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AN EXAMINATION OF POVERTY REDUCTION IN EGYPT

CONTRIBUTING FACTORS,
SUSTAINABILITY, AND LESSONS

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EXECUTIVE SUMMARY

Over the last decade, Egypt has been transitioning from a state-led, inward-oriented economic system to an outward-oriented market system in which the private sector plays a dominant role. The first years of economic reform (1991-1993) were characterized by economic stagnation. Afterward, a relatively healthy growth rate resumed. Critics of the economic reform process argued that such reforms would have a negative impact on the poor. This was not the case in Egypt: the incidence of poverty between 1990-1991 and 1999-2000 actually decreased from 19 percent to 17 percent.

Reductions in poverty in the 1990s resulted largely from employment creation in the non-tradable service sector. Revenues from oil, which represented well over 40 percent of merchandise exports, stimulated employment creation in this sector and also resulted in employment opportunities in the Persian Gulf states for unskilled Egyptian labor. Labor migration, in turn, generated remittances that financed increased demand in the economy. Indeed, remittances averaged more than \$3 billion in the 1990s, representing more than one quarter of Egypt's total exports of goods and services. In addition to these foreign sources of income, aid (which averaged nearly 20 percent of central government expenditures in the 1990s) helped finance Egypt's deficit on current account. Finally, receipts from tourism, another sector linked to volatile global forces, represented more than 20 percent of total exports in the 1990s. The rapid growth of the Egyptian economy largely stems from these sources of income.

Egypt's dependence on these sources of income leaves the country extremely vulnerable to unpredictable and volatile global forces. In addition, the proceeds from them have been used to finance consumption rather than investments in productive assets. In particular, Egypt's dependence on remittances for employment creation and income generation is particularly troublesome because remittances (which are highly correlated with oil receipts) are more volatile than other sources of employment and income. As a result, the sustainability of growth, job creation, and ultimately poverty reduction in Egypt is dubious. Sustained poverty reduction depends heavily on structural reforms aimed at reducing the dependence of the economy on unstable and probably declining sources of foreign exchange. In addition, domestic policy should aim at channeling whatever income the country derives from these sources toward investments in productive assets and should not rely on foreign labor markets to generate employment, but should treat international labor migration as a safety valve.

Cross-country evidence suggests that an important way to achieve sustainable growth and poverty reduction in labor-abundant countries such as Egypt is by promoting a pattern of growth that emphasizes labor-intensive production for export. This study shows that exchange rate management is key to export promotion; job creation; and, ultimately, poverty reduction. This is because "Dutch Disease" in Egypt has resulted in the exchange rate for non-oil tradable sectors being overvalued, causing weakened competitiveness of these sectors in export markets. This is problematic because the non-oil tradable sectors tend to be more labor intensive. The upshot is that the overvalued exchange rate has dramatically limited the

growth of labor-intensive sectors. Although Egypt achieved poverty reduction despite flat exports, achieving sustainable poverty reduction requires that the country significantly expand its exports of labor-intensive goods. Sound exchange rate management is an important tool that can aid in achieving expanded exports.

In addition to shedding light on the relationship among growth, poverty, exports, and exchange rate management, the case of Egypt demonstrates the importance of recognizing and dealing with issues of political economy that inevitably emerge in the process of reform. Because the Government of Egypt was highly cognizant of the potential political opposition to both privatization and tenancy law reform, it appeased potential opponents. In the case of privatization, it provided financial incentives for workers to retire or resign, provided a three-year guarantee against dismissal, and controlled the speed of privatization. The government's actions in this regard were largely responsible for jumpstarting the previously stalled process. In the case of tenancy reform, the government provided reclaimed land to affected farmers. By so doing, the government contributed greatly to the success of the reform.

Although international financial institutions have pressured Egypt to increase the flexibility of its notoriously rigid labor market, labor market reform has not occurred. This is in part because this is not a high priority for most domestic businesses. Although *de jure* labor legislation in Egypt is rigid, in reality domestic firms have developed mechanisms by which to largely avoid compliance. Labor legislation is more of a problem for international firms than domestic firms of all sizes because international firms have a higher profile and thus are an easy target for inspectors, and these firms have not developed mechanisms that allow them to effectively avoid compliance. Consequently, rigid labor legislation may have a negative impact on foreign direct investment. With more flexible labor legislation, Egypt would be a more attractive destination for badly needed foreign direct investment. Inadequate investment, both domestic and foreign, is a major obstacle to increased employment for unskilled workers. Every reform that contributes to increasing investment is therefore desirable, but labor market reform may not be as central in Egypt as is often assumed.

Reform in the agriculture sector has had a positive impact on the poor because it has generated a significant number of jobs in rural areas, where poverty is highest. The case of liberalization of rice, which positively affected nearly half of all rural households, illustrates the poverty-reducing potential of such reforms.

The Egyptian government has not developed a national strategy to reduce poverty. As a result of the legacy of earlier populist policies, the government does possess a sophisticated social protection system that is highly inefficient and transfers most benefits to the better-off rather than to the poor. Some programs, notably bread subsidies, have had a positive impact on the poor through the introduction of self-targeting to reduce leakage.

Because poverty tends to be chronic in Egypt, programs that transfer assets may be more important than stop-gap safety net projects. However, Egypt's experience with asset transfer in the Mubarak Project has been disappointing. Poor program design, implementation, and supporting services make it difficult, if not impossible, for the targeted beneficiaries to earn a living. This project has demonstrated that transfers must be *de jure* and *de facto* if the

beneficiaries are to have a chance at success. Without a title, it is impossible for the beneficiaries to obtain credit for inputs and ultimately to make needed investments. Finally, human capital development, whether in the form of education or training, is key to ensuring that Egypt is successful in its pursuit of a labor-intensive growth strategy and, ultimately, that poverty reduction in Egypt is sustainable.

INTRODUCTION¹

The last decade of the 20th century ushered in both tremendous changes in the political economy of Egypt and positive changes in its poverty profile. Similar to many developing countries in Latin America and Africa, in the 1960s and 1970s Egypt followed an import-substitution industrialization model characterized by an inward-oriented focus and extensive state intervention in the economy. By the second half of the 1980s, it was apparent that Egypt had reached the limits of its state-led development strategy. The economic crisis that emerged in the late 1980s and early 1990s forced Egypt to embark on its Economic Reform and Structural Adjustment Program (ERSAP) in 1991. ERSAP was a classic “Washington Consensus” package of stabilization and structural adjustment, which aimed at shifting Egypt away from its state-led, inward-oriented economic model and toward a competitive, export- and market-oriented model. Interestingly, concomitant with this change in strategy has come a reduction of poverty.

Although the stabilization and structural adjustment program that Egypt initiated was expected to bring hardship for several years, in fact only the first couple of years were characterized by economic stagnation (Kandeel and Nugent 2000).² Indeed, annual real income growth rates accelerated from 1.2 percent in 1991 to 6.25 percent in 2000. Consequently, Egypt moved from being a low-income country with an average per capita income of \$780 in 1991 to being a middle-income country with an estimated average per capita income of \$1,490 in 2000 (World Bank 2002b).³

While critics of neoliberal economic reform argue that such reforms have a negative impact on the poor, the poverty incidence in Egypt increased from 1981 to 1990 but decreased afterward. In particular, despite the relatively low levels of gross domestic product (GDP) growth during the 1991-1995 period (that is, the first four years of ERSAP) poverty decreased and continued decreasing between 1995 and 2000. The change in the direction of poverty after 1991 raises the following questions: What factors are responsible for the decrease in the incidence of poverty? How can they be sustained and bolstered? What aspects of liberalization have had a positive impact on poverty reduction?

Notwithstanding the decline in poverty in the 1990s some policymakers have voiced concern about the sustainability of poverty reduction in Egypt and the potentially negative political ramifications that a reversal in the trend may cause. They point to the obstacles that remain to

¹ The authors are grateful to Gustav Papanek, whose detailed and helpful comments have immeasurably enhanced our analysis.

² Kandeel and Nugent (2000) attribute this outcome largely to two factors: effective financial reform and massive debt relief received by Egypt after the Persian Gulf war.

³ The figures given are current \$US. In real terms, the income therefore did not double. Nevertheless, the movement from low- to middle-income is a clear indication of great progress. Incomes are measured using the Atlas method (World Bank 2002b). This method is used “to smooth fluctuations in prices and exchange rates, a special Atlas method of conversion is used by the World Bank. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country and the G-5 countries (France, Germany, Japan, the United Kingdom, and the United States)” (World Bank 2002b).

long-term poverty reduction such as an overvalued exchange rate (a hallmark of an economy suffering from Dutch Disease);⁴ the decreasing opportunities for unskilled labor migration to the Persian Gulf; the possibility that the shift to a market-oriented economy may, over time, engender a worsening in the distribution of income (Adams and Page 2001); and the decline in the rate of economic growth that has plagued the Egyptian economy since 2000.

The purpose of this study is therefore threefold: (1) to determine what factors (structural changes, external factors, and/or domestic policy) have had a positive impact and negative impact on the poor; (2) to address the related questions of whether and how the very recent decline in poverty can be sustained and fortified; and (3) to distill the lessons learned from the Egyptian case that may have applicability to developing countries tackling the problem of poverty.

The study is organized as follows. The next section discusses the economic context in Egypt since the 1950s. The section highlights the most salient structural and domestic economic policy changes as well as the most significant changes in external economic conditions over the last five decades. Having provided the economic context in which changes in poverty are occurring, the section then presents evidence on poverty, growth, and distribution in an attempt to understand the changing pattern in Egypt's poverty profile between 1981 and 1999-2000. This is followed by a section that explores the relationship between Egypt's changing economic context and poverty profile. It examines the effect of external, structural, and institutional factors on poverty. More specifically, the influence of the following factors on poverty is examined: globalization, aspects of economic reform such as privatization, attempts to reform the Egyptian labor market and associated institutions, and agriculture sector reform. The discussion then turns to an evaluation of the effectiveness of targeted programs and safety nets in combating poverty in Egypt. Finally, the study concludes with a section drawing lessons learned from the case of poverty reduction in Egypt.

THE CHANGING ECONOMIC CONTEXT IN EGYPT, 1952-2000⁵

Since the 1950s, economic policy in Egypt has gone through at least three distinct phases—establishment of a centralized, state-led inward-oriented economic system; limited economic opening; and stabilization and structural adjustment. A full understanding of the factors that have influenced changes in poverty requires that the changing economic context be understood. Therefore, these phases will briefly be discussed here.

⁴ Under ERSAP, initiated in 1991, the exchange rate regime was liberalized. Indeed, Egypt devalued the pound and then pegged the exchange rate in nominal terms to the dollar. Inflation differentials that emerged between Egypt and its main trading partners resulted in an appreciation of the Egyptian pound (Page and van Gelder 2002). In January 2001 a managed system in which the pound was nominally pegged to the dollar was introduced. Weakening growth performance between 2001 and 2003 led the Egyptian government to abandon its peg to the dollar and allow the Egyptian pound to float in January 2003. This amounted to the fourth devaluation since late 2000. Since then, the pound has lost 24 percent of its value (Pacific Exchange Rate Service, <http://pacific.commerce.ubc.ca/xr/>). Although the hope is that the devaluation will help boost exports and attract tourism, the danger is that it will fuel inflation by increasing the cost of imported goods and thereby have a negative impact on the economy in general and the poor in particular.

⁵ This section is adapted from Salem (2001).

Phase 1: Establishment of a Centralized, State-led, Inward-oriented Economic System

The authoritarian government of Gamal Abdel Nasser marks the first phase of economic policy change in Egypt. During the period that spanned the mid- to late-1950s to 1970, Egypt followed an import-substitution industrialization model, characterized by an inward-oriented focus, highly protected domestic markets, extensive state intervention in the economy, and an emphasis on social welfare objectives.

Industrialization and modernization were the primary goals of the government. To achieve its goals, the government became increasingly involved in the economy by nationalizing its most important sectors, including textiles, food processing, and fertilizer, as well as the Suez Canal. By the early 1960s, the Egyptian government had consolidated its control over the economy and had replaced the private sector as the primary agent of economic development. The extent of government involvement in the economy is evident by the fact that by the early 1960s the public sector had more than tripled its contribution to gross capital formation; it accounted for 75 percent of industrial output and 90 percent of all new investments (Zaki 1999, Harik 1997). Furthermore, private sector investment as a percentage of total investment in the economy was reduced from 76 percent in 1952 to less than 15 percent. The Government of Egypt became the largest investor in the economy and the largest employer, and contributed 40 percent of GDP annually.

The Nasser government privileged industry over all other sectors and therefore neglected the traditional backbone of the Egyptian economy: the agricultural sector. Indeed, Waterbury (1983) points out that rather than continue to invest in the agriculture sector, the government transferred net assets from the agricultural sector to support the industrial sector and urban populations that were employed there.⁶ As a result, the growth rate of the agricultural sector decreased dramatically over the next decade and remained relatively stagnant until reform of the sector in the 1990s.

In addition to the goals of industrialization and modernization, Nasser's government emphasized social justice and redistribution in the 1961 Socialist Decrees. These ideals inspired the development of labor market policies and institutions that were among the most pro-labor in the world (Salem 2001). They provided job security; job guarantees; and generous social welfare benefits such as social security, minimum wage protections, bonuses, annual raises, and shares in company profits. In addition, the government provided generous consumer subsidies, guaranteed employment to graduates from secondary school and university, free universal primary and secondary education, free university education to all qualified students, and free healthcare.⁷

⁶ The neglect of agriculture began with Nasser in the 1960s and continued for the next two decades. Goueli and el Miniawy point out that "the share of agriculture and irrigation in total public investment fell from about 23 percent in the mid-1960s to about 8 percent in the mid-1970s, then increased to 9 percent in recent years." (Goueli and el Miniawy, "Food and Agricultural Policies in Egypt")

⁷ As a result of the government's guaranteed employment scheme, it absorbed the lion's share of the non-agricultural labor force.

Phase 2: Economic Opening

The second phase of economic policy change was initiated by Sadat in 1974 and lasted until approximately 1990. Dubbed *infitah* (economic opening), it was aimed at attracting badly needed foreign investment; promoting exports; and stimulating the private sector, which had been significantly weakened by the anti-private sector policies of the 1950s and 1960s.⁸ Between 1974 and 1978, the total foreign capital invested in Egypt amounted to less than \$300 million (Zaki 1999). As a result of this disappointing level of foreign investment, attention shifted to encouraging domestic investors.⁹ Although the policy of *infitah* by no means meant a re-introduction of a free market economy, it did succeed in generating greater participation of the domestic private sector in the economy (Salem 2001). Thus, even with *infitah*, the public sector remained the dominant force in the Egyptian economy, responsible for 70 percent of investment, 80 percent of foreign trade, 90 percent of banking, 95 percent of insurance, and 65 percent of value added until 1990 (Harik 1997).

Between 1975 and 1985, the Egyptian economy registered strong growth, averaging close to 6 percent of GDP annually (see Table 1) (World Bank 2002b). Egypt's growth was financed by its high and growing external revenues. During this period, especially in 1975-1984, Egypt's external revenues rose dramatically as a result of the oil boom and the improvement in Egypt's geo-political position (World Bank 2002b). In particular, Egypt benefited from the re-opening of the Suez Canal, resumption of oil production and the high oil prices, increased level of foreign aid, increased receipts from tourism, and increased remittances from expatriate workers. But the country was plagued by Dutch Disease, which led to an overvalued exchange rate for the non-oil sectors, limiting investment and undermining the basis for sustainable growth.

**Table 1: Real GDP Per-Capita Growth, 1975-2000
(constant Egyptian pounds)**

Period	Real GDP Per Capita Growth
1975-1985	5.75
1975-1980	7.2
1981-1985	4.0
1986-1990	1.8
1991-1995	1.3
1996-2000	3.5

Source: World Bank 2002b.

The windfall gains from the nationalization of the Suez Canal, oil price increases, and a spike in remittances were used to fuel consumption and to maintain the government's inflated public spending. Indeed, during the *infitah*, government expenditure rose sharply (Harik

⁸ *Infitah* also included limited trade reform that allowed the private sector to import certain categories of consumer items and other goods (Hinnebusch 1985, Zaki 1999).

⁹ Early on, the *infitah* policy was biased against domestic investment, but when it was apparent that foreign investment would not be forthcoming, the anti-Egyptian bias was removed and incentives were provided to large private sector firms to invest in the economy. In the end, *infitah* failed to attract serious foreign investment but did succeed in promoting the growth of the private sector and the investment of private firms in the Egyptian economy.

1997).¹⁰ However, despite strong growth, the period of 1975-1985 can best be characterized as one of jobless growth because rising open unemployment accompanied high growth. The massive inflow of resources was generally not used to invest in productive and employment-intensive sectors of the economy (ILO 1997).

By the second half of the 1980s, it appeared that Egypt was nearing the limits of its state-led development strategy. The windfall from the Suez Canal nationalization, which had resulted in a transfer of income to government from private (mostly foreign) investors, had long since run its course and no longer significantly contributed to GDP growth. The liberalization of imports had contributed to a growing trade deficit. As a result, debt rose eight-fold between 1974 and 1985 (Richards and Waterbury 1998). In addition, incomes from petroleum sales experienced a sharp fall by the mid-1980s when oil prices plummeted, costing Egypt 11 percent of its GDP. As a result of the drop in oil prices in the mid-1980s, the demand for labor in the Persian Gulf states also decreased and remittances suffered. The Egyptian economy was thus left exposed to massive external and domestic account imbalances (Handoussa 1991, p. 4).

Phase 3: Economic Reform

By the mid-1980s, the government recognized that economic reform was inescapable. However, the government was not convinced that the market was the solution (Harik 1997). Part of its reluctance to embrace market solutions stemmed from the fear that doing so would entail dismantling the structure upon which government power was based (Harik 1997, p. 15). In particular, for over three decades, the state had benefited its strategic constituency through redistributive and welfare policies.¹¹ In exchange for these economic benefits, the state was given a relatively free hand in the political sphere. Neoliberal-inspired economic reforms that called for minimizing state intervention, privatizing the state-owned enterprises, curtailing transfers to the political elite, and increasing the flexibility in the labor market were therefore politically risky. Consequently, the government's approach to reform was "to make policy changes that would not cut into the interests of the power coalition" (Harik 1997, p. 15).

By the late 1980s, the Egyptian government was facing a fiscal crisis of great proportions. Economic growth was negative, and international debt was nearly \$50 billion, making the country's ratio of debt to gross national product (GNP) one of the highest in the world (Richards and Waterbury 1998). In exchange for massive debt relief, in 1991 the Mubarak government agreed to a conventional stabilization and structural adjustment package with the International Monetary Fund (Richards and Waterbury 1998), known as the Economic Reform and Structural Adjustment Program (ERSAP). The main objective of the program was to achieve stable economic growth through a private sector-led and market-oriented strategy, including fiscal reforms, trade liberalization, financial and labor market

¹⁰ Adams (2000) reports that remittances from expatriate workers fuelled a construction boom between 1975 and 1985.

¹¹ In Egypt, organized labor, public sector managers, the military, and civil servants constituted the government's strategic coalition or base of support.

liberalization, privatization, and creation of an appropriate regulatory environment. In response to the government's concerns regarding the economic and social dislocations associated with ERSAP, international donors including the World Bank, U.N. Development Programme, and European Union created a \$613 million Social Fund for Development to create jobs, retrain workers, and alleviate the burden of adjustment on low-income groups (to be discussed in the section on social safety nets and targeted policies) (Bush 1999, Weiss and Wurzel 1998).¹²

The success of Egypt's stabilization program is widely acknowledged. Egypt, however, has taken a gradual approach to structural adjustment, and its record on this front has been more mixed. This is most apparent in such areas as trade and labor market reform.

POVERTY IN EGYPT

Incidence and Depth of Poverty

Only a limited number of observations are available with respect to poverty. Even indirect measures of changes in the income of the poor, such as changes in real wages, are available on a consistent basis only for 15 years. Statements about developments with respect to the poor therefore have to be taken cautiously. For many periods, there are observations at the beginning and at the end, but none in between. Consequently, it is difficult to match incidence of poverty with changes in the economy, such as the rate of growth, except over long time periods during which growth may have varied. Moreover, there is considerable variance in the quality of estimates, and as a result of differences in methods and definitions, the estimates themselves vary widely. Comparability over time is poor. The estimates of poverty incidence by El-Laithy and Osman (1996) appear to be the most reliable. (See Tables 2-8.)

All estimates agree that the incidence of poverty increased substantially between 1980-1981 and 1990-1991. According to El-Laithy and Osman (Table 2), the average annual rate of increase in poverty over this decade was rapid (0.81 percentage points per year). The poverty gap, measuring how far the poor were below the poverty line, also increased, indicating that the extent of poverty worsened. Real wages for unskilled labor decreased by 18 percent,¹³ lending strong support to the data on increasing poverty (CAPMAS data in International Labour Organization, 1997). In contrast, poverty incidence decreased slightly over 1990-1991 to 1995-1996 and again during 1995-1996 to 1999-2000.¹⁴ However, the overall picture for the 1990-1991 to 1995-1996 is mixed: although the poverty incidence decreased, the poverty gap increased slightly.

¹² In the second phase, which began in January 1997, the Social Fund for Development received an additional \$746 million (Bush 1999, p. 32).

¹³ From about 84 for 1980-1982 to 68.5 for 1990-1992 (both two-year averages) (See Table 5).

¹⁴ Because the methods used by El-Laithy and Osman (1996) and the World Bank (2002a) study are different, the level of poverty cannot be compared. The methods used by the World Bank represent a refinement of those used by El-Laithy and Osman and can be used to determine consequences of 1995-1996 to 1999-2000.

**Table 2: Incidence of Poverty and Poverty Gap in Egypt, 1980-1981 to 1999-2000
(percentage of households)**

Year	Poverty Incidence		Poverty Gap	
	El-Laithy and Osman	World Bank	El-Laithy and Osman	World Bank
1980-1981	17.0		3.2	
1990-1991	25.1		4.4	
1995-1996	22.9	19	4.6	3.30
1999-2000		17		2.97

Source: El-Laithy and Osman 1996; World Bank 2002a.

The poverty gap has varied considerably over the last two decades.¹⁵ It increased substantially in the 1980s but very little from 1990-1991 to 1995-1996, the early stage of economic reform in Egypt. Furthermore, the World Bank (2002a) estimates reveal that, with the decline in poverty incidence, the poverty gap decreased slightly in 1999-2000, implying that more of the desperately poor moved closer to the poverty line. This decline, which came about in a period when economic reform was being consolidated, contradicts the critics of this process who argue that pro-market reforms invariably harm the poor. The poverty gap is also relatively low, implying that the majority of the poor in Egypt are clustered just under the poverty line.¹⁶

Table 3 compares poverty rates based on the per capita spending of \$1 a day at 1985 purchasing power parity prices poverty line for Egypt with those from the Middle East and North African (MENA) region as well as other regions. Compared with the MENA region of which Egypt is part, poverty in Egypt is high, but it is low compared with Latin America and Asia. The table also reveals that the level of poverty in Egypt can be characterized as low by global standards (Adams and Page 2001).

Table 3: Comparing Egypt's Poverty Incidence (using \$1/day poverty measure) with That of Various Regions (percent)

Country/Region	Poverty Incidence
Egypt (1985)	7.4
MENA (1985)	5.5
Latin America (1987)	15.3
East Asia and the Pacific (1985)	26.6

Source: van Eeghen and Soman.

If the \$2 per day poverty line is used (this poverty line may be more appropriate, given the level of Egypt's average per-capita income), the poverty incidence increased very slightly between 1991 and 1995 (Table 4). Since \$2 represents a much higher poverty line than the

¹⁵ The head count index or poverty incidence is a measure of the numbers of people or households who are below the poverty line. The poverty gap index (P1) measures the gap between the expenditure or income levels and the poverty line, or the *depth of poverty*. P1 also measures the level of resources needed to elevate all those in poverty to the poverty line, assuming that targeting of those resources is perfect.

¹⁶ On the basis of the 1999/2000 poverty gap estimate, the World Bank (2002a) estimated that (assuming perfect targeting of resources) a mere LE 350 million, or 0.1 percent of GDP (approximately \$75 million) would lift everybody out of poverty.

standard Egyptian definition of poverty and the movement is small, this is not inconsistent with the small decrease in poverty incidence under the Egyptian definition.

At \$2 per day, the poverty gap decreased by a small but significant amount between 1991 and 1995. Over the same five years, at the lower poverty line of \$1 per day the poverty gap more than doubled (World Bank 2002b). The implication is that, although fewer people became poor, those who were in abject poverty became even poorer than they had been in 1991. In other words, during the initial period of reform, when growth in per-capita income was slow, the poorest may well have become worse off. This is consistent with the poverty gap data from El-Laithy and Osman for the same period.

Table 4: Poverty Incidence and Poverty Gap Based on \$1/Day and \$2/Day Measures (percent)

Year	Poverty Incidence		Poverty Gap	
	\$1/day	\$2/day	\$1/day	\$2/day
1985	7.43			
1991		51.9	1.1	15.3
1995	3.1	52.7	3.1	13.9

Source: World Bank. 1999-2000. *World Development Report*; World Bank 2002b.

Wages as an Indicator of Poverty

Changes in real wages are good indicators of changes in income. This is especially true in the case of Egypt, where the ILO (1997) reports that “wage labor in 1995 represented 72.1 percent of urban employment; 42.9 percent of rural; and 55.5 percent of total.” The World Bank (2002a) reports that wages are the main source of income for the poor, representing 43 percent of their total income in 1999/2000. It is therefore not surprising that the decline in real wages shown in Table 5 is consistent with the increase in poverty (incidence and depth) during 1980-1991. During this period, real wages fell across all sectors.¹⁷ Particular attention, however, should be paid to the wage trend in the agriculture and construction sectors because in these sectors the poor are most likely to be employed and because wages in these sectors are paid overwhelmingly to unskilled workers. During this period, real wages paid to agricultural workers fell by more than 40 percent between 1985 and 1990. This dramatic decrease in real wages had a significant impact on the poor. However, because poverty estimates exist only for 1981 and 1991, the dramatic decrease in wages in the late 1980s is masked by the rise in wages from 1980 to 1982, when wages in agriculture and construction nearly doubled in just two years. Consequently, the increase in poverty shown by the poverty incidence estimates over this period seems to reflect the realities of the latter half of the 1980s. It is reasonable to conclude that the decline in wages was one main factor contributing to the increase in poverty in this period.

¹⁷ Note that Table 5 highlights the wage trend in the agriculture and construction sectors because it is in these sectors that the poor are most likely to be employed. Moreover, wages in these sectors are primarily for unskilled workers. In other sectors, a large proportion of wage earners are skilled, technical, or professional workers, who are not among the poor. Average wages in these sectors, therefore, do not really reflect the income of the poor. The column for total wages suffers from the same problem.

In 1991-1995, wages remained relatively constant throughout the period, but declined slightly in agriculture and construction. The series ends with 1994-1995. During the same period, poverty incidence improved slightly. However, poverty incidence data are for 1995-1996 and wage data end with 1994-1995. Wages started rising again in 1993-1994, and if they continued to rise in 1995-1996 for which we lack data, the poverty incidence and wage data could be consistent.

Table 5: Index of Real Wages in Egypt, 1980-1981 to 1994-1995 (1985=100)

Year	Agriculture	Housing and Construction	Total
1980-1981	60.2	64.4	80.4
1981-1982	57.7	62.1	87.4
1982-1983	130.8	135.3	120.0
1983-1984	119.3	121.4	113.0
1984-1985	107.0	107.9	104.9
1985-1986	100.0	100.0	100.0
1986-1987	88.2	85.0	86.4
1987-1988	85.5	80.1	84.3
1988-1989	81.6	75.4	79.7
1989-1990	75.0	82.1	73.6
1990-1991	72.0	77.1	70.9
1991-1992	66.3	70.2	66.4
1992-1993	65.8	65.8	64.4
1993-1994	67.0	63.2	65.3
1994-1995	68.6	63.3	67.8

Source: CAPMAS data as reported in ILO 1997.

Poverty and Inequality in Egypt

Unfortunately, reliable income distribution data are hard to obtain in Egypt and only limited estimates of Egypt's Gini coefficient and even fewer of income distribution by quintile exist. Between 1975 and 1995, there was a dramatic reduction in income inequality: the Gini decreased from 0.38 to 0.29.¹⁸ The Gini in 1991 (the year that the structural adjustment and stabilization program was initiated) was 0.32 and by 1995 it declined to 0.29 (Deininger and Squire). This is low compared with that of other developing countries. The rapid rate of growth by world standards over the two decades to 1995 is the best explanation for an improvement in the income of the poor and the reduction in income inequality in the country. Over this period, per-capita GDP growth rose by an average of almost 4 percent. Other factors that might have contributed to declining inequality were the government's policy of guaranteed employment, government subsidies for consumer goods, and increased wages for unskilled labor in the decade spanning the mid-1970s to the mid-1980s because of labor

¹⁸ The MENA region as a whole registered a reduction in income inequality between 1970 and 1995. Among developing regions, only MENA and South Asia recorded an improvement in income distribution. It must be noted that the Ginis and the income distributions from which they derive are seldom reliable and thus must be read with caution. This stems from a variety of problems with reporting, including that the rich tend either to not report their income or to underreport it and the poorest of the poor are generally left out altogether.

migration (to be discussed in the next section). In addition, the crisis of the late 1980s and early 1990s resulted in reduced incomes for the upper quintiles as well. Inequality was thus reduced by shrinking the incomes of the highest groups and reducing the incidence of low end poverty—those receiving less than \$1 a day. What emerged was a situation in which poverty became even more widespread and increasingly shallow. Thus, Egypt made the most progress in reducing abject poverty, and in this sense even the lower growth of 1990-1995 can be characterized as having a pro-poor dimension.¹⁹ Another way of measuring changes in income distribution is the share of the rich and of the poor in total income. However, only two observations exist. By this measure as well, the distribution of income in 1991 and 1995 becomes more equal: the income share of the lowest 40 percent increased from 25.1 percent to 27.4 while that of the highest 30 percent decreased from 67.8 to 64 percent. With improved income distribution and per-capita growth, poverty declined. Table 6 summarizes the estimates of income shares by quintiles for 1991 and 1995.

Table 6: Distribution of Income by Quintiles, 1991 and 1995 (percent)

Quintile	1991	1995
Lowest 10	3.9	4.4
Second 10	8.7	9.8
Second 20	12.5	13.2
Third 20	16.3	16.6
Fourth 20	21.4	21.4
Highest 20	41.1	39
Highest 10	26.7	25

Source: World Bank 2002b.

Relationship between Poverty and Growth

Historically and in cross-country analysis, economic growth helps reduce poverty and the faster the rates of per-capita GDP growth, the higher the rates of poverty reduction and vice versa. It is interesting to examine the relationship between per-capita GDP growth and poverty in Egypt. Over the last 20 years, GDP growth has been positive but inconsistent. Growth of GDP per capita was high by world standards at an average of 3.3 percent per year in 1980-1990. It fell to less than half that in 1991-1995 and then returned to a high 3 percent in 1996-2000.

It is both surprising and discouraging that, despite a high growth rate in 1980-1990, the incidence of poverty actually increased significantly (Table 7). This result may be more easily understood if this 10-year period is divided into two sub-periods. From 1980 to 1985, growth averaged 4 percent per capita, but between 1986 and 1990, growth per capita was less than half that, at 1.8 percent. No poverty data exist that would allow us to analyze the consequences for the poor of the differences between the two sub-periods. However, data on real wages for unskilled workers (Table 5) show that during the rapid growth in the early 1980s real wages about doubled. Therefore, the income of the poor undoubtedly increased substantially and poverty declined. Not only was this a period of high growth in Egypt but it

¹⁹ Pro-poor means that the incomes of the poor rise faster than those of the non-poor.

was also a time of massive migration to the Persian Gulf states, which benefited from the oil boom. Both factors raised wages and benefited the poor. This was followed by a decline of 30 to 40 percent in real wages during the period of slow growth in per-capita incomes in the second half of the 1980s. A decline in migration and increase in reverse migration after the end of oil boom contributed to falling wages.

Slow growth may not generate enough demand for unskilled labor to absorb the increase in the labor force. With labor supply increasing faster than demand, real wages tend to stagnate or fall. The income of the poor is likely also to stagnate. With per-capita income increasing, income distribution will become less equal and poverty incidence can increase. This is what seems to have happened 1980-1990. Further work is needed, especially on the composition of growth and on its labor intensity, to provide a fuller explanation of the reasons why an increase in poverty accompanied a rapid growth of per-capita income over the period as a whole.

In 1991-2000, poverty declined despite a lower rate of growth. As shown in Table 7, the benefit of growth for the poor was, however, limited: the percentage decrease in poverty was, at a maximum, only 0.31 times the percentage increase in output per capita.

Table 7: Relationship between Growth of GDP per Capita in Egypt and Reduction in the Incidence of Poverty and Poverty Gap, 1980-2000

	1	2	3	4	5
Years	% Avg. Annual Change in GDP/capita	%Avg. Annual Change in Poverty	Ratio (2)/(1)	% Avg. Annual Change in Poverty Gap	Ratio (4)/(1)
1980-1990	3.27	.81	.247	.12	.037
1991-1995	1.43	-.44	-.31	.04	.028
1996-2000	3.0	-.4	-.13	-.07	-.023

Source: World Bank 2002b. Author's calculations.

Table 8 shows growth per capita, poverty incidence, Ginis, wage data, and income distribution over 1975-2000. Two conclusions can be drawn from this table:

- In general, the higher the rate of growth, the greater the increase in the real wage and the greater the reduction in the Gini coefficient of inequality. However, poverty incidence in two cases out of three exhibits the opposite relationship: poverty increased after relatively rapid growth and diminished after slow growth. We have only three observations for poverty incidence, so this perverse result may just be a statistical accident.
- There is no fixed relationship between the rate of growth and the change in poverty incidence, income distribution, or real wages. To explain why a 3 percent rate of per-capita growth can lead to greater poverty in one period and less in another, a great deal of additional work needs to be done on the composition of growth and the effect of specific policies.

Table 8: Summary Table Relating Growth, Poverty Incidence, Gini, Real Wages, and Income Distribution, 1975-2000

	Annual Rate of Per Capita Growth over the Period	Poverty Incidence E&O* (%)	Poverty Incidence W.B.* (%)	Gini Coefficient	Real Wage**	Share of Poorest 40%
1975-1990	4.5			0.38 to 0.32		
1980-1990	3.3	17 to 25.1			59 to 74	
1990-1995	1.6	25.1 to 22.9		0.32 to 0.29	74 to 68	25.1% to 27.4%
1995-2000	3.3		19 to 17			

Source: Growth per capita World Bank 2002b; Poverty Incidence El-Laithy and Osman 1996; Poverty Incidence W.B. World Bank 2002a; Gini Deininger and Squire. <http://www.worldbank.org/research/growth/dddeisqu.htm>; Real wage CAPMAS data as reported in ILO 1997; Income Distribution: World Bank 2002b.

*E&O refers to El-Laithy and Osman, 1996; W.B. refers to World Bank 2002a.

**Two-year average of agricultural wages.

Chronic Nature of Poverty in Egypt

In addition to being shallow, Haddad and Ahmed (2002) have found that poverty in Egypt can be characterized as overwhelmingly chronic (as opposed to transient). Understanding whether poverty is chronic or transient has important implications for how to deal with it. For example, if most poverty were transitory, targeting of subsidies would be difficult to justify because the target group would not be easily identified and would keep changing over time, and the costs of targeting programs might outweigh the benefits. However, in a situation such as Egypt where poverty is overwhelmingly chronic, the costs related to identifying the target group are significantly less. Another implication is that rather than focusing on safety nets, which are more important when poverty is transient, asset accumulation for the poor becomes more important.

Location of Poverty and Identity of the Poor in Egypt

Although the overall poverty situation improved during 1990s, benefits were unevenly felt. As shown in Table 9, the incidence of poverty in both periods is significantly higher in rural areas than it is in urban areas and it is higher in Upper Egypt than in Lower Egypt. The incidence of poverty fell by more than half in Metropolitan Egypt, it fell by a significant amount in Lower Egypt (both rural and urban), and it rose dramatically in Upper Egypt.²⁰ Indeed, the poverty rate in rural Upper Egypt almost doubled between 1995-1996 and 1999-2000, and it increased from 29 percent to 34 percent in the urban areas of Upper Egypt (World Bank 2002a). Although it is not surprising that there is a divergence in both the level and the changes in poverty over time in rural and urban areas, what is surprising is that there exists a divergence in the level and changes in poverty outcomes of two rural and largely agricultural areas (rural Lower and rural Upper Egypt). The spatial dimension of poverty is therefore important in the Egyptian case, but it is not limited to the traditional sense of the

²⁰ The term "Metropolitan" refers to Cairo, Alexandria, Port Said, and Suez.

rural-urban dichotomy. Differences in the distribution of wealth and natural resources and in social and public services may help account for this outcome (World Bank 2002a).

Table 9: Comparison of Poverty Levels by Region, 1995/1996 and 1999/2000

Region	1995/1996	1999/2000
Metropolitan	13.10	5.06
Lower Egypt Urban	8.34	6.17
Lower Egypt Rural	21.53	11.83
Upper Egypt Urban	10.82	19.27
Upper Egypt Rural	29.32	34.15

Source: Adapted from World Bank 2002a.

In addition to the strong regional and rural dimension of poverty, Assaad and Rouchdy (1999) point out that a high concentration of poverty exists in the squatter and informal settlements in Metropolitan areas. For a variety of reasons, such as that surveys often do not enumerate those living in squatters camps and informal settlements, poverty estimates hide the existence of these pockets of severe poverty. For example, the 1996 Egyptian Human Development Report reports that there are 3.3 million poor and more than 1 million ultra poor (equivalent to one quarter of the national total in each category) living in Greater Cairo Metropolitan Region and the governorate of Alexandria (Assaad and Rouchdy 1999). Poverty in Egypt thus has important regional dimensions, with the lion's share being located in rural Lower Egypt, in rural areas in general, and in concentrated pockets of squatter and informal settlements in the larger metropolitan areas.

For policy purposes, it is important to identify not only the spatial dimensions of poverty but also those groups that are disproportionately poor. Certain categories of Egyptians emerge as relatively more deprived than others, including farmers with little land and landless agricultural laborers. This group represents 40 percent of the rural poor (van Eeghen 1995). Urban low-skilled workers who make up one-third of the urban poor are also among the most deprived.

Gender Dimensions of Poverty

El-Laithy (2001) reports that in each region the percentage of poor females is higher than that of males. For example, in rural areas 21.85 percent of females are poor whereas 20.98 percent of males are poor. However, more interesting for policy purposes is that female-headed households, which represent a significant segment of Egyptian households (estimates range between 16 and 22 percent), are significantly more vulnerable to poverty than their male-headed counterparts (El-Laithy 2001; Assaad and Rouchdy 1999). Indeed, according to the 1997 Expenditure, Income and Housing Survey, female-headed households are 1.5 times as likely to be poor as male-headed households in urban areas and 1.3 times as likely to be poor in rural areas (Assaad and Rouchdy 1999).

Non-income Measures of Poverty

Although this study is based on income poverty, it is important to consider other dimensions of poverty because poverty clearly manifests itself in ways that are not directly captured by income. Some poverty indicators gauge deprivation in other aspects of human welfare such as health, education, nutrition, and standard of living.

During the past decade, Egypt has made some progress in a number of social indicators. It is clear from Table 10 that the trend in poverty measured by non-money metric indicators diverges from that as measured by income-related indicators. For example, in 1980-1990, when the poverty incidence was increasing, all of the non-income poverty indicators showed an improvement.²¹ This suggests that the government may have done something right. It is not clear what was happening, but at the very least this divergence in outcomes demonstrates that, although income poverty is an important measure, other measures of welfare should be considered.

Table 10: Non-Income Poverty Indicators

	1980	1985	1990	1995	2000
Mortality rate, infant (per 1,000 live births)	121.4	91	67.8	53	41.8
Under 5 mortality rate (per 1,000 live births)	175	...	85	58 ^a	52
Maternal mortality ratio (per 100,000 live births)	203.8	190	...	174 ^a	153
Immunization, measles (% of children under 12 months)	41	74	86	89	95 ^b
Life expectancy at birth, total (years)	55.5	59.2	62.8	65.3	67.5
Illiteracy rate, adult total (% of people 15+)	60.73	56.78	52.9	48.9	44.7
School enrollment, primary (% gross)	73.1	85.4	93.8	99.8	...
Sanitation (% of population with access), Total	...	...	87	...	94
Rural	...	...	80	...	91
Urban	...	...	96	...	98
Population using improved water sources (%), Total	...	...	94	...	95
Rural	...	...	91	...	94
Urban	...	...	97	...	96
Population growth (%)	2.53	2.57	2.29	1.94	1.90

Source: World Bank 2002b.

^a 1997

^b 1999

It is important to note that disparities exist between Upper and Lower Egypt and between rural and urban populations, especially in child mortality rates, educational attainment, quality of education, access to sanitation, and improved water sources (World Bank 2002a).

In sum, non-income indicators of poverty can improve while poverty incidence, based on income, increases. Poverty gap estimates exposed the fact that poverty is shallow and has become less shallow over the last decade. The implication of the last finding is that small movements in income can have a large impact on the depth of poverty. Contrary to the national trend in poverty, which has been decreasing over the last decade, poverty in rural

²¹ Real wages also increased during this decade, albeit slightly. Only poverty data show a deterioration.

Lower Egypt is increasing. Finally, this section highlighted the fact that gender is positively correlated with poverty and the probability that female-headed households will be poor is disproportionately high.

Education and the Poor

The World Bank (2002a) points out that, despite the fact that the proportion of GDP Egypt spends on health care and education is similar or higher than other comparable developing countries, the quality of service provision is low and thus the return to investment is also low. It is instructive to examine the relationship between education and the poor in Egypt because a lack of educational achievement appears to be a defining characteristic of the poor in Egypt. For all of the country, more than 60 percent of poor household heads are illiterate, compared with 33 percent for non-poor household heads. Although progress has been made in the last five years of the 1990s, during which illiteracy fell about 4 percent, a large gap between poor and non-poor remains with respect to educational status. For example, in Metropolitan Egypt, 38 percent of non-poor were illiterate or had minimal reading and writing skills, whereas more than 80 percent of the poor fell into those categories. Less than 10 percent of poor household heads in Egypt had finished secondary school or higher, whereas 35 percent of non-poor household heads had secondary or higher education .

Data from the most recent Household Income and Expenditure Survey (World Bank 2002a) show that for all of Egypt 27 percent of illiterate household heads are poor, an incidence of poverty considerably higher than the poverty rate for the entire population. Poor and illiterate household heads also suffer deeper poverty than poor who have basic education or better. Poverty incidence for illiterate household heads was found to be more than 2 points greater than the average for the entire country.

Although the data on educational status and the poor shown are dismal, there is reason for hope: a relatively high percentage of school children of both poor and non-poor are enrolled in school. In rural areas of Upper Egypt, the poorest region of the country, 94 percent of children ages 6 to 15 are enrolled in school (World Bank 2002a). For the country as a whole, only 3.33 percent of children in this age bracket, 2.53 percent of non-poor children, and 6 percent of poor children are not in school. In a few years, this will lead to large decreases in illiteracy and should contribute to breaking the education-poverty cycle.

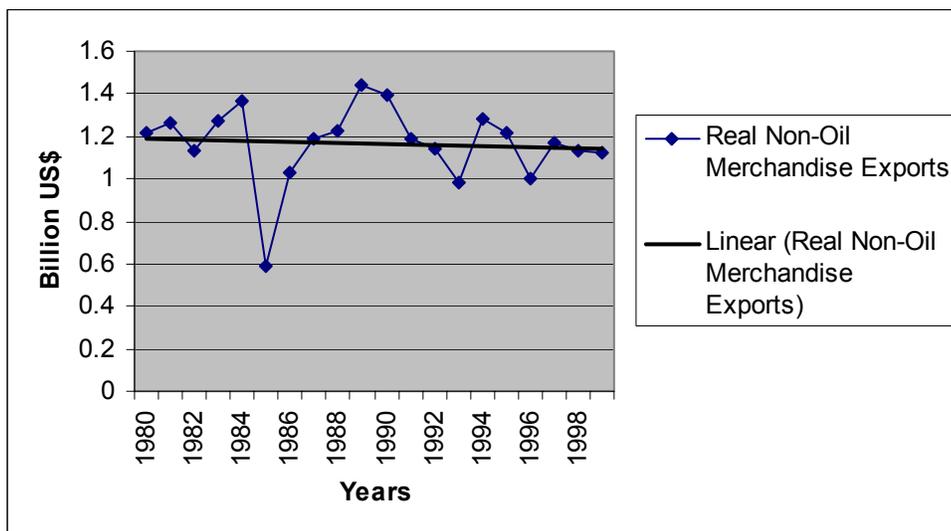
GLOBALIZATION, ECONOMIC REFORM, AND POVERTY IN EGYPT

Globalization²²

Conventional wisdom posits that there are strong links between trade, growth, and poverty reduction. The underlying assumption is that freer trade significantly accelerates growth and thus has a positive impact on poverty reduction. This is especially true because in the absence of distortions and controls exports will be labor intensive. Labor is the relatively abundant factor in countries like Egypt. With free trade, exports will be labor intensive and imports capital intensive. In contrast, this line of argument holds that protectionism hurts the poor because it will generally encourage the more capital-intensive industries. This sub-section examines the relationship between trade and pro-poor growth in Egypt over the last two decades. Special attention is paid to the period after the initiation of neoliberal reforms in 1991.

Despite undertaking trade reform as part of the ERSAP, Egypt's export performance over the past decade (as well as in the previous decade) has been dismal. Egypt has not integrated further into the global economy. In fact, despite economic growth the country's merchandise exports (non-oil) in real terms have declined slightly since the 1980s (see Figure 1). Compared with that of other lower middle-income countries, Egypt's trade performance over the last decade has been feeble. Not only did Egypt's exports decline in real terms, but its merchandise exports as a percentage of GDP also decreased sharply, from a high of 0.53 percent of GDP in 1989 to 0.25 percent in 1999 (World Bank 2002b).

**Figure 1: Real Non-Oil Merchandise Exports, 1980-1999
(constant 1995 \$)**



Source: World Bank 2002b.

²² Although the term “globalization” traditionally refers to trade, private capital, and labor flows, in this study the term is limited to trade and international labor flows because these are important in Egypt.

Egypt's poor export performance is directly linked to two factors: (1) the remaining anti-export bias in its trade policies; and (2) the appreciation of the average effective exchange rate in the 1990s (Page and van Gelder 2002). The anti-export bias in Egypt's trade policies has negatively impacted the country's trade performance. Whereas tariffs for other lower middle-income countries average 18 percent in the late 1990s, those in Egypt stood at 28 percent. Tariff structures are convoluted and discriminate against low-end, processed products (the type of products that Egyptian producers have the capacity to produce) (Page and van Gelder 2002). Because effective tariffs for fully processed products are still significantly higher than those for semi-processed products, resources are diverted away from exports to import-substitution sectors (Page and van Gelder 2002). The result is a continuing the pattern of inefficient, non-competitive production for the domestic market, resulting in lower growth rates.

Page and van Gelder (2002) argue that Egypt has not been able to become part of the "new global pattern of production in which multi-national companies outsource production of parts to other companies globally, despite its proximity to European markets and relatively low labor costs" partly because its tariffs are structured in such a way as to deny local producers access to internationally priced inputs. This has clearly had a negative impact on Egypt's ability to develop a labor-intensive exports sector. This is relevant to the issue of pro-poor growth because cross-national evidence suggests that an important way to achieve such growth in labor-abundant countries is by emphasizing labor-intensive production for export.

The second and possibly more important factor influencing Egypt's paltry export performance is its exchange rate. Similar to other Dutch Disease economies, Egypt has been faced with an overvalued exchange rate since the mid- to late-1970s, when oil became an important source of revenue for the economy. Indeed, the petroleum sector became one of the dominant export sectors and foreign exchange earners, providing 30-50 percent of merchandise exports. The petroleum sector was a driving force in Egypt's tremendous growth, especially in the decade 1975-1985. However, in the absence of corrective measures by the Central Bank in the 1980s and early 1990s to sterilize the foreign exchange, the impact of the windfall from oil was to drive up the value of the Egyptian pound. As a result, the competitiveness of the non-oil tradable sectors, especially agriculture, manufacturing, and food processing, has been seriously undermined. Indeed, Table 11 highlights the fact that oil exports as a percentage of total merchandise exports nearly quadrupled to 37 percent over 1975-1999, while the percentage of agriculture and processed foods in total merchandise exports fell from over 55 percent to a mere 17 percent. Because the oil sector is capital intensive whereas the declining sectors are labor intensive, the result is growth that generates little employment.

As will be discussed later, in the 1990s the employment opportunities that were created came from the non-tradable sector. During this period, poverty declined despite flat exports. Export promotion, especially of labor-intensive goods, represents an area that has the potential to contribute to further declines in poverty.

Table 11: Structure of Exports (% of merchandise exports)

Year	Agriculture	Manufacturing	Oil Exports	Processing Food	Ores and Metals
1975	38.54	34.05	9.45	17.40	.52
1980	25.55	10.95	64.25	6.78	2.47
1985	12.09	10.07	68.14	5.60	4.06
1990	9.53	42.47	29.41	9.68	8.86
1995	6.12	40.40	37.17	9.80	6.41
1999	7.85	37.12	36.91	8.91	4.39

Source: World Bank 2002b.

To promote exports successfully, however, policymakers must get the incentives (that is, macroeconomic policy and exchange rate, in particular) right. Data from 1986-1992 clearly demonstrate this point. During this period, the dollar went from being worth LE 0.7 to LE 3.3, representing a devaluation of nearly 400 percent. During the same period, exports of non-oil merchandise nearly doubled. Because there were no significant changes in tariffs nor in other export incentives, this huge increase in non-oil exports can be attributed largely to the devaluation of the exchange rate. Exchange rate management is clearly an important tool for policymakers. The following sections will examine variables that contributed to the decline in poverty in Egypt in the 1990s.

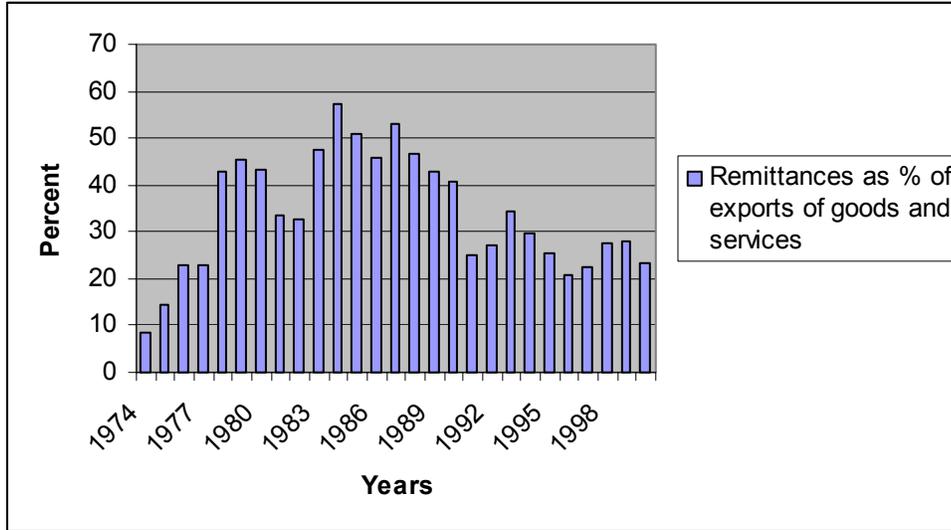
Labor Mobility and Poverty Reduction

International labor mobility is increasingly seen as an important remaining impediment to increased efficiency in the allocation of global resources (Rodrik 2001). The Egyptian labor market is unusual in that it has been characterized by significant waves of international labor emigration since the oil boom of the 1970s. In the late 1970s and early 1980s, 10-15 percent of the Egyptian labor force migrated abroad (EIU 1992). Most of those who migrated were unskilled labor from rural areas who went to the Persian Gulf. The remittances they sent back to Egypt had important direct and indirect impacts on the poor (Adams 1991). The remittances generally went directly to poor households and thus directly increased their incomes. The remittances also fueled a construction boom that led to increased labor demand in the construction sector (Adams 2001). Equally important, a large proportion of the supply of unskilled labor was withdrawn from the Egyptian labor market. With labor supply reduced and demand for labor increased as a result of the boom fueled by remittances and by increased oil income, agricultural wages doubled in two years (see Table 5). This dramatic increase in real wages had a positive impact on the poor. However, given that poverty data exist only for 1980-1981 and 1990-1991, it is not possible to precisely determine the impact of the wage increase that occurred between the late 1970s and mid-1980s on poverty incidence or the poverty gap.

International migration opportunities for unskilled labor diminished after the price of oil plummeted in 1985 and again around the time of the Gulf war in 1991. The trend in the wage data (see Table 5) reflects a softening of the labor market for unskilled labor during both

periods. The loss of remittances was an important factor in the increase of poverty during the latter half of the 1980s and may have slowed the rate of poverty reduction in the early 1990s.

Figure 2: Remittances as Percentage of Total Exports of Goods and Services, 1974-2000



Source: World Bank 2002b.

Over the last quarter century, remittances, along with income from oil, the Suez Canal, and tourism, have represented one of the most important foreign exchange earners for the Egyptian economy. Indeed, the Egyptian economy developed a substantial dependence on these volatile sources of income, significantly affected by regional and world politics. The Egyptian economy has relied substantially on remittances since the 1970s and continues to depend on them to the present (see Figure 2). Remittances, which represented more than 40 percent of Egypt's exports of goods and services in the 1980s and more than 25 percent in the 1990s, continue to be a significant share of total exports of goods and services. In addition, revenues from oil represented over 40 percent of merchandise exports and tourism more than 20 percent of total exports. The Egyptian economy has thus become vulnerable to forces outside of its control because the rate of migration and of remittances depends very much on oil prices. Had some of the temporary windfall gains from high oil prices been channeled into productive investments that promoted labor-intensive sectors, they would have provided a boost through potentially large multiplier effects. However, this was not the case: high oil prices and the rise in remittances they spawned were used largely to fuel a construction and consumption boom in the 1980s. The potential multiplier effects were lost. Treating international labor migration as a safety valve rather than depending on it as a major source of the generation of employment and income would be one way to avoid such vulnerability.

Labor Market

Labor Market (non-reform) in the 1990s

The origins of labor market institutions in Egypt can be traced back over three decades to the *dirigiste* policies of Gamal Abdel Nasser's government. Indeed, the goals of social justice and redistribution that inspired the Socialist Decrees issued by Nasser's government form the backbone of Egypt's current labor laws and the institutions that constitute the Egyptian labor market. These institutions provide labor with job security; job guarantees; and generous social welfare guarantees such as social security, minimum wage protections, bonuses, annual raises, consumer subsidies, and shares in company profits for public sector workers.

Egypt's labor laws have been described as being "among the most restrictive in the world" (Fawzy 1999, p. 34). The complexity and rigidity of the current labor code are blamed for scaring away international investors (AMCHAM 1996). The current law (Law 137 of 1981) prohibits employers from dismissing or laying off employees after they have completed a three-month probationary period without consulting a tripartite committee in which management, unions, and the Ministry of Manpower and Emigration are represented. An appeal process can follow. The process renders dismissals extremely costly and lengthy affairs, because court cases can drag on for years. In effect, these provisions provide labor with *de facto* lifetime job security (Fawzy 1999).

According to Egypt's multilateral advisors and donors, this labor legislation acts as a strong disincentive to hire and train employees and hinders the efficient allocation of labor and other resources (World Bank 1995). A complaint voiced by the business community is that the limited ability of firms to impose sanctions on labor for nonperformance results in low labor productivity (AMCHAM 1996). Moreover, businesses maintain that these regulations are an obstacle to relieving the unemployment problem because they give investors incentives to obtain labor-saving machinery. Indeed, Egypt is a labor-surplus country, yet the capital-labor ratio is extremely high in the formal economic sector.

A draft labor law has been circulated by the government that removes many rigidities in the current labor legislation. In particular, it provides for increasing flexibility of the labor market by ostensibly making it easier for employers to adjust their labor force to economic conditions and allowing them to hire employees directly rather than through government labor offices. The aim is a more competitive, market-oriented environment. Because the draft law provides a mechanism by which employers can sanction employees, it might result in an increase in employee productivity. Further, by increasing the flexibility in the Egyptian labor market, the draft law may encourage employers to hire more labor. Work on the draft labor law began in 1991. Although a draft labor law was prepared years ago, the government has been reluctant to present it to Parliament. For the past six years, the government has announced it would introduce the draft law in Parliament within the year.²³ The government's reluctance to do so stems from the belief that its passage may be politically

²³ The draft labor law was approved by the Shura Council in summer 2002 and is to be introduced in the People's Assembly shortly.

risky because it eliminates many of labor's traditional protections and thus directly threatens the rank and file. In addition, the draft law does not have a strong political constituency that supports it. Business, although not against the draft laws passage, is lukewarm about it. This is largely because business does not believe the benefits of passing the draft law outweigh the cost of lobbying for its passage and the potential political fallout it might generate.

In a recent survey of over 100 Egyptian businesspersons, Samiha Fawzy (1999) found that close to 55 percent stated that the lack of skilled labor is among the largest constraints to growth they face. Indeed, they felt that it is a significantly larger constraint than labor legislation. This study also found that the degree to which labor legislation was a burden varied by size and by whether a firm is domestic or international. Labor legislation seems to be more of a problem for international firms than domestic firms of all sizes. This may be because international firms have not developed strategies and connections that allow them to effectively get around compliance with the legislation. In addition, international firms have a higher profile and thus are an easy target for enforcement. Consequently, rigid labor legislation may have a negative impact on foreign direct investment.

Fawzy's survey also found that small- and medium-sized domestic firms felt that labor legislation was less of a constraint to their growth than large domestic firms. Again, this may be because it is easier to enforce compliance by larger firms. Ultimately, however, even the large domestic firms have developed creative means to avoid compliance with labor legislation. Lax enforcement of the legislation and the ability of business to circumvent compliance help explain why business has not pushed hard for the passage of the new draft labor law, which, on paper, represents gains for business.

Although more flexible labor legislation is supposed to increase efficiency in the allocation of resources, its main impact in the Egyptian case may be reduced transaction costs involved in avoiding compliance with existing labor legislation.²⁴ John Sheahan (2003) concluded that in the case of Peru, increased flexibility in the labor market as a result of reform of labor legislation may not have produced the anticipated improvements in efficiency and increases in investment. Given the weak enforcement of current labor legislation, the same may be true in Egypt as well for existing domestic firms. However, changes in labor legislation may increase foreign direct investment and, by decreasing transaction costs and related uncertainty, may increase domestic investment as well.

A final point to consider is that, although increasing flexibility in the labor market may improve an economy's competitiveness because it facilitates adjustments in the labor force, it also increases labor's vulnerability. Because Egypt does not possess a well-functioning labor market, as it becomes more flexible the need for effective safety nets to cushion the negative effects of a fluid labor market on labor will become more acute.

²⁴ "It is important to note that transaction costs such as devising ways of getting around the law or bribing inspectors may be higher for foreign investors but affect domestic investors as well.

Unemployment

Since the mid-1980s, unemployment has emerged as one of the most severe problems facing Egypt. The ILO reports that open unemployment increased from an average of 6 percent in the 1980s to an average of 9.4 percent between 1990 and 2000 (ILO 2002).²⁵ By any standards unemployment in Egypt is high. Most of those openly unemployed are young, educated, first-time entrants into the labor market. Indeed, recent figures indicate that the unemployment rate for graduates of secondary technical schools is 73.5 percent, whereas that for university graduates is 16.5 percent (ARE Ministry of Planning 1999).

Unlike unemployed graduates, the poor cannot afford to be unemployed and are forced to enter the informal sector. The size and rate of increase of the informal sector, which employed 85.9 percent of the total non-agricultural labor force in 1986 and 91.6 percent in the 1990s, are evidence of the inability of the formal sector to generate sufficient employment opportunities. Although informal sector employment is clearly better than the alternative of no employment at all, workers in the informal sector enjoy no protections and often live in poverty. Creating more formal sector employment opportunities for unskilled labor is critical to lifting substantial numbers of poor out of poverty. Creating increased job opportunities for skilled labor is important for ensuring that this group does not fall into poverty.

The legacies of guaranteed government employment and the centrally planned economic system have distorted the formal labor market in at least two ways. First, the educational system produces graduates for whom there is no demand, partly because it was designed to respond to the needs of a centrally planned economy that guaranteed graduates permanent jobs whether they were qualified or not. Consequently, the graduates that emerge from secondary technical schools and universities do not possess the skills required by a modern economy. Second, rather than take casual jobs in the informal sector or search for private sector positions, the educated members of the under-30 age cohort (who generally come from the middle and upper classes) prefer to hold out for stable government jobs.²⁶ This phenomenon of numerous unemployed youth is creating a situation where the length of time that individuals remain dependents has increased exponentially. This has direct and indirect impact on poverty. By remaining unemployed and dependent, the graduate becomes a drain on the average family's standard of living and threatens the family's ability to remain above the poverty line. In addition, these individuals represent a drag on the economy.

²⁵ Unofficial estimates put the unemployment rate at 15-20 percent, or three times the world average (EIU 2002).

²⁶ Since the 1960s, the government has guaranteed employment to all those with secondary and university degrees. In 1978, however, job guarantees for graduates were suspended in state-owned enterprises. Although they continue in the government sector, the waiting period has reached 11 years, making the guaranteed employment scheme de facto defunct (EIU 2002).

Employment Creation in Egypt in the 1990s

The respectable growth rates over the last decade were employment intensive, translating into employment creation rates (2.7 percent per year) that kept pace with the rate of labor force growth (2.7 percent per year) (World Bank 2002a). Table 12 reveals that employment elasticity in Egypt was higher during 1995-1999 than it was in a set of selected OECD and non-OECD countries. Nonetheless, employment growth was not sufficient to make up for the backlog of unemployed or to absorb the underemployed workforce in the informal sector. Estimates of the number of jobs that need to be created to accommodate both the new entrants (both skilled and unskilled) to the labor force and the enormous number of existing unemployed are between 500,000 and 900,000 on an annual basis. The employment picture grows even dimmer when one considers that these estimates do not reflect the fact that the majority of workers have found employment in the informal service sector, where work sharing or underemployment is the norm.

Table 12: Employment Elasticities

Country	Employment Growth	Value-added Growth	Elasticity
Egypt (1995-1999)	2.7	5.5	0.5
Korea (1972-1990)	3.1	8.4	0.4
Mexico (1990-2000)	6.0	3.4	1.8
Turkey (1990-2000)	0.0	3.0	0.0
Poland (1993-1998)	0.7	6.2	0.1

Source: World Bank data, CAPMAS, OECD National Accounts, OECD LFS as cited in World Bank 2002a.

Almost all of the employment gains occurred in the non-tradable sectors (World Bank 2002a). It is important to note that not all of the jobs created were in the formal sector; rather, many were informal sector jobs characterized by work and income sharing (i.e., disguised unemployment). This is particularly true of employment in services and the agriculture sector.

Employment in services, which employs nearly half of the labor force, grew at 5 percent; agricultural employment, where approximately one-third of the labor force is employed, fell by 1.1 percent per year; and industrial employment grew slowly, registering 1.7 percent per year (World Bank 2002a). Exports account for a small and shrinking share of GDP. Consequently, the contribution of exports to employment generation was weak. These figures are not surprising for an economy that struggles with Dutch Disease and the accompanying overvalued exchange rate, but it has serious negative implications for the long-term sustainability of employment generation because it is tied to limited domestic demand.

The rate of labor force growth will continue to outpace population growth for the next decade as the large cohort of 10-19 year olds enters the labor market and will dissipate only when the smaller cohort of those now age 10 reaches working age (Assaad 2000). Consequently, immense social, political, and economic pressures are being generated. This makes the task of solving the unemployment problem an urgent national priority. The pace of employment creation for skilled and unskilled must be accelerated if the economy is to absorb a significant number of both the current unemployed and the new entrants to the labor market.

Continuing the 1990s pace of employment creation will be a challenge, given the slower growth that has characterized the first three years of the present century. Doing so will require that the government get its macroeconomic policies right and develop a national, coordinated, and deliberate employment policy. The deliberate employment policy is especially important given that, as a result of the legacy more than three decades of a centrally planned economy where the government distorted the labor market and the education system, Egypt does not possess a well-functioning labor market nor does it possess a labor force with the skills required by a modern economy. Consequently, during this transitional period, the government needs to develop an employment policy that fosters institutions and incentives to generate employment and the types of skills demanded by the private sector. The section of this study on social safety nets and targeted programs will discuss some active labor market interventions the government has undertaken.

Privatization and Its Impact on Poverty

Political Economy of Privatization

The most important component of ERSAP was the privatization of public sector enterprises. Privatization was a huge undertaking, given the size of the public sector, and rife with potential political problems.²⁷ It promised an increase in the efficiency of the privatized enterprises, a decrease in the drain on public coffers, and ultimately growth. Although critics argued that privatization would result in massive lay-offs and increased poverty for labor, advocates pointed out that job losses might occur in the short run but the growth that would be generated by the increased efficiency of the privatized firms would result in job creation in the medium to long run.²⁸ Given the importance of job creation for poverty reduction in Egypt, it is important to look at the impact of privatization on employment.

Between 1991 and 1995, the pace of privatization in Egypt was slow. Some scholars attribute the slow pace in part to the Mubarak government's fear of provoking labor (Brumberg 1992, Pripstein Posusney 1997, Zaki 1999). "Successive leaders' fears of losing their presumed and proclaimed mass legitimacy by antagonizing labor on a national scale" resulted in the slow pace of privatization (Pripstein Posusney 1997, p. 247). Indeed, a project manager who had worked with USAID's Partnership for Development Project on privatization in Egypt confirmed this in the following statement:

²⁷ By 1990, the public sector accounted for more than one-third of GDP and was responsible for 55 percent of industrial output. More than 90 percent of the banking and insurance sectors were in government hands. Furthermore, the public sector controlled more than 80 percent of international trade.

²⁸ The government's guaranteed public sector employment policy for graduates may have kept large numbers of people out of severe poverty, but it was not sustainable and had long-term highly negative economic consequences. Public companies beset with highly inefficient labor also experienced low returns to capital. By 1989, according to the Privatization Coordination Support Unit, the return to capital for public companies fell to 5.9 percent whereas the average interest rate was 14 percent.

All along, the government was highly cognizant of the labor issue. It was the number one theme in the privatization project. What was to be done with labor? How could they privatize without the threat of labor becoming a destabilizing force? Political issues were definitely at the forefront in the formulation of the policy of privatization. (Author's interview with Project Manager)

Given the sensitivity of the Mubarak government to the labor issue, it is not surprising that the government continued its protection of labor after economic reform was initiated and against the advice of the World Bank, donors, and investors, who argued that such protection was inefficient and discouraged investment. In the wake of ERSAP, the Mubarak regime stated that labor would not be harmed by privatization (Pripstein Posusney 1997, p. 214). Indeed, the privatization program had a large public awareness component to educate workers about their rights under private management and their rights as new owners of their companies. Public awareness campaigns also educated the public on the intent and need for privatization, and it stressed that the public was invited and indeed encouraged to take part in the program. The program's education program hammered home the message that privatization's ultimate goal was more growth, more jobs, and a reduction of poverty and not massive unemployment through large-scale sales of national assets to foreign firms.

The government issued Law 203 in 1991 as part of its effort to prepare state-owned enterprises for privatization, and one stipulation of this law was that all privatized companies would be subject to current labor laws (Pripstein Posusney 1997, pp. 213-214).²⁹ The government further announced that no worker would lose his or her job as a result of privatization (EIU 1992, p. 16). This last provision was ensured by a clause that stated that the privatized firms could not lay off employees for three years. Because a major problem of state-owned enterprises is overstaffing, this provision has been a major disincentive to potential buyers. The government further stipulated that 10 percent of the shares of all privatized companies would be reserved for the workers.

The government's privatization program was re-energized in 1996. By 1998, 92 of the 314 state-owned enterprises slated to be privatized had been either sold or liquidated (International Business and Technical Consultants, Inc. 1999). The most significant factor that allowed the government to move more aggressively on privatization was that it had recently developed a dual strategy to deal with the labor problem (Pratt 1998). The first part of the government's strategy had been applied early in the privatization program and involved allowing the workers to participate in the privatization program by buying the state-owned enterprises through employee stockholder associations. The second part of the strategy consisted of establishing a scheme that was designed to encourage workers to voluntarily leave the public sector workforce. These included a voluntary early retirement program (to be discussed) and severance pay for those too young to retire, and job retraining. Atef Ebeid, the minister in charge of privatization, answering charges that these programs

²⁹ Law 203 established 27 holding companies based on industrial sector. These 27 holding companies held 314 affiliated companies, also known as Law 203 companies, all of which were in principle candidates for privatization. The original set of Law 203 affiliated companies had more than 1 million employees and assets estimated at LE 100 billion.

would be extremely costly, described the amount to be paid as “not excessive at all when spent for the benefit of social stability” (EIU 1992-1997, p. 21).

Overall, Egypt’s experience with privatization has been bumpy. The first few years were dedicated to preparing the population for a basic transformation of the economy. Only after the political stage was prepared were a large number of affiliated companies privatized in the late-1990s. The lesson here is clear: if a policy makes economic sense but is stalled for political reasons, it is important to consider creative ways to neutralize political opposition. In the case of Egypt, this meant providing reform-legitimizing social safety nets to potentially reform-destabilizing political actors.

Since 1999, however, the process of privatization has slowed. In 2000, the Ministry of Public Enterprise had only nine majority privatizations (down from an average of 24 in the late-1990s), eight were made in 2001, and in 2002 only two companies were fully privatized. The slowdown in the privatization process in part stems from adverse economic conditions and a downturn in Egypt’s capital markets. But, more important, the reasons for the recent slowdown in the pace of privatization could be that the remaining affiliated companies are less attractive candidates for private sector investors and that the government has a waning commitment to forge ahead with the program.

Privatization and Employment

From January 1, 1990, through December 31, 2001, nearly 200,000 workers voluntarily retired through the early retirement program and another almost 40,000 workers were expected to retire early in 2002.

Table 13: Labor Force Restructuring, 1/1/90 to 12/31/01

Data on the Program	Actual 1/1/90-6/30/96	Actual 7/1/96-12/31/01	Planned 1/1/02-6/30/02
Number of workers	13,000	182,000	38,000
Total program cost	150 million	LE 4,399.3 million	
Cost per worker	LE 23,200	LE 24,109	
Total annual wage savings	LE 66.6 million	LE 1,233.4 million	
Per worker annual savings	LE 5,123	LE 6,759	
Pay back period	3.5 years	3.6 years	
Internal rate of return in perpetuity	44.4 percent	28.0 percent	

Source: Carana Corporation 2002a.

Data on the labor restructuring program are presented in Table 13. As shown, 195,000 workers retired early, a great majority (93 percent) retired during the latter half of the 1990s, when the privatization program had its most success. Workers who volunteered to retire were paid, on average, a lump sum of LE 24,000 (almost \$7,000 using the exchange rate at the time), or about 3.5 years of salary. This money came from the Privatization Restructuring Fund. The returns to companies were very high. Internal rates of return to the program were consistently over 25 percent for all sectors involved in the program.

Labor force restructuring has occurred more quickly than progress made in privatization. Through June 2000, labor force restructuring had occurred in almost 200 public sector firms, in 66 privatized companies, and 131 Law 203 companies not yet privatized. Beginning in June 2001, the government chose to conduct labor restructuring in “distressed” Law 203 companies. Recovery of the costs to these firms took even less time than other Law 203 companies, with an average internal rate of return of over 30 percent.

Preliminary evidence suggests that privatization itself had only a small direct effect of employment, perhaps only 2-3 percent of the labor force. At the start of the economic reform, the 314 Law 203 companies hired about 6 percent (slightly less than 1 million workers) of the total labor force in Egypt, estimated at that time at 15.5 million workers. By the start of 2001, the remaining 190 Law 203 companies had fewer than 500,000 workers. Reductions in the Law 203 labor force are accounted for by government labor-restructuring policies, non-replacement of naturally retired workers, and privatization. Some 200,000 workers retired voluntarily (see Table 13). If normal retirements were 5 percent a year, a very low rate, another 300,000 or so would naturally have retired. So virtually no workers were fired by privatized firms after the expiration of the three-year pledge not to dismiss workers. In addition, the Privatization Coordination Support Unit concluded in its April-June 2002 Quarterly Review that the privatization program’s effect on labor has not been negative and may, in fact, be positive. Many privatized firms maintained pre-privatization employment levels, and Privatization Coordination Support Unit reports that many privatized firms actually increased employment levels. The experience of many anchor investors offers anecdotal evidence that they increased employment after taking over Law 203 firms, while other forms of privatization, especially initial public offerings and employee shareholder associations at least maintained pre-privatization employment levels.

Agricultural Sector and Cotton Processing and Spinning

Reform in the agricultural sector began in the 1980s. During those years, the most important reforms were designed to return planting and marketing decisions to farmers and to permit the private sector to participate in input and output markets. Although often imperfectly implemented, agricultural sector reforms had significant positive effects on farm incomes and the welfare of the rural population. Critics maintain that the agricultural reforms of the 1980s introduced a unique Egyptian form of crony capitalism. In fact, however, production in agriculture increased and benefits were widely spread throughout the sector. The agricultural sector tested the ability of the Egyptian government to implement a reform program. Its achievements were undeniable but not enough to overcome the macroeconomic imbalances persisting in the wider economy.

Microeconomic policy adjustments were an important part of ERSAP. Indeed, the government made bold moves, particularly in the agricultural sector, to remove government subsidies and to eliminate government intervention in markets. Prices, for the most part, were freed from government control.

Relaxation of price controls permitted private investors to invest profitably in a wide range of productive sectors, even in those in which public sector companies were dominant. This is well illustrated by the agricultural sector, in which parallel public and private sector companies exist and compete. In the rice sub-sector, for example, since liberalization a large number of new private rice mills entered the market and have come to dominate a market (89 percent of rice milling is done by private firms) previously recently dominated by the public sector.³⁰ The same is true of cotton manufacturing, which for more than three decades was the exclusive domain of the public sector. For example, cotton ginning went from being completely controlled by the public sector in 1990 to being 45 percent private-sector controlled by 1999.

Since the initiation of ERSAP, the annual percentage growth of value added in the agriculture sector has increased from a low of 2.4 in 1990 to 3.7 in 1999, after registering a decrease in the 1980s. Reversing the trend in agriculture growth and achieving a 3.7 value-added growth rate is quite an accomplishment, given that agriculture in Egypt does not involve horizontal growth (because nearly all cultivable land is in use) but more efficient intensive growth on existing farm land. In addition, it is important to note that agricultural experts maintain that a 4 percent growth of value added in agriculture is the optimum rate of growth. By way of background, there are 8 million people in the agricultural labor force and between 2.5 and 3 million rural households. Currently, 12-13 million feddans (a feddan is approximately 1 acre) are being cultivated and the average farm is 4-5 feddans.

The Case of Rice

Rice represents the best illustration of the positive effects of liberalization on agriculture and ultimately poverty. It is a case in which liberalization of the sector resulted in increased production, significant employment generation, higher prices for farmers, lower prices for consumers, and increased exports.³¹ Before the economic reform program began, all stages in the rice sector, from farmers to consumers, were controlled by the government. Farmers were told how much rice to grow, and they were mandated to deliver a certain portion of their harvest to government warehouses at government-controlled prices. The government banned private marketing of rice, and only public sector mills or a few specially licensed private mills could legally mill rice. The right to export was granted to a few public sector mills, cooperative societies, and public sector marketing companies.

The government eliminated most restrictions on the rice sector in 1991. It removed delivery quotas and permitted private sector participation in the transport, storage, milling, and trading, both domestic and export, of rice.

³⁰ The USAID-funded Reform, Design and Implementation Unit (RDI) of the Agricultural Policy Reform Program conducted a study on the employment effects of privatization and liberalization on the rice sector in Egypt. Few such studies of this type exist in spite of the central importance of this issue in Egypt's policy reform program. This section of the study relies heavily on information from the RDI report.

³¹ Although it may seem contradictory, farmers received higher prices and consumers paid lower prices because the government was no longer buying rice at a depressed price and selling it high to consumers. The market has actually worked in such a way that it has brought both the selling and the buying price closer together so it is a win-win situation for both farmers and consumers.

The response to the liberalization of the rice sector was immediate and huge. First, in terms of production, the area planted to rice expanded by about 45 percent between 1990 and 1997, from 1.02 million feddan to 1.482 million feddan. About one-third of the additional rice area displaced the production of other summer crops such as maize and cotton, but most of the increase came from an expansion in total cultivated area and more intensive use of existing land. The average size of a rice farm is approximately 1 feddan. There are approximately 1.4 million rural households that now cultivate rice. It is important to note that more than half of rural households are involved in rice production. Consequently, liberalization of rice production has had a significant impact on poverty reduction in rural Egypt even though rice is a minor crop in most areas.

Liberalization of rice production alone had a substantial proportionate effect on employment. The Reform, Design and Implementation Unit (RDI) of the Agricultural Policy Reform Program estimated, using data from the Ministry of Agriculture and the GTZ, that the increase in cultivated rice area provided an annual increase of 54,000 years of additional labor, totaling half a million jobs over the decade of the 1990s.

In addition to increased production, liberalization of the rice sector also brought about significant private investments in milling capacity (see Appendix A). Prior to liberalization, milling was the exclusive domain of the public sector. Between 1990 and 1998, the number of commercial mills and small village and tractor mills grew enormously. What emerged was the proliferation of small-scale, low-technology mills successfully competing against the remaining public sector mills. Tables 14 and 15 show the dramatic increase (approximately 85 percent) in the number of private sector mills. The holding company governing rice mills privatized 15 public sector mills, thereby decreasing the total to 52 from 37 and reducing public sector competition with the new and expanding private rice milling sector.³² Private sector dominance of the milling sector after implementation of the economic reform program is illustrated by the high percentage of rice milled in private mills (89 percent) versus the percentage in public sector mills (9 percent). In 1990-1991, 38 percent of total rice produced was milled in public sector mills.

Private trading of rice also appreciably increased employment in the rice sector, including domestic trading and exports. RDI estimated that, in the eight years between 1990 and 1998, the number of private traders who handled rice (in addition to other commodities) increased from 1,920 to 8,000. RDI also estimated that the number of private exporters increased from 20 firms in 1990 to 160 in 1997, again a huge increase, although at least 80 percent of total rice exported was traded by only a handful of companies.

³² Private sector investment in rice milling generated intense competition in the sector and put public sector mills at even greater financial risk than previously. To compete more effectively under market conditions, public sector mills participated in the Early Retirement Program to reduce employment rolls with the hope of becoming more cost competitive. More than 2,200 permanent employees, out of 8,036, or 27 percent, retired early under the program. The total anticipated savings to public sector rice mills was about LE 15 million per year.

Table 14: Estimates of Employment in the Rice Sub-sector before Economic Reforms, 1990-1991

Type of Firm	No. of Firms	Person-Years Per Firm	Total Person-Years
Rice farms	---	---	1,062,000*
Private Traders	2,000	0.167	340
Public mills	52	---	10,050
Comm. Mills	37	11	407
Village Mills	3,600	1.86	6,700
Total	---	---	194,497

Source: Krenz, Shenashan, Kent 1999.

*Total person-days

Table 15: Estimates of Employment in the Rice Sub-sector after Economic Reforms, 1997-98

Type of Firm	No. of Firms	Person-Years Per Firm	Total Person-Years
Rice farms	---	---	1,386,000**
Private Traders	8,000	0.167	1,340
Private Exporters	125	3.0	375
Public mills	37	---	6,600*
Comm. Mill	350	11.0	3,850
Co-op mills	5	---	430
New village mills	1,700	1.9	3,315
Old village mills	4,500	1.1	5,175
Tractor mills	2,000	0.167	333
Total	16,789		252,418

Source: Krenz, Shenashan, Kent 1999.

* Actual employment in public mills, January 1999.

** Total person-days net of employment reduction in other crops.

Tables 14 and 15 show the estimated net increase in employment from liberalization and privatization of the rice sector in Egypt. A total of 57,921 person-years (or 347,526 person-days) of employment were generated per year (equivalent to a 30 percent increase over the liberalization), resulting from more intensive agricultural production and private investments in milling and trading. A great majority of the increase in employment, 93 percent, was accounted for by increased rice production. Nonetheless, nearly 4,000 annual jobs were generated in milling and trading because of economic reforms in the sector, including the jobs lost as a result of early retirement and the privatization of public sector rice mills. In addition, farmers received 20 percent more for their rice, increasing their total revenue by approximately 80 percent. At the same time, the price of rice to consumers declined and exports of rice increased. Consequently, not only did rice liberalization result in substantial employment generation, but it also raised farmers' incomes and increased the welfare of rural and urban consumers.

In terms of the economy as a whole, the absolute employment and production effects of reform in rice were not large. But reforms had similar, although less dramatic, effects on

other agricultural crops. In sum, reforms in the agricultural sector during the 1990s generally improved the environment for private sector investment and agricultural production. This has been the basis for the employment growth that has occurred in the sector and has contributed to a reduction in poverty in Egypt since the mid-1990s. Evidence from the agricultural sector confirms that getting the prices right and letting private incentives work led to increased economic activity at all steps in the production-processing-consumption chain. The liberalization reforms permitted private sector investors to pass on opportunities to purchase public sector companies and instead to invest in new equipment and new mills and to hire new employees.

The Case of Cotton Processing and Spinning

As with rice, the cotton-manufacturing sector in Egypt was run by the government until the reforms of the early 1990s. From a base of zero in 1990, by 1999 the private sector grew to control almost 45 percent of seed cotton marketing, 37 percent of ginning, and about 20 percent of cotton lint exports. By 2000-2001, the private sector exported a majority of cotton lint. By the late 1990s, the private sector also dominated the ready-made garment and weaving industries.

The more liberalized policy and regulatory environment led directly to private investments in cotton spinning also. Although the industry was still dominated by the government in the late 1990s, the public sector share of spinning was steadily declining, from over 90 percent in 1991 to an estimated 69 percent in 1998. Private sector output of cotton yarn increased four-fold between 1990 and 1998. The Monitoring, Verification, and Evaluation (MVE) Unit of USAID's Agricultural Policy Reform Program found that nine new spinning mills were established after 1994, when the first and most significant seed-cotton market reforms took place. MVE also reported that private investors planned future investments in spinning mills as a direct response to a friendly economic policy environment. Private firms dominated the market in polyester spinning by the late 1990s.

Although less detailed data are available on the cotton-spinning sector, the MVE study reported job creation as a result of the privatization and liberalization process in the cotton-spinning sector. According to MVE, 23 private or privatized spinning companies added almost 1,200 jobs between 1998 and 1999. Although this increase may not appear to be significant, these companies were privatized, and rather than shed labor as many predicted would happen, job creation actually occurred as a result of increased efficiency and incentives to invest.³³ Indeed, most privatized firms maintained or increased employment. It is impossible to extrapolate these data to the sector as whole, except to assert that liberalization and privatization in the textile sector most likely created jobs.

³³ This includes job losses that occurred in one privatized firm.

The private investment in the textile sector was entirely the result of improved investment conditions in Egypt and not privatization because few public sector companies in the textile sector have been privatized.³⁴

SOCIAL SAFETY NETS AND TARGETED PROGRAMS

The Egyptian government's economic policies in the 1990s focused primarily on economic reforms designed to stimulate private sector investment and economic growth. The government did not develop a national strategy to reduce poverty. Moreover, although it does possess a sophisticated social protection system, it is highly inefficient and transfers most benefits to the better-off rather than the poor (Loewe 2000). The World Bank (2002a) reports that "income from transfers (including government transfers—government pensions, social insurance pensions, Sadat pensions, and social security benefits—private transfers and remittances) provided 10 percent of the income of the poor (compared to 15 percent for the non-poor), yet they received only 5 percent of all national transfers" (p. 57). These transfers are significant for the poor, but they are not well targeted because the non-poor receive almost all of them.

It is important to note that in Egypt private and community and religious-based protection systems co-exist with public social protection schemes. Although they have traditionally been an important source of social security for the poor, interpersonal transfers have been declining and represent no more than 1.8 percent of GDP (Loewe 2000).

Community and religious-based social protection systems have traditionally been vibrant and since the mid-1980s have been especially important in health care provision. A major advantage of the private and community and religious-based social protection schemes over those provided by the state is that targeting is much more precise and accomplished at a significantly lower cost because the identity of the poor and their condition are known to family and community members. Private and community and religious-based social protection schemes are also better equipped to respond rapidly to meet the needs of the poor.

This study focuses on publicly provided social protection schemes and interventions aimed at reducing poverty. Despite the absence of a coordinated national policy on poverty reduction, the Egyptian government has designed and implemented ad hoc interventions aimed at poverty reduction through, for example, transfer of assets to the poor. Two of these interventions—food subsidies and income transfers—provide social protection, whereas the other three—employment creation schemes, the Social Fund for Development, and training—are designed to reduce poverty through transfer of productive assets, employment creation, and investments in human capital.

³⁴ The USAID-funded Monitoring, Verification and Evaluation (MVE) Unit of the Agricultural Policy Reform Program conducted a study on the impact of privatization and policy reform in the cotton-spinning sector. The data acquired from that study are used in this report. It is important to note however that MVE chose to look at cotton spinning only and not at the new investments in polyester spinning. Private investments in polyester far outpace investments in cotton. Unfortunately, little or no data exist on that subset of the spinning industry.

Social Protection

Food-Subsidy Program

The food-subsidy program in Egypt is the largest and most important government-funded social welfare program. Initiated as a temporary measure to assist Egyptians during periods of scarcity, it ballooned during the Nasser and Sadat years into an entitlement program and a large drain on the national budget. In the 1970s, such items as lentils, chicken, meat, rice, bread, sugar, tea, and cooking oil were part of the food-subsidy system. Expenditures grew from LE 3 million (\$900,000) in 1970 to LE 1.4 billion (\$411 million) 10 years later. The food-subsidy system in 1980-1981 represented 14 percent of total government expenditure.

Since the 1980s, the food subsidy program has diminished in importance. In the mid-1980s, the basket of subsidized goods was reduced to *baladi* bread, tea, sugar, and cooking oil, thereby reducing significantly total government expenditures on the program. The entire population of Egypt received ration cards, either red for the more needy or green for the non-poor. By the late 1980s and early 1990s, even after heavy reductions in food-subsidy expenditures, the government still sought ways to lower expenditures on food subsidies by reducing the number of red cards or by changing the composition of the basket of goods. In the mid-1990s, the government ended the tradition of granting ration cards for subsidized food to newborns, thereby ensuring a natural end to the program.³⁵

Baladi bread, in contrast, is subsidized for all consumers, rich and poor. The famous and legendary bread riots in the 1970s have made it nearly impossible for the government to mention eliminating the *baladi* bread subsidy. A large number of poor need and indeed benefit from subsidized bread, and the shallowness of Egyptian poverty implies that this program can lift large numbers of people out of poverty. According to the World Bank (2002a), “The subsidy on *baladi* bread was the most effective at lifting people out of poverty. Without the bread subsidy, 730,000 more people would have been in poverty” (p. 58). This is not the case for the subsidies on, for example, cooking oil, which were less effective in easing poverty. Cooking oil subsidies contributed to the easing of poverty for 170,000, significantly less than the impact of bread subsidies (World Bank 2002a).

Bread subsidies, because they have traditionally been available to all Egyptians, are an extremely inefficient method of reducing poverty. The government has recently introduced self-targeting methods to reduce the cost of the subsidy without eliminating its goal of helping the poor. For example, less expensive and domestically grown maize flour now replaces a portion of imported wheat flour, diminishing the quality of the bread. It is too early to tell whether self-targeting has been effective.

³⁵ There is an extensive literature on the food-subsidy program. The International Food Policy Research Institute (IFPRI) conducted studies in the 1990s on the means and methods of reducing the cost of the food subsidy program while not compromising its effectiveness. The government adopted but one of IFPRI’s recommendations, to mix maize and wheat flour for subsidized *baladi* bread. That recommendation has yet to be implemented countrywide.

Social Security

Administered by the National Social Insurance Organization (NSIO), social security in Egypt is supposed to protect workers in both the formal and the informal sectors against risks posed by disability, unemployment, survivor benefits, and old age.³⁶ In theory, employers and employees contribute monthly to one of six social insurance schemes. Permanent employees of state, public, and private sectors enroll in the General Social Insurance Scheme, which provides for free health care, sickness and maternity leave, pension insurance and unemployment benefits (unemployment benefits are 60 percent of last salary for 28 weeks).³⁷ According to Markus Loewe (2000), some of the problems that plague the system are low actual coverage, low benefit levels, and low internal returns to contributions. Further, government-sponsored social insurance provides only marginal assistance to the poor or elderly.

Pension benefits in the private sector are near the poverty line, averaging about \$450 annually, or less than one-third of average per capita income. If divided among two or more family members, this amount does not go very far. Still it compares favorably with programs in other countries at similar income levels. State employees, in contrast, receive about \$1,100 per year.³⁸ However, “average pensions are particularly low for surviving family members and the working disabled. When an earner is injured or dies at a young age, accumulated contributions are low, so that pension entitlements are insufficient for the family to survive. Low survivor and invalidity benefits are a reason for poverty concentration among women-headed households and households without a male earner” (Loewe 2000).

Informal sector workers are, in principle, required to enroll for social security and are supposed to purchase a stamp monthly at the NSIO local office. However, informal sector workers often cannot pay their contributions because there are no tax stamps left at the NSIO office (Loewe 2000). In addition, after retirement potential beneficiaries do not claim their benefits because they do not know where to go and how to go about accessing them.

The World Bank (2002a) maintains that social security transfers have had some effect in reducing poverty. In their absence, it maintains that the poverty rate in 1999-2000 would have increased by the 4 percent of the poor lifted out of poverty by these transfers. As in the case of food subsidies, better targeting of benefits would result in a greater positive impact of government transfers on poverty reduction. The World Bank estimates that had the LE 449 million (\$132 million) been distributed equally among the poor rather than skewed heavily in favor of the non-poor, the poverty rate in 1999-2000 would have been 14.3 percent instead of 17 percent and 18 percent of the poor would have emerged from poverty (World Bank 2002a).

³⁶ There is no government program to protect informal workers against unemployment.

³⁷ Though the entire population is required to enroll, only about half do so. Lack of staff reduces the ability of NSIO to monitor contributions, particularly those of the private sector. Often, employers and employees in the private sector underreport salaries in order to lower contributions.

³⁸ See Loewe 2000. He provides a comprehensive analysis of Egypt’s many social insurance schemes and their benefits and their inability to make a difference.

Social Assistance

There are few government programs to transfer income from rich to poor in Egypt. According to Loewe (2000), 80 percent of the poor received no assistance at all from the government. The World Bank reported in 1991 that aggregate spending on direct income transfers represented a mere 0.15 of GDP, or 3 percent of the poverty gap at that time (Loewe 2000).

The prospects for increased social assistance programs to close more of the poverty gap are dim. The Egyptian government has shown little interest or commitment to reducing poverty through direct income transfers or other types of social programs. Even though food subsidies were cut drastically as a percentage of GDP during the 1990s, social assistance spending did not increase. Well-implemented reforms to the system to make them more efficient and better targeted would have a positive impact on poverty reduction.

Targeted Poverty Reduction Programs

*Employment Creation Schemes: Transferring Assets to the Poor*³⁹

Both the government and NGOs have implemented employment creation schemes in Egypt. These schemes can take many forms, from those that provide credit to graduates so they can start their own businesses to schemes designed to transfer assets (land) to the poor and, in the case of the Mubarak Project, to young graduates from university and technical secondary schools.

The Mubarak National Project for Developing and Promoting Young Graduates and Small-Scale Beneficiaries began in the late 1980s and continues today. It is the government's primary employment-generating scheme in the agricultural sector. Known simply as the Mubarak Project, it is designed to turn new and jobless graduates and farmers made landless by the recent tenancy law reform into profitable farmers and employers by providing them with land, houses, and other support. Apart from the small social safety nets described above, the Mubarak Project is the largest, highest profile, and most explicit pro-poor policy of the Egyptian government. Unfortunately, its success can at best be described as uneven and at worst a failure.

Since 1987, 200,000 feddans have been allocated under that project to 45,000 graduates and landless farmers.⁴⁰ This program provides the graduates and landless farmers with 5-6 feddans of reclaimed land with basic infrastructure, including irrigation, electricity, and a house. Each family receives LE 50 per month for its first year of residence in the project, plus food from the World Food Programme. The program builds new communities with hospital, schools, and other services.

³⁹ The next three sub-sections are adapted from Salem and Salem 2002.

⁴⁰ To qualify, graduates must be under 30 years of age, newly graduated, married, and have completed military service.

The most controversial feature of the Mubarak Project is its rules governing land titling. The graduates and landless farmers are required to pay LE 11,000 total over 30 years before they receive title. They are not permitted to accelerate payments to receive title before the 30-year period has passed. Without title, they are thus unable to sell the land, nor can they use it as collateral for loans. If they leave the land for any reason, they lose any and all investments in land or irrigation improvements. To the graduate and the landless farmer, the land has productive value, but this is limited because most of the land is marginal. The land, without title, has no asset value.

Tenancy Law Reform and the Poor

Tenancy law reform (Law No. 96 of 1992) did away with 40 years of a tenancy law, Agrarian Reform Law No. 178 of 1952, which provided complete security to tenants, tenancy contracts that were inherited from parents to children, and strict limits on rents. The new law, consistent with privatization and economic liberalization, provides landlords with the right to take back their lands from tenants and to charge rents based on market conditions. A five-year transition period was granted from 1992 to 1996 (Sharaf et al. 1997). Among the immediate impact of this reform were increased rental prices of land and strengthened property rights for land owners. Estimates on the number of tenants affected by the reform range between 500,000 and 1 million. Although some were able to come to an agreement with landlords that allowed them to continue farming (albeit at much less beneficial terms), others were left landless. (Unfortunately, estimates concerning the latter group are hard to come by). Critics of the tenancy law reform argue that it was anti-poor because it effectively transferred assets out of the hands of poor farmers. Advocates counter that, although this may be true in the short run, in the long run the efficiencies generated in the agriculture sector and economy as a whole as a result of a properly functioning land market will lead to faster growth, more employment opportunities, and thereby pro-poor outcomes.

Tenancy law reform in Egypt provides a clear case where economic reform hurt the poor in the short run. Nonetheless, similar to the case of privatization, the government was able to mitigate the potential political fallout by ostensibly transferring assets (land) to farmers hurt by the reforms through the Mubarak Project.

The Mubarak Project is expensive: the Egyptian government spends LE 70,000 (approximately \$15,500) on land and supporting infrastructure for each family. Graduates and farmers often complain that the infrastructure is inadequate or of poor quality.⁴¹

The Mubarak Project is intended to be explicitly pro-poor, involving a policy in which assets are transferred from the government to graduates and poor farmers. Unfortunately, poor implementation and inflexible titling regulations sabotage this good intention. Poor infrastructure and inadequate supporting services make it difficult for those who receive the land to make a proper living. More important, the 30-year rule for granting title means that land, the most basic of all productive assets, is not transferred to the poor. Rather, the poor

⁴¹ Graduates also complain they are insufficiently trained to cultivate successfully on desert soils on the fringes of the Nile Valley. Many graduates leave the land for better conditions and jobs elsewhere. Reliable information on the numbers of graduates who have left the land does not exist, and some areas are more successful than others. Nonetheless, it is estimated that even in the best graduate program 10-20 percent of graduate families have vacated the land whereas in other areas as many as 80 percent left.

become a tenant to the state, on often marginally productive land, but with none of the rights granted until the last decade to tenants in Egypt.

Social Fund for Development

The Social Fund for Development was established in 1991 by the government with the cooperation of donors. Originally designed as a social safety net, its mandate has since changed. Currently, the Social Fund for Development aims at minimizing the risks associated with social exclusion, employment generation, and poverty alleviation. One main activity of the Social Fund is the Small Enterprise Development Organization (SEDO), which creates employment opportunities for unemployed (especially new graduates), low-income groups, women, and owners of small and medium-sized enterprises through the promotion of small enterprise development. SEDO does this by providing access to credit, business services, and technical assistance.

All economic activities (with the exception of land reclamation projects) that create job opportunities are eligible for SEDO support. Preference is given to activities that create new and sustainable job opportunities at a reasonable cost, use labor-intensive technology, encourage the participation of women, and are located in rural areas. Among the most important sectors for SEDO activities are the agricultural and livestock sectors. Approximately 25 percent of the Social Fund's projects have been in these sectors.

According the Social Fund's Annual Report 2000, since 1992 SEDO has generated only 311,804 jobs.⁴² It is not clear, however, how many of these jobs have been sustainable and have resulted in meaningful employment for the beneficiaries.

Instead of developing high quality well-targeted schemes that create sustainable employment opportunities that provide workers with above-poverty-line wages, the government appears to be preoccupied with the quantitative aspect of the problem (that is, the fact that 700,000 jobs need to be created to absorb surplus labor). Its employment creation schemes reflect this concern. Its focus is thus on quantity and not necessarily the quality of the support provided. Limited resources are spread over a vast number of eligible persons, and the programs are therefore not well targeted.

Another significant problem with the government employment creation schemes is that they have multiple goals. For example, they aim at decreasing population density in urban areas, increasing cultivated area, and increasing employment. These are all complex issues in their own right. Trying to achieve all three with one scheme makes the objective of creating meaningful and sustainable employment for skilled labor difficult to achieve.

⁴² Among SEDO's objectives is the creation of 130,000 jobs annually. The year 2000 was the first year SEDO surpassed its objective. Prior to that, job creation averaged 52,444 jobs annually.

Human Capital Development

Training

The Arab Human Development Report 2002 states that “a dependable, qualified workforce is essential for ensuring competitiveness, attracting investors, and meeting the needs of a demanding private sector both national and transnational” (UNDP 2002, p. 95). According to Gill and Heyneman (1997), “Today, high-quality training and technical education may be a more important contributor to growth than any other time in modern economic history” (p.18). Indeed, international experience has shown that investing in human capital is a key to increasing labor productivity, competitiveness, growth, and employment generation. For this potential to be realized in Egypt, however, the educational and training systems at all levels must be reformed. More specifically, the system must be upgraded and made flexible and responsive to the demands of the market. Reforming the educational system is a long-term process. However, reform of training programs (especially those based on a high level of public-private cooperation) can be achieved in the short to medium term.

In addition to the problem of supply of graduates exceeding the demand for graduates, the quality of graduates produced by the educational system is not adequate. Fawzy (1999) found that close to 55 percent of the 100 Egyptian business persons interviewed stated that the lack of skilled labor is among the largest constraints to growth they face (1999). The educational system produces graduates for which there is no demand partly because it was designed to respond to the needs of a centrally planned economy that guaranteed graduates permanent jobs whether they were qualified or not.

For the Egyptian educational system to produce consistently high-quality graduates who possess skills demanded by the private sector, it must be reformed. The success stories in the area of training have been those programs that have explicitly responded to the needs of the market. Generally, such programs are characterized by a high level of public-private cooperation and are demand driven. Consequently, an important aspect of reform will be to develop a mechanism by which the private sector has a voice in the development of curricula.

Ensuring the sustainability of poverty reduction in Egypt will require pursuing a growth strategy that focuses both on the quality and on the intensity of employment. Human capital formation is key to achieving such a growth strategy. Human capital formation at all levels through reform of the formal education system and promotion of training and retraining would augment returns to labor by providing workers with the education and skills necessary to increase their productivity and remuneration. This would help ensure the sustainability of poverty reduction.

CONCLUSIONS

Egypt has been successful in reducing poverty over the last decade.⁴³ This is especially interesting because the country achieved continued poverty reduction while in transition from a state-led, inward-oriented economy to a private sector and market-oriented economy. Some critics of the economic reform process have argued that the process increases poverty, but the opposite has occurred.

There are questions about the sustainability of progress in poverty reduction. The small reduction in poverty in the 1990s has resulted from employment creation primarily in the non-tradable service sector and the continued availability of jobs in the Persian Gulf states. Job creation in the service sector was also financed by inflows of capital, primarily of aid. In the early 1980s, an even bigger reduction in poverty was fueled primarily by growth of employment for Egyptians in the Gulf states. Relatively high oil prices were essential for both sources of employment. High oil prices in the early- and mid-1980s and somewhat higher prices in the later 1990s had two effects on employment:

- It generated demand and created jobs in Egypt itself; and
- It led to demand for labor in the Persian Gulf states that Egypt in part supplied.

Labor migration to the Gulf states in turn had two effects in Egypt:

- It reduced the labor supply to the Egyptian labor market, exerting an upward pressure on wages; and
- It financed increased remittances from Egyptian workers, which in turn financed increased demand.

Remittances increased from \$2 billion in the early 1980s to \$3 and \$4 billion later in the decade and averaged well over \$3 billion in the 1990s. Receipts from tourism increased from an average of 11 percent of exports in the 1980s to over 20 percent in the 1990s. Oil revenue for Egypt was around \$20 billion in the early 1980s but fell to \$6-10 billion in the late 1980s (in real, that is inflation-adjusted, dollars), reflecting mostly oil prices that also fueled the large-scale migration to the Gulf in the early 1980s. The deficit on current account rose to a peak of \$ 7 billion in 1984 when it had been less than half that in the late 1970s and again to another peak (over \$7 billion) in the late 1990s. The deficit has been largely funded by aid. These foreign sources—remittances, oil revenue, tourism, and aid—explain in large part the rapid growth of the Egyptian economy in the early 1980s (4 percent per capita yearly) and the later 1990s (3.5 percent) with the concomitant declines in poverty.

All of these sources leave the Egyptian economy vulnerable to unpredictable and volatile global forces. Oil prices are notoriously volatile, and in addition to their direct effect on Egyptian foreign exchange income, they have a profound effect on jobs in the Gulf. Those in

⁴³ In addition to a decrease in poverty in 1990-2000, increasing wages in 1980-1985 suggest that poverty also decreased during this earlier period. However, no poverty estimates exist for 1980-1985. Consequently, this conclusion remains tentative.

turn affect both the supply of labor competing for jobs in Egypt and the magnitude of remittances. Remittances have at times accounted for 50 percent of export earnings and still account for about one quarter of the exports of goods and services. Employment in the Gulf also is vulnerable to political vagaries as is aid. To reduce its vulnerability, Egypt should have used windfall gains to develop exports that are less volatile so as to gradually develop a reasonably stable source of employment and income for unskilled labor. But non-oil exports in constant dollars in 1999 were virtually identical with those in 1980, whereas population had greatly increased. Further, poverty reduction depends heavily on structural reforms to reduce the dependence of the economy on volatile, and probably secularly declining, sources of foreign exchange.

Exchange rate management is a key constraint to export growth and the related issue of sustainable labor-intensive employment generation. Dutch Disease in Egypt has resulted in the exchange rate for non-oil tradable sectors being overvalued, making many potential exports uncompetitive in world market. Since the non-oil tradable sectors tend to be labor intensive, the overvalued exchange rate has dramatically limited the growth of labor-intensive sectors. Although Egypt achieved poverty reduction despite stagnant exports, sustainable poverty reduction requires that the country significantly expand its exports of labor-intensive goods. Exchange rate management is key to export promotion; job creation; and, ultimately, poverty reduction.

In addition to highlighting the relationship among growth, poverty, exports, and exchange rate management, the case of Egypt demonstrates the importance of recognizing and dealing with issues of political economy that inevitably arise in the process of reform. Because the government was highly cognizant of the potential political opposition to privatization and tenancy law reform, it mollified potential opponents. In the case of privatization, it provided financial incentives for workers to retire or resign, provided a three-year guarantee against dismissal, and controlled the speed of privatization. In the case of tenancy reform, it provided reclaimed land to affected farmers. In the case of privatization, the government's actions helped jumpstart the previously stalled process, and in the case of tenancy law reform, the government's actions greatly contributed to the success of the reform.

Despite pressures from international financial institutions to increase the flexibility of the labor market through reform of labor law, this reform has not occurred in Egypt, probably because it is not a high priority even for most domestic businesses. Although labor legislation appears rigid, in reality domestic firms have devised mechanisms by which to largely avoid compliance. Ultimately, the main direct benefit of passing the new draft labor law would be a decrease in the transaction costs involved with non-compliance and in the related uncertainty for domestic firms. Possibly more important, passage of the new labor law would make Egypt more attractive destination for badly needed foreign direct investment. Inadequate investment, both domestic and foreign, is a major obstacle to increased employment for unskilled workers, the key to sustainable poverty reduction. Every reform that contributes to increasing investment is therefore desirable, but labor market reform may not be as central in Egypt as it is often assumed.

Egypt did carry out a successful reform program in agriculture that resulted in significant job creation in rural areas where poverty is highest. The case of liberalization of rice, which positively affected nearly half of all rural households, illustrates the poverty-reducing potential of such reforms.

Finally, this study showed that although some social safety net programs, most notably bread subsidies, had a positive impact on the poor, better targeting was essential to reduce leakage and provide more of the benefits to the poor. Bread subsidies will be more effective in the future because of increased self-targeting: as the quality of the bread is reduced, mostly the poor will buy subsidized bread. Most of the other subsidy programs benefited the non-poor at least as much as the poor because without self-targeting leakages just could not be prevented.

Because poverty tends to be chronic in Egypt, programs that transfer assets may be more important than stop-gap safety nets. However, Egypt's experience with asset transfer in the Mubarak Project has been disappointing. Poor program design, implementation, and supporting services make it difficult, if not impossible, for the targeted beneficiaries to earn a living. This project has demonstrated that transfers must be de jure and de facto transferred if the beneficiaries are to have a chance at success. Without a title, the beneficiaries cannot obtain credit for inputs and make needed investments on the land. Finally, human capital development, whether in the form of education or training, is key to ensuring that Egypt is successful in its pursuit of a labor-intensive growth strategy and ultimately ensuring that poverty reduction in Egypt is sustainable.

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APPENDIX A
TABLES ESTIMATING RICE-MILLING CAPACITY

Table 16: Estimated Rice Milling Capacities and Numbers of Mills by Category of Mills, 1990-1991 (MT of paddy)

Type of Mill	No. Mills	MT/Mill /Day	Days/yr.	MT/Mill /Yr.	MT/Year	Percent of Production
Public mills	52	---	---	---	1,209,400	38
Commercial mills	37	30	221	4420	163,540	5
Village mills*	3600	2.5	52	130	468,000	15
Village mills **	3600	2.5	140	350	1,260,000	40
Total milled					3,100,940	98
Retained for seed					65,060	2
Production					3,166,000	100

Source: Source: Krenz, Shenashan, Kent. 1999.

* Milling for traders (27%).

** Milling for producers and other village members (73%).

Table 17: Estimated Rice Milling Capacities and Numbers of Mills by Category of Mills, 1997-1998 (MT of paddy)

Type of Mill	No. Mills	MT/mill /day	Days /yr.	MT/mill /yr.	MT/year	Percent of Production
Public mills	37	---	---	---	517,627	9
Cooperative mills	5	78	221	17,238	86,190	1.5
Commercial mills	350	35	200	7,735	2,450,000	45
Traditional village mills	4,500	2.5	120	300	1,350,000	25
New village mills *	1,700	3	68	204	328,790	6
New village mills **		3	102	306	538,210	10
Tractor mills	2,000	1	50	50	100,000	1.5
Total	8,592				5,370,817	98
Retained for seed					112,978	2
Production					5,483,795	100

Source: Krenz, Shenashan, Kent. 1999.

*Milled for traders (40%).

** Milled for producers and other village members (60%).