

Chapter 11

Egypt: Comparing Poverty Measures

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Concepts of poverty

In poverty studies on Egypt, three definitions have been used of the poverty line: the basic needs approach, the relative income definition, and the sociological definition. The subjective definition of poverty has also been applied, but on a very small scale.

Basic needs

The basic needs approach was used in defining the income poverty line in the studies of Adams (1985), Radwan and Lee (1986),¹ Korayem (1987a, 1994a), and the World Bank (1990b). Although the basic needs approach provides a relatively more comprehensive basis for the measurement of poverty compared with other definitions, it certainly has its limitations and shortcomings. This is reflected mainly in the arbitrariness implied in defining a household's basic needs of food and non-food items, and in the prices used to measure a household's expenditures on those basic needs items, because prices are dependent on incomes, on location, and on social status (Kyereme and Thorbecke 1987; Van Praag and Baye 1990). Arbitrariness is also reflected in estimating the minimum food requirements for individuals in terms of calories level and protein, because individual calorie requirements depend on several factors, such as sex, age, size (i.e. weight and height), and the type of work performed (Kyereme and Thorbecke 1987). The calorie intake needed for the average individual is also disputable, and has been falling in recent years (Lipton 1983). To overcome, or at least to mitigate, the arbitrariness of calorie intake, some studies used more than one recommended daily allowance (RDA) to estimate the poverty line; for example Paul (1989) used three RDAs in estimating the poverty line.

Relative income

The relative income approach was used by El-Laithy and Kheir-El-Din (1994) and the Institute of National Planning (INP 1994) to define the poverty line in Egypt. According to this approach, the poverty line is defined relative to income per capita; it is set at one-half or two-thirds, etc. of income per capita. The shortcoming of this approach is that it lacks the criteria that guarantee that the relative income chosen as the poverty line satisfies the basic needs of the individual. It overlooks the fact that poverty signifies a certain state of being in which the individual does not have enough income to meet his or her basic needs of food, shelter, etc., no matter whether the income is one-half or two-thirds etc. of the per capita income. Also, the studies that define the poverty line according to the relative income approach do not state why a certain relative income has been chosen as the poverty line; e.g. why poverty is defined as one-half (and not as two-thirds for example) of per capita income.

Sociological definition

In a study on structural adjustment in the social welfare sector in Egypt, the sociological definition of poverty was applied (Shawky 1989/90). Shawky defined the poor as those who receive social assistance from the Ministry of Social Affairs (MSA). The sociological definition of poverty is open to serious criticisms. Among those criticisms is that it fails to define poverty objectively, because it implies that people are not poor unless they are recognized by a society as being poor by giving them social assistance. This is difficult to accept. Poverty signifies economic and social conditions in which the individual does not have enough income to meet the basic minimum needs of physical existence of food, clothing, and shelter. In these conditions, the individual must be defined as poor, no matter whether society recognize their poverty or not. Furthermore, a society may give different forms of assistance to people without considering them as poor, e.g. tax exemptions and grants (Jones 1990). Thus, dependence only on social assistance as a measure of poverty is deceiving; social assistance is a sufficient, but not a necessary, condition for poverty.

Subjective definition

The subjective definition of poverty has also been applied in Egypt, but on a very small scale. Radwan and Lee (1986), in their

study of agrarian change in Egypt, acquired data on people's perceptions of their basic needs requirements through a one day interview with the inhabitants of a small village (fifteen houses), which was part of the 1977 International Labour Organization (ILO) sample survey. People's perception of the level of income they required to meet their basic needs was £E5 per capita per month in 1977, which comes very close to the poverty line estimate in the study, which is £E67 per capita annually (Radwan and Lee 1986: Appendix). This indicates the modest aspirations of rural people, which runs counter to what is expected from such a definition. One serious shortcoming of this subjective definition of poverty is that people's perceptions of their basic needs requirements are likely to give an overestimated income poverty line (Paul 1989).

Studies of poverty in Egypt

Basic needs approach

Adams (1985), Radwan and Lee (1986), the World Bank (1990b), and Korayem (1987a and 1994a) all estimated an income poverty line following the conventional basic needs approach, which entails first estimating the minimum food requirements needed for the individual and/or household (based on sufficient minimum intakes of calories and protein), and then estimating basic consumption expenditures on non-food items.

Differences exist between the income poverty lines estimated in the five studies. First, Adams and Radwan and Lee estimated the income poverty line in the rural sector only, while the World Bank² and Korayem estimated it for both rural and urban sectors. Second, Adams and Radwan and Lee used survey data (different surveys though³) in estimating the rural income poverty line in 1982 and in 1977, whereas Korayem used household budget survey (HBS) data for 1981/82 and the household income and expenditure survey (HIES) of 1990/91 in estimating the income poverty line. However, Adams used the HBS data for the rural poverty line estimate in 1958/59, 1964/65, and 1974/75. The poverty line estimates of urban and rural households in 1981/82 that are adopted by the World Bank are just an updating of the estimates for 1974/75 in Ibrahim's study (1982), using the official consumer price index. However, the urban poverty line estimate for 1974/75, and consequently for 1981/82, is subject to serious criticisms.⁴ Third, the poverty line estimated by Adams and Radwan and Lee is actually an *expenditure* poverty line,

because they did not account for any savings in their poverty line estimates. Korayem, in contrast, estimated the *income* poverty line – she accounted for the savings factor.⁵ Fourth, Radwan and Lee and Korayem considered the age and sex structure of the average household in their estimation of the poverty line, whereas Adams ignored this factor. Fifth, because of the above differences, as well as the differences in the methods and prices used to estimate food costs, the studies came up with different estimates for the income poverty line and for the poverty level (see below).

The basic needs approach adopted by Adams, Radwan and Lee, the World Bank, and Korayem makes their estimates of the income poverty line subject to the shortcomings and limitations of this approach, as explained above. Moreover, estimating household expenditure at the poverty line by assuming that the size and age structure of the households follow the average national pattern, which is the case in Korayem's studies, is quite arbitrary because poor households are likely to be larger and to have a higher dependency ratio compared with the average household on the national level. By using survey data, Adams and Radwan and Lee minimized the arbitrariness of this factor in their poverty line estimates, because they derived household size from the sample data.

Relative income approach

El-Laithy and Kheir-El-Din (1994) and the Institute of National Planning Report (INP 1994) applied the relative income approach in estimating the poverty line in urban and rural sectors in Egypt in 1990/91, using HIES data.⁶ El-Laithy and Kheir-El-Din defined the expenditure poverty line in urban and rural sectors at two-thirds of per capita expenditure in each sector as estimated from the HIES, while the INP defined the income poverty line in urban and rural sectors at 40 per cent and 30 per cent, respectively, of national per capita income. Both estimates are subject to the shortcomings of the relative income approach as cited above.

The sociological approach

As said before, Shawky (1989/90) applied the sociological definition of poverty, which defines as poor people those who are recognized by society as poor. Thus, the poor in Egypt were defined as those who receive social assistance from the MSA.

According to the MSA definition of poverty, the household income poverty line ranges from zero to £E100 a month.

Comparing the results of poverty estimates

The relative level of poverty

Comparing the relative level of poverty in Egypt – or the head-count index – as estimated by the above studies in the years 1974/75, 1981/82, and 1990/91, where comparable estimates exist, one finds the following.

In 1974/75, the percentage of rural households below the poverty line was estimated as 60.7 per cent by Adams (1985) and 50.9 per cent by Korayem (1987a). Radwan and Lee (1986) estimated the percentage of poor rural households in 1977 (which is close to 1974/75) as only 35 per cent according to their broader definition of poverty (i.e. excluding the “marginal” poor), while this percentage increased to 56 per cent according to the income poverty line definition.

For the 1981/82 estimates, the lowest estimated level of poverty is 10.3 per cent of the population, which represents the MSA beneficiaries (Shawky 1989/90),⁷ and the highest estimates are those of Korayem, ranging between 29.7 and 43.0 per cent of rural households in scenarios A and B respectively, and between 30.4 and 44.4 per cent of urban households in the two scenarios.⁸ In between fall the estimates of Adams (1985) and the World Bank (1990b). Adams estimated 17.8 per cent of rural households to be poor, while the World Bank estimates 24.2 per cent of rural households and 22.5 per cent of urban households for 1981/82.

For 1990/91, the poverty level in the urban sector is estimated at 29.2 per cent (El-Laithy and Kheir-El-Din 1993), 35.9 per cent according to Korayem’s HED estimate (1994a),⁹ and 39.7 per cent by the INP (1994) estimates. In the rural sector, the poverty level is estimated at 20.8 per cent by El-Laithy and Kheir-El-Din (1993), 31.6 per cent by the INP (1994), and 54.5 per cent (HED estimate) by Korayem.

Extreme poverty

Four studies have addressed the issue of extreme poverty in Egypt (El-Laithy and Kheir-El-Din 1994; INP 1994; Korayem

1994a; World Bank 1990b). The relative income approach is widely used in the literature to estimate extreme poverty. This conventional method has been applied by three out of the four studies: the World Bank, El-Laithy and Kheir-El-Din, and the INP.

The World Bank adopted Lipton's method of estimating the extremely poor as those whose expenditure on food is 80 per cent of the expenditure on food that is estimated to be required to meet the minimum individual caloric requirements (Lipton 1983). According to this definition, and using the HBS, the extremely poor were estimated as approximately 12.8 per cent of rural households and 10.8 per cent of urban households in 1981/82 (World Bank, 1990b: 9 and Annex K). These World Bank estimates of the extremely poor, especially the estimate of the urban extremely poor, are quite close to the estimate of poverty provided in Shawky (1989/90).¹⁰ El-Laithy and Kheir-El-Din estimated the extreme poverty expenditure line in urban and rural sectors in 1990/91 as one-third of per capita expenditure in each sector as derived from the HIES. The INP (1994) estimated an extreme poverty income line for Egypt for 1990/91¹¹ as 25 per cent of the national per capita income for urban and rural sectors.

The fourth study (Korayem 1994a) applied a different methodology in estimating extreme poverty in Egypt. Here it was argued that the estimated extreme poverty income line has to fulfil two constraints: to be at the lowest possible level below the income poverty line, and at the same time to be above the starvation level of income. Since there is no guarantee that the arbitrarily defined level of relative income is high enough to meet the second constraint, the relative income approach is rejected. The extreme poverty income line is estimated on the basis of the least-cost diet planned in the study of urban and rural households.¹² Because of the impossibility of eating one diet all year, estimating the extreme poverty income line on the basis of the cost of one diet only implies that, for most days of the year, the destitute eat poor diets in terms of calories and protein intake. In this way it is guaranteed that the estimated extreme poverty income line will be above the starvation level and at the same time at the lowest level possible below the poverty line.

The extremely poor in 1990/91 were estimated by El-Laithy and Kheir-El-Din (1994) at 4.7 per cent of urban households and 5.0 per cent of rural households, by the INP (1994) at 6.5 per cent and 8.7 per cent of urban and rural households, respectively, and by Korayem (1994a) as 0.5 per cent of urban households and 22.2 per cent of rural households (HED estimate).¹³ The three studies

that have estimated poverty and extreme poverty at the level of the governorates, using the HIES of 1990/91, came to the conclusion that Upper Egypt has the highest poverty and extreme poverty levels compared with Lower Egypt and the urban governorates.

Other dimensions of poverty

Apart from the selection of the poverty line itself, few indices have been developed in the literature that reflect three other dimensions of poverty: the incidence of poverty (measured by the head-count ratio), the intensity of poverty (measured by the poverty gap), and the degree of inequality among the poor (Foster et al. 1984; Grootaert and Kanbur 1990; Haagenars 1987; Sen 1976; World Bank 1990a). Sen's index was estimated by Adams (1985) and Radwan and Lee (1986) using detailed survey data, while Foster's index was estimated by El-Laithy and Kheir-El-Din (1994) using the preliminary data of the HIES for 1990/91. The Sen index estimates by Adams, and by Radwan and Lee for 1974/75 and 1977, which are the two closest years that could be used for comparison, differ considerably. Sen's index of poverty in rural Egypt as estimated by Adams in 1974/75 was 0.212, whereas the estimated index by Radwan and Lee in 1977 was 0.113, which is almost half Adams' estimates. This shows how sensitive the value of those indices is to the data used.

The poverty gap was estimated for the rural sector by Adams (1985) and by Radwan and Lee (1986), and for both urban and rural sectors by Korayem (1990b, 1994a). Significant differences are found in the average poverty gap estimates. Comparing the estimates in the two closest years, 1974/75 and 1977, it is found that Adams' estimate of the average poverty gap per adult unit equivalent (AUE) per year was £E30.5 in 1974/75, whereas Radwan and Lee's estimate for 1977 was £E19.4. To assess the impact of alternative policy packages on poverty, Korayem (1990b) estimated the poverty gap in 1983/84 using a general equilibrium model for Egypt (GEMET);¹⁴ the estimated poverty gap was £E979.8 million in the rural sector and £E1467.2 million in the urban sector. The poverty gap and the income gap ratio¹⁵ have also been estimated for 1990/91 by Korayem (1994a) using the conventional method. The poverty gap was £E1827.8 million in the urban sector and £E1991.7 million in the rural sector, while the income gap ratio was 75.8 per cent in the urban sector and 85.3 per cent in the rural sector. Both indices show that poverty was more acute in the rural sector compared with the urban sector in 1990/91.

The main features of poverty and how the poor adapt

In reviewing the literature on poverty in Egypt, one may point to three issues that describe the main features of the Egyptian poor. The characteristics of the poor; sources of income for the poor; and how the poor are adapting to the state of poverty.

The characteristics of the poor

Some of the literature on poverty in Egypt has discussed the characteristics of the poor as a group (El-Laithy and Kheir-El-Din 1994; World Bank 1990b; Radwan and Lee 1986), while other studies deal with the characteristics separately, depending on the subject under discussion (Korayem 1987a).

One of the common characteristics of the poor is malnutrition. It is not equally distributed with respect to sex and age, being more common among mothers and children.

Another characteristic of the poor is the relatively large household size compared with the non-poor. For example, in the 1977 ILO survey in the rural sector, it was found that the average size of poor households was 6.4 members compared with 5.3 members for the non-poor (Radwan and Lee 1986). This fact is also confirmed by other studies (Aazer et al. 1991; El-Laithy and Kheir-El-Din 1994; Oldham et al. 1987). The large size of poor households is accompanied by a high dependency ratio, indicating a bias in the household structure towards lower age groups (Radwan and Lee 1986).

Regarding the male/female structure of the poor households compared with non-poor households, Radwan and Lee (1986) found a slightly higher female/male ratio for poor households, while the World Bank (1990b) found no such difference. In other countries, it has been found that the female/male ratio is higher in poor households as a result of the fact that female-headed households have, in general, lower incomes than male-headed households (World Bank).

Another characteristic of the poor in Egypt, as in other countries, is the lack of assets, whether material assets (land, property, etc.) or human capital (e.g. education, skills). Data on the distribution of assets in the rural sector in Egypt can be derived from the 1977 ILO survey. This shows that the "definitely" poor group, who represented 35.3 per cent of rural households, owned 19.7 per cent of cultivated land, whereas the non-poor, who represented 44 per cent of households, owned

67.5 per cent of agricultural land. Besides, 25 per cent of the poor households who work in agriculture are landless. The distribution of non-agricultural assets (houses, the establishments, non-agricultural land, etc.) is also unequal (Radwan and Lee 1986).

There is a strong correlation between the incidence of poverty and the level of education. The World Bank study (1990b) shows that, generally speaking, the governorates in Egypt with a higher incidence of rural poverty have higher levels of illiteracy. Using the 1981/82 HBS data, it has been found that the highest poverty level is in households with an illiterate head; the incidence of poverty in this category is 41.4 per cent for urban households and 51.2 per cent for rural households (El-Laithy and Kheir-El-Din 1994). The 1977 ILO survey showed that whereas 95.4 per cent of the rural poor had not completed primary education, and could therefore be regarded as illiterate or semi-illiterate, this ratio fell to 87.6 per cent for the rural non-poor (Radwan and Lee 1986). This is also the case in the urban sector. In a study of eighteen squatter markets in Cairo, it was found that the illiteracy rate among the market vendors was substantially higher than the rate for the Cairo population as a whole – 52 per cent as against about 35 per cent (Tadros et al. 1990). Illiteracy and low education levels mean that the poor will be engaged in low-paid jobs, receiving low income and, hence, having less chance to educate their children. In this way, social mobility decreases and poverty is inherited generation after generation.

Finally, one of the characteristics of poor rural households that recent studies have revealed is the changing image of women's work. Women's work, which used to be common and acceptable in the rural Egyptian society, is not so anymore; it is taken as a sign of poverty (Abaza 1987).

Income sources for the poor

One may distinguish two approaches to income sources in the literature on poverty in Egypt, depending mainly on whether the study is sociological or economic. The sociological approach tends to focus on a group of people who share a common low-income activity (vendors, landless labourers, etc.) or on poor residential districts; in either case it studies the socioeconomic factors of the people involved (Aazer and Esshak 1987; Oldham et al. 1987; Tadros et al. 1990). The economic approach focuses only on the economic activities that generate income equal to, or less than, a defined income poverty line (El-Laithy and Kheir-El-Din 1994; Korayem 1991; Radwan and Lee 1986).

Reviewing both types of literature, one may point out four well-defined types of low-income activity: the informal sector (e.g. vendors), the public sector (employees at second grade level and below), agricultural landless labour, and small agricultural land holders (less than 3 feddans). This list is by no means comprehensive. For example, another low-income source that is not covered in the literature, because of a lack of data, is old-property owners.

Other sources of income for the poor are the social assistance schemes administered by the Ministry of Social Affairs (MSA) and non-governmental organizations (NGOs). However, the social assistance given by the MSA to the poor is extremely low.¹⁶ This is due to the relatively small budget assigned to the MSA, in spite of the large number of beneficiaries. The effectiveness of the NGOs is limited because of their relatively small budget; on the one hand, the subsidy that the NGOs receive from the MSA is small, and, on the other hand, they are subject to legal constraints regarding fund-raising to finance their activities (World Bank 1990b).

Remittances are another source of income for the poor. However, some studies show that the impact of remittances on poverty is small (Adams 1991; Radwan and Lee 1986), whereas others imply that they may represent an important source of income for the poor (Korayem 1986).

How the poor are adapting to poverty

Adaptation mechanisms

Five adaptation mechanisms have been identified (Korayem 1994b): clustering of the poor in certain residential districts; raising household revenue through earned incomes and other means; minimizing household expenditure; exercising solidarity; and the woman's role in managing the household's life.

The clustering of the poor in certain districts helps them to survive financial hardship (such as events that call for additional expenses), whether this is caused by a mishap (such as death) or a happy event (such as marriage) or even an unexpected social event (such as an unexpected guest at meal time).

Because of the widespread illiteracy and the low educational level of the poor in general, many of them are engaged in low-paid and temporary jobs. The poor adapt to this situation by several means. On the one hand, they try to increase their earned income (e.g. by working longer hours or having more than one

job). On the other hand, they try to get additional intermittent revenue by ways other than work (selling some of their belongings, borrowing, etc.).

Household expenditure can be minimized by several means, e.g. sharing a house with other household(s); buying defective low-priced items (e.g. perishable vegetables and fruit, defective textiles, used clothes); decreasing expenditure on health by reducing the dosage of a medicine below what is prescribed by the doctor to make the medicine last longer, and so on.

Different forms of solidarity exist among the poor and enable them to cope with the hardships of poverty: solidarity between household members, between relatives, within the community, and within the society as a whole.

One of the important means of coping with poverty is the vital role that the woman plays, as a wife and mother, in the survival of her family. For example, it is the woman who makes the small income cover the household's needs; and she is the one who takes responsibility for finding ways to get an income to feed her children (by working, or selling some of her belongings, or borrowing) when the father is unemployed or just walks away from his family responsibilities.

Adjusting to a fall in real income

When real income falls, substitution takes place between food and non-food expenditures, between food items, and between non-food items. Given the already low expenditure on non-food items by the poor, how do they adjust if their incomes fall and/or prices rise? The question is answered by estimating the expenditure and price elasticities of seven main non-food items for the poor: housing and utilities, clothing, transportation, health, education, cigarettes (and tobacco) and beverages, and furniture and household appliances. Expenditure on these seven items represents more than 75 per cent of total expenditure on non-food items of households on the poverty line and below in both urban and rural sectors.

Estimating the expenditure elasticity for those items, it has been found that, when the income of the urban poor falls, the relatively largest cut in spending will be on education and the relatively smallest reduction will be on housing and utilities, and then on health. For the rural poor, the relatively larger cut in spending will be on furniture and household appliances and on education, while the relatively smallest cut will be in expenditure on housing and utilities, then in expenditure on cigarettes (and tobacco) and beverages, and thirdly in expenditure on health.

The price elasticities of the non-food items were estimated assuming that the substitution effect is zero. The values were considerably low (Korayem 1994b).

The effects of poverty

The effects of poverty are addressed explicitly by one study, but only with respect to the impact on children and health (Korayem 1987a). The consequences of poverty for children are manifold. The poor housing and sanitary conditions in which poor children grow up expose them to health hazards that make them vulnerable to diseases and increase child mortality. For example, the child mortality risk is nearly three times as great in the lowest social class compared with the highest class (Shorter 1989).

Child labour is another important effect of poverty. All the literature based on field surveys that has discussed this phenomenon in Egypt points to poverty as the main cause (Abdellatif and Mohamed 1990; Besheer 1991), or one of the main causes (Aazer et al. 1991; UNICEF 1990) of child labour. Many of the children work in industrial jobs without protective measures,¹⁷ which exposes them to injury and ill-health. An important negative aspect of child labour is the spread of illiteracy among children: over 50 per cent of the working children in the samples were illiterate (Abdellatif and Mohamed 1990; Besheer 1991). Illiteracy will probably be carried with them into their adulthood in most cases.

Infant and child mortality is the most common indicator of the strong direct link between health and poverty. Several studies demonstrated a positive relationship between a high rate of infant and child mortality and poor living conditions, a low educational level (especially of mothers), and the rural-urban population distribution (Korayem 1987a; Sayed et al. 1989; Shorter 1989; World Bank 1990b). The strong correlation between poverty and poor health is also indicated by the extent of stunting of poor children compared with well-fed children. Stunting, which is measured by height-for-age, is associated with poor overall economic conditions and is ten times the level expected in a well-fed population (Sayed et al. 1989).

The unfavourable health conditions of poor children applies also to poor adults in Egypt. The poorest section in the population is usually exposed to high morbidity and to chronic infections and parasitic diseases (World Bank 1990b). Unsafe water supplies in the rural areas and in poor urban districts increase the risk of exposure to serious diseases such as typhoid, paratyphoid, and infectious hepatitis.

Structural adjustment and the poor

The effects of structural adjustment and stabilization policies on the poor

The main components of the structural adjustment and stabilization policies in Egypt are: currency devaluation, liberalization of international trade, raising the price of utilities, reducing subsidies, and applying tight monetary and fiscal policies.

One may distinguish two approaches in the literature on the effects of structural adjustment and the stabilization package on the poor in Egypt. The first approach divides society into groups and analyses the impact of the stabilization package on each of those groups; the impact on the poor is dealt with as a side issue (World Bank 1990b). The second approach examines the effects on the poor as one group (Korayem 1987a, 1990b, 1994b). In spite of the different approaches adopted, all agree that the poor will suffer and that something should be done to minimize the social cost involved.

As postulated by the World Bank (1990b), adjustment measures can affect the population via three means: incomes, consumption, and public services received. Accordingly, the study divided society into three groups – producers, consumers, and the beneficiaries of government social services – and assessed the impact of stabilization on them. When assessing the impact of the policy package on consumers, the study discusses the impact on the poor. It anticipated that the reduction in food subsidies would have a negative effect on the bulk of the population, especially the poor, who spend a large share of their budget on food. The study also argued that the planned increase in the prices of water, electricity, fuel products, and transportation would have diverse effects on the poor depending on the goods and services under consideration. For example, the increase in the prices of utilities would hurt the urban poor, but would not affect the rural poor because most rural households have no access to piped water and electricity. The study also anticipated that the cuts in government expenditure under the stabilization measures would entail a further decrease in the per capita expenditure of the Ministries of Social Affairs, Education, and Health, which would hurt the bulk of the population, especially the poor. However, the study emphasized that the social costs would have been higher if structural adjustment had not been implemented.

Korayem (1987a) examined the effects of the stabilization measures on the economy in general, with special focus on the impact on the poor. Currency devaluation, the elimination of subsidies, and cuts in government expenditures on investment and wages hurt the poor the most. This is because the poor spend a large portion of their budget on subsidized food commodities; in addition, a large share of those commodities is imported and hence their prices would be raised by devaluation. Also, the cuts in government expenditures on wages and investment would decrease job creation in the public sector at a time when job creation was not increasing in the private sector, owing to the contractionary policy applied. These measures have a larger negative impact on the employment of the poor, who are disadvantaged because of their low educational level and poor social contacts.

In another study, Korayem (1990b) compared the impact of the IMF stabilization package on poverty with alternative policy packages, using a simple general equilibrium model for Egypt (GEMET). Six policy scenarios, including the IMF policy package, were applied with different combinations of tight and moderate measures of fiscal, external, and monetary policies. It was found that the two strongly contractionary policy scenarios (the IMF package is one of them) gave the relatively worst impact on poverty, measured by the level of absolute poverty and the size of the poverty gap.

Korayem (1994b) assessed the impact on the poor of the economic reform and stabilization package (ERSAP) applied in Egypt since 1991/92. She pointed out three types of policy in ERSAP, and examined the impact of each on the poor. These are: (i) the macroeconomic policies, which affect the poor and the population in general through their impact on prices, employment creation, and income distribution; (ii) policies designed specifically to support the poor (the Social Safety Net and the Social Fund); and (iii) policies affecting the provision of subsidized social services by the government (specifically education and health services).

Poverty alleviation measures during adjustment

Two studies have proposed measures to alleviate poverty during structural adjustment (World Bank 1990b; Korayem 1994b), while another study offered an alternative adjustment package, instead of the IMF package, which aimed to minimize the negative impact on the poor (Korayem 1987a).

The elements of the poverty alleviation strategy proposed by the World Bank (1990b) are:

- measures to increase the income-earning opportunities of the poor by increasing their access to employment and assets; ;
- measures to improve the effectiveness of public expenditures in health and education in order to increase the poor's opportunities for human capital formation;
- measures to achieve effective targeting of all secondary income transfers (consumer and producer subsidies, and direct welfare transfers);
- the creation of an Emergency Social Fund to foster the above efforts and to protect the low-income population from the negative impact of adjustment measures.

Korayem (1994b) suggested different measures to reduce poverty within the three approaches proposed by the World Bank: the economic approach, the human capital approach, and the welfare approach. The economic approach deals with measures that increase the access of the poor to productive employment and assets; the human capital approach includes measures that increase investment in human capital to promote the productive potential of the poor (such as investment in education, training, and health); and the welfare approach depends on measures that cope with poverty through transfer payments and subsidies.

Korayem (1987a) offered an alternative adjustment programme that was anticipated to reduce the negative impact on the poor as compared with the IMF package. It was argued that the IMF adjustment programme is directed mainly to reducing aggregate demand and restoring balance between the demand and supply sides of the economy at a lower level of national income. The proposed alternative package operated mainly on the supply side by increasing the productive capacity of the economy.

Gaps in poverty research in Egypt

None of the available studies explores the dynamics of poverty in Egypt. The main reason for this is the non-availability of data. To analyse the dynamics of poverty in Egypt, detailed information would need to be collected on a sample of households over an extended period of time. Longitudinal surveys, which interview the same people over a number of years, are the best source of information on the dynamics of poverty (Klein and Rones 1989).

A second best to the longitudinal surveys, which will save on cost and time, is to design a cross-generational sample survey, i.e. a sample survey that includes three generations. Applying the longitudinal surveys or the suggested cross-generational surveys in order to estimate the dynamics of poverty in Egypt will reveal how much of poverty is transitory and how much is permanent. This may show that the currently available single-year estimates of absolute and relative poverty overestimate the state of poverty in Egypt, because part of it may be just transitory. It has been found in other studies that the static estimate of poverty is usually greater by about one-third than the dynamic estimate of poverty (Klein and Rones 1989; Smith 1989; World Bank 1990c). The estimation and analysis of the dynamics of poverty in Egypt are important areas of research that are still unexplored.

NOTES

1. Radwan and Lee (1986) used a second criterion in addition to the income poverty line to differentiate between the poor and the non-poor according to a broader definition of poverty. This criterion is nutritional deficiency, which means the shortfall (or surplus) between calorie intake and calorie requirements. Depending on the two criteria, they differentiated between two groups among the rural households whose income falls below the estimated income poverty line: (i) the "definitely" poor, who suffer from nutritional deficiency as well as income deficiency, and (ii) the "marginal" poor, who satisfy their nutritional requirements but suffer from income deficiency.
2. In this study, the poverty line estimates of Ghattas, which were made in an earlier unpublished World Bank study (1989), were adopted.
3. Adams used the data of the 1982 consumer budget survey undertaken by the International Food Policy Research Institute (IFPRI), while Radwan and Lee used the data of the 1977 ILO survey; both surveys are carried out in rural areas.
4. The urban poverty line in 1974/75 is estimated by just increasing the rural poverty line by 30 per cent! For an assessment of the poverty line estimates adopted by the World Bank, see Korayem (1993).
5. On the poverty line, some savings may take place to provide funds for future needs (such as getting married), or to meet extra expenses for unexpected events (such as becoming sick), or to make "GAMIAH", which is an organized form of collective savings to get a total sum of money to meet a household's needs (such as buying a durable consumption good, or paying key money for a place to live in, etc.). Thus, saving at the income poverty line exists, but should

- be considered as "postponed" consumption and not as a source of investment.
6. The two studies used different sets of data, though. El-Laithy and Kheir-El-Din used preliminary estimates for HIES data, while the INP used a semi-final set of HIES data.
 7. The estimate in Shawky refers to the financial year 1982/83.
 8. Korayem provided two estimates (scenarios A and B) for the income poverty line, and hence for the level of poverty, in urban and rural Egypt in 1981/82. In scenario A, official prices were used in calculating food costs at the poverty line, while in scenario B food costs were calculated at prices 20 per cent higher than the official prices because, it was argued, official prices are unrealistically low.
 9. Korayem provided one estimate for the income poverty line in each of the urban and rural sectors, and two estimates for each sector for the head-count index (or relative poverty): the HED estimate and the HID estimate. The HED estimate refers to relative poverty when the households' expenditure brackets are used, while the HID estimate refers to relative poverty when the households' income brackets are used; both sets of data are taken from the HIES 1990/91. For comparison with other estimates, we are using the HED estimate because it seems more reliable. This is because, generally speaking, expenditure data are expected to be more reliable compared with income data, and also because of the exclusion of remittances in the income questionnaire, whereas the expenditure data implicitly include the part of remittances that is spent on consumption.
 10. Shawky argues that "the MSA in Egypt concentrates on the poorest of the poor and not the poor" (Shawky 1989/90: 18).
 11. Although the estimates in the INP report are put under the year 1990, they belong to the financial year 1990/91, because the report is using the HIES data of 1990/91, as mentioned in the text.
 12. The estimate of the poverty line was based on the average cost of six planned diets that meet the safe level of calories and protein intake for urban and rural households.
 13. The HID estimate for the extremely poor is 6.6 per cent of urban households and 7.3 per cent of rural households (Korayem 1994a).
 14. The poverty gap for Egypt has been estimated using actual data for 1983/84, which form the base scenario; then other estimates for the poverty gap have been provided by GEMET using different policy scenarios and compared with the actual gap in the base scenario to find out which policy scenario(s) gives the lowest poverty gap.
 15. The income gap ratio = average income of the poor/income poverty line.
 16. For example, the total average payment for the individual in 1988/89 was £E57 annually, which is approximately half the statutory pension, which amounts to £E10 monthly (World Bank 1990b).
 17. For example, 91 per cent of the working children surveyed did not use any protective clothing or equipment (UNICEF 1990).

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