing farm Products	Other Agricultural Work	Nonagricultural Work
Farmers	Men	2,280	53	21	3	13	10
	Women	869	19	63	11	3	4
	Children	1,022	49	39	3	5	4
	Total	1,642	48	30	4	10	8
Farm Laborers	Men	2,324	58	13	3	11	15
	Women	904	31	35	4	8	22
	Children	1,374	55	23	2	7	13
	Total	1,716	53	15	3	10	16
Others (non agricultural)	Men	2,482	8	4	3	3	82
	Women	697	14	29	6	2	49
	Children	1,087	25	26	2	1	46
	Total	1,738	11	10	3	2	74

Source: Hansen, "Employment and Wages in Rural Egypt," American Economic Review, June 1969, p. 300.

livestock, poultry, bees and processing farm by-products, and they earn considerable income in this way.

Permanent Wage Labor. The other striking datum in the AC tally of the labor force in agriculture of 1961 is the small proportion of permanent wage laborers, 599,700, or 9 percent of the total agricultural labor force. In 1975, the Ministry of Planning count of permanent agricultural laborers showed that they were still 9 percent.

The Labor Force Sample Survey of 1975 shows that the total number of rural wage laborers was 1,856,000¹ of whom female workers made a very small minority of 4.3, another underestimate. Of these workers, those with permanent status as wage earners came to 1,292,900, or 69.6 percent of all wage laborers. Since this includes off-farm workers, estimated in this study at 23 percent, permanent agricultural wage laborers should come to 995,533. The rest of wage laborers, 563,100, are classified as temporary, seasonal, short of full-time, and unknown.² Unfortunately, no definitions of these terms are provided to allow us to determine precisely what they mean.

Permanent wage laborers in agriculture, according to the LFS data, have increased from 599,700 in 1961 to 995,500 in 1975, a difference of 395,800. While the increase in absolute numbers is not great, in percentage it has doubled, from 9 to 18.7 percent. The explanation

should be sought in the fact that the agricultural labor force has grown to 5,320,000.

lies in the fact that the LFS figures of 1975 greatly underestimate the number of casual laborers and the number of unpaid family workers. This has the effect of inflating the percentage for permanent wage laborers. Thus, we believe that the proportion of permanent wage earners in the agricultural labor force has not changed very much from what it was in 1961.

Casual Workers. Casual laborers are the second largest group of agricultural workers, according to the AC. They amount to 1,850,000 laborers, and 28 percent of the agricultural labor force (Table 10). The Census defines them as workers employed part-time only during the year and hired seasonally on farms and in public works or for specific farm work such as combatting the cotton worm, planting rice, harvesting, etc. They consist of children, mostly 6-12, adult females, the near-landless and the landless individuals who have nothing other than their labor to sell. Many of them work in places other than their own communities, all or part of the time, and are known as migrant workers (tarahil). Not all casual workers are among the very poor, because for some of the people in this category work as a seasonal laborer is a supplementary activity, not the primary source of income. For men, it is a secondary activity, and most women and children take it up to supplement family income. The size of these subcategories may be gleaned from figures given for women and children in the wage labor market. Table 12 shows that in 1961 there were some 104,000 adult

female workers over 18 years of age, or 6 percent of casual laborers; while girls and boys under 18 years constituted 67 percent. This leaves 27 percent of the casual laborers as adult men 18 years of age or over; in other words, 506,200 workers. Considering that there were then 434,200 farmers who were near landless and therefore mostly available for seasonal work, the total number available is over 900,000 casual workers. Migrant workers (tarahil), no doubt, constituted a large proportion of the casual laborers who have nothing to offer but their work. Tarahil were estimated at 200,000 in 1964.¹

Unfortunately, we do not have an accurate estimate of casual workers in agriculture for 1975. The Labor Force Sample Survey gives a grossly underestimated figure of 516,300, probably because it is a survey not a census. The LFS, it may be recalled, was based on residential units, and thus should have missed most migrant workers. The number given, at any rate, is 1,334,214 workers below the figure given for 1961 (cf. Table 10) in the Fourth Agricultural Census. We know of no revolution in agriculture that could have caused such a sudden drop.

In short, the number of workers engaged in agriculture in 1975 could be over 2 million workers short of the real figure. The serious underestimates are in unpaid family workers and casual laborers.

¹See Atiyah al Sayrafi, who quotes official Trade Union figures in 'Ummal al Tarahil', Cairo, 1975, p. 79.

Table 12

Wage Laborers According to Age and Sex, 1961

		Permanent Wage Laborers			Casual Wage Laborers		
		6 - 12	12 - 18	18	6 - 12	12 - 18	18
M		112,410	139,108	262,919	368,880	406,111	506,208
F		35,141	31,952	18,139	250,005	215,374	103,936
		Total Permanent Laborers			Total Casual Laborers		
M		514,437			1,281,119		
F		85,232			569,315		

Source: The Fourth Agricultural Census of 1961.

Labor Growth and Underemployment

In an interesting article on underemployment in agriculture, Mohie-Eldin maintains that the labor force in agriculture has remained constant from the period going back to 1937 and up to 1970.¹ But since the rural population has been growing rapidly, an employment crisis may be suggested by these findings. For instance, the rural population rose from 11,950,000 in 1937 to 20,560,000 in 1975, and, as we have noted earlier, by nearly 4.5 million since 1960. While this is less rapid population growth than in the cities, it is still considerable in view of the limited expansion in rural resources. As for the non-agricultural sector of rural areas, it seems to have kept pace with the changing situation, increasing to 23 percent since 1960.

These results, of course, suggest a deteriorating economic situation and increasing poverty among rural people. It seems curious, however, to have to conclude that the momentous changes in agriculture since 1952, such as in irrigation, land distribution, horizontal expansion, modernization and changes in agricultural management have not generated new job opportunities. For one should remember that converting land in Upper Egypt to perennial irrigation has increased the cropping acreage by some 847,600 feddans, and we have to assume that this was accompanied by an increase in the labor demand. In

¹ Mohie-Eldin, "Underemployment," op. cit.

addition, national involvement in the management of agriculture since 1952 has provided the non-agricultural sector with scores of thousands of officials, agronomists, clerks, and professionals who became employed in rural areas. Horizontal expansion of the cultivated area has not added more than 500,000 feddans of productive value, and has failed to live up to its promise of absorbing significant numbers of the rural population. After the initial stage of absorbing a large number of workers in reclamation works, the demand has declined, and the number of feddans supporting new families has been meager.

Can we conclude from this that underemployment and/or unemployment have increased since 1960 due to the rise in the absolute number of rural population and the limited growth of labor demand in rural areas? First, we ought to take account of demand for rural labor outside the rural areas; and second, examine the employment and unemployment situation. We shall start with the latter question and make our base of analysis the 1961 census as a benchmark with which to compare later results.

Open unemployment in rural Egypt has never been considered high. The highest figure, according to official statistics, was 3.0 percent in 1963, but then it dropped suddenly to 0.4 in 1964 and stayed low, a negligible 0.1 in 1971.¹ According to the study of the labor force by sample made by CAPMAS, open unemployment

¹Institute of National Planning, "Open Unemployment in the Egyptian Economy," by Amr Mohie-Eldin, Memo No. 1184, January 1977.

was 0.6 in 1971, and 1.1 percent of the rural labor force in 1975.¹ Whatever the case may be, it is clear that open unemployment is low in rural Egypt, though disguised unemployment which no one seems to assess could raise this figure.

Underemployment. As for underemployment, Mohie-Eldin has made the most developed argument. He maintains that the "agricultural sector is divided...into two subsectors that exist together--a family farm sector and a capitalist farm sector." He adds that the family farm sector in agriculture has to absorb the superfluous labor" that does not find employment opportunities outside agriculture or in the capitalist agricultural sector.² He points out in support of this argument that farms below 5 feddans absorb 73 percent of the agricultural labor force, occupy 38 percent of the agricultural labor force, occupy 38 percent of the cultivated area, and constitute 84 percent of the holdings. Since rural open unemployment was not more than 1 percent in the sixties, he concludes that there was underemployment in the agricultural sector. He cautions, however, that underemployment in rural Egypt applies to the small family farm sector, not to all farms.

It seems, however, that Mohie-Eldin has exaggerated the extent of underemployment on small farms (below five feddans). This may be due to the small figure of the agricultural labor force which he uses as the basis of his calculations. In his Table 2, he establishes the number

¹Based on CAPMAS, Labor Force by Sample, 1975, p. 41.

²Mohie-Eldin, ibid.

³Ibid., p. 116.

of the agricultural labor force for the years 1960 and 1970 to be 4,406,000 and 4,464,000 respectively, whereas the figure he uses to establish the density of the labor force on the land is 3,839,900. The data he uses to analyze labor density supposedly come from the Agricultural Census of 1961, which gives a figure of 6,600,000 agricultural labor force, including unpaid family workers. Leaving out the latter group, the figure is 4,061,792, still higher than the one Mohie-Eldin adopts. This factor makes quite a difference in the results of his analysis, and affects his conclusions. For instance, when the total agricultural labor figure is taken into account, workers on farms of less than 5 feddans turn out to constitute 64.5 percent of the agricultural labor force, not 73 percent. Moreover, Mohie-Eldin overlooks the fact that about 200,000 feddans listed in the census as holdings of over 20 feddans are publicly owned, not managed by individual farmers, and therefore not subject to the same treatment as capitalist farms.

By using the data from the 1961 Census for analysis of labor density on the land, we reach the following conclusions. First, it is clear that the density of workers in general per feddan on small farms is higher than on large estates, but nowhere near as high as in Mohie-Eldin's conclusions. It comes to 1.81 for farms under 5 feddans, and constitutes 4.5 times the density on the largest estates (Table 13). This compares with 11 times in Mohie-Eldin's analysis. It is important further to note

Table 13

Density of the Labor Force by Size of Farm, 1961

Size of Farm	Workers/Feddan	Feddans/Worker
< 2	2.70	0.37
2 - < 5	1.42	0.70
5 - < 20	0.84	1.20
≥ 20	0.40	2.52

Source: Based on data in the Fourth Agricultural Census.

that the greatest labor density is to be found in the very small farms of less than 2 feddans, not in the 2 to less than 5 ones. On the less than 2 feddan farms, density comes to 2.70 workers per feddan, and is 6.75 times what it is in the largest estates (less if we leave out publicly operated lands). The larger farms of 2 to 5 feddans have a density of 1.42 workers per feddan, or 3.5 times the density in the largest estate.

Mohie-Eldin argues that the burden of absorbing superfluous labor falls on the small farmers, that is, operators of less than 5 feddans. Our calculations show that it is the operators of less than 2 feddans that bear the brunt of the employment burden and to a lesser extent the operators of 2 to 5 feddans. As we have already seen, intensity on the 2 to 5 feddan farms is not sufficiently high.

Further examination, moreover, reveals that the less than one feddan farms are almost entirely (90 percent) cultivated by the head of the household and his family members (Table 14). This means that every household head has about

two other members of his family helping him, 66 percent of them are males and females under 18 years of age. Adult males and females who could be independently working on their own come to 118,225.

Table 14

The Distribution Ratio of Workers on Each Size Farm, 1961

Farm Size	Farm Operators	Unpaid Family Workers	Permanent Wage Laborers	Casual Laborers	Total
< 1	50.18	40.36	1.95	7.49	100
1 - 2	35.15	46.16	3.23	15.45	100
2 - 5	24.00	44.00	6.00	26.00	100
5 - 20	14.28	36.32	14.00	35.40	100
≥ 20	4.10	11.10	26.28	58.51	100

Source: Based on data in the Fourth Agricultural Census.

While small farmers of less than 5 feddans increasingly employ their family members, larger farmers employ increasingly more permanent and casual labor (see Tables 14 and 15). Indeed, the operators of less than 2 feddan farms employ hardly any permanent wage laborers. As the table clearly shows, the smaller the farm size the greater the percentage of family workers and the smaller the hired labor and vice versa. Farm operators of less than 2 feddans and members of their families constitute 85 percent of the labor. Other workers on these small farms constitute 15 percent; 3 permanent and 12 casual and temporary workers. However, since family labor in the fields is generally

Table 15

Distribution of the Agricultural Labor Force
by Type of Worker and Farm Size, 1961

Size of Farm (Feddans)	Farm Operators Working On Own Farm	Unpaid Family Workers	Permanent Wage Laborers	Casual Laborers	Total
< 2	809,910	844,421	51,621	231,079	1,937,031
2 - 45	547,331	1,000,323	126,664	602,431	2,276,749
5 - 20	221,519	563,443	217,277	549,219	1,551,458
≥ 20	32,849	88,785	210,116	467,785	799,535
Total	1,611,609	2,546,490	599,669	1,850,514	6,608,282
Percent	24.38	38.53	9.07	28.00	100

Source: Fourth Agricultural Census of 1961.

considered not to exceed one third the time spent by regular wage workers, the estimate of the density of labor on smaller farms should be a little less than we have already stated.

We may, therefore, conclude that small cultivators are engaged in cash-saving techniques through the use of occasional labor made up of family members, especially during peak seasons. It may well be an academic question whether this form of production is capitalistic or household. It is more important to remember that all Egyptian farmers, the very small and the very large, produce cash crops mostly for a cash market tied to national and international trade. A small portion only of unpaid family workers are available for the wage labor market, since they are mostly children of both sexes and their services in the fields are required only during peak seasons. The participation of women in field work is not likely to increase unless the countryside becomes impoverished. Peasants protect their women and seclude them as they move up the socioeconomic ladder.

The two sub-sector theory of the agricultural economy seems not to be applicable or significant in Egypt. There may well be underemployment in agriculture, and more of it in the smaller farms in view of the greater density of workers. However, as we have noted, the labor density on the small farms is not constituted of wage laborers but family workers, the majority of whom are not available for the wage labor market.

The second conclusion is that when unpaid family and casual laborers are accounted for, it becomes clear that agricultural labor is more intensive than has been shown by Mohie-Eldin. Labor intensity, however, has not been marked by extremes on the top and lower levels (see Table 13), and therefore the gap is not wide enough to justify a two sub-sector theory in agriculture, one with excessive underemployment and another labor saving.

The third conclusion is that agricultural labor has indeed increased in numbers and not remained constant. To show this, we shall consider various developments in agriculture in the light of points already established in this report.

The detailed information provided by the Agricultural Census of 1961 is not matched in any way by recent data made available by official sources. The data for the contemporary period are more general, and do not allow us to make parallel comparisons. However, the detailed account in our possession for land distribution in 1976 (Table 4), plus our findings on labor intensity per feddan, will enable us to reach a conclusion regarding the number of workers on the land and ipso facto the growth in the agricultural labor force.

Fragmentation of Land and Labor Demand. The major finding in the latest figures on land distribution in Egypt is the increase in the number of small farm holdings of less than 5 feddans, and the expansion of the land area under their control. While the number of small farm operators holding less than 5 feddans was 1,381,241 it rose to 2,637,270 in 1976, an

increase of 1,258,033 small holdings. This was matched by an increase in the cultivated area under their control to 3,948,000 feddans, an increase of 1,593,600 feddans. Particularly important to note is that most labor intensive farms of 1 to less than 3 feddans increased by an additional 487,400 new holdings. The greatest increase, however, has been registered in the smallest farms of less than 1 feddan, which more than doubled in number. They increased from 434,200 to 1,124,286 and the area they occupied expanded from 211,155 to 739,000 feddans.

The distributive trend in landholdings since 1961 can be explained by the following factors: first, two laws were passed successively reducing the ceiling on land holdings to 50 feddans. Statistically, we know that nearly 700,000 feddans had been distributed by 1975. Also to be noted is the fact that the large area occupied by estates over 10 feddans has increased by 1,676,500 since 1961. In the second place, it has generally been the tendency among large landowners in Egypt to sell land on easy terms subsequent to passage of land distribution laws in fear of further action by the government. Third, inheritance laws in Egypt contribute to fragmentation, and in the 15 years between the two censuses, much land could have passed to heirs.

We can assume, on the basis of the foregoing, that there has been a considerable increase in the number of small holdings since 1961. The major implication of

this finding for our labor figures is that more farm labor, not less, will be engaged in agricultural activities in 1978 than in 1961, despite the constancy in the agricultural labor force shown in official statistics. We noted earlier that small farms of less than 5 feddans are more labor intensive than larger ones, and with the increase in the number of holdings of this size, we expect the labor force on these farms to be much larger than it was in 1961. It may be recalled that the density of labor per feddan on the less than 5 feddan farms was 4.5 times what it was on the largest one of over 20 feddans, and this should mean that the increase in the number of workers has gone up considerably since 1961. If every feddan of land that was lost to the larger estates has now only two more workers employed on it, then about as many as 3.4 million casual workers have been added to the agricultural labor force.

However, the kind of worker that has joined the labor force during this transformation is not so much the permanent worker, but mostly the unpaid family worker and the farm operator managing his own farm. Small operators (of less than 3 feddans) have increased by 1,177,500 farmers. Among farmers, these are the least likely to hire permanent wage laborers. In 1961, farmers in this category hired only 97,490 permanent workers, or 1.5 percent of the agricultural labor force, and 450,000 casual workers, or 6.8 percent. Thus, we expect the new farmers

to hire very few permanent wage laborers and a few more casual workers. Thus, land reform has not only increased the number of farmers but of ^{the kind} farm workers as well.

Fragmentation of landholdings has contributed to labor involvement in agriculture in another way. We have already seen that fragmentation increased the number of unpaid family workers and casual laborers in the fields, but it has also contributed to greater work hours in animal husbandry. When a peasant acquires or rents a piece of land, no matter how small, his first tendency is to buy a cow or a gamousa. Informants have confirmed this tendency and noted the increasing number of farmers raising livestock. Further evidence of the increase is the phenomenal increase in the prices of animal fodder such as bersim. At any rate, since animals are mostly the responsibility of female and child workers of the household, more peasant families may be putting in more work hours in productive activities than before.

In effect, the current labor shortage in agriculture about which we so often hear is not only due to rural out-migration, but also to the changes in the nature of agricultural production and access to the land in the seventies. By employing their women and children on their own farms, and by increasing their own numbers, small operators have drained the labor pool available in peak seasons and pushed labor wages up. To replace them, other farmers have to hire workers in the regular labor force at much higher wages, who are also often unavailable.

Another factor that could have contributed to the shortage of agricultural labor is the increase in school enrollments in primary and intermediate education. Primary education in Egypt has been increasing at a rate of over 3 percent annually, while the increase in intermediate education in the years 1972/73 to 1976/77 has increased at 11 percent annually. We do not have separate figures for the rural sector, but should assume that the increase has been across the board.

An additional factor that has contributed to the shortage of agricultural labor is the trend of wage laborers now to work shorter hours, often not more than 5 hours a day. This development may be described as a concomitant cause and effect of labor shortage and higher wages. Since there is a labor shortage, workers in the field could make demands for shorter hours, and when they work shorter hours they generate the need for more workers.

Since unpaid family workers make such a difference in the conditions of labor and wages in agriculture, it is in order here to try to learn more about them.

Most unpaid family work is performed by women and children, and in 1961 this amounted to 65 percent of unpaid family workers. Female workers have the tendency to drop out of the ranks of field workers as they reach the age of 20. This is particularly true among those who work for wages. The question of women's participation in the labor force is controversial. According to the population census of 1960, female workers of the rural

population constituted 3.3 percent of the rural labor force. INP considers this a gross underestimate, especially when it is compared with the INP sample survey of 1965, which shows that the participation of women as unpaid family workers comes to 27 percent of the rural labor force and 5 percent in the wage labor market. According to INP, the proportion of women who work for the family comes to 82 percent of all women workers;¹ the rest work for wages. Based on CAPMAS data for 1971, women in the labor force were 212,300, or 4.7 percent of the agricultural labor force, and in 1975 constituted 173,500 workers, or 3.3 percent.² Again, this seems to be an obvious underestimate.

Hansen has shown that women work in agriculture one third of an eight-hour day, and children about half that time. Most of the work women do is in animal husbandry (63 percent), not in the fields (19 percent). Children work half the time of adult men and put in less time in the field but more time in animal husbandry (see Table 11). Hansen, of course, finds very little underemployment in the countryside and hardly any underemployment for men (p. 300). He also contends that women and children work very long hours. In view of the fact that more peasants own livestock in the seventies, woman and child labor in the household economy should be greater.

¹INP, RREP, Utilization, Table 11, p. 40.

²CAPMAS, Labor Force by Sample, 1970 and 1975.

What Hansen shows regarding the large proportion of time spent by women and children in animal husbandry and processing of farm products makes it difficult to gauge agricultural household income in terms of wages alone. This is in part true also of men who seem to work in diverse activities in addition to field work.

In summary, we have seen that the agricultural labor force is much more differentiated than is the general view and that the nature of agricultural production encourages the development of secondary occupations mostly related to agriculture. We have also noted that the household as a productive economic unit has gained new momentum rather than becoming obsolete due to new developments in agriculture. More females and children are now involved in productive work through family enterprises. The fragmentation of landholdings has re-inforced the household type mode of production and absorbed large numbers of workers who used to be available for hire during peak seasons. The demand for labor in the household enterprise has contributed to draining the pool of available workers for hire elsewhere, thus pushing wages up. Wages have also been affected by rural out-migration into the cities and other Middle Eastern countries. The construction industry in Egypt, both in the cities and in the countryside, has also attracted much of the rural labor force out of the agricultural sector.

Conclusion. It is clear that the socio-economic condition of rural population in Egypt is part of a larger

picture in so far as it is related to the national and international markets for agricultural products and for labor. While agriculture is still the main source of wealth and employment in the countryside, it is no longer the only one. Thus, it was necessary, in order to understand the main streams of revenue and social stratification in rural Egypt, to examine in addition to land distribution the labor force in all its diversity. The national labor picture which we discussed showed that the national labor market is saturated with skilled and unskilled workers and that unemployment is greater than it is in the countryside. Underemployment is a characteristic of both sectors, urban and rural. However, we noted some changes as of 1975 where more jobs, especially in construction, are opening up for the rural population in cities and overseas. These opportunities have eased somewhat the labor situation and contributed through remittances to the welfare of villagers. It was also made clear that agriculture can absorb very little more labor and other outlets will have to be found for the new entrants into the labor market.

We have also learned from this chapter on the rural labor force that those who are employed or find a living on the land have increased considerably in the last decade. This means that the land has been supporting more people while the land area has not increased. The decline in incomes that would be expected to result from this phenomenon has been somewhat offset by the development of

additional economic activities based on land such as livestock and by the improvement in prices of some agricultural products.

The absorption of large numbers of workers, we have found, was the result of the distributive trend in land holdings which was in turn the function of progressive measures of land reform and of inheritance laws. As more small farms appeared, more small farmers managing them came into being. In addition, the management of smaller farms in Egypt is more labor intensive. Unpaid family workers rather than wage laborers were the beneficiaries of the new employment possibilities. Fragmentation meant that farming was once again a household enterprise in which most able members of the family were involved.

It is generally the case that with modernization of agriculture and reforms, the management of farms changes from household to business management. This is not the case in most of the farms of Egypt. Land reform in its complex character as a package, not simply as land distribution, has contributed to the strengthening of the household economy in farming. It was also thanks to the comprehensive nature of land reform that productivity of the land did not decline with the increase in fragmentation. It seems that these developments contributed to absorbing more of the rapidly increasing rural population at a time when the land was not expanding and perhaps have forestalled, at least for a while, a serious crisis which could result from the pressure of the population on the land.

IV. STRATIFICATION BY INCOME

Rural society, as we have already seen, is sufficiently diverse that internal differences may be more pronounced than general differences with urban society. In terms of access to land, we have already seen that only a fraction of the rural population, 12 percent in 1976, had access to land in the form of ownership and/or tenancy. Those are differentiated in turn by the size of their holdings. Nearly 2.3 million farm operators with holdings under 3 feddans manage about 46 percent of the cultivation area, whereas they constitute about 80 percent of landholders. Eighteen percent of the land is still managed by 2.3 percent of operators in farms of 10 feddans or more.

Those who do not have access to the land consist of two broad groups: agricultural workers or non-agriculturalists. In 1975, official estimates showed that wage laborers and unpaid family workers constituted 63 percent of the rural labor force.¹ However, judging by standards established for an earlier period, a small fraction of these, not more than 10 percent, are permanent wage laborers. Non-agriculturalists make up 23 percent of the rural labor force and are divided into various occupational categories ranging from peddlers to laborers to professionals.

¹Based on data in CAPMAS, LFS, May 1975, p. 41. These consist of age groups 12 to 65

When the rural population is considered in terms of income distribution, a positive correlation with occupation will be observed. However, in some occupations such as trade, internal differences are very broad, as between a peddler who makes 50 pounds or less a year and a livestock merchant who makes thousands. Similarly, farm operators are separated by a wide gap between the rich and the poor, the managers of less than one feddan and the managers of 50. An effort to determine income levels taking these differences into consideration is therefore necessary.

The two main sources of income distribution data in Egypt are provided by CAPMAS, the first in household expenditures and the second in straight income figures.¹ The expenditures data have been collected once a decade since the fifties, and the latest describe the situation in 1974/75. The straight income data are for the same year, 1975, and are based on a sample survey of the labor force.

The 1974/75 Household Budget Survey collected information on the consumption patterns and expenditures of 12,000 households, 4,004 of which were rural. The survey was stratified into separate rural and urban samples. The rural sample size for each round was approximately 1,000 households distributed throughout rural Egypt. Data were collected monthly on the value of regularly consumed items (food, beverages, fuel, electricity, clothes, etc.).

¹CAPMAS, Bahth Mizaniyat al Usrah, 1974/75; and Labor Force by Sample, 1975 (in Arabic).

Expenditures on consumer durables and social services were collected for a one-year period ending the third month of each round.

In addition to the consumption information, the survey collected information on household size, age, sex and employment characteristics. The survey enables us to estimate the number of rural poor households and individuals in Egypt for the year 1974/75. It also serves as a basis to draw a profile of the rural poor showing household size, age, sex structure and the dependency rate. The results of the analysis presented in the following pages refer to the combined four round rural sample, unless otherwise indicated.

The Poor in Rural Egypt

In order to determine the number of poor individuals and poor households in rural Egypt, it is necessary to construct a poverty line. Samir Radwan attempted the construction of a poverty line for Egypt based on the preliminary results of the 1974/75 Household Budget Surveys.¹ He constructed the index in two stages. First, using the FAO calculations of the quantities of various foods that can meet the energy requirements of an "average Egyptian," he calculated a least-cost diet. Assuming the average family size to be five, he calculated that LE 175 was necessary to meet the nutritional requirements of a household for one year. Second, using the

¹Radwan, Samir, Agrarian Reform and Rural Poverty: Egypt, 1952-1975. International Labor Office, Geneva, 1977, pp. 40-50.

preliminary results of the 1974/75 Household Budget Survey, he found the household expenditures on non-food items of those households whose actual expenditures on food were nearest to LE 175 and added this to LE 175. His resulting poverty line is LE 270 for the "average Egyptian family" of five. Thus minimum cost of living for every rural individual was estimated at LE 54 per year, LE 35 of which go for food.

The number of poor rural individuals was determined in the Radwan study by taking the percentage of individuals surveyed living in households spending less than LE 270 and multiplying this by the total rural population. The number of poor rural households was found by taking the percentage of households surveyed with expenditures less than LE 270 and multiplying it by one fifth of the total rural population. The implicit assumptions in this calculation were that the average rural household size was five, and that all rural households with expenditures below LE 270 have at least five members, or suffer from diseconomies of small household size to such an extent that they are poor even if they have fewer than five members. On the basis of these calculations he found that 44 percent of rural households were poor and that there were 5,832,400 poor rural individuals in 1974/75.

Radwan states that his consumption expenditures poverty line is somewhat arbitrary for the following reasons.

1. It is not clear how the nutritional requirements for the "average Egyptian" were calculated. Furthermore, they were based on 1958/59 consumption norm estimates.
2. Age, sex and activity level were not taken into account when determining nutritional requirements.
3. Household economies of scale were not fully taken into account.
4. The assumed family size of five may bias the estimates.

We are not in a position to question the method or validity of Radwan's poverty line, though we may add another note of caution to the ones he has already suggested himself. Rural household expenditure and incomes are very difficult to gauge since there is no perfect cash market in rural Egypt.

Other observations regarding this point may also apply to the process of transforming expenditure data to income carried out in this case by the World Bank. In the first place, none of these analysts includes free services received by villagers, such as health, education and economic subsidies as part of income. Excluded also are incomes from livestock and business expenses incurred by farmers as part of total income of a rural household. Consequently, most estimates, including those of the World Bank, are lower than the real income. It is important to note that the transformation of expenditure figure by the World Bank to income was done by adjusting for savings and taxes only.

It is not possible given the time frame of this

study to make new estimates which take into account all of these refinements. We are able, however, to make an alternative estimate which takes into account the variance in the rural family size between rural poor and rural non-poor. Second, instead of assuming the rural household size to be the same as the national average family size, we can use the average rural family size found in the household budget survey to calculate the number of rural households. Finally, the final results of all four rounds of the 1974/75 Household Budget Survey can now be used, while Radwan had only the results of the first round available for his calculations. The use of all four rounds enables us to take account of seasonal changes in poverty and gives us a larger sample size upon which to base our calculations, permitting statistically more accurate calculations.

We will define our poverty line on the basis of per capita household expenditures in order to adjust for differences in family size. A drawback of this definition is that it implicitly assumes no household economies of scale. However, we shall rely in this analysis on the 1974/75 Household Budget Survey cross-tabulations of per capita expenditures by household size.¹ The cross-tabulations available to us look at per capita expenditure intervals of minimum LE 10. We are constrained, therefore, to adjust our per capita poverty line to either LE 50 or

¹Alternatively we could use the cross-tabulation of household expenditure intervals by family size. We cross-checked these and found the results identical.

or LE 60. Radwan's household poverty line translates to LE 54 per capita per year. We will use LE 50 per year¹ as the expenditure level required to meet the minimum consumption needs of an "average Egyptian," to be conservative.

The percentage of poor rural individuals found in each round of the survey as well as the percentage over the combined four round sample is shown below (Table 16).

Table 16

Poor Rural Individuals on the Basis of Household Budget Data

Round	Percentage of Individuals with Expenditures Below LE 50 Per Year ₂	Number of Poor Individuals _{3,4}
First	49	10,207,000
Second	46	9,582,000
Third	45	9,373,000
Fourth	36	7,499,000
Combined	44	9,165,000

From the same cross-tabulation tables we can also estimate the number of poor rural households. The total number of rural households is 3,661,000, and is reached by dividing the number of rural individuals by 5.69, the average size of rural households found in the 1974/75 Household Budget Survey. The percentage of poor rural

¹The average income per interval varies from one interval to another and is usual over the baseline of the interval.

²Rounded to the nearest percent.

³Rounded to the nearest thousand.

⁴Rural population figure used is 20,830,000 from Radwan, Agrarian Reform and Rural Poverty: Egypt, 1952-1975, p. 46.

households found in each round of the survey as well as the percentage over the combined four round sample are shown below (Table 17).

Table 17
Poor Rural Households on the Basis of Household Budget Data

Round	Percentage of Households with Per Capita Expenditures below LE 50 Per Year	Number of Poor Households
First	45	1,647,000
Second	41	1,501,000
Third	38	1,391,000
Fourth	32	1,172,000
Combined	39	1,428,000

The estimate of the number of rural poor households varies, in percentage terms, only slightly from Radwan's when family size is taken into account. Our estimate of the number of rural households below the poverty line is lower not only due to the percentage differences in our estimates, but also because the total number of rural households we assumed in our calculations was 3,661,000, whereas Radwan assumed the number of rural households to be 4,166,000. The difference in the percentage of rural poor individuals is drastic depending upon whether the effects of family size are taken into account. Our results and Radwan's results are compared in Table 18.

The higher percentage and number of rural poor individuals compared to rural households indicates that

Table 18

Comparison of Estimates of the Number of Rural Poor Households and Rural Poor Individuals

Indicator	Radwan's Estimate	Our Estimate for Combined Sample
Percent of rural households below poverty line	44	39
Number of households below poverty line	1,833,000	1,428,000
Percent rural population below poverty line	28	44
Number individuals below poverty line	5,832,400	9,165,000
Per capita poverty line used	LE 54	LE 50

Note: in our estimate the percentages are rounded to the nearest percent and the number of households and individuals are rounded to the nearest thousand.

poor families are larger on the average than non-poor families--a hypothesis we shall substantiate in subsequent sections of this paper.

Analysis of the latest income data released by CAPMAS for the 1975 labor force shows that 56.17 percent of rural households live below the 250 LE annual income level (Table 19). Regionally, poverty occurs in greater frequency in Upper than Lower Egypt. The poor in Upper Egypt constitute 62.8 percent of rural households whereas in Lower Egypt they make 49.55 percent (Table 19). The provinces with the largest proportion of the poor are Aswan, Qena, Beni Suef, and Minia in the order listed. In Lower

Table 19

Household Income by Interval and Region, 1975

Annual Income	50	50-	75-	100-	150-	200-	250-	300-	350-	400-	500-	600-	800-	1000-	1400-	2000+	Total	
Lower Egypt and Delta	N	56	86	202	451	694	691	570	539	336	326	174	137	65	34	9	20	4390
	%	1.3	1.95	4.6	10.2	15.8	15.7	12.9	12.2	7.6	7.4	3.9	3.1	1.5	0.7	0.2	0.4	100
Upper Egypt	N	137	160	312	670	947	794	489	424	306	237	144	93	38	26	9	16	4802
	%	2.8	3.3	6.5	14	19.7	16.5	10	8.8	6.4	4.9	2.9	19.4	0.79	0.5	0.18	0.3	100
Total	N	193	246	514	1127	1641	1485	1059	963	642	563	318	230	103	60	18	36	9192
	%	2.09	2.67	5.6	12.2	17.8	16.15	12	10.5	6.9	6.1	3.5	2.5	1.1	0.65	0.195	0.39	100

Source: Based on CAPMAS, Labor Force by Sample, 1975.

Egypt, Dakhalia, Minufiya and Domiat¹ are found to be among the poorest.

The CAPMAS income data are not broken down in rural-urban or family size terms, and we thus cannot determine the per capita income. The Household Expenditure results are, of course, not comparable with the household income data of the labor force, coming from different base data. However, both sources confirm the fact of widespread poverty in the countryside.

As the expenditure distribution data show (Table 20), the poor themselves are divided into the extremely poor and the basically poor. Those terms can be quite vague and subjective. To avoid the pitfalls of misunderstanding, we shall refer to the extremely poor as those who^{se} total per capita expenditure annually is below the minimum required for food alone. The implication is that this group of people are under-fed, under-clothed and ipso facto in ill health. The basically poor are those who can afford more than they need for food alone. It is to be remembered also that both groups, the extremely and the basically poor, live under the accepted subsistence level.

Radwan estimates the minimum sum required for food alone to be LE 35 annually for a single person. Accordingly, individuals in rural Egypt whose total per capita expenditure is less than LE 35 annually are extremely poor. On the basis of the Household Expenditure Survey, the extremely poor in rural Egypt make 24.7 percent of the

¹High frequency of poverty for Domiat is registered in the ORDEV survey, not CAPMAS income data.

Table 20
Distribution of Rural Households According to Per Capita Annual Consumption Expenditures

Expenditure Bracket (LE)	Average Household Expenditures ¹	Average Per Capita Expenditures ¹	Total Annual Expenditures ¹	Cumulative Percentage Expenditures ²	Cumulative Percentage Households ²	Cumulative Percentage Individuals ²	Cumulative Inferred Hg. Households ^{3,4}	Cumulative Inferred No. Individuals ^{3,4}
20	LE 89	LE 13	LE 4,632	0.3	1.3	1.5	47,500	317,400
20 - 29.9	173	26	39,552	3.1	7.0	8.1	256,900	1,691,200
30 - 39.9	231	35	133,974	12.4	21.5	24.7	788,200	5,153,100
40 - 49.9	278	45	196,972	26.2	39.2	44.1	1,435,500	9,182,100
50 - 59.9	311	55	192,417	39.6	54.6	59.5	2,000,600	12,396,100
60 - 79.9	379	69	320,821	61.9	75.8	79.9	2,775,000	16,639,100
80 - 99.9	458	89	183,986	74.8	85.8	89.0	3,142,600	18,535,200
100 - 149.0	557	118	211,619	89.5	95.3	96.8	3,490,000	20,172,400
150 - 199.9	703	164	78,084	95.0	98.1	98.9	3,591,500	20,607,700
200 - 249.9	707	212	27,588	96.9	99.1	99.5	3,627,200	20,726,600
250 - 299.9	1001	283	13,010	97.8	99.4	99.7	3,639,100	20,768,700
300 or more	1322	473	31,723	100.0	100.0	100.0	3,661,000	20,830,000
All Groups	358	63	1,434,378	100.0	100.0	100.0	3,661,000	20,830,000

¹ Rounded to the nearest Egyptian Pound.

² Rounded to the nearest 10th percent.

³ Rounded to the nearest hundred.

⁴ Total number individuals taken as 20,830,000 from Radwan, Agrarian Reform and Rural Poverty: Egypt 1952-1975, International Labor Organization, printed 1977, page 46. The total number of families was found by dividing the total number of individuals by 5.69, the overall budget survey calculated average rural family size.

rural population or 5,153,100 individuals (Table 20).

At the bottom of this stratum is to be found the group of people whose average per capita expenditure annually was LE 35. Their number was 3,461,900 or 16.6 percent of the rural population.

The extremely poor are cared for by the Ministry of Social Affairs which provides pensions and relief aid to orphans, widows, divorced women, the disabled, the elderly, the sick and families of jailed individuals, as well as families of conscripted soldiers. The basic two forms of aid are (a) pensions which are dispensed on a regular basis for life or until the state of complete dependency is ended and (b) subsidies which are paid on a temporary basis for people in a financial distress situation. Presumably, most individuals on the aid list have some income of their own but very meager. The average pension in 1975 nationally was 18.7 pounds (see Table 21) and it went up to 22 in 1976¹ and, to judge from data in one province, it has become 45 pounds in 1978. The Ministry lists its recipients as households, though it is clear from the cases that some are and some are not. Widows, for instance, are not necessarily heads of families nor are single mature women without a source of income. Nationally, the number of pensions for 1976 was 111,721 so-called households. If we consider half of them are rural,² then those on pensions would constitute 1.5

¹Arab Republic of Egypt, Ministry of Social Affairs, Wizarat al Shu'un al Ijtima'iyah: 1975/1976, Cairo, n.d.

²Rural population was 60 percent but rural pensions were smaller. Now urban and rural pensions are equal in value.

Table 21
Regular Pensions to Needy Families in Egypt, 1975

	Orphans	Widows and Divorced	Totally Disabled	The Elderly	Total
Number of Households	6,389	25,961	19,843	59,528	111,721
Percent of Households	5.7	23.2	17.8	53.3	100.0
Total Value of Pensions	106,640	544,961	389,197	1,047,244	2,087,218
Percent of Pensions	5.1	26.10	18.6	50.2	100.0
Average Payment	16.7 LE	21 LE	19.6 LE	17.6 LE	18.7 LE

Source: Arab Republic of Egypt, Ministry of Social Affairs, Mufakirat al Ihsa'at al Ijtima'iyah, 1974, 1975, Cairo, 1978.

percent of rural households. This is about what we would expect. In 1979, we found that in two markazes of Giza Province, the number of people on pensions constituted 1 percent of the population. In 1975, most pensions were paid to the elderly, 53.3 percent of all cases (Table 21). The number of people wanting pensions and on the waiting list are estimated at nearly the same number as those already receiving aid.

Fewer people were receiving subsidies, i.e., temporary aid, in 1975. They were 47,625 so-called households, and received in aid 969,792 pounds, an average of 20.4 pounds. (See Table 22.) Aid to families of enlisted soldiers is not included here.

It is difficult to see in view of this how some households could be listed in the Household Expenditure Data as receiving less than 20 pounds annually. Similarly startling results are obtained from a poor urban quarter in Giza Province, Boulaq al Dakrour, where as many as 94 percent of the households are considered to have an annual income of less than 175 pounds.¹

The proportion of the rural population below the subsistence level established by the data we have used is very large by all accounts. In the ORDEV survey of 1974/75 also most villagers fall below the poverty line set by Radwan and accepted in this study. All this should suggest one of two things. First, that the Radwan poverty

¹ Arab Republic of Egypt, Governorate of Giza Province, Urban Development Section, A Report on Boulaq al Dakrour (mimeographed), 1972.

Table 22

Occasional Subsidies to Needy Families in Egypt, 1975

Monthly Subsidy	
Number of Households	23,346
Total Value	446,071
Average Subsidy	19.1
Combined Subsidies	
Number of Households	199
Total Value	3,928
Average Subsidy	19.7
Only One Payment	
Number of Households	9,069
Total Value	129,537
Average Subsidy	14.3
Relief	
Number of Households	15,011
Total Value	390,256
Average Subsidy	25.9
Total Households	47,625
Total Value	969,792
Average Subsidy	20.4

Source: Arab Republic of Egypt, Ministry of Social Affairs, Mufakirat al Ihsa'at al Ijtima'iyah, 1974, 1975, Cairo, 1978.

line is for some reason quite high, for it is not conceivable that about half of the rural population are unable to meet their subsistence levels. The second possibility is that the income data on which we base our results do not represent the full picture. Gauging family income accurately requires in-depth field work, which is not in the frame of this study.

Informal observation and the rising prices for many

crops in the seventies do not suggest a widespread deterioration in the rural standards of living. Official statistics show a rise in the value of agricultural products and agricultural wages in the period 1969/70 and 1975. The value of agricultural produce rose by 91 percent and income from agriculture by 90 percent.¹ Agricultural wages rose during the same period by 106 percent, although the number of those working in agriculture as accounted for in these official statistics did not increase by more than one percent annually. Based on these data, the average annual wages in agricultural occupations rose from 54 pounds per capita in 1970 to 106 pounds in 1975. Naturally, the rate of inflation has to be taken into account too, and Radwan puts it at 80 percent² during the same period. This is still below the average increase in agricultural wages and prices of produce. At any rate, the balance does not suggest a sharp deterioration in rural economic conditions. Moreover, there is evidence that those who manage land, even the smallest plots, make more than usually is considered to be the case. In recent years, the price of some produce, such as bersim, has gone up considerably, and a feddan planted with bersim is believed to yield more than 120 pounds net in six months, the growing period for this crop. Another indicator of the rise in the value of agricultural produce recently is the phenomenal rise in the price of agricultural

¹These data are based on CAPMAS, Yearbook, 1976 (Arabic).

²Radwan, op. cit., p. 27.

land after 1973. Income from livestock too is usually poorly assessed and often overlooked by surveys and studies of rural household economy. Informal observation indicates that it is fairly high. In view of the observation made earlier that more farmers (mostly near landless) raise some livestock now, their incomes must be better than seems to be the case.

Differences in Rural Income. The gap between the highest and the lowest household incomes is still very wide, though narrower when viewed in per capita terms. The highest household expenditure rate, according to the Household Expenditure Data, is 2,327 pounds, and is about 66 times the expenditure of the household in the poorest category. In terms of per capita figures, though, it is only 14 times. The greatest per capita deficit in expenditure is among the earners of 100 to 200 pounds, because the size of the household is inconsistent with income. The Gini coefficient in the budget year 1974/75 was 0.392. In comparative terms, this indicates a reasonable degree of equality, but considering that it reflects incomes within the rural community taken by itself, the distribution could be more egalitarian. In terms of trends, there has been a tendency to growing inequality after 1964/65, when the Gini coefficient was 0.353, the lowest it has ever been.¹

Considering the distribution from a different angle,

¹See World Bank Report (mimeo.) and Radwan, op. cit., p. 47.

we find that the share of the poor 39.2 percent of households and 44.1 percent of individuals is only 26.2 percent of rural expenditures. Those who are not poor, 60.8 percent of households and 55.9 percent of individuals, are responsible for the remaining 73.8 percent of rural expenditures and have an average per capita household expenditure level of LE 83.2 per year, compared to LE 37.4 per year for the poor group. The complete distribution of expenditures by annual per capita expenditure bracket is shown in Table 20. The same table shows by expenditure bracket the average household expenditures, the average per capita household expenditures, the total LE expenditures and the number of households and individuals in each expenditure bracket.

The most striking feature about the widening gap in incomes since 1964 is that it is at variance with the distributive trend in access to land resources. This could be explained in part by the fragmentation tendency which created some 690,000 new near landless farmers with less than one feddan each, and some 487,400 more in the group managing 1 to 3 feddans. In contrast, income of medium to large size farms may have increased on the average with the increasing shift among members of this group toward cultivation of vegetables and fruits.

Profile of the Rural Poor

The 1974/75 Household Budget Survey permits us to draw a profile of the rural poor based on the demographic

characteristics of household size, sex and age, and the economic characteristic of dependency rate. These data reveal that the poor rural households are larger and have more children on the average than households which are not poor. At the same time, we find that there are poor households of all sizes, indicating that poverty can in no way be considered a function of household size alone. The ratio of females to males is almost identical for poor households and households that are not poor. The dependency rate (ratio of income earners to all individuals) is higher for poor households but this appears to be a result of family age structure rather than unemployment. When the dependency rate is adjusted for the age structure, we find no significant difference between poor households and households that are not poor. This implies that the problem of poverty is not necessarily one of unemployment, but rather of underemployment, low wages, or both.

The average size of poor rural households, those with per capita expenditure of less than LE 50, is 6.4 individuals, while the average size of the non-poor rural households is 5.2. This result is based on the total expenditure per income interval divided by the number of individuals in that interval group (Table 23). In contrast, determining the size of the household by the number of individuals listed in that income bracket shows the opposite results (see Table 24). However, the

Table 23

Household Size by Per Capita Household Expenditures

Expenditure Bracket (LE/yr.)	Average Household Size	Expenditure Bracket (LE/yr.)	Average Household Size
< 20	6.67	80 - 99.9	5.16
20 - 29.9	6.56	100 - 149.9	4.71
30 - 39.9	6.51	150 - 199.9	4.29
40 - 49.9	6.22	200 - 249.9	3.33
50 - 59.9	5.69	250 - 299.9	3.54
60 - 79.9	5.48	300 or more	2.79

inconsistency in the two results is apparent rather than real. Further analysis shows that the data in Table 16 are consistent with the results from the per capita expenditure data and family size. This shows that the average size of a poor rural household is larger.¹

Although poor rural households are larger on the average, this is not to say that all poor households are large. There are poor households of all sizes. What is true, however, is that a disproportionate percentage of large households are poor. Table 25 shows the incidence of poverty by household size.

Rural Poverty and Household Age Structure

Poor rural households have a lower proportion of

¹See note in Appendix explaining the apparent contradiction.

Table 24

Expenditure of Households and Per Capita by Expenditure Interval in 1975

Expenditure Interval	No. of Households	Percent Households	No. of Individuals	Percent Individuals	Average Expenditure (Household)	Average Size of Household	Per Capita Average Expenditure
0 - 50	75	2	142	0.6	35.3	1.0	22.06
50 -	85	2	125	0.5	62.2	1.4	44.4
75 -	110	2.7	257	1.1	87.0	2.3	37.8
100 -	300	7.5	961	4.2	128.3	3.1	41.4
150 -	440	11	1773	7.8	174.6	4.0	43.65
200 -	524	13	1285	5.6	226.5	5.0	45.3
250 -	502	12.5	2793	12.3	275.1	5.55	50.0
300 -	428	10.7	2777	12.2	324.4	6.25	51.9
350 -	353	8.8	2282	10.0	373.1	6.5	57.4
400 -	465	11.6	3140	13.8	445.3	6.75	65.9
500 -	266	6.6	1920	8.4	541.2	7.4	73.1
600 -	244	6.0	1980	8.7	690.2	8.0	86.3
800 -	110	2.7	1006	4.4	881.35	9.05	97.4
1000 -	68	1.7	639	2.8	1180.6	9.5	124.3
1400 -	23	0.6	258	1.1	1580.6	10.6	147.2
2000 +	22	0.5	198	0.8	2326.8	9.9	235.0
Total	4004	100.0	22774	100.0			

Source: Based on CAPMAS, Bahth Mizaniyat al Usrah, 1974/75.

Table 25

Incidence of Rural Poverty by Household Size

Household Size (No. Individuals)	Percentage Which Are Poor	Household Size (No. Individuals)	Percentage Which Are Poor
1	25	6	45
2	18	7	48
3	22	8	51
4	31	9	58
5	39	10+	47

prime aged members (members between the ages of 20 and 60) than other households. Better than 42 percent of non-poor household members are in the prime age category, while only 36 percent of poor household members are in the prime age category. Table 26 examines the age structure of households which are poor and households which are not poor.

Table 26

Rural Poverty and Household Age Structure

Age Bracket	Percent of Poor in Age Bracket	Percent of Non-Poor in Age Bracket	Percent of Population in Age Bracket
Infants	1.4	1.0	1.2
1 - 4	12.0	9.3	10.5
5 - 9	17.6	12.6	14.8
10 - 19	27.4	26.3	26.8
20 - 39	19.9	23.0	21.7
40 - 59	16.2	19.5	18.0
60+	5.6	8.2	7.0
	100.0	100.0	100.0

We find that the poor have a disproportionately large number of children and a disproportionately small number of adults including adults over 60. This suggests that the average life span of the poorer individuals is shorter than that of the non-poor.

Two explanations of the table on poverty and age structure are possible. First, the poor households may include a disproportionately large number of families that are just starting out, so that the primary income earners of the households are at the lower end of their lifetime earnings profile. To the extent that this is true, the poverty problem of an individual household is self-correcting. Over time, poor households are not locked into poverty. The second interpretation, however, is that households are locked into poverty, with primary household income earners able to expect no improvement in their wages over their lifetimes. Out of lack of access to family planning methods, ignorance of family planning, or desire to increase the number of potential household earners, they may be having larger families than the families who are not poor in their age cohort. The poverty problem is more severe by this second interpretation. An examination of Tables 26 and 27 leads us to believe that this second interpretation is likely to be at the core of the poverty problem. We see in Table 27 that the percentage of household members in the poorer expenditure brackets in both the 20-39 and 40-59 age brackets is lower than the rural average. If the first interpretation

Table 27

Household Age Structure by Per Capita Household Expenditures Category

AGE	EXPENDITURES BRACKET LE/YEAR												
	20	20 - 29.9	30 - 39.9	40 - 49.9	50 - 59.9	60 - 79.9	80 - 99.9	100 - 149.9	150 - 199.9	200 - 249.9	250 - 299.9	300+	All Categories
1	0.3%	1.4%	1.5%	1.5%	1.1%	1.2%	1.0%	0.8%	0.4%	0.8%	0.0%	0.0%	1.2%
1-4	15.0	12.7	12.0	11.4	10.4	10.4	7.5	7.7	7.1	6.2	4.3	6.0	10.5
5-9	18.2	20.4	17.0	17.0	14.3	13.3	11.1	11.0	9.0	6.9	4.3	6.0	14.8
10-19	32.3	26.4	28.0	26.9	27.1	25.7	29.2	24.9	21.8	18.5	23.9	25.4	26.8
20-39	16.7	18.0	19.7	21.0	21.4	23.4	22.5	24.0	26.9	29.2	23.9	26.9	21.7
40-59	14.4	15.8	15.9	16.6	18.5	19.0	20.5	20.2	22.7	22.3	32.6	17.9	18.0
60+	3.2	5.2	5.9	5.6	7.1	7.0	8.1	11.3	12.0	16.2	10.9	17.9	7.0

were correct, we would expect to find a higher percentage of 20 to 39 year olds in the lower expenditure brackets and a lower percentage of the 40 to 49 year olds. Because we find a lower percentage of 20 to 39 year olds in the lower expenditure bracket, we suspect that interpretation number two is more likely to be correct. This supports the observation that life span of the very poor is shorter. Unfortunately, we cannot determine with much certainty the extent to which each interpretation is correct without time series data on a set of households.

Rural Poverty and the Dependency Rate. The Household Budget Survey cross-tabulated the number of income earners in a family with per capita household expenditure brackets. From this we can calculate the dependency rate (number of income earners to the number of individuals) by per capita household expenditure bracket. The average dependency rate of the poor (those with per capita household expenditures below LE 50) is 4.31, while that for the non-poor rural households is 3.61. Table 28 shows the dependency rate by per capita household expenditure bracket.

The trend is clear. The lower the per capita household income, the higher the dependency rate. However, this does not necessarily mean that the poor are more likely to be unemployed. To determine this, we need to adjust the dependency rate for the difference in age structure between poor households and households which are not poor.

Table 28

Dependency Rate (Ratio Earners to Individuals)
and Per Capita Household Expenditures

Expenditure Bracket (LE/Year)	Dependency Rate	Expenditure Bracket (LE/Year)	Dependency Rate
Less than 20	4.23	80 - 99.9	3.48
20 - 29.9	4.50	100 - 149.9	3.47
30 - 39.9	4.36	150 - 199.9	2.87
40 - 49.9	4.23	200 - 249.9	2.32
50 - 59.9	3.90	250 - 299.9	2.56
60 - 79.9	3.73	300 or more	1.91

We can take as eligible income earners those household individuals which are between the ages of 20 and 60, then divide the actual number of income earners by the number of eligible income earners to get an employment rate of sorts. The result of such an analysis shows that 64.2 percent of eligible poor household members are employed, compared to 65.2 percent of eligible non-poor household members. The figures are extremely close, and we must conclude that there is little if any difference between employment rates of eligible poor household members and eligible members of households which are not poor. Poverty in rural Egypt may not, therefore, be a problem of year-long unemployment, but rather of under-employment (a comparatively low number of days worked by income earners of poor households); and/or the low wages earners from poor households are able to command.

Income Groups and Occupation. The discussion on the distribution of income thus far may be characterized as abstract. We shall try here to identify, as much as data permit, the social identity of each income group. To help us in this endeavor, we shall use primarily the results of a national survey of 116 villages conducted in 1974/75 by the Organization for Reconstruction and Development of Egyptian Villages (ORDEV). We shall see that there is a clear correlation between income and occupation, despite the variations in social conditions of members of an occupational group.

The first striking characteristic in the ORDEV data is the positive association between low income and the single income source. Four out of the five occupational groups who rank lowest in income have one occupation only and no other source of income. Those with a secondary occupation or source of income are invariably better off than the single occupation group. We shall discuss income, therefore, in terms of occupational categories and according to rank, starting with the poorest, but first it should be made clear that the data in the ORDEV study are based on declared estimates of expenditure by the interviewee.

The lowest income group as revealed by the survey is landless non-agriculturalists who are self-employed and whose source of income is not in the main stream of income sources of rural people (Table 29). In other

Table 29

Stratification of Welfare by Source of Income

Poverty Criteria:											
Combined Index		Average Expenditure LE		Percent less than LE 100		Percent less than LE 300					
Source of Income	Rank	Score	Rank	Average	Score	Rank	% LE 100	Score	Rank	% LE 300	Score
Unspecified Sources	1	0.073	1	137.7	0	1	54.4	0	2	87.4	0.073
Agricultural Wage Labor	2	1.048	2	151.0	0.022	2	26.5	0.513	1	93.7	0
Farm Operators of Less than 1 Feddan	3	1.542	3	187.0	0.081	4	17.2	0.684	3	85.7	0.093
Self-employed	4	1.740	6	256.0	0.194	3	18.5	0.660	5	74.2	0.226
Non-Agricultural Wage Labor	5	2.106	5	243.8	0.174	5	9.2	0.831	6	70.4	0.270
Farm Operators of 1 to 2.99 Feddans	6	2.146	4	238.2	0.165	6	6.6	0.879	4	74.5	0.223
Farm Operators of 3 to 4.99 Feddans	7	2.458	7	290.7	0.251	7	5.9	0.892	7	57.2	0.423
Farm Operators of 5 to 9.00 Feddans	8	2.894	8	377.1	0.393	8	5.2	0.904	8	34.0	0.693
Farm Operators of 10 or More Feddans	9	4.000	9	747.6	1.000	9	0.0	1.000	9	7.5	1.000

Notes: The higher the rank, the greater the welfare.
The higher the index score, the greater the welfare.

Source: ORDEV Survey of 116 Villages.

words, it is not from or off the land, manufacturing, livestock or salaries. The survey does not specify their sources of income, but it may well be surmised from village life conditions. They are quite likely to be migrant workers, tinkers, cleaners, water carriers, janitors, guards, hangers-around for odd jobs, and the handicapped who perform ritual functions. We must also include among them some of the unemployed who are often listed as not having had any previous occupations and no doubt count in their ranks the partially handicapped, widows and orphans. In all, they constitute 7 percent of the sample, and earn on the average 118 pounds annually per household. Although they are the lowest income group in this survey, their reported income is higher on the average than that of the lowest stratum of the extremely poor in the household budget survey (see Table 20). Nevertheless, their annual income is still way short of the level required to meet the cost of food alone, and therefore they should be considered extremely poor.

The second poorest group are agricultural wage laborers who have no other source of income or employment. They constitute 16 percent of the sample and have an average household income of 139 pounds, or 11.6 pounds per month, and 40 piasters a day. Since the data at hand do not include the household size, it is not possible to determine the per capita income. Suffice it to say that it should be among the smallest, having already seen that household size is correlated with income. Thus,

they too fall into the extreme poverty group.

As for their composition, they must be mostly casual laborers, including some permanent wage laborers. Their declared income is comparable to agricultural wage laborers employed by cooperative societies. The average annual income from wages of an agricultural worker employed by cooperative societies was 138 pounds (131 in the regular cooperatives and 146 in agrarian reform cooperatives)¹ for the same period, 1974. Before 1973 an agricultural wage laborer still earned less than 30 piasters a day during the peak season, and much less during the off season. In 1968, for instance, an agricultural laborer earned 24 piasters a day during the peak season and less than the minimum wage of 18 piasters during the slack season. The minimum wage of agricultural work was violated by private employers as well as government agencies. In 1975 evidently wages of agricultural laborers had improved. In terms of the annual income data just cited, wages would be as follows. If we consider wage laborers to be employed full time, six days a week, then the average wage would be 45 piasters daily. But of course they do not work six days a week on a regular basis, and the daily wage should have been higher. This is clearly more than double the amount a worker earned in 1968, and is consistent with official data already cited. We may add another important note here, and that is that some migrant workers ought to be included in this group of workers who earn

¹Based on data given by CAPMAS, Annual Bulletin of Cooperatives in the Agricultural Sector (in Arabic).

an average of 45 piasters a day. This is because agrarian cooperatives employ workers who are classified as migrant, since they are hired by a contractor and placed at the service of the cooperative to work in markaz or province areas in cleaning canals, digging ditches or field work in the agrarian reform areas run by the cooperatives or the Agrarian Reform Agency. We may also remember that agrarian reform workers earn on the average 146 pounds, or 47 piasters daily on the basis of a six-day week.

The third category of the poor is the near landless who manage less than one feddan of land, and presumably have no secondary source of income. They constitute 12 percent of the sample and earn on the average 187 pounds per household annually. We find two incongruent data in this account. First, the percentage of the less than one feddan farmers in the survey is about half of that in the Agricultural Census of 1961 and 4 times less than the 1976 figure. Second, it is by no means clear how a family whose only source of income is about half a feddan of land could obtain an income of 187 pounds annually, since it is generally agreed that a feddan of land planted with traditional crops yields somewhere between 60 and 90 pounds net income. However, some informants maintain that planting bersim and raising livestock now makes it possible to earn more than 200 pounds net at current prices. When income from livestock, which almost every cultivator raises, is considered,

such an income may not be unrealistic. However, the reported income of the near landless contradicts income data in the survey for managers of one or more feddans, which is reported to be 238 pounds only. It is possible that the interviewers were casual in their probing on this question, which resulted in not revealing other sources of income mainly from work as hired laborers. This is particularly likely since a very negligible number in the landowning category listed a secondary source of income, which is very unusual considering that most near landless peasants work as casual laborers and most farmers raise some kind of livestock, totally or partially owned by themselves.

More light may be shed on this question from data regarding this category of people in an in-depth study of three villages in Giza Province¹ conducted in 1972. This study shows that owners of less than one feddan constituted about 18 percent of landholders, and that the average income from agricultural production was 35 pounds per annum only, out of a total annual income of 163 pounds. The income from non-agricultural products, 78.5 pounds, came from raising livestock and other sources. "Other sources" are not specified in the study, but we know that farmers in this category hire their services out as casual laborers. Thus for the near landless peasants, the agricultural produce taken by itself accounts for 21.5 percent of the family income only.

¹See Working Paper No. 1, prepared by Dr. Abd al Basit Hasan, Ph.D. dissertation by Safia Mahmoud Hamdi, Faculty of Agriculture, Cairo University, 1973.

However, the reported income from agriculture in the study cited here is questionable since Giza farmers grow high priced cash crops, and in certain cases a feddan of land may yield as much as 600 pounds annually. Nevertheless, the report serves to highlight the importance of income derived from livestock, especially for those who have some land to raise animal feed.

The question of household income from livestock, poultry, and bees in rural areas remains an overlooked issue in studies of rural incomes, and hardly ever appears in statistics or surveys. Informal observation indicates that it constitutes a very large proportion of household incomes, equal to or a little more than the yield of a feddan of land. Discussing the matter with informed farmers, we have learned that a peasant can earn annually from a gamousa and a cow in terms of milk, work in the field, and offspring, as much as from one feddan of land.

We have already observed the tendency in rural Egypt for association between land fragmentation and rise in the number of livestock in the rural areas. This has been confirmed by informal observation in the field. It is also confirmed by statistics coming from one markaz in Giza Province. Official statistics for markaz al Saf in Giza show that there are 35,889 feddans of land cultivated. The number of cows and gamousas raised in the markaz is reported to be 51,068, an average of 1.4 cows or gamousas per cultivated feddan. There are no large animal farms in al Saf. The practice in Egypt in general

is for a well-off farmer to enter into partnership with small cultivators whereby he pays for the price of the animal and the cultivator raises it. Thus many, though not a majority, of animals are held in partnership.

We ought not to forget also that most rural families raise chickens at home at very little cost and obtain a considerable income in terms of eggs and meat. Bees and pigeons are also raised by a few farmers, though this practice is more common among the wealthy. In short, income from animals and poultry is a major component of peasant economy and no income data are valid that do not take it carefully into account.

The fourth category in rank order of poverty is the self-employed non-agriculturalists who make an average of 213 pounds per household annually, and make 8 percent of the sample. The study does not specify who they are, but we can surmise that they consist of craftsmen, barbers, peddlers, small shopkeepers, and the like.

Fifth in rank order are non-agricultural wage laborers, some 245 cases, about 10 percent of the sample, who have no other occupation or source of income. The average household in this category makes on the average 217 pounds annually, or 18 pounds a month, considerably more than the comparable income of agricultural wage laborers. On the basis of a six-day week, full employment, the average daily wage of a non-agricultural laborer would be 70 piasters. The survey does not include in the non-agricultural occupations professionals, administrators,

technical persons and other salaried individuals. This is probably because such individuals were considered by the survey administrators as not native residents of the villages studied. Most of these, however, are of rural backgrounds, and should be included. We can supplement this deficiency by indicating the average salary of managers, technical staff and clerks in the employment of agricultural societies, and assume that those in similar capacities working for the municipal councils have comparable, perhaps a little higher, income. The average income per employee in a cooperative society who is not an agricultural laborer was 298 pounds,¹ a figure that is scaled down by the large number of clerks in cooperatives. Employees of the agrarian reform cooperative earn more than the regular type cooperative employees.

It may be useful in this context to present a comparison of agricultural with non-agricultural wages, to underline the disparity (Table 30). It can be seen that while rural wages rose steadily, they did not keep pace with changes in other sectors, at least until 1974.

The sixth rank income group consists of farm operators managing 1 to less than 3 feddans of land, again presumably with no other source of income. They make up 22 percent of the sample, and earn on the average 238 pounds annually, or 20 pounds a month. Their size in relation to the total number of landholders is again much smaller

¹Based on data in CAPMAS, Annual Bulletin of Cooperatives in the Agricultural Sector, 1974.

Table 30

Average Annual Wages, Agriculture and All-Sector Averages
Egypt 1969/70 to 1974

Sector	1969/70	1970/71	1972	1973	1974
Agriculture (LE)	53.0	55.6	56.3	60.5	65.1
All Sector Average (LE)	142.6	157.3	167.5	179.7	195.2
Ratio Agriculture/All Sector	0.37	0.35	0.34	0.34	0.33
All Sector Average Deflated by Consumer Price Index (LE)	142.6	153.6	157.5	156.5	153.9

Source: Gus Schumacher, Egypt: Rural Development Review and Identification, unpublished manuscript.

than the figures for the same group in the 1961 and 1976 land distribution data, which were 41 and 37 percent respectively. This may in part be explained by the fact that those who partially manage land are listed in the survey under separate categories.

In comparison with the in-depth study of Working Paper No. 1, the ORDEV income figure is lower by some 30 pounds. In the Giza villages, the average annual income of a household in this category is 268 pounds; the share of agriculture in this is 99 pounds, or 37 percent of the total household income. The rest again comes from live-stock and other sources.

Next come holders of 3 to less than 5 feddans, whose

annual income on the average is 291 pounds, and who constitute 6.5 percent of the sample. It is at this level that subsistence is met on the basis of the poverty line set by Radwan. This is also confirmed by the Giza study, which shows an average income of 358 pounds annually. Thus, these two studies agree with the ILO Rural Employment study that 3 feddans are the minimum size farm necessary to support a rural family.¹ However, in areas where vegetables and fruits are grown, one feddan is sufficient. Again, average income from agriculture is reported here to be 166 pounds, or 46 percent of the total income. The rest comes from livestock and other sources. Other landholders in the survey fall in the higher ownership brackets, and all earn more than 300 pounds a year.

We may now add that some wage laborers in agriculture have listed a secondary occupation, and come to 111 in all, or 4.4 percent of the sample. Those show a higher income than the rest of agricultural laborers and make over 200 pounds on the average. The secondary sources of their income are managing land in ownership or tenancy relation, and raising livestock. Similarly, some non-agricultural wage laborers are involved in livestock production and managing land as a secondary occupation. Those come to 101, or 4 percent of the sample, and make on the average 288 pounds, an income equivalent to owners of 3 to 5 feddans. Those listed as self-employed non-agriculturalists also manage land and/or raise livestock as a secondary

¹ ILO, Rural Employment Problems in the United Arab Republic, Geneva, 1969. This is in contrast with the figure of 5 feddans adopted by Radwan.

occupation. They make 81 cases, or 3 percent of the sample, all of whom make more than 300 pounds annually.

It is obvious that most of those who list a secondary occupation are better off than the members of their group who have a single occupation. It is certain, moreover, that more of the landholders in this survey have secondary occupations though not listed, an observation that confirms what we have maintained earlier that declared income is lower than real income.

If there is a single conclusion to this discussion of rural income, it is that we are still on very soft ground insofar as rural family budgets are concerned. A study of income streams compared with expenditure is badly needed if we are to have confidence in our conclusions. The best and potentially most reliable results are to be obtained by in-depth methods used selectively over various regions, as we are not so much in need of national data as an accurate assessment of what wages and returns from various streams of income are in a rural family. More survey results are about to come out in the coming year, and we will stand on firmer ground insofar as national data are concerned. What is not likely to come out is an accurate assessment of a family budget in a rural setting for various occupational groups.

CHAPTER V

Conclusion

The profile drawn up here for the contemporary rural scene in Egypt shows mixed results, which, on balance, upholds the record of agrarian reform. Most of the original objectives of agrarian reform have been fulfilled to a reasonable degree: relatively egalitarian distribution of land holdings, maintenance of private property with a considerable measure of collective management, preservation of productivity levels, secure tenancy conditions for small farmers, end of usurious practices, credit facilities for small cultivators, end of political domination by large landowners, participation of cultivators in the implementation of national policy regarding agriculture, conversion of large areas into perennial irrigation, and the extension of social services to local communities such as education, health, welfare, technical assistance, electricity, potable water and the like. Finally, the strategy of the central government to divert revenue from agriculture to assist in the development of national industry was by and large achieved, but with indifferent results. National policy aimed at making the small cultivator the mainstay of the agricultural economy has been successful to the extent that the household economy has become more viable than ever before. Modernization of agriculture by such measures as introduction of some mechanization and new techniques of cultivation plus cooperative management have not undermined the household economy, they have rather sustained it.

The small household economy has been strengthened by such agrarian reform measures as (1) provision of credit on easy terms to small farmers plus all the necessary inputs for cultivation, (2) offsetting the effects of fragmentation on productivity by instituting land consolidation, and (3) introducing methods of large scale production to the household system of cultivation by means of state cooperatives. Government encouragement of farmers to raise livestock have also contributed to the household incomes of small cultivators. Thus agrarian reforms have contributed to spreading the benefits of agriculture more widely, as this report empirically demonstrates.

Finally, it should be mentioned that agrarian reform introduced the institutional frame that made it possible for local farmers to establish contact with officials and seek services at the local levels. Municipal government was introduced with built-in measures of representation, and cooperatives for the management of agricultural services made it possible for small cultivators to have access to services provided by the national government. Municipal institutions were particularly important in that they became the focal point where most national services were made available to villagers. Of particular importance in this context is the extension of welfare to helpless individuals who needed assistance for survival. Thus aid to the poor which the Ministry of Social Affairs provided has been administered by the municipal government.

There are, however, areas in which the national government failed to perform according to plan. This is nowhere better demonstrated than by the findings of this study regarding the continuation of widespread poverty. Most important areas of failure are those which threaten the main resources of rural people: land and manpower. To cope with the

problem of land shortage, the national government embarked on an ambitious scheme of land reclamation of desert lands but after a long period of work and great expenses, only a small area was turned into productive use. This was furthermore offset by the continuous encroachments on the agricultural land by urban and industrial expansion. As we have shown earlier, the total area of land under cultivation in 1976 was smaller than that of 1961, despite land reclamation efforts. This problem has been compounded by continuing increase in the rate of population growth on a national scale and in rural areas in particular. The poor continue to have large size families, and family planning has not affected or even reached most of the poorer segments of rural population. Consequently, the population pressure on the land continued unabated and has reached a point where it could have unsettling effects on society as a whole.

The high intensity of labor on the land has almost reached the limit. We have demonstrated in this study how agricultural employment on the land has increased considerably in the last two decades. Small farms of less than three feddans generally managed by members of the household have absorbed most of the additional labor. This tendency can be considered as cash savings techniques adopted by small farmers who resort to employment of household members like children and/or housewives, rather than hire wage laborers. Nearly half of Egypt's cultivation area is managed by holders of three or less feddans. These, it should be added, cannot afford to divide their holdings much further nor will they be able to absorb more labor. One can conceive, however, of the possibility of the rest of the holdings, i.e., the remaining 50 percent of the cultivation area, to develop in the same pattern of fragmentation and absorption of more

labor of the same kind, unpaid family workers. Under such a condition, it may still be possible to absorb more workers on the land but not by very much. It is not, however, certain that the future course of changes in landholdings in Egypt will follow the pattern of the last twenty years. Capitalistic cultivation methods are currently encouraged by the economic policies of the regime, and profitable returns from some agricultural products may encourage greater consolidation of land rather than further fragmentation. In such a case, agriculture would not be able to absorb more labor since larger estates are less labor intensive. The excess population would have to search for some other employment.

Excess population in rural Egypt has already started to find other avenues of employment, mainly in the rapidly growing construction sector in the country as a whole and in oil-rich Arab countries. As we have already pointed out in this study, the labor supply in rural areas has diminished to an extent that pushed agricultural wages upwards. It has also been reported that migrant workers who are generally considered the poorest of the poor of the agricultural population have experienced an improvement in their work conditions and wages. Better living conditions while on the job, better transport facilities and a meal are now provided. It is not known, however, how much of the wages earned by these workers are cut by labor contractors who are still the major recruiting agency. Continuing improvement in the conditions of the labor force, however, depends on the demand for Egyptian labor by oil-rich Arab states and on the growth in the non-agricultural sector of the Egyptian economy. So far, Egyptian industry has not shown the growth necessary for the absorption of available labor. This may, however, change, and growth

may come along to Egypt with peace. Up till now, under-employment in agriculture continues to be the norm.

The other area of concern is that the off-farming sector in rural areas has shown very slow growth in the last two decades. It increased from about 21 percent to about 23 percent of the rural labor force. More needs to be done in this area, considering that agricultural land is not expanding. The efforts of the Egyptian government at present to stimulate non-agricultural pursuits are steps in the right direction but are not sufficiently strong to make progress in this area adequate or to absorb the entrants into the labor market in rural areas. In 1972, the government created a new body in local government called the Organization for Reconstruction and Development of Egyptian Villages (ORDEV), whose task is to make grants to local councils to enable them to provide local communities with better services and to strengthen local government. The latter task is to be fulfilled by providing seed money grants to village councils in order to undertake revenue generating activities, the purpose of which is to improve the financial situation of municipal councils and enable them to render more service to villagers. Moreover, the national government scheme of local autonomy has put municipal government in full charge of the Local Development Fund (LDF) whose purpose is to make it possible for municipal councils to undertake revenue generating activities. The sources of revenue for the LDF are three: (1) a share of the levies on agricultural products and sales, (2) revenue from municipal council productive projects, and (3) grants in aid from ORDEV. Up to this point, the share of the LDF is smaller than that of the governorate, and therefore is not large enough to sufficiently stimulate growth of economic projects in local communities. Since municipal councils are not allowed

to initiate taxing policies, their share of the existing levy should be higher, if not having the whole levy revert completely to their benefit.

The cost of municipal administration, it should be noted, is still born by the central government to a very large extent, and the share of the national government's financial burden is growing rather than declining. This is obviously a disappointing fact, since the central government had hoped to reduce its burden by emphasizing decentralization of local government. The deficit in the revenue of local government that had to be born by the central government in 1979 is 506 million Egyptian pounds, an increase of 111 million over the deficit of the previous year. The revenue generated by the grants made by ORDEV to local government, on the other hand, has reached only 63 percent of its potential, according to ORDEV assessment in 1979. This is based on cash flow; in real terms, the returns should be much lower. It is beyond this study, however, to go into the details of this modest record of local government in the economic development field. Suffice it to say that bureaucratic routine, lack of management skills and motivations on the part of local officials and difficulty of access to credit are major factors. The government encouragement of the private sector at present may prove more successful and this does not augur well for the economic enterprise of municipal councils, for the simple reason that ability to compete with the private sector without official protection is limited. Contrary to some theories of development, competition may not lead to improved results for both sectors since the public sector lacks motivation and persistence. It may find excuse in the tough competition

from the private sector to lay down its arms rather than to be spurred to further progress. At present, however, there is room for growth in local enterprise and this makes it possible to accommodate both sectors without having ill-effects on each other. This is due mainly to the great unmet need for production and services.

The results of this report point clearly to danger spots in the economic conditions of the rural population of Egypt, which is still the larger segment of the population. Despite the fact that gauging rural incomes is far from being satisfactory, the household expenditure data point to a decline in incomes for a large section of the population and make those in the poverty bracket larger than the 1964 period. The fact that this study provided additional insights which point to an improved economic condition of the landed population, even among the very small holders who qualify as near-landless, does not detract from the fact that a large number of the poor are among the non-landed population. This population should be expected to increase more rapidly since the land available in Egypt will not make room for more comers. It has been clear also that migrant workers engaged in agriculture and agriculture related activities are among the very poor. The invalid, orphans, widows and the very elderly are also listed among the extremely poor. These are maintained at the subsistence level or below it by means of aid from the central government. Migrant workers, on the other hand, have recently benefited from the improved demand for labor and their wages and working conditions have improved. These groups, the migrant workers, non-agricultural self-employed poor and the completely dependent, do not form more than ten percent of the rural population. The rest of

the poor of rural Egypt have not been clearly identified or described in this report or any other that we know of. The task of identifying the groups who live under the poverty line and their occupational and general conditions are essential for knowing their prospects and what could be done for them. A special inquiry would be necessary in order to reach reliable results.

Prospects for future employment are bound with the educational levels of the new entrants into the labor market. The situation in this regard is still not very encouraging as illiteracy tenaciously persists in rural Egypt and is still at about 73 percent of rural population. By 1974, about two-thirds of school age children were attending primary schools, due to lack of room and difficulty in enforcing the compulsory education law. In terms of related services, one finds that electricity has not yet reached all villages and in many communities where there is electricity, not many use it domestically. The level of energy consumptions in Egypt is growing rapidly with the rise in general consumption patterns, especially in the urban areas. Thus as Egypt moves out of the austerity practices of the fifties and sixties, it may find that it is very difficult to sustain a higher standard of living for the population size it maintains at present.

Another sign for concern is the rapid inflation affecting Egypt currently and that will affect it for the years to come. While very few agree on what the rate of inflation is at present, an annual increase of 30 percent is considered a reasonable estimate by many experts. The fact that Egypt depends heavily on foreign aid (Arab and Western), plus dependency on other non-productive sources of income such as remittances, tourism, and Suez Canal

dues, give reason for concern and point out to the importance of encouraging productive activities in the countryside such as those supported by ORDEV. Suggestions of areas where changes could be made for the social and economic development of rural Egypt may therefore be a fitting conclusion to this study.

Areas for Improvement

A. Land Resources. Agricultural land is still the major source of income for the majority of the rural population and therefore is the corner stone of any efforts to improve the economic conditions of the population. Urban expansion, salinity, and industrial use of top soil have been the major factors contributing to the erosion of the land wealth of Egypt. In the past, the Egyptian government focused on reducing salinity, increasing perennial irrigation and expanding the cultivation area into the desert. Work continues to be in progress on salinity and perennial irrigation and to a lesser extent land reclamation. However, as has been indicated earlier, grandiose schemes to convert large tracts in the desert into fertile land have given indifferent results and the major thrust at present is to build cities in the desert rather than reclaim agricultural land. This is not the occasion to comment on the creation of desert towns in Egypt, except to say that it may not prove to be an answer to the immediate needs of the rural population and, under Egyptian conditions, it may take a long time before it will be possible to accommodate urban residents.

In Egypt, the desert surrounds agricultural land and cities on all sides except on the Mediterranean coast. The line of demarcation between the desert and the sown is very distinct all over the country. The expansion

of Cairo may be quite suggestive on this question, since the city has expanded against both lines: the desert and the green. Greater Cairo has spread rapidly into the fertile lands of Giza and still does so, and also north into the desert lands giving rise to the suburban communities of Heliopolis and Madinat Nasr. Madinat Nasr continues to cut deep into the desert and expand rapidly. The main lesson from the Cairo experience is that cities and villages expand into their immediate environment, regardless of the nature of the soil. This pattern however, has not proved to be true of residential expansion in the countryside and provincial towns which continues to be at the expense of fertile lands and inwards as well. Inability to expand into the desert as in Cairo is due in part to the lack of tangible official support, especially in infrastructure terms, whereas in Cairo official support has proven to be instrumental in the march against the desert.

Egyptian conditions suggest that the desert should be attacked directly by all bordering communities starting with the line of contact between the green and the barren. Every bordering village and town would have to be involved in the march outward and thus assume the major responsibility, leaving the central government with a supportive role. What is more the march onto the desert should be multi-pronged approach comprised of land reclamation for agricultural use and urban expansion for residential purposes, industries, public buildings and roads. At present the government is encouraging citizens to reclaim land adjacent to their villages when such lands are considered potentially fertile. This is still, however, a timid effort, and Egyptian shortage of useful land calls for an intensified and widespread campaign. Public awareness

should be aroused and official support for such activities should be unequivocally expressed.

The proximity of the desert to residential communities and to the Nile should make such efforts quite feasible. Road construction along east-west axis would guide efforts in direction of the desert. Finally, the development of building bricks from desert clay and sands should be made with the utmost speed to stop the pillaging of the best soil in the Nile Valley for making building material. Should urban expansion continue to erode the agricultural lands of Egypt at the present rate, Egypt would lose the bulk of its agriculture in a matter of one hundred years.

B. Human Resources. Next in importance to agricultural land is human resources, of which Egypt is over-supplied. We have already shown that the population pressure on the land is very strong and at present there is not more than 0.3 feddans of land for every rural resident, and no more than 0.15 feddans of land for each Egyptian at large. At this rate, a rural family of six persons would have only 1.8 feddans to support it. This is already below the amount of land considered necessary to keep a family at the subsistence level. In short, it is clear that the land cannot support many more newcomers without reducing everyone to poverty and perhaps most into extreme poverty.

The question of what to do about this question of population is complicated by political and value considerations. Nevertheless, family planning is an alternative that cannot be ignored any longer by Egyptians, even if they choose to follow other policies to solve this problem. For it is clear that no single strategy is by itself sufficient at this stage.

for resolving Egypt's population crisis. So far the family planning achievements of Egypt are unimpressive and not reassuring.

Another alternative to the solution of the population problems is migration to other parts of the region which are under-populated and where labor is in demand. At present, Egypt has about one million and a half workers unemployed, not to mention under-employment, both urban and rural. At the same time, oil rich Arab countries such as Saudi Arabia, United Arab Emirates, and Libya alone will be in need of over four million workers before 1982. These countries are already recruiting hundreds of thousands of Asian workers who do not know the language of the host countries and most of whom are illiterate. Egypt has so far contributed a number of its citizens for work in those countries, but the Egyptian labor force abroad is characterized by high educational qualifications to a disproportionate extent, which creates labor shortages in certain sectors in Egypt itself. The Egyptian government does not seem to have a clear employment policy for Egyptians in the region. It could actively promote the employment of unskilled workers, where they are badly needed in the region as well as regulate the flow of skilled labor. There seems to be no reason why Egypt should be saddled with a problem of unemployment when the region as a whole is in bad need of workers.

A third and obvious course to absorb the increasing numbers of the Egyptian unemployed is for the economy, especially industry, to start making progress. Such an eventuality would, however, require some changes in the qualifications of the labor force. First, it would require more literate workers, who constitute at present less than half the labor force. It would also require an increase in the number of skilled and

vocationally trained Egyptians. Egyptian education in most fields is not on a level that makes it meet the challenges of industrialization, neither quantitatively nor qualitatively. Yet the brunt of the financial burden born by the Egyptian government in its efforts to provide education for those already in schools and universities is very high. Foreign aid could play an important role and one for which it may be better prepared.

C. Agricultural Policy. Another area relevant to the question of relieving rural poverty is the agricultural policy of the Egyptian government. The contribution of the 1952 Revolution to the countryside and to small cultivators cannot be denied or underestimated. Agrarian reform, however, has not been achieved without a price. The strategy of the Revolution, which to a large extent continues to be the case now, has been to divert resources from the countryside for industrial development, provision of inexpensive food supplies to the urban population and/or for financing the national government. Consequently, the balance of trade, as in other countries of the Third World, is tipped in favor of the urban sector. The manner in which the Egyptian government diverted resources was not through taxation, for that was and still is lenient, but rather through crop and price controls. Currently, the government continues to follow the same policy. It has, however, reduced since 1973 the taxation burden on the small cultivator by exempting owners of three feddans or less from the land tax. This means exemption of half the land and more than two-thirds of the cultivators. In a balancing act, however, it has raised the land rent, an inevitable step considering the rise in the prices of many crops.

The government has continued to extract the surplus from many cultivators¹ by continuing the established policy of price and crop controls. Peasants are still compelled to raise rice and cotton according to governmental plans and to sell these products to government controlled companies at officially set prices. Some provinces, however, are exempt such as Qalyubia and Giza because they are close to Cairo and have to provide fruits and vegetables for the city. Farmers who wish to plant fruit trees are also exempt from the plan, but it is usually the larger owners who can afford to do so. The government continues to hold monopoly on the supply of fertilizers and pesticides and used to have complete control over all agricultural inputs. Some scholars argue that control and supply of agricultural inputs by the government at official rates works to the disadvantage of cultivators.²

Caution, however, should be exercised in discussing the terms of trade, for raising the question regarding extraction of the surplus in agriculture may conjure up images of 19th and early 20th century absentee landlords. This is certainly not the case now in Egypt. In two decades, agrarian reform contributed to the countryside what the countryside had

¹Two unpublished papers deal with this question of buying cheap and selling dear. See Karima Karim, "Tawzi' al-Dakhl Bayn al-Hadar wa al-Rif, 1952-1975," Third Annual Conference of Egyptian Economists, Cairo, 1978; and John Waterbury, "Administered Pricing and State Intervention in Egyptian Agriculture," Conference on Politics of Food, held in Rome by the American Universities Field Staff, June 1978. Also see John Waterbury, "Egyptian Agriculture Adrift," American Universities Field Staff, Reports, No. 47, 1978.

²See Robert Mabro, The Egyptian Economy, 1952-1972, Oxford: Clarendon Press, 1974, pp. 76-79.

not received in two centuries. For despite the fact that expenditure on agriculture has been only five percent of all public expenditure,¹ the inflow of goods and services to rural communities from the national government has been outstanding. Brought into the countryside since 1952 are roads, potable water, electricity, health centers, schools, craft training centers, cooperative societies, municipal councils, credit for agriculture, technical and administrative personnel such as agronomists, physicians, nurses, accountants, teachers, etc.

On balance, the transfer of the surplus from agriculture during the sixties is estimated at about six percent, though there are differences among authorities on this point.² This figure includes price differentials, taxation, and investments allocated to agriculture. It does not, however, include estimates of losses suffered by cultivators from crop controls.

Aggregate figures often conceal as much as they reveal and the loss to farmers from selling to the government may be better appreciated when it is realized that the government share from cotton during the sixties ranged from 30 percent in 1969/70 to 181 percent in 1966/67. The government share of the income generated from rice has averaged about 74 percent in the years 1968-70; the rest of the revenue went to cultivators. Moreover, it should be remembered that these crops cost the farmer more to cultivate and bring lower prices than other crops. Peasants have also

¹ USAID, Near East Bureau, "Egypt: Recent Socio-Economic Data," October, 1977, p. 17.

² Abdel-Fadil, op.cit., p. 180; Radwan, op.cit., p. 76; Waterbury, op.cit., and Karim, op.cit.

to provide the government with a quota of some crops at official rates, which is usually to their disadvantage. Only in crops such as wheat and onions is the peasant not at a disadvantage in selling to the government. In recent years, the government has moved to raise the prices of cotton and rice for cultivators, naturally motivated by the need to reduce peasant malaise and to keep up with inflation and the improved prices internationally. However, there is still dissatisfaction regarding the marketing of cotton due to the possibility of assessing cotton at lower grades and therefore roll back the price to where it was before.

Egypt earns some of its hard currency by selling internationally demanded crops such as cotton and rice. The government has also to insure that local textile factories receive enough raw material to keep the industry working. However, in as far as peasants are concerned, cotton growing is risky, uses up the land for a long period of the year, is expensive to cultivate and brings modest returns. Fruits, vegetables, potatoes, berseem (clover), sesame seeds, herbs, and other crops bring much better returns. By restricting cultivation, the government is not allowing the market forces a free course and the victim is the cultivator. Some cultivators now find it more economical to pay the penalty for not growing the required crops and plant something else. This is not the way to raise the revenue from agriculture. Moreover, cotton is not the only crop that generates industrial projects; fruits and herbs do as well and sell in the international market at a considerable profit. Berseem too has contributed enormously to the growing livestock industry in Egypt which contributes in turn to meat and dairy products. It seems that by

letting the market forces have a more free reign in cultivation, all parties--peasants, government and urban interests--would be the beneficiaries.

Egyptian agriculture is famous for its high yield, yet it has not in all cases reached the maximum possible results. Variations in yield are considerable even within one village and with respect to one crop. More could be done for the improvement of productivity across the board. A concerted effort to study low yielding farms and finding the solution would contribute enormously to the rural economy. Egypt has the organizational network and expertise to be in a position to undertake such a task. Facile solutions found in mechanization, regardless of some merit, are not necessarily the answer.

D. Local Government Role. Finally, the role of local government in the improvement of the economic conditions of rural people should be considered. This is an area of some promise, to judge from the great interest shown by the national government and the sound structure of local administration. The new local government law of 1975 shows that the government has focused on institutional changes aimed at generating a greater capacity by local institutions for development and service. The official strategy of local government reform may be summarized in the following points.

1. Decentralization of authority by a process of devolution from the national to subnational levels. Most of the authority exercised in the past by central government ministries had been located in the governorate of provinces. This had reduced red tape, made government more accessible to ordinary citizens and officials of local councils and

gave more weight to local interests through representation. In addition, a new middle level structure has been created at the district level (markaz), linking municipal councils with the governorate. At all three levels--governorate, district and municipal council--an elected body participates along with official staff in the governance process.

The new administrative structure created at the district level is a replica of the administrative structure of the governorate. Almost all the line ministries represented at the province level are represented at the district level as well. This measure has brought official and technical expertise, especially in financial matters, closer to the village community.

While the relations between municipal council and district government is clearly defined by law, the impact of instituting a district structure on local councils is still in the making. Thus far, some features may be discerned. The district authority has clearly more leverage to represent local interests at the governorate than did the municipal council in the past. Being well staffed with qualified experts in various fields, district government contributes significantly to clarification and resolution of problems before they are presented to the governorate. Finally, the head executive officer at the district level can provide much wanted leadership to local councils and get things moving. On the other hand, it can already be observed that district government has started to overshadow municipal councils as it becomes more and more the focus of local administration. However, there is nothing inherent in the structure of local government that would prevent a municipal council from developing its potential and establishing itself

as a strong contender of district government, something that has already happened in some areas.

The new law of local government has emphasized the development role of municipal councils. Toward that goal, a Local Development Fund (LDF) has been instituted in municipal councils, the purpose of which is to undertake productive activities and provide services to the community. The revenues of the LDF come from a share of levies collected locally on agricultural products and inputs plus returns from local economic projects. In addition, the LDF may receive grants in the form of seed money with which to start revenue producing projects and/or service oriented projects. These grants are provided by a national structure known as the Organization for the Reconstruction and Development of Egyptian Villages (ORDEV) created especially for this purpose. The municipal council has full autonomy in the use of resources and management of the Local Development Fund, except for the use of grants which have to be used for the purpose for which they were solicited. While Local Development Funds suffer from capital shortage and in certain cases from entrepreneurial skills, on the whole they show a potential as a vehicle for stimulating and improving local economies. The LDF is an important mechanism that may contribute significantly toward reducing rural poverty.

3. Disaggregating cooperative functions and placing most of them in a new structure known as the village bank. Agricultural cooperatives were started by the reform minded Revolutionary regime in the fifties and early sixties to provide cultivators with the necessary credit and

input on easy terms. Cooperatives used to be run by an official staff and an elected council of cultivators. By 1961, all agricultural inputs had to be obtained through the cooperatives and all marketing of traditional crops, such as cotton, rice, wheat, maize, onions and sugar cane had to be marketed through the cooperatives. Cooperatives solved many potential problems that could have ensued after land reform, but because of their early successes, the central government found in them a useful mechanism through which it could control all the agricultural process. Thus, they were burdened with too many functions for which they were ill-equipped or prepared. The results of overloading the cooperatives were seen in the late sixties as inefficiency, negligence and corruption. These problems were compounded by benign neglect of cooperative affairs by the central government. Despite all this, cooperative record has not yet been seriously assessed and statistical accounts show that most regular cooperatives ran a profit up to the last period before their functions were transferred to village banks. The reputation of cooperatives has been generated in part by political opposition: by the left because they prevented the development of collectives in agriculture and by the right because they were a symbol of agrarian reform that had deprived most of large landlords and farmers in general from a free market.

At present, the village bank provides most of the inputs in cash and on credit but with a high interest rate. It also serves as a regular bank for villagers and provides loans for investment in agriculture. Up to this point, most of its activities have been in providing agricultural inputs. The loans which it offers are given at a high rate of interest (relative to the ability of small farmers) and with strict rules regarding

loan security. Consequently, only a few wealthy farmers have been able to benefit from these loans. The banks, however, have rationalized the system of credit and the dispensing of agricultural inputs and made order of account keeping better than cooperatives. Nevertheless, making the cooperative a marginal organization, has deprived villagers from a participatory institution in which they had the right and ability to have their say in the management and implementation of agricultural policy and in committing profits in local projects.

On the whole, one may conclude from the earnestness with which local government and development are being pursued that rural poverty constitutes a serious concern for the national government. The motivation is there and the structure is sound and one cannot but hope that it will all work for the benefit of poor villagers, cultivators and non-cultivators. Some observations, however, can already be made regarding the possibilities and limitations of the Local Development Fund in promoting the economic welfare of villagers.

Possibilities and Limitations of the LDF

The ability of local councils to undertake economic activities useful to villagers and to the finances of local government is bound with two questions: administrative talent and raising funds. In the first place, one finds that economic projects carried out by municipal councils have shown moderate results at best. CDRV estimates the performance rate at about 60 percent of potential, and much of this is due to lack of entrepreneurial talent among local officials and dripping administrative routines. Training of local officials in entrepreneurial

skills relevant to their own environment is as necessary now as training them in administrative skills, so long as they are expected to perform both functions. Moreover, some kind of incentives policy has to be worked into the system in order to motivate local officials to perform better.

Raising the capital for development remains the major problem for municipal councils. Although municipal councils have an input into the budgetary process, the budget is in effect determined and set for them by the Ministry of Finance and the Governorate. There is little they can do to utilize budget allocations for entrepreneurial activities. The potential for development activities lies in the Local Development Fund, since the municipal council has full freedom to commit LDF resources for entrepreneurial activities and services unrestrained by administrative routine or higher authorities. Moreover, the sources of revenue for the LDF is mostly local, coming from local levies. The problem, however, is the meager amount that accrues to the LDF from these levies and other sources. The major contribution to the LDF thus far has been CRDEV which provides seed money for starting projects. This is, however, a single time effort and could not be counted upon indefinitely. Some local councils have been able, however, to generate income from projects started through such grants which provides them now with a steady source of income. On the whole, revenue generated from investments of the LDF is still negligible and more needs to be done to provide necessary capital to village councils.

With respect to raising capital for investment in developmental projects, the village bank has proved to be useful only to private

entrepreneurs with means. Local councils have not been able to raise loans in village banks because of the difficulty of setting up a collateral that satisfies bank officials. Village bank officials consider local councils bad risks being public bodies from which they could not collect in case of default. This tendency is particularly troublesome since in principle the village bank is part of local government and is intended to contribute to its development. In practice, however, village banks, staff and management, are tied to the Governorate and are completely free from the authority of local councils.

Some ways ought to be found to enable local councils to raise capital for development. Some measures may be suggested here in passing. One way to improve the available capital for the LDF is to allocate all the revenue from local levies to the LDF, since those funds are raised locally to start with. At present, local councils obtain a share less than half the revenue from the levies. However, levies by themselves are not enough as the situation is at present, for even with full returns from levies, the capital necessary for productive investments would still be too small.

Village councils do not have the authority to impose taxes and therefore are legally constrained from raising revenue. The freedom to impose taxes on local businesses is necessary if the central government desires to see local councils become self-sufficient and productive.

As a starting point, the archaic system of local taxation should be rehailed. This is necessary regardless of who would undertake the step, the national or subnational administration. The system of rural taxation

has been based on the outdated assumption that agriculture is the only source of revenue in rural areas. Consequently, shops, commercial transactions, real estate, mills, productive firms, businesses that have to do with the renting of machinery and transport and other non-agricultural activities are not taxed locally, though at present income generated by such activities is considerable. Should this source of revenue be tapped to the interest of local councils, their capacity to provide services and engage in productive activities should become much improved.

A comment on the national strategy of local development is in order here. As has been indicated earlier, the national government planned to stimulate local development by means of decentralization of administration in the hope that local councils would become capable of undertaking entrepreneurial activities and generate revenue for themselves and for their communities. Local councils, it was conceived, would perform an entrepreneurial role in addition to the administrative functions with which they are basically charged. Since most rural people were seen as of modest means or poor and entrepreneurial talent in short supply, local councils which are staffed by skilled personnel and are supported by the national government in terms of finances and economic services would serve as the major agent of local economic development.

In their capacity as the public sector in the rural economy, village councils have so far shown limited ability for the entrepreneurial roles envisaged for them by the national government. It should, however, be emphasized that the record so far shows limited capacity not failure. Two main reasons may be singled out here to explain the modest performance

of the public sector in rural areas. First, the capital necessary for investments in productive activities has not been adequate, and second, entrepreneurial talent and motivation on the part of the official staff has not been as strong as the national policy had assumed it to be. We have already commented on the question of raising capital to improve local councils capacity for economic investments. In the following, therefore, we shall make a few suggestions regarding the administration of the public sector in rural areas.

Obviously, one's first impulse is to suggest training of local officials in finances, economic investments and business administration. Most local officials are recruited from professions of agronomy, teaching and law. There are also some accountants. Economists and business administration graduates are not yet in large supply to make them available for employment in local government. Obviously, a developing nation and one like Egypt with an elaborate and advanced educational system cannot ignore much longer the need to produce more graduates in these fields. Training on the job would also prove to be of great value, especially if training would take into account the experiences of local councils in the entrepreneurial field. There have been some successful and impressive performances in some areas that are left unknown to others. Local officials would learn most from their successful colleagues because they speak the same language and have familiar problems to discuss. Those who have solved their problems are apt to inform others meaningfully of their exploits. Local officials also have a great deal to learn from their own failure.

However, more than training is necessary to get the public sector moving, and the first basic suggestion here is to make the participation of private citizens in public enterprise a major component of the strategy. At present, the system allows for involvement of ordinary villagers but not much has been achieved in that aspect of the enterprise. The second basic assumption, is for national planners to be realistic about the potential developmental role of local officials. It should be realized that the public sector locally is not the most efficient agent of entrepreneurial activities and business management. Egypt already has serious problems with the public sector on the national level and needs no instructions on the subject. However, it locally should be realized that the public sector is even at a greater disadvantage than it is nationally, simply because it does not enjoy the strong support and attention the national government gives to major industries.

Some ways thus should be conceived by means of which private citizens could become actual partners of local councils in economic development projects. A very few successful councils have been able to induce villagers to become share holders in small businesses started by the village councils. However, for the vast majority of rural people, confidence in the motivation, ability and to a certain extent, it should be said, honesty of local officials is not sufficiently strong to overcome their inherent resistance to invest in publicly managed business. Moreover, turnover of official staff generates a sense of discontinuity in local enterprise, since very much depends on the persons in charge of the economic projects. Other methods, therefore, may be necessary to devise. Here are some that are drawn from experiences that have already proven to be successful in Egypt but have not been capitalized on thus far.

The following suggestions are based on the assumption that the public sector is relevant to local development and is at an advantage over other local agents by virtue of overall government support. Therefore, it is suggested that local councils can perform the "breeder" role in local economic development by which is meant the initiation of productive projects with the express purpose of turning them over to private citizens. It should be remembered that this method is suggested as one possible course of action, not the sole role of local councils. Local councils are in a position to play the breeder role because of official encouragement and facilities made available to them and in the absence of other local agents whose role is solely public service. But while local councils can start productive projects, they are poorly prepared to run them efficiently and economically, not to mention the limited capacity to provide continuity. Complementing this role are private citizens who do not have the capital or facilities to start revenue generating projects but are highly motivated by self-interest.

Taking the lead, local councils could start projects and turn them into profit making activities to both sides. Two examples may illustrate this process. A village council may start say a sewing shop supplied with a master craftsman and sewing machines. The shop would perform dual roles of training youngsters and taking commercial orders for pay. The products which are sold by the shop are the result of the supervised work of trainees. The second and more important aspect of the sewing shop would be to sell every graduate trainee a sewing machine on which he/she had been trained. Turning over the machine will not be gratis but at its market price. The problem is that the trainee can be assumed to lack the funds necessary

to buy the machine. The council could offer the trainee to continue to work at the shop and pay the price of the machine from the proceeds of his work by installments. Once the price is paid, the trainee would take the machine home and start his/her business as a private entrepreneur.

A similar undertaking which illustrates the point is for the local council to start a bee farm, quite a common investment by village councils. As it happens, most bee farming is done by village councils and/or financially capable private individuals. This economic enterprise could be made to reach ordinary citizens of modest means by the breeder type role of the village council. The council could start the farm then sell the beehives to individual citizens. The process would be similar to that followed in the sewing machines example. An interested party would be invited to send a person to be trained on the job. This way, the village council would secure the necessary labor for its project and provide a villager with a skill. The trainee would be given the option of buying the beehive or beehives he works on and paying by installments from the proceeds of his work. Once the price is paid, he could take the beehive home and start his own farm.

The advantage of the "breeder" type role of the public sector is that it would spread economic activities to a section of the population too poor to be able to start business on its own, plus providing them with the necessary skills. In the second place, the undertaking can prove financially advantageous to both sides, each making some kind of profit out of the project. Third, it would solve the problem of the needed capital for investment which most villagers lack and avoid the problem of extending services to villagers on credit and collection of debt, a

very arduous and unproductive task. As has been mentioned earlier, these examples have been successfully tried by some village councils but have not been generalized, perhaps because there is no agency which makes such information available to other councils.

Another role that may be suggested here for the public sector to stimulate the economy is for the village council to start productive projects then auctioning them off to private citizens to manage. A village council able to start a livestock or poultry project could turn over the management to a private entrepreneur and take a share of the proceeds. This pattern of activity is suggested because the nature of some economic projects does not lend itself to the breeder type system such as raising poultry and livestock. For it to be economically worthwhile, these projects should be sufficiently large. Moreover, villagers raise poultry and livestock on a very small scale anyway for private more than commercial purposes. Local experience thus far has shown that while local councils have been able to start such projects, they often fail to turn them into profitable undertakings or fail to provide continuity of performance. Turning over the management of the farm to a private entrepreneur could prove profitable to both sides. One draw back of this pattern of activities is that it lends itself most successfully to cooperation with financially and socially advanced entrepreneurs, although in some projects poor villagers could become involved.

Finally, village councils may be encouraged to develop local industries that use raw material of their own environment. Many village councils have already embarked on such activities and the most successful

have been in Fayyum Province. Village councils can start projects which use to advantage local products such as processing dates, olives and vegetables for the market. The possibilities of starting projects that would generate lucrative returns are still numerous in local communities, especially because of the changing conditions of rural society and economy which are not matched by entrepreneurial activities to take advantage of the situation.

In short, the official drive to stimulate local government and small local enterprise is a step in the right direction, yet one which is still short of the necessary imagination and perseverance to make it a success. It has, however, the potential of improving local economies and spreading the benefits to the rural poor, especially those who have no opportunity in agriculture.

APPENDIX

A NOTE ON THE ADJUSTMENTS FOR FAMILY SIZE AND THE COMPATIBILITY OF THE DIFFERENT TABLES IN THE HOUSEHOLD BUDGET SURVEY RESULTS

Determination of the number of poor households or individuals from these cross-tabulations requires the assumption of a constant family size. Generally the average family size is assumed to be the constant, which biases the number of poor households and the number of poor individuals. The bias will be worse the greater the actual dispersion around the average. The direction of the bias is possible to predict if the average family size, and the dispersion around that average is constant for each expenditure category. If it is not, the direction and extent of bias are impossible to predict.

To avoid making the constant average family size assumption, cross-tabulation on Household Expenditures by family size or tabulations of per capita expenditures must be used. If per capita tabulations are used, these must be constructed by dividing household expenditures by the number of members in each household observation. Dividing the sum expenditure of a group of households with differing numbers of members by the sum of individuals in that group of households will still give biased results. (In other words, we still have a bias if we use the cross-tabulations of household expenditures by

expenditure items on pages 5 and 6 of the results to determine the average per capita expenditures by household expenditure group.) Because the estimates of the number of poor households and individuals and the average size of poor households are so different depending on whether one uses the cross-tabulations on Household Expenditures and Expenditure Items (which are biased by the required assumption on family size) on the one hand, or the Cross-Tabulations on Household Expenditures by Family Size (page 17 in Budget Survey results) or the per capita Expenditure Tabulations (on pages 9-10 of the Budget Survey Results) or cross-tabulations on per capita expenditures and family size (page 19 of the Budget Survey Results) on the other hand. We will demonstrate below the precise reason for the difference in estimates and the compatibility of the various tables in the household Budget Survey Results. For this demonstration we will use only the results from the first round (rather than the combined round results) to ease calculations and to enable the reader to refer directly to the published tables. The combined round results presented in the working paper will of course differ from the results presented here based on the first round only.

Estimates of Poverty Based on Cross-Tabulations of Household Expenditures and Expenditure Items (Tables IA and IB on pages 5-6 of published results)

Two types of poverty lines can be used to estimate the number of rural poor from these tables: a household

poverty line or a per capita poverty line. We will use a household poverty line of LE 250 based on an assumed family size of five and a per capita poverty line of LE 50.

A household poverty line of LE 250 (assuming an average family size of 5) gives an estimate of 40 percent poor households and 26.9 percent poor individuals. These percentages were calculated by summing the number of families (individuals) left of the solid blue line and dividing by the number of families (individuals) found in the "total" column.

Table IB is derived from Table IA and shows the average family size by expenditure interval and the average per capita household expenditures based on expenditure interval household group averages. The household poverty line of LE 250 translates to a per capita poverty line of LE 50 if each family is assumed to consist of 5 individuals. A necessary (but not sufficient) condition to validate the assumption that each household consists of five individuals is that the per capita poverty line (based on expenditure interval group averages) estimate of the number of poor households and individuals coincides with the estimate based on a household poverty line of LE 250. We see from Table JB that the group average per capita poverty line coincides with a household poverty line of LE 350 rather than LE 250. The number of poor households and poor individuals estimated based on a per capita group average poverty line is 61.7 percent and 50.8 percent respectively.

We can further see that our estimate of the poor is severely biased if based on a household poverty line assuming a constant family size. It should be remembered that only if we have a constant average family size, and dispersion around that average for each expenditure interval can we determine the extent and direction of the bias. Instead we find the average family size increasing with expenditure interval.

For all the above-explained reasons, a reasonably accurate estimate of the number of poor households and poor individuals requires that we take accurate account of family size. This means that we must either go to tables which cross tabulate household expenditures with family size or to tables which determine the per capita expenditures for each individual household rather than for groups of households.

Before we go on to other tables, some comments are in order concerning impressions about the size of poor versus non-poor households one gets from Table IB. Here, using a household poverty line of LE 250, we find the average size of the thereby defined poor households to be 4.1 and that of the non-poor households to be 7.1. If we use the per capita poverty line of LE 50 based on average per capita household expenditures of expenditure categories, we find the thereby defined average size of poor households to be 4.9 and of non-poor households to be 7.7. We are tempted to conclude that poor households tend to be small and non-poor households to be large. Whether

or not this conclusion is correct depends upon how many small households which in fact are not poor (one-member households in the categories with expenditures from 50 to 249, two-member households in the categories from 100 to 249, three-member households in the categories from 150 to 249, and four-member households in the category 200-249) have been misdefined as poor, and how many poor households have been defined as non-poor (households with six or more members in the expenditure category 250 to 299, with seven or more members in the category 300 to 349 category, and so on). Those households which are small but not poor in actuality pull down the average size of what we have defined as poor households. Those households which are large and poor in actuality raise the average household size of the households we have defined as non-poor.

Cross-tabulations of Household Expenditure Category Intervals with Family Size

First it might be prudent to check the compatibility of these tables with the cross tabulations from Table I. The first thing to check is the number of households in each household expenditure interval. The second line from the bottom of Table IA gives the number of households. The bottom line of Table 2 gives the number of households. It can be seen that they are identical. Second, we would like to see that the number of individuals matches for each expenditure category. To determine the

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number of individuals from Table 2, you must multiply the number of households in each observation cell by the corresponding family size. For example, for the first expenditure interval (less than LE 50), the number of individuals is $(15 \times 1) + (4 \times 2) + (1 \times 3) = 26$. This is identical to the number of individuals for this expenditure category found in Table 1A. We run into a problem for households in the family size category "10 or more." Since we don't know what number to multiply by for this family size group, the best we can do is see that the number of individuals needed to make the two tables match is plausible for expenditure categories with households in the 10 or more category. The reader can verify for himself that these are all in plausible ranges. Finally, we might look to see that a household poverty line of LE 250, assuming a constant family size, gives the same estimate of poor in Table 2 as it does in Table 1. We find that not only is the estimate of number and percentage of poor households identical in the two tables (given the same definition of poverty), but the number and percentage of poor individuals is identical, as are estimates of the average size of poor and non-poor households. We can only conclude that the tables are comparable.

Once we are satisfied that the tables are comparable, we can see exactly how estimates using a household poverty line of LE 250 assuming a constant family size of 5 are biased. A household poverty line of LE 250

for a family size of 5 translates to the following different poverty lines depending on family size.

<u>Family Size</u>	<u>Poverty Line</u>
1	LE 50
2	100
3	150
4	200
5	250
6	300
7	350
8	400
9	450
10	500
11	550
etc.	

With our new poverty line that adjusts with family size, we find that the percentage of poor households is between 43.8 and 51.9, depending upon whether the high or low estimate is used. This estimate is higher than that found using the constant poverty line of LE 250 which assumed a constant family size. Our new poverty line adjusting for family size gives an estimate of the percentage of poor individuals between 46.3 percent and 61.5 percent depending upon whether the high or low estimate is used. This is much higher than that found using the invariant poverty line of LE 250.

The adjustment for family size gives a vastly different estimate of the size of poor versus non-poor households. Our adjusted poverty line shows the average size of poor households to be between 6.3 and 7.1 (depending on whether the high or low estimate is used) and that of the non-poor to be between 4.8 and 5.7. That is, here we find that poor households are on the average larger than non-poor households. Failure to adjust for family size can lead to erroneous conclusions concerning the average size of poor versus non-poor households.

So far we have only a range estimate of the number of poor households and poor individuals. We would like a precise estimate. To get this estimate, we need tables which look at per capita expenditures calculated from individual household observations and not from averages of groups of households. Two sets of tables do this for us: the cross-tabulations of per capita expenditures and expenditure items on pages 9 and 10 of the survey results, and the cross-tabulations of per capita expenditure intervals with family size on page 19 of the survey results. We will turn now to the cross-tabulations on page 19 of the survey results.

Cross-tabulations of Per Capita Expenditure Intervals with Family Size

Table 3 on the following page is a translation of the per capita expenditure cross-tabulations with family size on page 19 of the Arabic first round results. First we would like to check the consistency of

these cross-tabulations with our Table 2. If the tables are compatible, then the number of households of each size should be the same. The number of households by size is listed in the final column of each table. These are identical. The household poverty line that adjusted with family size was in fact identical to a per capita poverty line of LE 50. With this in mind then, the percent of households of each size which are poor should be identical between the two tables for households of 1 to 8 members (above 8 members, it should be remembered, we could only find a range estimate of poor from Table 2). The table below shows that they are indeed identical.

Household Size	Percent Which Are Poor	
	Household Cross-Tabulations	Per Capita Cross-Tabulations
1	.28	.28
2	.26	.26
3	.31	.31
4	.375	.375
5	.44	.44
6	.50	.50
7	.56	.56
8	.56	.56

Calculation of the table above was as follows. For the household cross-tabulations (Table 2), for any family size group, the number of households to the left of that size

groups poverty line is added up and then divided by the total number of households in that size group. For the per-capita cross-tabulations, the vertical poverty line is drawn in on Table 3. For each household size group the number of observations to the left of this line is summed up and then the sum is divided by the total number of households in that size group. The identity between the two estimates found by performing this calculation not only tells us that the tables are compatible, but assures us that the per capita calculation was done for each household observation rather than on groups of households.

From Table 3, then, we can get a point estimate of the number of poor households. We find the number of poor households to be 45.6. To determine the number of poor individuals we have to multiply the sum of households of each size and multiply by the family size. We run into a problem again for the family size group 10 or more. We can determine what this is by reference to the cross-tabulations of per capita expenditures with expenditure items. The number of households in each per capita expenditure category is identical to that in our Table 3, and the number of individuals calculated to be in the 10 or more family size group is fully plausible. (For example, in the less than LE 20 column, 32 individuals must be in families of 10 or more. Our Table 3 shows three families with ten or more individuals--and this is certainly compatible with 32 individuals.)

We find the point estimate of the percentage of poor individuals (after adjusting of the number of individuals in families of 10 or more) to be 49.3 percent. We can also now come up with a point estimate of the average size of poor households versus the average size of non-poor households. The average size of poor households is found to be 6.5, while that of non-poor households is 5.5. Further evidence that poor households are larger on the average comes from a second look at the bottom of page 8. We know that the percentage of all households which are poor is 45.6 percent. If poverty were distributed evenly across all household size groups, we would then find the percentage of poor in each household size group to be 45.6 percent. If the actual percentage found is less than 45.6 percent, then there is an under-representation of poor in that household size group. If the actual percentage found is greater than 45.6 percent, the poor are disproportionately represented in that household size group (they are over represented). Looking now at the table on the bottom of page 8, we find the poor are under-represented in households of 5 or fewer members, but over-represented in households of 6 or more members.

Table 1A

First Round:
Household Expenditures/Expenditure Items Cross-Tabulation:
Translation Lines 41, 42, and 43 from Page 6

Household Expenditure Interval	Number of Individuals	Number of Families	Total Expenditure with Gifts and Advances
< 50	26	20	746
50 - 74	52	27	1,671
75 - 99	106	35	3,091
100 - 149	289	78	9,899
150 - 199	504	112	19,463
200 - 249	626	118	26,702
250 - 299	756	126	34,706
300 - 349	677	102	33,156
350 - 399	596	89	32,913
400 - 499	804	113	49,452
500 - 599	340	44	23,777
600 - 799	551	65	44,942
800 - 999	269	30	26,359
1000 - 1399	193	24	28,904
1400 - 1999	138	13	20,813
2000+	46	5	19,258
Total	5,968	1,001	375,852

Table 1B

Average Family Size, Average Total Household Expenditure
and Average Per Capita Household Expenditure
Calculated from First Round:
Household Expenditure/Expenditure Items Cross Tabulation

Household Expenditure Interval	Average Family Size	Average Total Household Expenditure	Average Per Capita Household Expenditure
< 50	1.3	37.3	28.7
50 - 74	1.9	61.9	32.1
75 - 99	3.0	88.3	29.2
100 - 149	3.7	126.9	34.3
150 - 199	4.5	173.8	38.6
200 - 249	5.3	226.3	42.7
250 - 299	6.0	275.4	45.9
300 - 349	6.6	325.1	49.3
350 - 399	6.7	369.8	55.2
400 - 499	7.1	437.6	61.5
500 - 599	7.7	540.4	69.9
600 - 799	8.5	691.4	81.6
800 - 999	9.0	878.6	98.0
1000 - 1399	8.0	1204.3	149.8
1400 - 1999	10.6	1601.0	150.8
2000 and over	9.2	3851.6	418.7
Total	6.0	375.5	63.0

Table 2

First Round Household Expenditures/Family Size
 Cross Tabulation:
 Translation from Page 17

Household Expenditure Interval	Family Size:	1	2	3	4	5	6	7	8	9	10 or more	Total H.H.
	< 50	15	4	1	-	-	-	-	-	-	-	-
50 -	15	7	2	1	1	-	-	1	-	-	-	27
75 -	11	6	8	3	2	1	2	1	1	-	-	35
100 -	7	14	17	17	14	3	3	2	-	-	1	78
150 -	1	12	22	21	30	14	7	1	3	-	1	112
200 -	2	7	15	23	16	23	14	11	3	-	4	118
250 -	1	5	11	12	19	30	19	12	12	-	5	126
300 -	-	4	3	7	20	17	17	13	13	-	8	102
350 -	-	4	-	7	12	21	16	15	5	-	9	89
400 -	1	1	4	12	15	15	15	16	15	-	19	113
500 -	-	1	3	3	1	5	5	9	6	-	11	44
600 -	-	-	1	1	7	11	7	9	6	-	23	65
800	-	-	-	3	2	2	2	5	3	-	13	30
1000 -	-	-	2	1	2	1	4	4	2	-	8	24
1400 -	-	-	-	-	1	-	-	1	2	-	9	13
2000 -	-	-	-	1	1	-	-	-	-	-	3	5
Total	53	65	89	112	143	143	111	100	71	-	114	1001

Table 3

First Round: Per Capita Expenditures/Family Size
 Cross Tabulations (Rural)
 Translation from Page 19

Per Capita Expenditure	Household Size	1	2	3	4	5	6	7	8	9	10	Total
	< 20	-	2	1	2	3	1	4	4	4	3	24
20 - 29	3	5	5	6	14	11	11	9	7	11	82	
30 - 39	6	6	9	18	30	22	19	20	23	21	174	
40 - 49	6	4	13	16	16	37	28	23	14	19	176	
50 - 59	9	6	16	15	19	25	21	15	6	16	148	
60 - 79	9	10	18	24	32	26	14	13	8	19	173	
80 - 99	8	10	14	10	15	7	4	6	5	7	86	
100 - 149	7	12	5	15	6	12	6	6	2	12	83	
150 - 199	1	8	5	1	4	1	4	3	2	5	34	
200 - 249	2	1	1	3	2	1	-	1	-	-	11	
250 - 299	1	1	-	1	-	-	-	-	-	-	3	
300 -	1	-	2	1	2	-	-	-	-	1	7	
Total	53	65	89	112	143	143	111	100	71	114	1001	