THE IMPACT OF POLICY AND PROGRAM
ON FERTILITY IN EGYPT:

THE EGYPTIAN FAMILY PLANNING SUCCESS STORY

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**ACKNOWLEDGEMENTS**

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# Table of Contents

I. INTRODUCTION 5
II. HISTORICAL BACKGROUND 6
III. SOCIOECONOMIC TRENDS IN EGYPT 8
   A. The Historical Past 8
   B. The Recent Past 9
   C. The Question of Economic Equity 12
IV. DEMOGRAPHIC TRENDS IN EGYPT 15
   A. Long-run, Overall Trends 15
   B. The Decline in Mortality 18
   C. The Decline in Fertility 22
V. THE EMERGENCE OF POLICY AND PROGRAM 25
   A. Early Growth of Population Awareness 25
   B. The First Program Phase, 1965-1975 27
   C. The Second Program Phase, 1975-1985 31
   D. The Third Program Phase, 1985-Present 37
VI. THE ROLE OF FOREIGN DONORS 43
   A. Background 43
   B. The Entry of International Donors 43
   C. The U.S. Agency for International Development 45
VII. RECENT TRENDS IN CONTRACEPTIVE USAGE 55
VIII. FUTURE CHALLENGES TO EGYPT’S PROGRAM 59
IX. CONCLUSIONS AND LESSONS TO BE LEARNED 62
ANNEX 1. THE DEMOGRAPHIC DATABASE IN EGYPT 67
   A. Census and Registration Data 67
   B. National Surveys 68
ANNEX 2. UNDERSTANDING THE EGYPTIAN FERTILITY DECLINE 72
   A. The Proximate Determinants Framework 72
   B. Estimates of the Proximate Determinants in Egypt 72
   C. Assessing the Relative Importance of Contraception 73
   D. The Supply vs. Demand Paradigm in Egypt 74
REFERENCES 76
LIST OF TABLES
Table 1. Total, Urban and Rural Population of Egypt by Census Years 7
Table 2. Growth Rate of GDP and Employment in the Major Sectors 10
Table 3. Structure of GDP by Major Sectors 10
Table 4. Key Indicators of Infrastructural Development in Egypt 11
Table 5. Indicators of Educational Development, 1960 to 1990 12
Table 6. Distribution of Household Income and Expenditure 13
Table 7. Trends in Fertility, Mortality and Natural Increase 15
Table 8. Percentage Distribution of Population by Governorate 17
Table 9. Indicators of Changes in Mortality in Egypt, 1940-1990 19
Table 10. Crude Death Rates by Governorates, 1940-1990 20
Table 11. Registered Infant Mortality Rates by Region, 1980-1987 21
Table 12. Registered Child Mortality Rates by Region, 1980-1987 21
Table 13. Growth of the Health Infrastructure, 1940-1994 21
Table 14. Estimates of Total Fertility in the Pre-Survey Period 23
Table 15. Total Fertility by Region, 1960-1992 24
Table 16. Growth of the Family Planning Service Network 42
Table 17. Donor Assistance to Egyptian Family Planning, 1976-1994 44
Table 18. Trends in Current Use of Family Planning by Region 56
Table 20. Future Population of Egypt under Various Fertility Assumptions 60

Annex
Table A-1. List of the Exact Dates of Each of the Censuses 67
Table A-2. List of Data Collected by the 1986 Census 68
Table A-3. Major Demographic Surveys in Egypt, 1974-1992 69

LIST OF FIGURES
Figure 1. Main Geographical Features of Egypt 6
Figure 2. Crude Birth Rate and Crude Death Rate, 1900-1992 16
Figure 3. Creation of the Public Health Network in Egypt, 1825-1850 18
Figure 4. Total Fertility Rates by Selected Characteristics 24
Figure 5. Age-Specific Fertility Pattern, 1980, 1992 and 2015 24
Figure 6. Organization of the First Egyptian Family Planning Program Effort 29
Figure 7. Organization of the Second Egyptian Family Planning Program Effort 33
Figure 8. Proposed Organization of Ministry of Population and Family Planning 39
Figure 9. Program Turning Points and Contraceptive Prevalence Rate 40
Figure 10. Current Use of Family Planning Methods by Place of Residence 56
Figure 11. Projected Replacement TFR and Required CPR, 1990-2015 59
Figure 12A. The Population Pyramid of Egypt, 1960 61
Figure 12B. The Population Pyramid of Egypt, 1995 61
Figure 12C. The Population Pyramid of Egypt, 2015 61

LIST OF BOXES
Box 1. The First Population Policy Statement 27
Box 2. Strengths and Weaknesses of the First Phase of the Family Planning Program 30
Box 3. Strengths and Weaknesses of the Second Phase of the Family Planning Program 37
Box 4. The Policy/Program Turning Points 40
Box 5. Major Goals and Activities under USAID Projects 53
Box 6. Steps Needed to Reach Replacement Level Fertility 60
Box 7. Lessons Learned from Egypt’s Experience 62
Egypt seems firmly and irreversibly in a transition from “natural” to controlled fertility. Desired family size is falling rapidly and use of modern contraception is rising due, at least in part, to a successful government family planning program effort. Replacement level fertility, such that the average completed family size is just over two children per couple, now seems a very likely outcome within the next 15 to 20 years. Total population will then begin to gradually stabilize leading finally to zero population growth about the middle of the next century (Courbage, 1994; Gilbar, 1992).

Egypt’s success story is even more remarkable because it has occurred after a long frustrating period of programmatic efforts to achieve this result. Egypt’s success in bringing population growth under control is also notable because of the key position that Egypt occupies in the Middle East-Arab World, a cultural and geographic region thought by many experts to be strongly resistant to the declining fertility trends observed in other regions of the world. Egypt offers hope that other Arab countries can come to grips with their present rapid population growth through well-managed policy and program interventions.

It will be useful to understand more clearly and exactly what has gone on in this Egyptian “transition,” so that we can answer questions such as: (1) what was the relative importance of socioeconomic factors as compared to direct program effects; (2) what were the key policy/program interventions that have led to the observed outcome; and (3) how did foreign donors help? The pages that follow are largely descriptive and historical, but some analysis is also attempted. We draw upon well-known statistical sources—surveys, censuses, program performance data—and also on many published books, articles and unpublished reports prepared by other writers. The focus is fertility and the underlying forces that in turn determine its level, particularly the spread of modern family planning practices. We do not attempt a complete review of the evolution of the Egyptian population. We treat mortality only briefly and largely ignore both domestic and international migration. Our main emphasis is on changes in the underlying policy and the structure of the family planning program. The result is an interpretation of how the Egyptian “success story” unfolded, the present situation of the Egyptian program, and the steps that may be required for Egypt to complete its fertility transition. Finally, we attempt to “explain” this experience in light of current demographic theories and models.

I. INTRODUCTION
Egypt is one of the oldest areas of continuous, densely populated settlement in the world, matched only perhaps by parts of China and India (see Figure 1). Like those areas, Egypt has for many millennia had a highly sophisticated, urban-based society that has produced some of the world's outstanding artistic, cultural and technological achievements. For these undoubted accomplishments to have occurred, Egypt must have been a stable, prosperous and progressive economic and social entity for long periods in its history. This also implies that for much of this long history the population of Egypt—its size, growth, composition and distribution—must have been in reasonable balance with its resources and its technological base. In other words, an equilibrium must have existed among its technology, its exploitable natural resources and its population size, distribution and growth so as to produce an investable social surplus.

Most ancient writers—Plato, Aristotle and others—assumed that a growing population was a sign of a prosperous, well-governed state. Ancient Egypt's population probably did grow at least slowly in the periods of its greatest prosperity and internal stability. The population-resources-technology equilibrium must have been shifting over time. Perhaps the excellent irrigation system developed was a technological response to a fixed land area and growing population density. It is also possible to suppose that ancient Egyptian imperialism and dominance over neighboring states represented a political response to the resource needs of a growing population. John Maynard Keynes thought that the pyramids at Giza might have been one of the world's first public works programs aimed at reducing unemployment. Some scholars have even found evidence that the ancient Egyptians actually practiced
population planning and birth control. As Dr. Zahia Marzouk notes, "Contraception goes back to Ancient Egyptian times. Honey, the rock of the Crocodile, and Dachka, a condom made out of thin skin, were all used" (Houston, 1992, p. 74; see also Bardis, 1967; Hefnawi, 1982).

Obviously, we can not be sure about the validity of any of these fascinating possibilities. It seems certain that demographic factors must have helped shape events and trends in Egypt's long history, however, beyond this unarguable proposition, anything more is conjecture. We will never know whether any of our contemporary economic-demographic theories or models fit the actual economic-demographic history of Egypt over the long run.

Fortunately, when we focus on the developments of the last hundred years, on the emergence of modern Egyptian society, it is, in fact, possible to trace a consistent economic and demographic history (El-Badry, 1991; Coale, 1982). Beginning about a hundred years ago, there is a statistical record in the regular decennial censuses, which increase in accuracy and coverage as one moves closer to the present (see Table 1). Since roughly the end of World War II, we have a solid empirical basis for tracing, interpreting and understanding the interaction of demographic and economic changes in Egypt and also the effect of policies and programs. (Annex 1 discusses data sources in detail.)

The major concern of this report is population growth and the policies and programs designed to deal with this growth. Movements of people into or out of Egypt have not been a major factor in this growth, and mortality change has been monotonically downward in direction. For at least the last half century, Egypt's population growth has been driven by fertility. Thus, we will look most closely at fertility and contraceptive prevalence. However, other economic, social and demographic factors are important to the extent that they have affected motivation, attitudes and behavior regarding family size, and hence, contraceptive behavior and fertility. Although these factors will be considered briefly, the focus of this monograph will remain the Egyptian population policy and program: how it was generated, how it has changed over time, and what has and has not worked.

### Table 1
**Total, Urban and Rural Population of Egypt by Census Year (thousands)**

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Total</th>
<th>Urban</th>
<th>Percentage</th>
<th>Rural</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1882</td>
<td>6712</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1897</td>
<td>9669</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1907</td>
<td>11190</td>
<td>1930</td>
<td>17.2</td>
<td>9260</td>
<td>82.8</td>
</tr>
<tr>
<td>1917</td>
<td>12718</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1927</td>
<td>14178</td>
<td>3810</td>
<td>26.9</td>
<td>10368</td>
<td>73.1</td>
</tr>
<tr>
<td>1937</td>
<td>15921</td>
<td>4492</td>
<td>28.2</td>
<td>11429</td>
<td>71.8</td>
</tr>
<tr>
<td>1947</td>
<td>18967</td>
<td>6363</td>
<td>33.5</td>
<td>12604</td>
<td>66.5</td>
</tr>
<tr>
<td>1960</td>
<td>26085</td>
<td>9965</td>
<td>38.2</td>
<td>16120</td>
<td>61.8</td>
</tr>
<tr>
<td>1977</td>
<td>30076</td>
<td>12033</td>
<td>40.0</td>
<td>18043</td>
<td>60.0</td>
</tr>
<tr>
<td>1976</td>
<td>36627</td>
<td>16037</td>
<td>43.8</td>
<td>20590</td>
<td>56.2</td>
</tr>
<tr>
<td>1986</td>
<td>48254</td>
<td>21216</td>
<td>44.0</td>
<td>27038</td>
<td>56.0</td>
</tr>
</tbody>
</table>

Source: CAPMAS (excludes Egyptians living outside Egypt)
III. SOCIOECONOMIC TRENDS IN EGYPT

A. THE HISTORICAL PAST

Egypt entered the modern world economic system in the nineteenth century and has been inextricably linked to external economic forces ever since (Richards, 1982). The introduction of large-scale, highly profitable cotton production plus other export commodities resulted in the expansion of total agricultural acreage in the last half of the nineteenth century, which probably squeezed the small-scale subsistence sharecropping or renting fellahin by driving up the value of land. The export “boom” that followed created a labor “shortage” and plans for importing labor from the Indian subcontinent or China (as was being done then in sub-Saharan Africa) were proposed and seriously discussed (Mabro, 1974, p. 17). As late as the first decade of this century, some analysts wrote of the shortage of labor in Egyptian agriculture. Landownership was heavily concentrated, with less than two percent of the landowners owning nearly half of the cultivated area, while 80 percent owned less than 20 percent. Some 20 percent of rural households were landless.

Egypt’s agricultural elite prospered, but by the 1930s, labor shortage had been replaced by labor surplus due to declines in mortality coupled with high and constant fertility. Landlessness grew and structural underemployment in agriculture became endemic. Egyptian agriculture had also become subject to the uncontrollable fluctuations in world commodity prices and the general state of health of the world’s industrial nations. The collapse of world commodity prices in the 1920s and the prolonged world depression of the 1930s led to substantial open unemployment in Egypt. These changing economic fortunes fell very harshly on rural village Egypt as they did on other primary producing rural areas. By 1939 some 50 percent of rural households were effectively landless (Baer, 1969; Richards, 1982; Hansen and Marzouk, 1965).

On balance, the first four decades of this century saw only modest economic development or transformation in the Egyptian economy. In 1939 agriculture accounted for over 50 percent of total output and over 70 percent of labor utilization. Modern textile, cement, chemical and paper products industries were established in the 1930s (Mabro and Radwan, 1976) and the urban population, which had comprised about 20 percent of the population since 1900, rose to 25 percent by 1937. Growth occurred in light, consumer-oriented industry to service this growing urban, middle-class sector. As industry grew, there was a gradual replacement by indigenous Egyptian entrepreneurs, managers and skilled workers in the roles previously held largely by foreign technicians, businessmen and clerks (Adams, 1986). The Misr group of companies came into existence following the founding of the Misr Bank, the first totally-Egyptian industrial-financial complex.

Some changes took place in public services such as education, communications, transport and health. The systems and technologies acquired by Egypt beginning in the late nineteenth century rivalled those of many European nations, but the impact was concentrated in the urban centers.

Education did receive some attention, and the Constitution of 1923 “guaranteed” primary education to all Egyptians. The public budget for education rose to 12 percent of the total government budget by 1939 (Cochrane, 1986; Hyde, 1973; Heyworth-Dunne, 1938), yet the overall adult literacy rate was only 22 percent in 1937 and the female rate was half of that. This increased spending on education was to have a significant long-run development impact, for it created a large group of educated,

---

1 This section draws on several of the standard discussions of these historical matters. See Richards, 1982; Adams, 1986; Hansen and Marzouk, 1965; Mabro, 1974; Hopkins, 1987; and Baer, 1969.
middle-class young people who were to provide the cadre for a dramatic expansion of the public sector in Egypt after 1952.

Government spending on health also rose during the 20s and 30s and serious efforts were made to establish a rural public health system and come to grips with Egypt's endemic diseases. We will review the trends in mortality and morbidity in the next section of this monograph.

The total budget for all government activities remained modest and public programs were too small to bring about any significant change in the character of the economy. Some public sector investment in rural infrastructure occurred, most notably the second Aswan low dam and several smaller dams in the Delta region. Investment also occurred in transport (railways and roads) and communications. But, generally the government made no serious effort to reshape the economy.

Government economic policy was dominated by financial prudence and a strong desire to maintain a balanced public budget, honor its international obligations (including allowing repatriation of profits by foreign firms), and maintain its credit abroad (Mabro, 1974).

Thus, coming into the post-World War II period, not much had changed in Egypt. The country's political structure was still semi-feudal with the king and the royal family at the apex of the hierarchy. Real political and economic decision-making power rested in the hands of the British colonial and military representatives on any issues of real interest to them. Landownership remained highly concentrated as did control of the emerging industrial sector.

B. THE RECENT PAST

World War II had a powerful impact on Egypt, even though Egypt was not formally a belligerent power. The war accelerated urban growth as rural people moved to cities for work, and the local economy generally prospered because of enormous war-induced demand for all local goods and services. Modest further improvements in education and health occurred as well. Landlessness and poverty continued to grow, however, as population growth continued to exert more and more pressure on the land.

All this began to change in 1952. The group of army officers who overthrew the king and his British advisors clearly and explicitly intended a complete overhaul of the Egyptian socioeconomic and political system. The policies they proposed to undertake included: (a) land reform aimed at breaking up the old large estates owned chiefly by absentee; (b) an increase in the cultivated acreage and an increase in the productivity of all farm land through greater use of fertilizer and greater use of irrigation; (c) direct government ownership and operation of key industries; (d) rapid expansion of the industrial sector; (e) expansion of public services, especially health and education; and (f) an expanded and growing role for Egypt in the Arab Near East with a consequent increase in the size and strength of the Egyptian armed forces (Goldschmidt, 1988).

These objectives were pursued through a detailed central planning mechanism and government control over many aspects of the economy that had traditionally been private. When the first fully articulated statement of principles of the new regime was issued—the National Charter of 1962—it explicitly espoused socialism—"Arab Socialism"—as the underlying philosophy of the new state. Among other things, this committed the government to a guarantee of education, health, housing and employment for all the people of Egypt. Its implementation entailed a more inwardly-oriented economic policy stressing self-sufficiency, import-substitution, control over most domestic markets and a large expansion of the public sector (Hansen, 1975).

For much of the 1960s and 1970s this "Arab Socialist" orientation led Egypt to closer economic ties with the Soviet Union and the Eastern Bloc nations and reduced trade with its traditional partners in the West. In retrospect it seems clear that some of the assumptions of this model of development were particularly ill-suited to Egypt and that the policies employed were frequently counter-productive for real economic progress. The complex, ever-changing Middle East political situation and the several wars in which Egypt
was embroiled between 1965 and 1975 led to massive expenditures on the military, which further complicated efforts to achieve systematic economic development.

By 1980, Egypt’s situation in the region had changed and so had its basic approach to development. The policy of infitah (openness) replaced that of self-sufficiency and for the last decade Egyptian policy has aimed at dismantling the government ownership and controls created in the 1960s, relying instead on free market economic incentives and processes to power future economic growth. The government of Egypt has drawn strong support for these efforts from the international donor community, including the United States, the World Bank and the IMF (IMF, 1991; Economist Magazine, 1994).

In terms of the most conventional indicator of economic growth, the annual rate of increase in national output or GDP, the record has been mixed at best (see Table 2). Overall growth in real output accelerated after 1952 and grew even more rapidly in the 1970s, largely due to Egypt’s oil boom and the flow of remittances from Egyptians working in the Gulf area. As oil prices fell and the other positive factors played out in the 1980s, the growth rates fell sharply reaching negative real levels in several years.

### Table 2
**Growth Rate of GDP and Employment in the Major Sectors**

<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>GDP</td>
<td>Empl.</td>
<td>GDP</td>
<td>Empl.</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.7</td>
<td>2.3</td>
<td>2.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Industry</td>
<td>6.6</td>
<td>5.1</td>
<td>7.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Petroleum</td>
<td>-</td>
<td>-</td>
<td>43.6</td>
<td>-</td>
</tr>
<tr>
<td>All sectors</td>
<td>6.1</td>
<td>3.6</td>
<td>8.4</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Source: Institute of National Planning, 1994

### Table 3
**Structure of GDP by Major Sectors**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Productive Sectors</td>
<td>55.6</td>
<td>54.5</td>
<td>52.4</td>
<td>48.1</td>
<td>50.6</td>
</tr>
<tr>
<td>Agriculture</td>
<td>28.5</td>
<td>30.5</td>
<td>19.6</td>
<td>20.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Industry</td>
<td>21.6</td>
<td>17.7</td>
<td>13.3</td>
<td>16.7</td>
<td>17.1</td>
</tr>
<tr>
<td>Petroleum</td>
<td>0.9</td>
<td>2.7</td>
<td>13.2</td>
<td>3.8</td>
<td>10.6</td>
</tr>
<tr>
<td>Other Prod.</td>
<td>4.6</td>
<td>3.6</td>
<td>6.3</td>
<td>6.9</td>
<td>6.4</td>
</tr>
<tr>
<td>Other Sectors</td>
<td>44.4</td>
<td>45.5</td>
<td>47.6</td>
<td>51.9</td>
<td>49.4</td>
</tr>
<tr>
<td>Total Percent</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Institute of National Planning, 1994
TABLE 4
KEY INDICATORS OF INFRASTRUCTURAL DEVELOPMENT IN EGYPT

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</thead>
<tbody>
<tr>
<td>Per capita use of electricity (Kw hours)</td>
<td>100</td>
<td>254</td>
<td>492</td>
<td>950</td>
</tr>
<tr>
<td>TV sets per 1,000 population</td>
<td>2</td>
<td>16</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Passenger cars per 1,000 population</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Kilometers of paved highway</td>
<td>5,000</td>
<td>12,000</td>
<td>16,027</td>
<td>38,308</td>
</tr>
<tr>
<td>Radio sets per 1,000 population</td>
<td>58</td>
<td>132</td>
<td>137</td>
<td>737</td>
</tr>
<tr>
<td>% of households with access to safe water</td>
<td>50</td>
<td>65</td>
<td>75</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: World Bank; CAPMAS; Institute of National Planning

Recent years have seen a recovery, with the growth rate between 1987 and 1992 averaging 4 percent.²

An important structural shift away from agriculture has occurred in the postwar period. In 1960, agriculture represented approximately 40 percent of total output but has fallen steadily ever since (see Table 3). It now accounts for less than 20 percent of Egypt's GDP and employs only 35 percent of the labor force. Industry has grown and currently employs 25 percent of the labor force, but the biggest growth has been in the services sector.

Nonetheless, growth within the agricultural sector has been remarkably steady (Richards, 1982)—around two percent per year, reaching a high of 3.5 percent in the early 1960s and a low of minus 1.8 in the late 1970s. Much of this growth has been due to an expansion of cultivated acreage onto newly irrigated land or because of more effective use of irrigation and double cropping. Yield per acre has increased only modestly. The percentage of basic food requirements being produced in Egypt actually fell from nearly 70 percent in 1960 to only 25 percent in 1980 (Radiwan and Lee, 1986, p. 163).

This is not a record of outstanding, rapid, sustained growth. Yet many genuine economic accomplishments did occur and Egypt has undergone a quite remarkable social transformation. The greatest change has been the enormous increase in the social infrastructure of the nation (see Table 4). By 1994 over 21,000 villages had access to electrical power, a doubling since 1980. The telecommunications system and mass electronic media now reach into every corner of the country. In 1990, there was one telephone for every four families, whereas the ratio was one per 20 families in 1980. The number of kilometers of paved road and highways has more than tripled in two decades and now stands at 40,000 kilometers. Public transport is available everywhere and internal mobility of goods and people is at an all time high (Al Ahram Center, 1992).

Public spending on health has accelerated the declines in mortality already underway in the 30s and 40s, leading to a life expectancy at birth of 60 years for males and 63 years for females in 1994, an increase of ten years since 1960. According to the 1992 Egyptian Demographic and Health Survey (EDHS), the infant mortality rate is now 62 per 1,000 live births, while it was over 100 in 1960 (Ministry of Health, 1992).

TABLE 5
INDICATORS OF EDUCATIONAL DEVELOPMENT, 1960 TO 1990

<table>
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<td>Adult Literacy Rate</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>35</td>
<td>40</td>
<td>42</td>
<td>44</td>
<td>48</td>
</tr>
<tr>
<td>Male</td>
<td>40</td>
<td>46</td>
<td>50</td>
<td>54</td>
<td>58</td>
<td>60</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>20</td>
<td>24</td>
<td>27</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>Primary School Enrollment Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60</td>
<td>72</td>
<td>78</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>Male</td>
<td>68</td>
<td>82</td>
<td>87</td>
<td>89</td>
<td>90</td>
<td>99</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>54</td>
<td>56</td>
<td>68</td>
<td>70</td>
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</tr>
<tr>
<td>Secondary School Enrollment Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>26</td>
<td>38</td>
<td>54</td>
<td>60</td>
<td>69</td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>40</td>
<td>52</td>
<td>64</td>
<td>70</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>15</td>
<td>25</td>
<td>43</td>
<td>50</td>
<td>58</td>
</tr>
<tr>
<td>Percent of central budget going to education</td>
<td>4.2</td>
<td>6.1</td>
<td>7.0</td>
<td>5.2</td>
<td>4.9</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: CAPMAS; Ministry of Education

Equally striking changes have occurred in education (see Table 5). Educational facilities have expanded vastly and about 90 percent of girls and nearly 100 percent of boys now attend at least primary school, compared to 49 percent of girls and 68 percent of boys in 1960. The adult literacy rate, which was only 25 percent as late as 1960, now stands at 60 percent for men and 34 percent for women. Thus, the quantity and also the quality of the physical and human capital base in Egypt has expanded remarkably (Abdel-Khalek and Tignor, 1980).

C. THE QUESTION OF ECONOMIC EQUITY

The policies of both the socialist and the market-oriented phases of Egyptian economic policy have aimed at redistribution so as to improve the average level of living and decrease the sharp economic inequalities so obvious in Egypt. In retrospect, it seems clear that this goal has not been attained, largely (but not completely) because of incorrect policies. Abdel-Khalek and Tignor (1980, pp. 7-9) write, “The years between 1952 and 1980 witnessed a mixed record with respect to equity achievement...the commitment to equity remains, the capacity to improve living standards is limited.” Adams (1986, p. 17) writes, “These figures point to the absence of any significant shift in the overall distribution of income...”

Thus, government policy with respect to agriculture has not only failed to come to grips with poverty in the rural areas, it has arguably made conditions worse, in spite of numerous government programs. A land reform law was enacted in 1952 and amended in 1961 and 1969. These laws set upper limits to the amount of land that could be held by an individual or a single family and resulted in the government redistributing some land to previously landless rural households. Landlessness fell modestly between 1950 and 1960. The main thrust of the government’s intervention in agriculture, however, was to fix rents, wages, share-cropping shares, and to give cultivators security of tenure. Operating through cooperatives established in the
villages, the government also controlled the flow of fertilizer and other inputs, the use of irrigation water, and the marketing of a large share of output. Government intervention in and control of agriculture were widespread and pervasive. However, government investment in the sector remained modest, the chief input being a growing number of government agents trained at the 11 agricultural colleges that had been created. Much of the capital investment that did occur favored the large, government-operated farms that had also been created. Most commentators on this period agree that government "squeezed" agriculture rather than supporting or encouraging it (USAID, 1982; Radwan and Lee, 1986).

The result was the modest 2 percent average growth rate that failed to keep up with the average annual rate of population growth during the entire period 1960 to 1990. Thus, there occurred a slow but steady decline in output per capita. Rural household income and expenditures in real terms stagnated, remaining virtually unchanged between 1960 and 1980. Landlessness rose again and was over 50 percent of rural households by 1980. Even had a radical redistribution of land occurred, it would not have solved the problem. In 1980 there was less than half of one feddan (an acre, roughly) per rural farm family in all of Egypt, much less than a minimum subsistence plot. Population has grown more rapidly than the land area in the last 15 years so that the present situation is even worse. Over half of rural households now live below the officially-defined poverty level (Hansen and Radwan, 1982; Radwan and Lee, 1986; Guhl and Sayed, 1988).

Nor does it seem that policy has been any more successful in the industrial sector. Estimates of urban unemployment run as high as 15 percent (USAID, 1994) and only the government policy of providing some job for all university graduates keeps this rate from being much higher. It is, therefore, not clear that real economic development has occurred in the last three to four decades. The measured income distribution is still sharply skewed and the Gini Coefficient has actually worsened (see Table 6). Poverty and landlessness may have actually increased not decreased. However, the statistics suggest that education, health and access to public services has improved, although more so for urban dwellers and middle-class farmers (Hansen and Radwan, 1982; Abdel-Khalek and Tignor, 1980; Radwan and Lee, 1986).

The issue of whether any measurable increase has occurred in economic well-being at the individual or the household level must be seen against the changing demographic background to these economic trends. In the 1930s most observers accepted that Egypt had already become over-populated for its resource table.

**Table 6**

**Distribution of Household Income and Expenditure (in percent)**

<table>
<thead>
<tr>
<th>Income Strata</th>
<th>1974/75</th>
<th>1981/82</th>
<th>1990/91</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Lowest 20%</td>
<td>6.0</td>
<td>6.1</td>
<td>7.7</td>
</tr>
<tr>
<td>20-40%</td>
<td>11.3</td>
<td>10.7</td>
<td>13.7</td>
</tr>
<tr>
<td>40-60%</td>
<td>15.4</td>
<td>14.7</td>
<td>17.9</td>
</tr>
<tr>
<td>60-80%</td>
<td>21.0</td>
<td>20.8</td>
<td>23.0</td>
</tr>
<tr>
<td>Top 20%</td>
<td>46.3</td>
<td>47.7</td>
<td>37.7</td>
</tr>
<tr>
<td>Gini Coefficient</td>
<td>0.39</td>
<td>0.40</td>
<td>0.29</td>
</tr>
</tbody>
</table>

Source: Institute of National Planning, 1994
base. That is, in economic terms, the marginal productivity of additional members of the labor force was declining rapidly and might well become negative. Yet population size has, in fact, quadrupled since those observations were made. Whatever the difficulties of its economic policy, Egypt’s economic growth has managed to stay at least slightly ahead of population growth. Per capita standards of living have not grown sharply, neither have they collapsed downward as they have in some sub-Saharan African nations. In the face of very rapid, sustained population growth, Egypt has still transformed itself structurally and accumulated a physical and human capital base on which genuine, long-run economic development is now beginning to occur (Kelley, Khalifa and El-Khorazaty, 1982). One important part of this transformation has been the beginning of a “transition” to lower fertility that has emerged in the last two decades. We now turn to a closer look at these underlying demographic trends.

3 There is at least the possibility that an interaction exists between demographic and economic trends. Levy (1985) suggests that since traditional crops in Egyptian agriculture, particularly cotton, have been labor intensive and organized around the small family farm, these factors have provided a powerful pronatalist incentive for rural people. Furthermore he argues that the temporary migration of much Egyptian labor to the Gulf in the 1970s and 1980s led cultivators into mechanization of agriculture out of necessity and that, once converted to this new technology, the incentive for large families and high fertility among rural farm families was lost. This is a fascinating thesis, but one which we cannot explore.
IV. DEMOGRAPHIC TRENDS IN EGYPT

A. LONG-RUN, OVERALL TRENDS

The overall demographic trend of Egypt's population in the last century presents a classic example of the demographic experience of most of the developing African, Asian and Latin American world. According to one study (McCarthy, 1976), the total population of Egypt rose from about 3.8 million in 1800 to 4.7 million in 1850, an increase of less than half of one percent per year. This rate increased in the next half-century and by 1900, the population had reached 10 million, largely because of declining mortality.

As Egypt entered the modern era at the turn of this century, both fertility and mortality remained relatively high and overall growth moderate, typically less than 1 percent per annum. Slowly, but with gathering momentum, growth began to accelerate. Total population doubled in the 50 years between 1897 and 1947, and then doubled again in the 30 years between 1947 and 1976 (see Table 7). Natural increase powered this growth. Fertility was high, while the death rate fell steadily, except for short-term reversals such as the sharp increase associated with the impact of the worldwide in-

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Birth Rate</th>
<th>Crude Death Rate</th>
<th>Rate of Natural Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>45.7</td>
<td>34.0</td>
<td>1.1</td>
</tr>
<tr>
<td>1910</td>
<td>44.0</td>
<td>34.4</td>
<td>0.9</td>
</tr>
<tr>
<td>1920</td>
<td>44.1</td>
<td>37.7</td>
<td>0.6</td>
</tr>
<tr>
<td>1930</td>
<td>44.6</td>
<td>29.9</td>
<td>1.5</td>
</tr>
<tr>
<td>1940</td>
<td>46.1</td>
<td>30.4</td>
<td>1.6</td>
</tr>
<tr>
<td>1950</td>
<td>48.7</td>
<td>22.1</td>
<td>2.7</td>
</tr>
<tr>
<td>1960</td>
<td>46.6</td>
<td>19.3</td>
<td>2.7</td>
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<tr>
<td>1965</td>
<td>45.4</td>
<td>14.7</td>
<td>3.1</td>
</tr>
<tr>
<td>1970</td>
<td>38.2</td>
<td>16.4</td>
<td>2.4</td>
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<tr>
<td>1975</td>
<td>39.0</td>
<td>12.8</td>
<td>2.7</td>
</tr>
<tr>
<td>1980</td>
<td>37.5</td>
<td>10.0</td>
<td>2.7</td>
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<tr>
<td>1985</td>
<td>39.8</td>
<td>9.4</td>
<td>3.0</td>
</tr>
<tr>
<td>1990</td>
<td>32.5</td>
<td>7.5</td>
<td>2.5</td>
</tr>
<tr>
<td>1991</td>
<td>31.0</td>
<td>7.6</td>
<td>2.3</td>
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<tr>
<td>1992</td>
<td>29.2</td>
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</tr>
<tr>
<td>1993</td>
<td>28.7</td>
<td>7.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Note: All rates are based on adjusted registration data applied to midyear population estimates interpolated from census year totals. Rates for 1900 are backward extrapolations since registration data began in 1906. Rates for 1910 to 1960 are those for areas covered by the Health Bureau since registration accuracy in these areas approached 100 percent. Rates for 1965 to 1993 are officially adjusted CAPMAS data.


We have employed numerous sources in compiling this section. See McCarthy, 1976; El-Badry, 1991; Abdel-Hakim, 1967; Kiser, 1944; Hill, 1981; Valaoras, 1972; and Schultz, 1972. The underlying sources of data on which all these studies are based are discussed in Annex 1.
This growth has been very unevenly distributed across Egypt's 100 million square kilometers. Egypt is a large country with very limited arable land, and in spite of reclamation programs, arable land has not increased much. Egypt's population of 57 million in 1993 lives on less than 6 percent of the land area of the nation. The legendary density in the Nile Valley has increased as total population has grown, rising from 446 persons per square kilometer in 1937 to 1035 persons by 1993. Government policies have included efforts to reclaim desert land and to build new urban settlements in previously barren areas, but these have not seriously affected the growth of crowding in the already existing areas. In Cairo as a whole, density is over 30,000 persons per square kilometer, and in some wards of Cairo and Alexandria, density is over 100,000 persons per square kilometer.

About half of Egypt's people now live in urban areas, compared to less than 20 percent in 1907 and 34 percent in 1947. By 2025 this is expected to reach 70 percent. The increasing density is, of course, powered by natural increase, but the growth of urban places is also due to movement of population from rural to urban areas in response to changing economic conditions.

Egypt is divided into four main regions: Upper Egypt or the largely rural governorates lying in the south of the country between Cairo and the Sudan border; Lower Egypt or the governorates making up the Nile Delta area between Cairo and the Red Sea; the Urban Governorates or the major metropolitan areas of Cairo, Alexandria, Suez, and Port Said; and the Frontier or the sparsely-populated governorates of the Sinai, the Red Sea Coast and the Western Desert. The Urban Governorates comprise the urban-industrial centers of the nation, and Lower Egypt makes up its agricultural heartland. Upper Egypt is traditionally the most remote and backward region of the nation. Over time the share of population living in these regions has changed (see Table 8). Since 1960, however, there has not been much change in the distribution of the population by region. The Urban Governorates comprise about 20 percent of the

---

**Figure 2**

**Crude Birth Rate and Crude Death Rate, 1900-1992**

Declines in mortality continued but fertility, which had been relatively unchanged for decades, also began to fall. As the declines in mortality effectively leveled off, the declines in fertility then began to cause a decline in natural increase. Thus, somewhere about 1970, the increasing trend in the growth rate was reversed and the growth rate began to decline. This trend continues today and the overall growth rate now is below 2 percent per annum for the first time in several decades. Egypt's population of 1970 will have doubled by 2005, but the next doubling after that will not take place for 60 years, assuming continued reduction in the growth rate. Given present trends, Egypt should reach a zero growth rate and a stationary population size sometime before the turn of the twenty-first century.

---

**Fluza pandemic of 1919-21. This decline was led by decreases in infant and child mortality, but adult mortality also declined particularly among males. By the outbreak of World War II, the average annual growth rate had risen to over 2 percent, more than double the rate of 30 years earlier (Ahmed, 1971). The acceleration in growth continued into the postwar period reaching a peak of nearly 3 percent by the early 1960s (see Figure 2).**
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Total Egypt</strong></td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Urban Governorates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cairo</td>
<td>20.45</td>
<td>21.84</td>
<td>21.43</td>
<td>20.15</td>
</tr>
<tr>
<td>Alexandria</td>
<td>12.89</td>
<td>14.03</td>
<td>13.85</td>
<td>12.58</td>
</tr>
<tr>
<td>Port-Saïd</td>
<td>5.84</td>
<td>5.99</td>
<td>6.33</td>
<td>6.06</td>
</tr>
<tr>
<td>Suez</td>
<td>0.94</td>
<td>0.94</td>
<td>0.72</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>Lower Egypt Governorates</strong></td>
<td>43.17</td>
<td>42.70</td>
<td>43.25</td>
<td>43.24</td>
</tr>
<tr>
<td>Damietta</td>
<td>22.68</td>
<td>1.57</td>
<td>1.57</td>
<td>1.54</td>
</tr>
<tr>
<td>Dakahlia</td>
<td>23.17</td>
<td>7.47</td>
<td>7.47</td>
<td>7.22</td>
</tr>
<tr>
<td>Sharkia</td>
<td>7.00</td>
<td>7.01</td>
<td>7.15</td>
<td>7.08</td>
</tr>
<tr>
<td>Kalyoubia</td>
<td>3.80</td>
<td>4.03</td>
<td>4.59</td>
<td>5.21</td>
</tr>
<tr>
<td>Kafr-AI-Sheikh</td>
<td>3.75</td>
<td>3.72</td>
<td>3.84</td>
<td>3.75</td>
</tr>
<tr>
<td>Ghurba</td>
<td>6.60</td>
<td>6.32</td>
<td>6.26</td>
<td>5.98</td>
</tr>
<tr>
<td>Menoufia</td>
<td>5.19</td>
<td>4.85</td>
<td>4.67</td>
<td>4.60</td>
</tr>
<tr>
<td>Behera</td>
<td>6.49</td>
<td>6.58</td>
<td>0.73</td>
<td>6.73</td>
</tr>
<tr>
<td>Ismailia</td>
<td>1.09</td>
<td>1.15</td>
<td>0.97</td>
<td>1.13</td>
</tr>
<tr>
<td><strong>Upper Egypt Governorates</strong></td>
<td>35.56</td>
<td>34.29</td>
<td>34.60</td>
<td>35.44</td>
</tr>
<tr>
<td>Giza</td>
<td>5.14</td>
<td>5.49</td>
<td>6.60</td>
<td>7.72</td>
</tr>
<tr>
<td>Beni-Suef</td>
<td>3.13</td>
<td>3.08</td>
<td>3.03</td>
<td>3.00</td>
</tr>
<tr>
<td>Fayoum</td>
<td>3.23</td>
<td>3.11</td>
<td>3.12</td>
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</tr>
<tr>
<td>Menia</td>
<td>6.00</td>
<td>5.67</td>
<td>5.61</td>
<td>5.48</td>
</tr>
<tr>
<td>Asyout</td>
<td>5.12</td>
<td>4.70</td>
<td>4.63</td>
<td>4.59</td>
</tr>
<tr>
<td>Suhag</td>
<td>6.08</td>
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<td>5.25</td>
<td>5.07</td>
</tr>
<tr>
<td>Qena</td>
<td>5.20</td>
<td>4.89</td>
<td>4.67</td>
<td>4.68</td>
</tr>
<tr>
<td>Aswan</td>
<td>1.48</td>
<td>1.73</td>
<td>1.69</td>
<td>1.68</td>
</tr>
<tr>
<td><strong>Frontier Governorates</strong></td>
<td>1.01</td>
<td>1.61</td>
<td>0.75</td>
<td>1.17</td>
</tr>
<tr>
<td>Red Sea</td>
<td>0.10</td>
<td>0.12</td>
<td>0.15</td>
<td>0.19</td>
</tr>
<tr>
<td>El-Wadi-El-Gidid</td>
<td>0.13</td>
<td>0.20</td>
<td>0.23</td>
<td>0.24</td>
</tr>
<tr>
<td>Matrouh</td>
<td>0.40</td>
<td>0.41</td>
<td>0.31</td>
<td>0.33</td>
</tr>
<tr>
<td>North Sinai</td>
<td>0.19</td>
<td>0.44</td>
<td>0.03</td>
<td>0.35</td>
</tr>
<tr>
<td>South Sinai</td>
<td>0.19</td>
<td>0.44</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>TOTAL POPULATION</strong></td>
<td>26085</td>
<td>30076</td>
<td>36627</td>
<td>48254</td>
</tr>
</tbody>
</table>

Source: CAPMAS
Population, Lower Egypt 43 percent, the Frontiers about 1 percent and Upper Egypt 35 percent. Rural villages of Upper Egypt, which are economically depressed areas, represent about 20 percent of the total population of Egypt.

**B. THE DECLINE IN MORTALITY**

The data presented above suggest that mortality was still relatively high in Egypt well into this century with crude death rates of 35 per 1,000 population and infant mortality rates of over 200 per 1,000 live births. These rates had been even higher in the previous century. The situation at the beginning of this century already reflected the first impact of Western medical practice and a rudimentary public health system created in the middle of the nineteenth century. Under the rule of Muhammad Ali, Dr. Antoine B. Clot, a French surgeon, was given charge of the health of the army and other public officials. De facto, he became the Minister of Health and Public Health Officer. Under his leadership, medical schools (including one for women) and hospitals were created, quarantine and sanitary regulations enacted, and public health education campaigns launched. The system even reached into the rural areas of the Delta. By the middle of the nineteenth century, Egypt had in place a public health structure equal to, if not superior to, those in many European nations (see Figure 3). The major epidemic diseases—cholera, smallpox, plague—had been effectively controlled if not eliminated. These had been major causes of death in the early part of the century. Their elimination meant that mortality rates, on average, fell by perhaps as much as 5 or 10 per 1,000 population. With fertility remaining constant, a modest annual natural increase then began to occur and total population began to grow.

The impact of these health measures was limited for two main reasons. First, in those days neither preventive, epidemiological public health nor curative medical practice were based on any solid scientific understanding of the environmental-microorganic vectors responsible for most illnesses. Public health measures were based on common sense pragmatism rooted in observation and experience. (Florence Nightingale never believed in the existence of "germs.") Medical practice was dominated by abstract theories of organic functioning and aseptic procedures were still years in the future. Thus, given the level of poverty and economic and social backwardness, Egypt probably extracted as much as possible from its health system.

Second, in the last several decades of the nineteenth century, the political, economic, and social picture in Egypt changed rapidly. Egypt came increasingly under foreign domination and concern with health measures was not a high priority of colonial rulers. Money for the system became less generous and, even

---

**FIGURE 3**

**CREATION OF THE PUBLIC HEALTH NETWORK IN EGYPT, 1825-1850**

| Military Medical Council | Sanitary Administration |
| 1825 Cairo | Board of Health 1831 |
| | Alexandria - 17 Branches or Agencies |
| Medical School | Provincial Health Services |
| 1827 Cairo | 1842 |
| | 6 Metropolises |
| | 11 Provincial Capitals |
| | 17 Centers |
| Women Medical Officers | Barber Surgeons Training |
| (Midwives) 1831 | |
| 1836 Vaccination Service | Functions of District Health |
| Civil Hospitals (16) | Offices 1842 |
| Municipal Clinics | Vital Statistics; Sanitary |
| Ophthalmological Clinics | Regulators; Smallpox |
| | Immunizations; Quarantine; |
| | Street Refuse; Marsh |
| | Drainage |
| | District Hospital 1845 |

---

5 This section draws on the admirable recent work by Kunhcke (1990). See also McCarthy, 1976; El-Badry, 1991; and Cuno, 1992.
in urban areas, facilities actually closed or became less effective due to staff shortages and lack of supplies. Economically, Egypt had discovered a profitable world market for cotton, and this led to a restructuring of its rural, agricultural sector with greater use of irrigation so as to double-crop larger areas of the Nile Valley. These changes, it is now clear, also created very favorable environments for several new water-borne diseases—malaria, bilharzia, gastroenteritis—which in a few years became endemic and made further reductions in mortality and morbidity difficult. Egypt, especially rural Egypt, remained an unhealthy place throughout the first half of this century.

Yet what may be called the public health orientation had been implanted and remained as well as some administrative capacity. In the 1920s, rural Health Bureaus were established, and as the water-borne disease vectors became better understood, preventive measures were attempted. More hospitals and medical schools were founded and a Department of Health in the central government was created. Transport and communications improved and the steady improvements in the private sector urban medical services also trickled out to the countryside. Mortality continued to fall slowly and life expectancy rose. The infant death rate fell more sharply than the death rates at older ages. The rate of natural increase rose and population growth accelerated.

Following the Revolution of 1952, “Health for All” became a major goal of the new government, even though this was a decade before the famous “Alma-Ata Declaration” of that name. The budget allocated for health rose over two percent of total government spending and a dramatic expansion of the system occurred (Ministry of Health, 1992; Ministry of Planning, 1982; Institute of National Planning, 1994). By the mid-60s there were 3,500 urban and rural health clinics and centers in operation and over 100,000 persons working for the Ministry of Health. Major attacks were made on the remaining endemic chronic diseases (malaria, bilharzia) with technical and financial assistance from international agencies and groups, such as WHO, the Rockefeller Foundation, and others. The impact of these new programs on the death rate was dramatic. The crude death rate, which was still around 30 in 1940, fell to 15 by the early 1960s, to 10 by 1980, and to 7.4 in 1992. The absolute decline in the death rate between 1950 and 1990 was probably greater than the decline in the previous 100 years (see Table 9). The decline in infant and childhood deaths has been even more dramatic. The infant mortality rate (IMR) de-

Table 9
Indicators of Changes in Mortality in Egypt, 1940-1990

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Death Rate</th>
<th>Infant Mortality Rate</th>
<th>Child Mortality Rate</th>
<th>Life Expectancy at Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>27.2</td>
<td>238</td>
<td>—</td>
<td>34.4</td>
</tr>
<tr>
<td>1950</td>
<td>25.4</td>
<td>204</td>
<td>—</td>
<td>45.2</td>
</tr>
<tr>
<td>1960</td>
<td>17.4</td>
<td>168</td>
<td>—</td>
<td>56.3</td>
</tr>
<tr>
<td>1965</td>
<td>14.7</td>
<td>149</td>
<td>—</td>
<td>58.8</td>
</tr>
<tr>
<td>1970</td>
<td>16.4</td>
<td>153</td>
<td>110.3</td>
<td>53.4</td>
</tr>
<tr>
<td>1975</td>
<td>12.8</td>
<td>118</td>
<td>90.9</td>
<td>57.0</td>
</tr>
<tr>
<td>1980</td>
<td>10.0</td>
<td>108</td>
<td>55.3</td>
<td>58.0</td>
</tr>
<tr>
<td>1985</td>
<td>9.4</td>
<td>97</td>
<td>36.1</td>
<td>59.0</td>
</tr>
<tr>
<td>1990</td>
<td>7.5</td>
<td>62</td>
<td>24.8</td>
<td>62.8</td>
</tr>
</tbody>
</table>

Source: All estimates for 1940 to 1970, except the CMR, are from Coale, 1982; all the CMRs and the IMRs between 1980-1990 are from the 1992 EDHS; the CDR and the e(o) 1980-1990 are from CAPMAS.
clined from 190 per 1,000 in 1950-54 to 62 in 1988-92, a 67 percent decrease. The child mortality rate (CMR) fell by comparable amounts.

The mortality declines of the last several decades have been distributed unevenly among the regions of Egypt (see Table 10). Between 1980 and 1992, the IMR in Urban Governorates fell by 46 percent, in Lower Egypt by 52 percent, in the Frontier Areas by 39 percent and in Upper Egypt by only 27 percent (see Table 11). Similar trends can be observed in child mortality (see Table 12). The result is that already existing differentials between Upper and Lower Egypt in mortality levels have widened while the rates for rural Lower Egypt and the Urban Governorates have tended to converge.

There seems no question that much of this change is due to improvements in health infrastructure and staffing of government programs over the last several decades. As shown in Table 13, the health infrastructure has grown enormously.

**Table 10**

**Crude Death Rates by Governorates, 1940-1990**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Governorates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cairo</td>
<td>26.8</td>
<td>18.9</td>
<td>13.3</td>
<td>9.0</td>
<td>6.8</td>
</tr>
<tr>
<td>Alexandria</td>
<td>22.5</td>
<td>16.9</td>
<td>12.0</td>
<td>7.9</td>
<td>6.8</td>
</tr>
<tr>
<td>Port-Said</td>
<td>18.1</td>
<td>11.4</td>
<td>—</td>
<td>6.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Suez</td>
<td>31.5</td>
<td>17.7</td>
<td>—</td>
<td>10.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Lower Egypt Governorates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damietta</td>
<td>22.1</td>
<td>14.5</td>
<td>11.9</td>
<td>8.4</td>
<td>6.3</td>
</tr>
<tr>
<td>Dakahlia</td>
<td>30.5</td>
<td>16.5</td>
<td>13.7</td>
<td>8.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Sharkia</td>
<td>25.3</td>
<td>15.6</td>
<td>15.0</td>
<td>9.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Kaloubia</td>
<td>32.1</td>
<td>22.3</td>
<td>19.6</td>
<td>11.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Kafr El-Sheikh</td>
<td>--</td>
<td>19.2</td>
<td>12.2</td>
<td>8.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Gharbia</td>
<td>28.6</td>
<td>20.7</td>
<td>16.1</td>
<td>10.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Menoufia</td>
<td>32.3</td>
<td>14.4</td>
<td>19.2</td>
<td>12.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Behera</td>
<td>23.6</td>
<td>10.3</td>
<td>13.8</td>
<td>9.6</td>
<td>6.7</td>
</tr>
<tr>
<td>Ismailia</td>
<td>26.9</td>
<td>19.3</td>
<td>--</td>
<td>8.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Upper Egypt Governorates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giza</td>
<td>28.9</td>
<td>14.7</td>
<td>18.5</td>
<td>9.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Beni-Suef</td>
<td>21.6</td>
<td>20.0</td>
<td>20.6</td>
<td>12.9</td>
<td>8.9</td>
</tr>
<tr>
<td>Fayoum</td>
<td>30.0</td>
<td>18.6</td>
<td>18.7</td>
<td>11.6</td>
<td>7.7</td>
</tr>
<tr>
<td>Menia</td>
<td>26.8</td>
<td>18.4</td>
<td>19.6</td>
<td>11.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Asyout</td>
<td>27.0</td>
<td>14.1</td>
<td>17.1</td>
<td>10.9</td>
<td>8.8</td>
</tr>
<tr>
<td>Souhag</td>
<td>23.5</td>
<td>10.7</td>
<td>16.1</td>
<td>10.6</td>
<td>8.5</td>
</tr>
<tr>
<td>Qena</td>
<td>17.9</td>
<td>14.6</td>
<td>14.0</td>
<td>11.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Aswan</td>
<td>24.6</td>
<td>13.5</td>
<td>16.2</td>
<td>12.3</td>
<td>7.3</td>
</tr>
<tr>
<td>Frontier Governorates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Sea</td>
<td>11.3</td>
<td>17.8</td>
<td>13.6</td>
<td>10.3</td>
<td>5.3</td>
</tr>
<tr>
<td>New Valley (South Des.)</td>
<td>27.9</td>
<td>11.0</td>
<td>13.0</td>
<td>7.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Matrouth (North Des.)</td>
<td>20.8</td>
<td>9.5</td>
<td>8.1</td>
<td>7.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Sinai</td>
<td>17.2</td>
<td>3.8</td>
<td>—</td>
<td>3.2</td>
<td>4.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26.5</td>
<td>16.9</td>
<td>15.1</td>
<td>10.0</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Note: Data are unadjusted, registration figures. Therefore, rates for the total are slightly different from the adjusted CDR shown in Table 7.

Source: CAPMAS
# Table 11
## Registered Infant Mortality Rates by Region, 1980-1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Gov.</td>
<td>80</td>
<td>75</td>
<td>67</td>
<td>65</td>
<td>59</td>
<td>47</td>
<td>47</td>
<td>43</td>
<td>46%</td>
</tr>
<tr>
<td>Lower Egypt</td>
<td>73</td>
<td>66</td>
<td>66</td>
<td>59</td>
<td>53</td>
<td>41</td>
<td>38</td>
<td>35</td>
<td>52%</td>
</tr>
<tr>
<td>Upper Egypt</td>
<td>78</td>
<td>74</td>
<td>78</td>
<td>72</td>
<td>74</td>
<td>60</td>
<td>57</td>
<td>57</td>
<td>27%</td>
</tr>
<tr>
<td>Frontier</td>
<td>64</td>
<td>59</td>
<td>52</td>
<td>47</td>
<td>42</td>
<td>25</td>
<td>36</td>
<td>39</td>
<td>39%</td>
</tr>
<tr>
<td>Egypt</td>
<td>76</td>
<td>70</td>
<td>70</td>
<td>65</td>
<td>62</td>
<td>49</td>
<td>47</td>
<td>45</td>
<td>41%</td>
</tr>
</tbody>
</table>

Source: CAPMAS unadjusted vital statistics; data for later years not available

# Table 12
## Registered Child Mortality Rates by Region, 1980-1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Gov.</td>
<td>5.4</td>
<td>5.9</td>
<td>6.0</td>
<td>4.0</td>
<td>4.9</td>
<td>4.2</td>
<td>3.8</td>
<td>3.5</td>
<td>35%</td>
</tr>
<tr>
<td>Lower Egypt</td>
<td>10.5</td>
<td>10.4</td>
<td>11.9</td>
<td>7.9</td>
<td>8.8</td>
<td>7.7</td>
<td>5.8</td>
<td>5.6</td>
<td>47%</td>
</tr>
<tr>
<td>Upper Egypt</td>
<td>13.7</td>
<td>13.9</td>
<td>17.7</td>
<td>13.4</td>
<td>13.9</td>
<td>13.6</td>
<td>11.1</td>
<td>11.1</td>
<td>19%</td>
</tr>
<tr>
<td>Frontier</td>
<td>5.6</td>
<td>7.0</td>
<td>7.1</td>
<td>4.8</td>
<td>4.8</td>
<td>5.0</td>
<td>3.8</td>
<td>4.4</td>
<td>20%</td>
</tr>
<tr>
<td>Egypt</td>
<td>10.8</td>
<td>10.9</td>
<td>13.0</td>
<td>9.3</td>
<td>10.0</td>
<td>9.3</td>
<td>7.5</td>
<td>7.4</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: CAPMAS unadjusted vital statistics; data for later years not available

# Table 13
## Growth of the Health Infrastructure, 1940-1994

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Total Govt. Budget Spent by MOH</th>
<th>Population Per Physician</th>
<th>Population Per Hospital Bed</th>
<th>Number of Govt. Health Units</th>
<th>MOH In-Service Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>4.1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1950</td>
<td>4.2</td>
<td>—</td>
<td>—</td>
<td>571¹</td>
<td>—</td>
</tr>
<tr>
<td>1960</td>
<td>4.5</td>
<td>2,600</td>
<td>460</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1965</td>
<td></td>
<td>2,260</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1970</td>
<td>1.9</td>
<td>1,910</td>
<td>462</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1975</td>
<td></td>
<td>970¹</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1980</td>
<td>2.2</td>
<td>1,065</td>
<td>498¹</td>
<td>4,926²</td>
<td>12,677²</td>
</tr>
<tr>
<td>1990</td>
<td>2.8</td>
<td>545</td>
<td>516¹</td>
<td>6,370</td>
<td>19,178¹</td>
</tr>
<tr>
<td>1994</td>
<td></td>
<td>—</td>
<td>511</td>
<td>6,800</td>
<td>48,239¹</td>
</tr>
</tbody>
</table>

¹ 1952   ² 1984   ³ 1978   ⁴ 1992

Source: World Bank; CAPMAS; Ministry of Health
C. THE DECLINE IN FERTILITY

Most analysts agree that fertility in Egypt was more or less constant during the first six decades of this century. After a careful review of the evidence, Coale (1982) wrote of the “plateau that characterized the [birth] rate before World War II and into the postwar years.” Plateau is, of course, not totally accurate since year to year fluctuations did occur, but the rate was always in the mid- to high-40s. According to the 1960 census, the median number of children ever born to women married 30 years or more was eight children, further supporting the belief that fertility had been high. Under such conditions of stability, the completed family size or children ever born is equivalent to the total fertility rate (TFR). It seems that the TFR as Egypt entered the post-World War II period was in the range of 7 to 8 (El-Badry, 1956; Coale, 1982 and 1988; Ahmed, 1971; Zaghoul and El-Ghamry, 1971).

This rate was almost certainly a “natural fertility” level in the sense that few deliberate efforts were being made by couples to cease producing children after a certain number had been reached. The biological potential fertility is, of course, even higher, approximately 14 births per woman under ideal conditions, but traditional restraining forces such as prolonged breastfeeding, frequent temporary separation of spouses and early widowhood for many women hold fertility below its full potential.6

This long period of high and stable fertility was also marked by an almost complete absence of differences in fertility among major regions or socioeconomic groups within the country. Urban areas nearly always show lower fertility than rural areas of the same population. Yet this was not the case in Egypt. “Contrary to a common view about the impact of urbanization on reproductive behavior, differences between rural and urban areas seem insignificant. Data derived from the 1960 population census indicate that cumulative fertility rates were in fact slightly higher for Cairo and Alexandria than for the rest of Egypt” (Marzouk, 1957). This does not mean that there was absolutely no contraception being practiced, only that such practice affected only the educated, urban elite, a number too small to affect national or subnational averages.

Fertility probably rose slightly during the later years of the second World War and for a few years when the war ended. This was associated with a rise in the marriage rate. Schultz concluded: “There is evidence that the crude marriage rates rose during World War II reaching a peak for the entire country in 1943 and in Cairo and Alexandria in 1944. There followed a modest rise in registered crude birth rates in both the major cities and the countryside that continued into the postwar years” (Schultz, 1972). He then speculated that fertility had remained more or less constant after 1947, a conclusion also reached by Coale as discussed below.

There is a consensus among several analysts about this stability in the fertility pattern prior to about 1960 (see Table 14), which implies that there was little or no use of contraception. From 1960 onward, the picture changes, and it seems that fertility had begun to fall. However, there is some ambiguity in the data on fertility in the period 1960 to 1980, the point at which solid, well-grounded survey-based data on fertility begin to be available. On the basis of his own largely indirect analytical methods, Coale found that: “Between 1960 and 1976 overall fertility declined in Egypt by 18 percent...The reduction in the index of proportion married was greater than the reduction in marital fertility... Thus, the reduction in fertility in Egypt over 1960-76 was caused by both later marriage and a small decrease in marital fertility... The decline in marital fertility in Lower Egypt was about 5 percent” (Coale, 1988).

Coale also noted that there was some evidence that the age-specific marital fertility rates at higher ages and longer durations of marriage began to decline in the late 1960s, indicating modest but growing efforts at deliberate control of fertility. By the time of the 1960 census, there had emerged modest urban-rural differences in current fertility for the first time in Egyptian demographic history although these still affected only a small proportion of the urban population (Abu-Lughod, 1965).

---

6 We will discuss the role of other proximate determinants as well as contraception in determining fertility in Annex 2.
### Table 14
**Estimates of Total Fertility in the Pre-Survey Period**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1936-37</td>
<td>6.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1946-47</td>
<td>6.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1959-60</td>
<td>6.7</td>
<td>1962-66 6.9</td>
<td>1960-65 7.1</td>
<td>1947 5.7</td>
</tr>
<tr>
<td>1975-76</td>
<td>5.5</td>
<td>1972-76 5.6</td>
<td>1970-75 5.5</td>
<td>1960 6.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1976 5.6</td>
</tr>
</tbody>
</table>

Other estimates include:
1. 1960 7.2 (CAPMAS via the Brass P/F method applied to census data)
2. 1959 6.9 (Rizk, 1965, from a small survey of rural and urban areas)

Source: As indicated in the table headings.

Vital registration data on births for Egypt as a whole in this period suggest that fertility began to decline around 1967, falling by about 10 percent but rising again in 1972 so as to regain its previous level by 1979. Coale was skeptical of this apparent movement, arguing that even a slight decline in the accuracy and completeness of the registration system could account for the apparent decline and that a subsequent catching up, with late returns from earlier years being registered in the late 1970s, could also explain the apparent recovery in the rate. Based on this logic, he rejected the idea that fertility had risen in the late 1970s. Fertility histories from the first of the several national fertility surveys seemed to suggest that fertility had been falling for some time. "The occurrence of a substantial decline in fertility between the mid-1960s and mid-1970s is confirmed. Much of the decline was caused by an increase in age at marriage and a decline in the marriage rate that occurred in the late 1960s and early 1970s" (Coale, 1988).

Other analysts, however, take seriously the apparent decline and subsequent rise in fertility in this period and relate it to the increased intake of young men into the Egyptian military in the late 1960s and early 1970s, which led to a postponement of marriages and to frequent, prolonged separation of married couples. Political events calmed down after about 1976; postponed marriages then occurred and marital relations returned to normal (Sayed, 1980; Fergany, 1976; Khalifa and Kader, 1981; Magdi, 1986). This is a plausible scenario but would not affect the thrust of our argument here. Whatever the short-run fluctuations, all analysts and datasets agree that the long-term trend in fertility from 1960 to the present has been downward.

This decline has accelerated over time. The first major national fertility survey undertaken by CAPMAS in 1974–75 reported an overall TFR of 5.5 with very marked urban-rural and Lower versus Upper Egypt differentials. The 1979-80 Egyptian Fertility Survey (EFS) reported a TFR of 5.3, the 1983–84 Egyptian Contraceptive Prevalence Survey (ECPS) reported a TFR of 4.9, the first (1986-88) Egyptian Demographic Health Survey (EDHS) reported a TFR of 4.3 and the second (1990-92) EDHS a rate of 3.9. Thus, the TFR has fallen from over seven to under four between 1960 and 1990, a period of 30 years (see Table 15). This is a decline of between 40 and 50 percent, or over one percentage point per year on average. Declines of this magnitude cannot be explained in terms of increased breastfeeding or further increases in the age at marriage for women. They can only be due to sharp increases in the use of contraception by couples. (Annex 2 provides a deeper understanding of the reasons for the decline in fertility.)

The decline in fertility has been led by the urban centers—the large Urban Governorates and the urban places of Lower Egypt (see Figure 4) as might be expected in the early stages of a "transition." But all regions and divisions of the population show the same declining trend.
TABLE 15
TOTAL FERTILITY BY REGION, 1960-1992

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Governorates</td>
<td>5.9</td>
<td>3.9</td>
<td>3.8</td>
<td>3.3</td>
<td>3.0</td>
<td>-50.0</td>
<td>-9.5</td>
</tr>
<tr>
<td>Urban</td>
<td>7.0</td>
<td>5.0</td>
<td>4.3</td>
<td>4.0</td>
<td>2.8</td>
<td>-60.2</td>
<td>-29.6</td>
</tr>
<tr>
<td>Lower Egypt</td>
<td>7.4</td>
<td>5.6</td>
<td>5.9</td>
<td>4.4</td>
<td>3.6</td>
<td>-51.8</td>
<td>-18.6</td>
</tr>
<tr>
<td>Rural</td>
<td>7.5</td>
<td>6.0</td>
<td>6.0</td>
<td>5.3</td>
<td>4.1</td>
<td>-45.4</td>
<td>-22.0</td>
</tr>
<tr>
<td>Upper Egypt</td>
<td>7.8</td>
<td>6.8</td>
<td>6.3</td>
<td>6.4</td>
<td>6.0</td>
<td>-23.7</td>
<td>-7.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.1</td>
<td>5.5</td>
<td>5.3</td>
<td>4.7</td>
<td>3.9</td>
<td>-44.5</td>
<td>-16.2</td>
</tr>
</tbody>
</table>

Source: CAPMAS; 1980 EFS; 1988 EDHS; 1992 EDHS

Changes have also occurred in the age-specific pattern of fertility. The curve shifted slightly to the left when TFR first began to fall, but more recently the entire curve has shifted downward as would be expected with a rapid increase in contraceptive use (see Figure 5).

FIGURE 4
TOTAL FERTILITY RATES BY SELECTED CHARACTERISTICS, 1992

FIGURE 5
V. THE EMERGENCE OF POLICY AND PROGRAM

A. EARLY GROWTH OF POPULATION AWARENESS

Awareness of a problem, or the potential for a problem, usually precedes action to deal with the problem. The awareness in Egypt that population growth might be so high as to create economic and social complications for the country seems to have been present in some quarters for a long time. The first systematic research on Egyptian population trends appeared in the late 1930s, most notably in a book and several articles by Wendell Cleland, a sociology professor at the American University in Cairo (Cleland, 1936; 1937; 1939).

Using the series of decennial censuses taken since 1886, Cleland presented statistical evidence that the population of Egypt was growing at an increasing rate. Egypt, he observed, was already a desperately poor country and any sustained increase in the population would inescapably pose a serious threat to the economic viability of the country. He urged a government-sponsored policy and program to spread family limitation among the populace.

Cleland's work stirred up a lively, if largely academic, debate among medical and scientific writers in the last few years before the outbreak of the second World War. Some doubted that Egypt's population could be growing rapidly, given the appalling public health conditions that prevailed then (Bentley, 1937). Others argued that the ancient population in Pharaonic times had been far larger, and hence, present-day Egypt could hardly be over-populated. Cleland's suggestion that a birth control program was needed stirred up even more controversy, reflecting the various ethical and religious attitudes of the day.

This early academic warning that population growth was on the rise does seem to have had an influence on some people's thinking. A group of university teachers and professional persons combined to create the "Happy Family Society," a family planning promotional group, in 1937. Thanks to their efforts, laws banning the sale of contraceptives were repealed and a Fatwah was obtained from Al Azhar stating that family planning was allowed by Islam "under certain conditions." A few years later, the Child Society of Maadhi began actually offering family planning supplies and services to clients; these activities attracted considerable opposition from other quarters.

One of the family planning pioneers in Egypt, Dr. Zahia Marzouk, remembered these long-past events as follows: "In 1937 we began to think about the population explosion. University professors, gynecologists, statisticians, all sorts of people were interested in the future population of Egypt. We formed a small, unofficial association to discuss demographic issues. We wanted to hold a conference but thought it best to consult a religious person. Fortunately, the religious authority we contacted did not disapprove of family planning. He believed it was necessary if the woman's health or life was in danger or if they were afraid of being in a very poor, needy situation. Based on his opinion, we went ahead and held a conference on population in 1937. It was sponsored by the medical association." (quoted in Houston, 1992).

One can assume that some family limitation was being practiced by the educated, urban elite since contraceptive supplies (condoms, diaphragms and cervical rings) were available in Europe in this period. These were no doubt supplied by private physicians and pharmacies at relatively high cost and could not have affected more than a few thousand couples with no discernable impact on overall fertility levels. Such private efforts...
and initiatives continued and evidently grew rapidly after World War II. A study in 1969 (Shanawany) found that almost half of the oral contraceptive pill users in Alexandria were obtaining their supplies in the private market.

The Egyptian government had also begun to think about the population question in the pre-World War II period. The Ministry of Social Affairs was created in 1939, partly to study the population question and the social consequences thereof. The relationship between land, resources and population growth was highlighted in several government reports of the day. The creation of an expanded public health program built around "health bureaus" in rural areas was due at least partly to the belief that high death rates were also linked to high birth rates.

Thus, the implicit theory was that high death rates and high birth rates were both pre-modern. "Modernization" was seen as consisting of a series of interconnected changes that would first reduce death rates and, a step later, birth rates. This, of course, is the essence of the theory of the demographic transition, a notion that was already finding its way into the thinking of population specialists. First propounded by Thompson, Wilcox and others in the late 1920s, this notion was refined and more sharply focused at the hands of Notestein, Davis and others a decade later in the years after World War II (Robinson, 1964). We can assume that Cleland and other scholars in Egypt were aware of these theoretical developments and that they were guided by them, at least to an extent, in thinking about Egypt.

Egypt's modern political history dates from 1952 and the overthrow of the monarchy. The new government headed by a group of army officers launched strong, far-reaching policy and program interventions in many areas of Egyptian economic and social life. The approach was progressive but also centralist and authoritarian, which was in keeping with long Egyptian traditions of governance (Goldschmidt, 1988).

The new approach was also explicitly socialist, which was not in the Egyptian tradition. But, the socialism that emerged was more pragmatic and paternalistic than Eastern European or Asian versions and had a distinctly Egyptian flavor. This helped spare Egypt some (but not all) of the costly and painful mistakes, especially in the agricultural sector, that the European socialist model of development inflicted on many other developing countries.

The new government took the first tentative step toward a population policy in November 1953 when the Minister of Social Affairs submitted a memorandum to the Permanent Council for Public Services entitled "The Population Situation in Egypt and the Necessity for Planning a Population Policy for the Country." Following this in January 1954, the National Commission on Population Matters was created with subcommittees dealing with demographic, medical and economic aspects of population growth. Beginning in 1955, the medical subcommittee initially set up eight clinics (later expanded to 15) to provide services for couples regarding both fertility and sterility (Rizk, 1955). Even these cautious first steps were controversial and provoked strong comments from conservative groups, including the then-powerful Moslem Brotherhood.

The top leaders of the new government seemed ambivalent about family planning. Gen. Mohammed Naguib (Naguib, 1955, pp. 160-161) wrote: "The realization of our hopes will depend on a number of factors, the most important of which is Egypt's rapidly increasing population...but, birth control by means of contraception is hardly feasible in villages whose homes are lacking in running water, toilets and electric lights. A more effective means of controlling births, we feel is to provide the villages with the rudiments of modern civilization." His successor, Gamal Abdel Nasser, in a much-quoted 1959 interview, said: "Instead of concentrating on birth control, we would do better to concentrate on how to make use of our own resources. We live in and make use of only four percent of our country. The rest is neglected and all desert. If we direct our efforts to expanding the area in which we live, instead of reducing the population, we will soon find a solution." (As quoted in Omran, 1973)
No doubt many other influential Egyptians felt the same way. Family planning seemed a negative policy and this was a time of positive thinking. The first five-year plan had been announced, the new high dam on the Nile at Aswan was being planned. The country was very optimistic about the rapid industrial and economic growth that would follow its completion. The population policy initiative languished. In 1960 the National Commission on Population Matters was transformed into a nongovernmental organization (NGO), the Egyptian Family Planning Studies Association. (The EFPSA could best be described as quasigovernmental since it received government financial support, and government officials served on its various committees and assisted in its clinical work.) In response to hostile questions raised in parliament in this period, the government stated it had not yet defined its position on population growth.

By the early 1960s, the pendulum had begun to swing in the other direction. In 1962, the Egyptian government promulgated a new National Charter laying out the basic assumptions and guiding principles for the new Arab Republic. This charter clearly identified rapid population growth as a threat to the economic betterment of the Egyptian people (Box 1).

**Box 1**  
**The First Population Policy Statement**

"Population increase is the most dangerous obstacle that faces the Egyptian people in their drive towards raising the standard of production in their country in an efficient way. Attempts of family planning deserve the most sincere efforts by modern scientific methods."

National Charter of Egypt, 1962

A ministerial committee was created to study what should be done, and the parliament discussed and debated the issue. Islamic scholars at Al Azhar University formally considered the matter and again ruled that family planning was completely consistent with Islamic law and custom. Private family planning organizations were created in both Cairo and Alexandria, and the EFPSA changed its name to become the Egyptian Family Planning Association (EFPA), which then affiliated with the International Planned Parenthood Association. A Population Research and Family Planning Division was also created in the Research Section of the Ministry of Health (MOH) in 1964. MOH's first step into the field of family planning (Rizk, 1955).

**B. The First Program Phase, 1965-1975**

In 1965 a Supreme Council for Family Planning was created to serve as the top policymaking body in population and family planning. The Council was to do overall planning for family planning in the country, to study the relationship of population to economic, social and medical issues, and to coordinate the activities of all the ministries and private groups. The Supreme Council consisted of the Ministers of Health, Education, Cultural and National Guidance, Local Government, State for Cabinet Affairs, Religious Affairs, Social Affairs, and the Central Agency for Public Mobilization and Statistics (CAPMAS), with the Prime Minister as the ex officio chairman. In each of the 25 governorates a similar group was formed, the governorate family planning advisory committee, chaired by the governor and composed of local directors of the various ministries sitting on the Supreme Council, plus representatives of the Arab Socialist Union, the ruling political party, and representatives of other interested

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*This section draws on the excellent surveys of this material already done by other authors. See Gadalla, 1978; Hassouna, 1980; Sayed, 1984; UNFPA, 1985; Stycos et al., 1988*
local groups. A regional executive bureau worked under each governorate committee to supervise program implementation. An Executive Family Planning Board was created as the operating agency for the Council.

The actual delivery of services was the responsibility of the Ministries of Health and Social Affairs since they already had in place staff and facilities throughout the country. The MOH created a National Family Planning Project within its existing organizational structure and the Ministry of Social Affairs (MOSA) continued to supervise the NGOs. The new Executive Family Planning Board was to coordinate the work of these ministries and to directly undertake research, training and educational activities. It was given a budget of one million Egyptian pounds per year. The family planning program seemed to get off to a strong start.

Following a United Nations evaluation team visit in 1969, the newly-created United Nations Fund for Population Activities began to provide contraceptive supplies and technical assistance. Assistance was also furnished by UNICEF, WHO, the Ford Foundation and other international groups. The contraceptive pill became available in the private sector in 1962 and the IUD became available in 1964. A “family planning week” was declared in 1968 and the media discussed the issue freely and openly for the first time. Some writers urged adoption in the program of abortion and sterilizations, but Islamic scholars ruled that such “terminal” methods were not allowed by Islam, although “planning” (spacing) using other methods was acceptable.

By 1966, Egypt had both a policy and a program aimed at reducing fertility and population growth. However, a high-level policy commitment and an effective program are two quite different matters altogether. Creating the program was one thing, making it work something else again.

The entire scheme was viewed as “incremental” to other health-connected activities already underway. This was true from top to bottom. All the members of the numerous committees created were already fully occupied with other duties and consequently the committees, including the Supreme Council itself, rarely if ever actually met. Personnel assigned to the national Executive Family Planning Board, its sub-components and the local implementing bureaus were selected from among regular MOH staff and paid an increment of 30 percent of their base salary for their new duties. Family planning facilities were also “incremental” to the regular MOH installations. The clinics were opened for family planning three afternoons a week, after regular clinic hours. Physicians and other personnel providing services were paid overtime. They were also allowed to make a modest charge for the supplies (10 piasters per packet of orals and one pound per IUD), the money being divided half to the doctor and half to the other staff.

Put in the best light, it could be argued that this approach was an effort to build a program quickly while economizing on the use of scarce personnel and clinical resources. On the positive side, a nationwide system of over 2,000 clinics, hospitals and service delivery points was created virtually overnight. Moreover, the use of MOH facilities seemed to ensure that family planning would be fully “integrated” into regular health activities, a tactic most family planning experts favored.

But the reality that emerged over time was rather different. What had been created was the appearance of a program that existed mostly “on paper,” not a real, functioning field service delivery operation. The flaws in the structure quickly became apparent and were frequently commented on. A particularly analytical critique (Gadalla, 1978) found numerous “problems” with the program, as outlined below.

1. The program was inadequately funded.
From 1965 to 1970 the average budget allocated to the Executive Family Planning Board amounted to about 50 cents (US) per
married woman in the 15 to 49 age group, with much of this consumed by overhead and administrative expenses.

2. Top leadership changed frequently. The chairman of the Executive Family Planning Board changed five times in the first four years of the program and similar turnover occurred in many governorates. Continuity was lacking and direction uncertain.

3. Program leaders lacked experience and knowledge in organizing and running family planning activities. No “model” existed that could be easily copied, and efforts by some foreign donors to furnish advice and technical assistance were not always welcomed. By proceeding at once to a nationwide program, the Board denied itself the opportunity to begin small, on a trial and error basis, and develop an indigenous structure that could be shown to work. The program had no chance to work out the kinks or learn by mistakes. Once launched nationwide, it was difficult to modify even when it became clear that it was not working.

4. The division of labor and responsibility between the Ministry of Health and the Family Planning Board caused confusion. Most of the staff were full-time employees of MOH and part-time employees of the Family Planning Board, but it was unclear who was really in charge of them or their activities.

5. Staff were inadequately trained. The MOH physicians and others recruited to work on family planning received little or no special training and the local family planning board members, who were supposed to play an important outreach function, received no training at all. The quality of the services supplied was, consequently, very poor.

6. Supply of contraceptives was inadequate. Only one method was generally available, the pill, and its supply came from several sources in a halting and uncertain fashion. IUDs were in demand, but only a fraction of the government hospitals had trained staff and supplies enabling them to provide this method.
7. Quality of services was often poor. In some clinics IUDs were inserted with little counseling of clients or follow-up, and workers were not prepared to deal with rumors and problems. Pill clients were also inadequately briefed and service providers did not worry about switching clients from one brand to another, with a total of five brands being used in the program at one time or another. This led to complications and side-effects with which the staff was not prepared to deal.

8. Leadership commitment to the program fluctuated. While the president endorsed the program in 1965, he seemed to have second thoughts and seldom mentioned it after it was underway. Mid- and lower-level political and administrative leaders gave no indication of being in favor of the policy or the program and clients and field workers were aware of this. Opposition to the whole philosophy of family planning continued to be loud and recurrent in the media and in key groups.

9. No concerted information, education and communication (IEC) program was launched, and the family planning program remained “hidden” for all practical purposes. Given the fact that the government was advertising and propagandizing other development goals and programs, this suggested to many that the policy was not a serious one. Even pro-family planning officials felt that it was wise to maintain a low profile to avoid offending anyone.

This list of shortcomings and weaknesses of the program is firmly based on the reality of the period. In sum, the program Egypt created in 1965 to implement its policy had both strengths and weaknesses (see Box 2). It created, overnight by mandate, a nationwide service delivery program to implement the policy. This was a good beginning, but none of the vital follow-up steps—strong day-to-day leadership, staff training, logistical development, information and education campaigns—were taken. The result was a poorly led, badly managed, ill-sup-

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**Box 2**

**Strengths and Weaknesses of the First Phase of the Family Planning Program**

**Strengths:**

- Enunciation of a clear national policy favoring family planning for the first time
- Endorsement of the policy by top religious leaders
- Creation of a cabinet-level family planning policy board
- Making family planning officially a part of the responsibilities of the MOH
- Addition of family planning to the services provided at over 2,000 government clinics, hospitals and health stations

**Weaknesses:**

- Family planning was “incremental” to all other health services and the facilities and staff were employed only part-time
- No “dedicated” family planning logistics or training management systems were developed
- Private sector health-care providers were not involved
- No public information or education program was launched
plied and underfinanced effort to distribute pills using an untrained staff and inadequate existing health facilities both on a part-time basis.

Some commentators have referred to this phase as the "traditional family planning approach" (Gadalla, 1978), but this hardly seems fair. Even in 1966, most experts would have quickly seen the weaknesses in the actual implementation being attempted.

Overall Egyptian development strategy never placed family planning as a top priority. Rather family planning was always discussed in official development plans and strategy papers as one of four "lines of action" to deal with the problem of excess numbers, the other three being resettlement in new communities, reorganization of existing villages, and increased skills and productivity of the labor force. No sense of urgency was conveyed in any of the government planning documents about the growth of population.

The program performance was disappointing. After some initial success with both the pill and the IUD, program achievement seemed to level off and even to decline. By 1973 only two pill acceptors per month, on average, were recorded by family planning clinics and only one IUD acceptor per month in those clinics doing IUD insertions. The program never reached more than a fraction of the potential clients, and the staff became dispirited and apathetic about undertaking any new initiatives. Critics, foreign and domestic, quickly branded the program a "failure" and many drew the more sweeping conclusion that this proved that a "traditional," supply-oriented program would not work in Egypt (Warwick, 1982). The stage was set for the second phase of Egypt's program history, which was to take an entirely new approach, the so-called "population and development project" (PDP) approach.

C. THE SECOND PROGRAM PHASE, 1975-1985

The PDP approach was based on the assumption that innate cultural and psychological resistance to family planning was high in traditional rural, agricultural societies such as Egypt. People could not be induced to adopt family planning unless the underlying sociocultural "systems" were modified first. To be successful, the family planning effort would have to be merely one part of a major effort to totally restructure village life in Egypt. Thus, "development," broadly defined, was a necessary prerequisite to the fertility decline which was being sought (Bindary, 1972; 1973; 1982). One advocate explained simply that it was an effort to change the underlying social factors which in turn determined fertility rather than the more crude and direct method of family planning (Bindary, 1972).

The overall strategy was articulated in a document (Supreme Council for Population and Family Planning, 1975) that identified three dimensions to the population and human resource problem in Egypt. These were: growth, population characteristics and distribution. Thus, population quality (or characteristics) and location (distribution) were judged as equal in importance to growth (and hence to fertility). This approach was challenged by some donors as "playing-down" the family planning effort. Egyptian officials denied that this meant "playing-down" fertility control and said they were simply adding other factors to the picture while also retaining the family planning effort.

A dynamic, persuasive advocate of the development approach, Dr. Aziz Bindary, took over as director of the operational activities of the program. The program launched a series of comprehensive micro-level economic and social development schemes with an accompanying community-based family planning information and service delivery program. The sociocultural systems to be modified through the

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9. The problem with IUD supply is explained by the following note (IPPF, 1976, p. 3) "The government (Dr. Mazhar) plans...to include IUDs but he is determined to keep the fitting of these devices in the hands of the gynecologists...this idea is fundamentally sound."

10. At the time, there seemed considerable sociological support for this assumption. See: El-Hamamsy, 1972; Gadalla, 1968; Khalifa, 1973; and Rizk, 1973.
program were to be: family socioeconomic levels and well-being; education; women’s employment; agricultural modernization; industrial and non-farm employment; infant and child mortality levels; old age economic security; increased information; and increased social services including family planning. Taken altogether, these changes were intended to lead to a complete transformation of the traditional economic and social basis of life in rural-village Egypt. Rising family planning acceptance and declining fertility would, it was argued, follow naturally from these other micro-level development changes.

The Egyptian population and development planning (PDP) initiative came at a time when this particular paradigm was much in vogue among development specialists in the Third World and in donor agencies. The World Population Conference in Bucharest (1974) had been sharply divided over the best policy/program approach to dealing with sustained high levels of fertility in the developing world. One group continued to advocate supply-creating family planning programs coupled with modest demand-creating IEC efforts. A second group was hostile to the family planning approach on moral, ethical and philosophical grounds and because many felt that family planning “would not work” in the Third World. Egypt appeared to be an example of the failure of the “supply-oriented” approach and was so listed. The slogan that emerged and gained widespread acceptance was “Development is the best contraceptive.” Egypt’s new approach embodied this philosophy and was by no means seen as radical or controversial.

Dr. Bindary, the Egyptian Director, was frank to say that he did not think family planning services were the answer. He said: “The real solution, in my view, is the liberation of rural women and their entry into the workforce. This alone will lead to a lowering of the birth rate and to the solution of population growth in Egypt” (UNFPA, 1980). He described the new approach as addressing the “population problem in its entirety” but admitted that five to ten years might be needed for his program to show results. However, he maintained that it would certainly work. A highly sympathetic account of the program concluded that “What happens here will be clearly watched by the rest of the Arab World and by other Third World countries as well” (UNFPA, 1980).

The new program made very few changes in the existing organizational structure (see Figure 7). The top governing body was renamed the Supreme Council for Population and Family Planning with membership more or less unchanged and still chaired by the Prime Minister. Operations were directed by a Family Planning Board, headed by Dr. Bindary. Each governorate had a Regional Population and Family Planning Committee, chaired by the governor, who was to direct the various specific development programs in that area. At the local level, “population and development” activities under the Ministry of Local Government were added to the existing MOH and MOSA programs.

The key person at the village level was the raidat, a full-time multi-purpose female extension worker recruited from the area in which she worked, roughly one raidat per village. She was selected and supervised by a village advisory council of not less than 10 or more than 25 local leaders, who were paid fees for attendance at meetings and for other village development activities. The raidat was seen as a door-to-door contact person doing education, motivation and supply work with village women on nutrition, sanitation, environmental concerns, female income-generating activities, maternal and child health and family planning. The list of the raidat’s duties covered three single-spaced typed pages. Family planning was to be a part, but only a part, of a broad village-development effort working through and for rural women.

This approach was announced in 1975, with initial financial assistance from UNFPA. It was implemented in a series of stages, but by 1977 it had been put in place in 12 of the 26 governorates covering approximately 70 percent of rural women. The plan called for a gradual increase in coverage so that ultimately even the remote, sparsely-populated regions of Upper Egypt would also be included. This was, in fact, largely done by the early 1980s.
FIGURE 7
ORGANIZATION OF THE SECOND EGYPTIAN FAMILY PLANNING PROGRAM EFFORT (1975-1985)

Supreme Council for Population and Family Planning
(Chaired by P.M., included eight other ministries
plus director of CAPMAS)

| Population and Family Planning Board |
| (Executive Secretary plus Staff) |

Ministry of Social Affairs
Ministry of Health
Ministry of Local Government

Egyptian Family Planning Association
Other NGOs and PVOs
Govt. Hospitals
Govt. Health Posts and Clinics
Population and Development Project

Village PDP Councils
Raidat Field Workers

Many other donors also came into the picture. The World Bank supported construction of health centers (1973-77) and integrated health and family planning community-based activities in seven governorates (1979-84). IPPF aided the Egyptian Family Planning Association, and CARE, SIDA, UNICEF, GTZ and others supplied particular components or technical assistance. In the period 1977-79 each of the major donors took responsibility for one or more governorates in cooperation with the Supreme Council and the MOH.

By the late 1970s, USAID was also a major donor to PDP and the overall Egyptian family planning effort. USAID supported a successful experimental effort at integrated social service-family planning service delivery in one rural area (the Menoufiya Project, 1974-75), which in fact succeeded in almost doubling contraceptive prevalence from 18 percent to 30 percent in one year. This result seemed to provide support for the new population-development approach. USAID also supported expanded urban family planning services in Cairo through EFPA, IEC activities by the State Information Service, creation of training facilities and various other inputs. The size and relative importance of these USAID inputs to the program increased over time and by the middle 1980s, USAID was by far the largest donor to the program. (We will discuss these donor inputs in the next section of this monograph.)

The new program also saw the need to create a better database for monitoring program activities, particularly the key variables of contraceptive prevalence and fertility. To this end, Egypt participated in the World Fertility Survey in 1978-79 (the EFS) and conducted several other national surveys in the years before and after the EFS. The Population and Family Planning (PFP) Board was also in charge of nationwide IEC activities, which included creating institutional capacity to train family planning and health workers in contraceptive techniques, and promoting increased private sector involvement in the program. These were seen as national activities designed to complement the local level work of the raidats.
While the program was not just a family planning effort, specific family planning/fertility goals were adopted. These included: a reduction in the population growth rate from 2.1 in 1973 to 1.1 by 1982; a reduction in the crude birth rate from 33.6 in 1973 to 23.7 by 1982; and a reduction in the general marital fertility rate (annual births per 1,000 married women in the reproductive ages) from 236 in 1973 to 160 in 1982. The MOH also set detailed program goals that included: reaching contraceptive prevalence rates of 25 in the rural and 35 in the urban areas; increasing low parity acceptors by 25 percent; reducing pregnancies to women over age 35 by 30 percent; decreasing births of parity six and above by 30 percent; and increasing postpartum acceptance by 30 percent.

Dr. Bindary stated that these goals were neither optimistic nor pessimistic but instead realistic. Many observers, including most donors, agreed with this estimate and firmly supported the approach. The new approach embodied a completely different philosophy of how family planning could be made to work, and this seemed an interesting and attractive innovation.

An important, unintended result of the new set-up went unnoticed. The new approach effectively fragmented the overall family planning effort. The Ministry of Health continued to operate family planning clinics in its regular rural health bureaus, urban clinics and hospitals, but most outreach, national IEC and training was now under the new PFP Board. All private NGO efforts, including those of the Egyptian Family Planning Association, continued to be supervised by the Ministry of Social Affairs, but the IEC work was to be under the Ministry of Information. The Board was to coordinate efforts of all the other ministries, but it had no real authority or budgetary control over them and only a modest budget and staff of its own. The new approach was, in effect, a development scheme designed to do “demand creation” for an existing, totally separate family planning “supply” scheme. The approach assumed that demand could best be created by direct field worker contacts and that mass media approaches had a very limited role to play. It also seems to have taken for granted that supply was already in existence and that demand creation was the key to program success.

This new approach made no effort to address the specific shortcomings of the existing supply system pointed out by Gadalla (1978) and other authors. It also took a soft-sell, low-profile approach that avoided offending groups and individuals who were opposed to family planning. In fact, the flaws in the service delivery system listed above were being corrected slowly by the MOH over time. A separate department of family planning was established within the MOH in 1973 and a core of full-time persons began to develop who were capable of providing direction and leadership. In 1976 MOH made family planning an integral part of its program at all clinics and hospitals such that it was no longer an “overtime” activity. In 1977 MOH was given responsibility for all family planning service delivery. Training programs for clinic field staff were undertaken and 1,200 managers and supervisors, 6,000 physicians and 7,000 nurses from the public sector and NGOs were trained. Over 400 MOH clinics were upgraded and 100 new EFPA clinics opened in Cairo and Alexandria. A centralized contraceptive purchasing and distribution scheme was adopted and the efficiency of the supply system rose over time.

A national IEC project was launched through the newly-created Family Planning IEC Center in the State Information Service (SIS) in 1979. This center planned and executed a campaign to raise public awareness about the population issue and to build favorable attitudes about family planning. It made use of television and radio as well as print media, and organized discussion groups and local entertainments. The SIS/IEC activities were implemented through a network of local SIS centers throughout the country. These centers incorporated family planning into their ongoing work and collaborated with the PFP Board governorate offices. The important point to note is that these initiatives, primarily funded by USAID, did not flow from the PDP approach; they took place in spite of, not because of, the new PDP philosophy and structure.
The Egyptian PDP scheme was watched closely, monitored and evaluated. The first national fertility and contraceptive practice survey was conducted in 1974–75 (the Egyptian Demographic Survey or EDS) and prior to that only estimates based on program service statistics or small-area surveys were available to judge program impact. (These various surveys and the other program-related data are discussed in Annex 1.)

From 1974–75 onward, the situation changed radically with no fewer than seven large surveys being taken in the next 18 years. Three of these data collection efforts (1979, 1981 and 1983) were explicitly designed to measure the impact of the PDP program on demographic processes and, since the PDP was essentially a rural village program, so were these surveys. These overlapped with, but did not totally duplicate, other nationwide surveys done in 1979–80 (the Egyptian Fertility Survey or EFS and the Egyptian Contraceptive Prevalence Survey or ECPS). National surveys were also taken in 1984 (the second ECPS), 1988 (the first Egyptian Demographic and Health Survey or EDHS I) and 1992 (EDHS II). The State Information Service also commissioned two nationwide surveys to judge the impact of its media efforts in 1988 and 1989.

The first PDP evaluations based on the “rural surveys” were encouraging. Stycos analyzed the first rural survey and found that approval and awareness of family planning had risen in the areas covered by the program. Two analysts reached the same conclusion and found some indication of rising contraceptive prevalence and falling fertility in the “PDP areas” (Kelley, Khalifa and El-Khorazaty, 1982; Stycos et al., 1982). The PDP’s supporters were jubilant (Rowley, 1977). Unfortunately, these early hopeful signs did not hold up. By the mid-1980s it had become clear that contraceptive use had not risen faster in the PDP areas than it had anywhere else in the country and that fertility was virtually unchanged (Khalifa and Way, 1980; Stycos et al., 1982).

A follow-up to the Menoufiya Study was undertaken by the same researchers from the Social Research Center at the American University in Cairo in a village of the Beni-Suef Governorate. This study found that when family planning was made part of a comprehensive village development effort (as in the PDP), rather than being the main focus of the field workers (as had been the case in Menoufiya), no effect on contraceptive prevalence was observed (Gadalla et al., 1987). This further supported the findings of the larger surveys.

Evaluations of other aspects of the PDP program were equally mixed. Stycos and his group continued to follow the PDP areas (Stycos et al., 1988) and could find no evidence that contraceptive prevalence or fertility had been affected by any of the development activities underway in the rural areas under study. They also found that the development activities as such—the many, varied social betterment and “uplift” activities that the raidats were to have undertaken—had very little impact on the areas. Indeed, a majority of the women and men interviewed in the areas were unaware of the existence of the PDP activities and had experienced no contact with any project staff. Family planning had not worked very well in the PDP areas, but evidently nothing else had either.

The strength of the PDP approach, according to its advocates, was the locally-recruited and supervised village worker, the raidat. In practice they turned out to be its greatest weakness. A 1982 USAID evaluation noted: “Despite the importance of the raidats there have been continuous difficulties in recruiting and keeping them because of the low pay (a maximum of LE 8 per month depending upon performance) and the unrealistically high expectations for them as indicated in the job description (which covers three pages single-spaced of typed duties)... Studies by the PDP have been candid in their conclusions indicating the need for better selection, training and supervision... The raidat remains not a regular government worker because the Board does not want to create another large cadre of civil servants.”

Thus, the approach, however fine the theory, never in fact proved workable. Once launched, however, it proved difficult to modify in any basic way. Its supporters argued that it must be given time to prove itself,
and this was a persuasive argument. This “testing” period lasted ten years, and it was 1985 before the basic strategy was reexamined. In a thorough critique of the program Omran (1980) concluded, “The Egyptian family planning program is not achieving its goals. Its future is bleak if things continue the way they are now.” This was in 1980 and within a few years most other observers agreed with this conclusion. Omran’s detailed comments are worth repeating even today.

1. The “high-level” policy guidance by the Supreme Council for Population and Family Planning did not, in fact, exist. The Council rarely met and the Population and Family Planning Board, intended to be the permanent secretariat for the Council, had few functions and little real authority. There was open skepticism about the strength of the presumed commitment by the top government leaders to the goals of the family planning program.

2. The Ministry of Health continued to be the primary service provider for 80 percent of the clients and the MOH approach continued to be clinic-oriented. The MOH did not assign a very high priority to family planning, which competed for the time of the field staff. While 3,600 MOH service facilities of all types were listed, a large share of these did not offer meaningful services. Nearly all the staff continued to work part time.

3. The supply of pills to the field was often interrupted because, although locally manufactured, they required imported raw materials, and foreign exchange and licensing problems occurred from time to time. When this happened, clients often had no alternative method to use.

4. The performance payments made to clinic staff were based on the number of pill strips distributed and IUDs inserted. Thus, the system discouraged staff from introducing new methods. Also, the payments quickly came to be seen as a regular “fringe benefit” to salary, and reporting on clients served and supplies distributed was often unreliable as a result.

5. No effort was made to see that supplies were available in the private sector even though it was clear that most people obtained most of their medical needs from pharmacies and similar outlets. The EFPA was operating 360 clinics by 1970, mostly in Cairo, Alexandria and other cities of Lower Egypt, but no effort was made to bring other private medical practitioners or pharmacists into the program.

6. Managing the many and varied development activities—women’s clubs, employment-creation, and so on—consumed most of the time of the field workers, the raidats, and the local village-level committees. However, neither the raidats nor the committee members actually functioned as family planning outreach workers.

7. Clinical family planning methods were virtually ignored. IUDs were not available in all hospitals and sterilization was not a part of the program. This made the weaknesses of the logistical system for supplying the pill even more serious.

Omran’s criticisms of the program cover not only the demand-creating PDP activities but also the pre-existing and still ongoing supply-generating program largely run by MOH and MOSA. Many of his criticisms echo Gadalla’s comments of nearly ten years earlier. The criticisms were valid, although some were already on their way to being remedied.

Overall, the PDP had many apparent conceptual strengths but also critical practical weaknesses (see Box 3). On balance the practical weaknesses seemed to overwhelm the presumed advantages. The PDP stalwarts fought a long rear-guard action against the critics. Some donors continued to be emotionally attached to the PDP approach and, even in the face of the clear lack of results, recommended continuing the program (Van Ginnekin et al., 1985).
STRENGTHS AND WEAKNESSES OF THE SECOND PHASE OF THE FAMILY PLANNING PROGRAM

STRENGTHS:

- Key agents were local women workers
- Activities were integrated with other development programs
- Dissemination work was person to person to avoid controversy
- Making family planning officially a part of the responsibilities of the MOH
- Activities involved many ministries and many local groups

WEAKNESSES:

- The local women field workers were underpaid, poorly-trained and overworked leading to low morale and high turnover
- The approach seemed to stress other development objectives and family planning was often forgotten
- Private sector involvement continued to be poor
- Public information and education work was absent

A revised government strategy was announced in 1980 that aimed at: expanding and intensifying the PDP efforts; upgrading contraceptive services and placing greater emphasis on modern methods; and expanding IEC efforts (Supreme Council, 1980). This change seems to have followed from several critical evaluations by donor groups.

Another revision of the strategy followed a national conference on the future of the program held in 1984 under the sponsorship of the Council but with substantial participation of leading international experts (Kantner, 1984; SCPFP, 1984). Without totally rejecting the PDP concept, the conference urged the Egyptian government to try other approaches as well, including expanded service delivery. These recommendations carried weight and, in 1985, 10 years after the PDP approach was launched with such fanfare and high hopes, the emphasis shifted to improving services and to greater IEC work. In effect, the PDP was quietly dropped. (In fact, the raidat and the village councils still exist to this day at least on paper.)

Thus, the situation in the mid-1980s appeared to be that, after nearly 20 years of having an official policy and program in place aimed at reducing fertility, persons and groups inside and outside Egypt who knew the program best were discouraged about the past and uncertain about the future. When the PDP had been adopted in the early seventies, the earlier period had been referred to as the “traditional, supply-oriented” approach, so as to contrast it sharply with the “development” approach being undertaken. By most standards the Egyptian efforts had been both persistent and pragmatic. When one approach did not work, another had been tried, but neither had “worked” according to many observers. Experience seemed to prove what many people had been saying all the time—that family planning simply was not Muslim or Egyptian and that it would catch on only very slowly or perhaps not at all in this part of the world (Warwick, 1982).

D. THE THIRD PROGRAM PHASE, 1985-PRESENT

In fact, these judgements were premature and since then, contraceptive prevalence has risen sharply, and fertility has fallen dramati-
The 1992 Egyptian Demographic and Health Survey reports that current use of any contraceptive method was 47.1 percent of all currently married women, while ever-use of any method was nearly 65 percent. The total fertility rate (for the three years preceding the survey) was 3.9, and desired family size was even lower. Fertility had fallen by a full child per couple in 10 years and current prevalence had nearly doubled since 1980. Sixty percent of married women with two children did not want another child and most of those who did want another child indicated a desire to wait at least two years from the time of the survey. Knowledge of modern contraceptive methods approached 100 percent of married women and only 5 percent indicated disapproval of family planning.

An extremely important change that is related to the take-off of the program was the creation of the National Population Council (NPC) by Presidential Decree No. 18 of 1985. The NPC took over from the Supreme Council, with the membership remaining much the same. The new Secretary General of NPC, Dr. Maher Mahran, was given broad responsibilities for managing all the central functions previously under the family planning board. He also provided much more vigorous leadership than had been known before. President Mubarak continued to interest himself in the fortunes of the program and, from 1982 onward, spoke out often and strongly in favor of family planning. This increased emphasis culminated in the creation of a Ministry of Population and Family Planning in 1994 (see Figure 8).

A close review of the events of the period 1985 until the present suggests that a series of improvements and developments occurred that had a major cumulative effect on program coverage and effectiveness (see Box 4). We identify these as follows and relate them to the rising prevalence rate (see Figure 9).

1. The use of a mass media public information and education program by the State Information Service moved into high gear. After earlier efforts to do mostly general "population awareness" messages, the IEC effort moved to more specific family planning advice and information. Messages included quite detailed discussions of various methods, side-effects and related health issues. The campaign took a variety of formats, including "soap opera" dramas, musical presentations, audience participation-interviews, and purely factual informational messages. The decision to move into these more explicit and direct approaches was in response to evaluations of the earlier campaign, which had achieved only a limited impact (Bogue, 1983). The new approach was based on "learning from experience." Although the approach provoked criticism from conservative quarters and was viewed as risky by some supporters of the program, the new messages and shows quickly became popular and criticisms waned (Ministry of Information, 1994a and 1994b; Johns Hopkins, 1994b and 1994c).

2. A contraceptive social marketing project (CSMP), managed under the name of "The Family of the Future" (FOF), was launched to provide contraceptive supplies at subsidized prices to private physicians and pharmacists (Triton Corporation, 1985). The CSMP quickly became the major source of pills for the public in general and of IUDs for private physicians. Although the initial focus was in urban areas where it worked closely with the existing network of private NGO clinic facilities, FOF's distribution mechanism was highly effective, and soon FOF supply networks virtually covered the country. Contraceptive supplies, particularly pills, became available in the most remote rural areas where none were available previously.

3. The improved IUD, the Copper-T 380A, was donated by USAID and rapidly became popular throughout the country. Later the injectable was added and field trials began with the new Norplant® implant method.

4. In-service training of family planning service providers was expanded with the creation of training institutions in Alexandria and Cairo for this purpose. The Clinical Services Improvement (CSI) Project undertook the creation of model NGO clinics and training, while the System
FIGURE 8
PROPOSED ORGANIZATION OF MINISTRY OF POPULATION AND FAMILY PLANNING

MINISTER

CAIRO DEMOGRAPHIC CENTER
- Demographic Research
- Demographic Training

GOVERNORATE AFFAIRS
- Policy
- Liaison

GOVERNORATE OFFICES

TECHNICAL SECRETARIAT
STRAategic Planning/Evaluation
- Policy
- Contraception
- Institutional Development

ADVISORS
- Policy
- Contraception
- Institutional Development

MINISTER'S OFFICE
- Chief of Staff
- Budget Planning/Allocation

EXECUTIVE COMMITTEE

Planning/Monitor/Evaluation
- Intersectoral Program Planning
- Strategic Assessment
- Implementation Monitoring
- Sustainability
- Reports/Analysis

Resource Mobilization
- Resource Mobilization (Governorate, Central, Intl)
- Advocacy (Leaders, Communities, Women’s groups)
- Mass Media
- Interpersonal Communication

Human Resource Dev.
- Internal Staff Dev./Training (Central, governorate
- External Multi-sectoral Staff Tr.
- Internal/External Training Coord.

Fam. Health Facilitation
- Program Strategies
- Technical Supervision
- Private Sector/NGO’s
- New Initiatives
- Removal of Regulatory Controls

Information Research
- Service Statistics
- Population Information
- Research Mgt./Dissemination
- CDC, Applied Biomedical, O.R.I.
- Data for Decision Making

Mgt./Finance/Adm.
- Financial Mgt.
- Personnel Mgt.
- Purchasing/Store
- Data Management System
- Organizational
Box 4
THE POLICY/PROGRAM TURNING POINTS

• The announcement of the policy and beginnings of the service delivery program, 1965
• The PDP approach, 1975-1985
• A contraceptive social marketing/private sector initiative, 1982 to present
• The creation of the NPC in 1985 and its new leadership
• The refocusing of the mass media IEC campaign toward practical family planning information program, 1985
• The addition to the program of new contraceptive methods (the Copper-T IUD, in particular) thus improving client choice, from 1985 onward
• A clinical services improvement (CSI) effort for upgrading the quality of contraceptive services, 1987 to the present
• Creation of a comprehensive family planning services system in the MOH covering logistics, performance reporting, training and supportive supervision, 1988 to present

Figure 9
PROGRAM TURNING POINTS AND CONTRACEPTIVE PREVALENCE RATE

Development Project (SDP) within the Ministry of Health worked to improve facilities and staff competence. Quality of services rose and the drop-out rate fell.

5. As noted above, the Population and Family Planning Board was replaced in 1985 by the National Population Council, a more comprehensive agency covering all central support functions. New leadership in the person of Prof. Maher Mahran was provided. NPC emphasized IEC, broadened client choice and, above all, frequent endorsement by top leaders. It quietly dropped the previous emphasis on the "population and development" approach.

Further changes followed NPC's creation and by the late 1980s the program had come of age and began to function as never before. Some of the leap forward came from deliberate new tactics—the refocused IEC effort and the CSMP/FOF—but much of the improvement came from simply doing things better. The sharp rise in the flow of donor funding during this period is also part of the story, since most of the new and/or improved tactics were connected with specific donor-funded projects. (Many of these specific programmatic inputs...
were funded by various USAID and other donor projects. We will discuss them in some detail in the next section.) These step-by-step changes and improvements to the program can be related directly to the rising level of contraceptive prevalence since 1985.

The program continues to grow and change. A "revised population strategy" covering the period 1992-2007, resulted from a series of working groups and symposia conducted by the technical secretariat of the NPC in 1991-1992 (NPC, 1991). The new strategy aimed to increase the contraceptive prevalence rate from 47.6 in 1991 (PAPCHILD) to 53 in 1997, to 59 in 2002, to 65 in 2007. This increase in prevalence was expected to reduce the birth rate from 32 in 1991 to 25 in 2007. The strategy also links demographic/family planning goals to changes in the areas of infant, child and maternal mortality, female literacy, and related environmental and economic developments.

Recent statements (NPC, 1994; Mahran, 1995) repeat these goals but now include the goal of reaching a CPR of 74 percent by 2015, implying replacement level fertility. The policy identifies three main ways of achieving its objectives: further expanding and upgrading family planning services with special reference to rural areas; improving health services particularly for infants and mothers; and using IEC to change negative concepts and misinformation related to family planning.

It should be noted that in October 1993 the Secretary General of the NPC was also named Minister of State for Population and Family Welfare with oversight responsibilities for family planning service delivery of the MOH and the NGOs, including EFPA, as well as research activities of the Cairo Demographic Center. A substantial reorganization of the NPC is currently under discussion by the government and by various donors who have been asked for assistance in creating a new ministerial structure.

A final point needs to be made about the history of the program. The Egyptian program was never really a failure. The pessimistic conclusions in the mid-70s or mid-80s were wrong on two main counts. First, they were based on an incorrect understanding of the history of family planning efforts in Egypt. Neither the first "traditional" family planning phase nor the second "population and development" phase actually succeeded in doing what they set out to do because neither ever created a meaningful implementation apparatus. In the most basic sense, neither approach was ever "tested" (Moharram and Richardson, 1984).

When efforts to improve early program performance were made, they took the wrong direction, further confusing the situation. The more astute critics of the first, so-called supply-oriented phase clearly identified why the program was having so little impact. Yet, these weaknesses were not addressed when the program was reorganized. Instead a whole new PDP demand-oriented apparatus was created parallel to the old MOH supply apparatus with a new set of problems and weaknesses of its own. Neither program effectively came to grips with either supply or demand. The great debate over the Bucharest philosophy, as well as the supply versus demand arguments, were largely irrelevant to the real situation at the village-neighborhood level.

The second reason that the pessimistic conclusion about the program was wrong emerges from an objective look at program experience (see Table 16). Even the very early program shows clear increases in both facilities and utilization. The longer-term perspective makes clear that, regardless of the ups and downs of the programmatic effort and in spite of changing philosophy and approach, contraceptive prevalence has risen and fertility has fallen in Egypt slowly but steadily ever since about 1960. (We use 1960 as a base point since this was before the first policy statement was issued.)

The estimated 1960 CPR for Egypt as a whole was 5 percent of all married women in Egypt. (Figure 9 presents these data.) Dating the program from about 1965 there evidently was a modest program impact and modern contraceptive usage apparently rose to 10 percent of currently married women by 1970.

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11 The title was changed to Minister of State for Population and Family Planning in January 1995.
The first national prevalence survey (1975) reported usage as 26 percent. Prevalence did level off and even declined slightly during the PDP period, from 26 percent in 1975 to 24 percent in 1980. By the mid-80s the rate was rising again and reached 37.8 percent in the 1988 EDHS and 47.1 in the 1992 EDHS. Thus, only briefly during the PDP phase did prevalence fail to rise over the entire 30-year history. Perhaps the PDP failed, but as we have noted, it was never really more than an adjunct to the service delivery program.

From its level of 6.7 in 1960, the total fertility rate fell to 5.5 by 1975-76, 5.2 by 1979-80, 4.4 by 1986-88 and 3.9 by 1990-92. The PDP phase does not seem to have led to a reversal of the downward trend in fertility, but the decline from 1975 to 1980 was slower than that in either the earlier or later periods. Overall, the record shows a 40 percent decrease in fertility over a 30-year period, a decline in fertility as rapid as that in Thailand, Korea or other countries in the developing world representing much-heralded success stories. Thus, the program was not a “failure” in 1975 or 1985, and it did not magically become a success overnight in 1990. People seem to have expected too much too soon of the program and to have given up on it just as the cumulative efforts were beginning to bear fruit. By 1985, the seeds of an effective program had taken root, and success required only patience and hard work.
VI. THE ROLE OF FOREIGN DONORS

A. BACKGROUND

The official policy and program in Egypt precedes by nearly a decade any major financial involvement by foreign donors. In the 1960s assistance came chiefly from private nongovernmental research and action groups including the International Planned Parenthood Federation, the Population Council, the Ford Foundation, the Rockefeller Foundation, and the Pathfinder Fund. The aid supplied was in the form of technical advisory assistance and contraceptive commodities. Much of this assistance flowed to the quasi-governmental Egyptian Family Planning Association as well as to the government Population and Family Planning Board. This pattern of private educational and philanthropic groups leading the way was found in nearly all developing nations launching population programs in the 1960s. Egypt was in the “first generation” of such programs along with India, Taiwan, Thailand, Kenya and a few other countries.

Prior to about 1970 most of the major bilateral donors were not involved in population/family planning issues. The United Nations Fund for Population Activities (UNFPA) was created in 1968 and other UN involvements followed. The Swedish Government SIDA began work in the mid-60s and the U.S. Agency for International Development (USAID) was authorized by the U.S. Congress to begin family planning assistance in 1968. World Bank interest in population and work by other developed countries dates from about the same period.

By the early 1970s, the large international donor agencies began to enter the picture in Egypt as elsewhere. These donors quickly came to play important roles in supporting the program and, at present, donor support accounts for about half of all local expenditures (see Table 17).

B. THE ENTRY OF INTERNATIONAL DONORS

The United Nations Fund for Population Activities provided contraceptive supplies and technical assistance and supplies for biomedical research beginning in 1969 (UNFPA, 1979). These activities were implemented through UNICEF and WHO and were valued at US $300,000. In 1971 a five-year agreement was signed including US $6.4 million of commodity and technical assistance. This was the first large-scale foreign aid provided to the Egyptian program, which resulted in a doubling of PFPB’s budget. A second five-year agreement for US $10 million was signed in 1976 with the funds going to support the Population and Development Planning (PDP) initiative already underway in seven governorates. Funds were provided for importing raw materials and commodities for local contraceptive manufacture, biomedical and statistical research, strengthening the managerial capacity of the Population and Family Planning Board, and assistance to CAPMAS in taking the 1976 population census.

The third five-year agreement, covering 1981-85, was in the amount of US $15 million for a similar portfolio of subprojects, including analysis and dissemination of demographic data by CAPMAS, continued support to the PDP program, further strengthening of the PFPB, new efforts in formal and non-formal population education, and improvement of the family planning service statistics system. The fourth five-year agreement ran from 1986 to 1990 and programmed US $13.3 million. The fifth five-year UNFPA project for the period 1992-1997 provided US $15 million.

Thus, UNFPA was the first major donor in the picture. Over the period 1971-1992, approximately US $45 million was programmed of which $20 million was spent. Funds chiefly supported efforts to improve the flow of contraceptive supplies, assist the PDP rural village outreach program, improve the demographic
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<td>-</td>
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Pre-1976 ($000)
USAID (all) 1,028
IPPF 1972-76 666
World Bank 1973-74 5,000
CARE 1971-1976 12,000
UNFPA 1971-74 8,000
Ford Foundation, Pathfinder, Pop. Council, DANIDA, SIDA, JICA, UNICEF, WHO, AVSC, Others 4,000

TOTAL $30,594

Source: See accompanying text

* Bilateral funds only, first period of support refers to 1978-1982
** Includes expenditures for $4.1 million in contraceptives actually delivered in 1992-1994
database, and strengthen the management capacity of the program. Implementation of these projects has been uneven but has improved over time. The internal UNFPA evaluation reports have been generally favorable and relations with the Egyptian government seem to have been harmonious. UNFPA clearly had a major advisory role and helped shape the PDP program when it was in the formative stage. UNFPA has also been a major supplier of contraceptive commodities to MOH.

The World Bank arrived on the family planning scene in Egypt in 1973 with a five-year US $10.5 million IDA credit for a project “aimed at strengthening the family planning component of Egypt’s new integrated health system” (World Bank, 1973). It planned to build and equip 22 health centers, 12 polyclinics and 6 nurse training centers; to purchase 150 vehicles for use by the program; and to undertake a research-cum-action home-visit program in several rural areas. Construction was later cut back to nine health centers, four polyclinics and one training center. The vehicles were purchased but the research element languished. Only about half the funds were actually spent, and the project was termed a “learning experience” for both sides. A later World Bank report said, “A major benefit of the first project was the establishment of a meaningful dialogue between the Bank and policymakers in the health and population fields in Egypt” (World Bank, 1978).

The second World Bank project covered the period 1978 to 1982 and involved an IDA credit of US $33 million (of which US $8 million was an ODA grant). It continued efforts to build and equip new health facilities, to train nurses (dayas or local midwives were added later), to increase the availability of transport and to improve IEC and outreach. Sixty-five percent of the project was for construction, vehicles and equipment. The project focused much of its activity in seven governorates that had been “assigned” to the Bank by the government under the PDP program. About two-thirds of the funds available were actually spent by 1985 when the remaining funds were deobligated. (Only about one-third of the ODA funds were used and ODA withdrew from the project before the planned termination date.) No further IDA concessional loan funds were available from the Bank for a new project after 1982 and the Egyptian government declined to borrow at regular Bank rates and terms. Hence, no further Bank project was negotiated after 1982 and the “dialogue” ended at that point.

The Federal Republic of Germany (GTZ and KFW) from 1977 to 1984 supported upgrading of rural health centers in three governorates, training staff, and providing technical assistance. From 1982 to the present, KFW has supported the purchase of commodity imports for the local manufacture of oral contraceptives. The Danish Development Agency (DANIDA) provided funds to construct a new headquarters for the Family Planning Board in Cairo. The Netherlands Government supported the PDP effort that was not tied to any particular governorates and undertook research-action projects in two areas. The International Planned Parenthood Federation has continued to support EFPA. Other donors such as the Ford Foundation, the Population Council, the Rockefeller Foundation and other nongovernmental and governmental agencies have provided intermittent support to various elements of the program.

C. THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

USAID has supported many aspects of the family planning effort in Egypt continuously since 1977, both indirectly through its financial support to private sector U.S. and other agencies working in Egypt and directly through a series of large bilateral agreements with the Egyptian government (GOE). USAID involvement has grown over time in size and complexity and, for at least the most recent ten years, has supported a very substantial share of total GOE and private sector activities. It is impossible to understand the way in which the GOE program has developed without understanding the portfolio of projects that USAID has been funding, since this portfolio is nearly a list of the major components of the GOE program as well. For this reason we will trace the history of the changing USAID project portfolio in some detail.
FAMILY PLANNING I BILATERAL

USAID financial assistance to the GOE program goes back to 1971, but for the first several years, the aid typically was channeled through other U.S. or international implementing agencies—the Association for Voluntary Sterilization, Pathfinder Fund, the Population Council, the Planned Parenthood Federation of the U.S. and others. These activities continued, but direct USAID-GOE activities began under a five-year (1977-1982) bilateral agreement signed in 1977 (USAID, 1977). The original agreement was for US $17 million, but a series of six amendments added new objectives and more funding until the final total was over US $65 million. Activities initiated under this agreement continued through 1987. The GOE had been in the population-family planning business for some time when USAID arrived on the scene. By 1977 the formative first phase of the program was over and the second PDP phase was well-launched. Thus, USAID's first project was a bundle of "targets of opportunity," aimed at assisting ongoing activities and filling in gaps. The project paper stated a firm commitment to family planning in Egypt. "The U.S. should be prepared to share fully in the costs of assuring the supply of appropriate contraceptive materials and supplies required to respond to growing demand in Egypt."

Initially, the goals included: efforts to increase and regularize the supply of contraceptives; support to the staff of the newly-created family planning division in the MOH; training in family planning for new medical and paramedical graduates; long-term and short-term training outside Egypt; and support for experiments in the transfer of new family planning technologies to Egypt. USAID documents are frank to say that this first project lacked a clear central theme or approach. Specific objectives were targeted but in an opportunistic fashion. As the project progressed new targets arose and new objectives and new funding were added in the series of amendments already mentioned. A major addition was Amendment No. 2 (July 1980) that funded operation of an integrated health and family planning rural outreach program in Menoufiya Governorate, implemented through the Social Research Center of the American University in Cairo. This program was similar in philosophy to the PDP but involved greater field worker density, more concentration of family planning and a greater degree of supervision from outside. It was seen as an "experiment."

The USAID project also directly supported a growing share of the PDP, and by 1981 some 512 village development councils in 12 governorates were funded by USAID. (As was noted above the GOE "assigned" major donors—UNFPA, USAID, and the World Bank—to each of the PDP-covered governorates. CARE, UNICEF and other smaller donors were fitted into this framework as well.) Amendment No. 3 (December 1981) added support for expanded IEC activities through ongoing activities at the State Information Service. SIS work had been funded since 1979 by UNFPA, but the new project included for the first time in Egypt a substantial media "blitz" using radio, television, as well as the print media, local cinemas and discussion groups. As the SIS project progressed, the approaches became more and more varied, sophisticated and effective, and came to include TV "soap operas" starring well-known cinema personalities, radio quiz programs, family planning poetry, and appropriate religious readings.

At the moment that SIS began this large-scale effort, "going public" with family planning in Egypt was still judged by many to be controversial and even dangerous. Some felt that it might lead to a backlash of opposition from the still powerful religious fundamentalists who did not follow the guidance of Al Azhar and other seats of Islamic learning. Others felt that it would not be effective since women would take advice on such matters only from trusted friends and family. As late as 1980, this was still the advice being given by many "experts."

As matters turned out, this was wrong. The SIS program began with a campaign to make people generally aware of family planning and then moved into discussion of how having many children complicated efforts to feed, clothe and educate one's family. The sec-
ond stage of the campaign turned to frank discussions of specific contraceptive techniques. These new highly visible programs were controversial to begin with since there really were no family planning IEC activities in Egypt before the SIS program. But they quickly became very popular and also proved highly effective. Studies commissioned by SIS showed very high approval ratings with the public and also that people did learn from the campaign. Family planning became commonplace very quickly.

Also added as the project moved along was support for a newly-created “Urban Community Distribution Program” launched in 1979 (and officially chartered by MOSA in 1980) by the Egyptian Family Planning Association. Beginning in Cairo and then spreading to Alexandria and other cities of the Delta, this aimed at bringing private sector medical care providers into the business of supplying family planning services and commodities. In 1981 this program was renamed “Family of the Future” and began operation nationwide, training physicians and pharmacists, ensuring that they had supplies to distribute and ultimately operating a network of model clinics to provide high-quality services in urban areas outside the regular government hospitals and other facilities. It then operated independently of the EFPA, with its own board and its own field staff (Portugal, 1995).

By 1981 the USAID project had grown in size and complexity, spreading out to nearly all major aspects of the GOE program, including both supply-strengthening and demand-creating activities. USAID had also become the largest single foreign donor to the program. However, the program was still over 90 percent a pill program. In 1980, about mid-way through the first USAID population project, USAID undertook a population sector strategy review in an effort to see where its “opportunities” were leading it and the GOE program (USAID, 1982). This review provided an excellent overview of the program at that point in time and contained some very specific suggestions about future strategy. The review noted that rural and urban Egypt were fundamentally different societies and argued that the same approach to a family planning program would not work in both places. It advocated a “dual strategy” with different institutional modalities and delivery schemes being employed in rural and urban areas.

The rural areas lacked both contraceptive supply outlets (clinics, pharmacies, private physicians) and strong public demand. The ongoing PDP approach had been tailored to this situation and the field staff of raidats and local committees were the chosen modality. Evidently some doubts were already being felt about the actual PDP impact so the strategy document proposed trial efforts to increase the density of field workers and to focus their efforts on re-supply of contraceptives at clients’ homes. The Menoufiya (and a bit later, Beni-Suef) action-research projects clearly were the implementation of this recommendation.

The urban areas were reasonably well-serviced by private sector health-care providers so the approach here could be different. The emphasis could be on motivating, training and supplying these private sector agents (pharmacies, physicians, others) so they would provide a range of quality contraceptive choices to the public. The existing Contraceptive Retail Sales scheme begun by EFPA was specifically mentioned as a forerunner. Large-scale advertising and promotional efforts were seen as the natural corollary of this approach.

The strategy document also noted that the Egyptian family planning effort had not, in fact, received high-level support over time. It spoke of “the thirty years of minimal official concern” over rapid population growth and urged that national leaders make clear and frequent statements endorsing the goal of family planning, and that this be made a high priority at all levels in the government.

This USAID strategy review seems to have had an impact on GOE policy. A later GOE report follows closely, without actually repeating, the USAID document. The “New National Strategy Framework for Population, Human Resource Development and the Family Planning Program” (SCPFP, 1984) adopted many of the specifics of the USAID report, particularly the new approach in the urban areas. It represents a definite broadening of the PDP approach. It did not dismantle or abandon the PDP (indeed much of the PDP apparatus re-
mains in place on paper at least in rural areas even today) but added important new elements to the overall program. It represents a bridge between the PDP and the later NPC strategy. As was noted above, not long after this review came a major national conference on the future of the program convened by the Supreme Council.

**Population/Family Planning II Bilateral**

The second USAID project was signed in January 1983. POP/FP II was budgeted for US $102 million and, while designed as a five-year project, actually ran through 1994 and spent US $112 million (USAID, 1993). The underlying assumption clearly was that the first project had achieved significant results. The tone was distinctly optimistic. “Egypt does appear to be on the eve of a demographic transition...” The new project was built on the same “dual strategy,” but many new subprojects were added. Urban services continued through the FOF and EFPA, including the new Clinical Services Improvement (CSI) Subproject; support for rural services continued through the community-based PDP. Expanded IEC was planned through the IEC Center in the SIS. Seven areas were identified for subprojects: commodity supply; community-based distribution; service improvement through the MOH; promoting private sector supply; family planning IEC; research, statistics and policy studies; and the use of population intermediaries to promote new technologies.

The next few years were years of transition for the GOE program and clearly this generated some concern on the part of the USAID project managers. Major evaluations and/or assessments of the USAID activities had taken place in 1982 (USAID, 1982) and again in 1986 (USAID, 1986), with mixed and conflicting results. The 1982 evaluation had been extremely cautious. “It is conceivable that a fertility decline could take off in the near future...but no one can be confident of such an outcome.”

Curiously, it indicated that no data were available on the level of contraception when, in fact, the results of the EFS (1979-80) were in hand, as well as the earlier (1974-75) NFS. Comparing the two should have suggested that the CPR was rising and the TFR falling. The report also spoke casually of “weak demand for contraception” but failed to note that the program was still a one- or, at the very most, two-method program. During this period there were strong pressures within the USAID/Cairo Mission to sharply reduce or even end support for the family planning program.

The 1986 evaluation came at a particularly troubled time. NPC had just been created from the former Population and Family Planning Board, and the top leadership had changed completely. Several of the ongoing projects had run into serious management problems, including the Family of the Future, which operated the very successful contraceptive social marketing program. Its financial and management problems eventually led to its demise (1991), but the function was assumed by other structures. The evaluation report recommended a more sharply focused approach by USAID stressing four pillars: policy dialogue, services, IEC, and research. The PDP emphasis, still present as late as 1983, had been dropped altogether when analysis of the Beni-Suef demonstration project showed that the multipurpose field worker, as opposed to the single-purpose family planning worker used in the Menoufiya Project, approach simply did not work. This definitive small-scale study, added to the mostly negative earlier evaluations of the PDP, effectively finished the PDP idea in Egypt (Gadalla, Nosseir and Gillespie, 1981).

The 1987 Project Amendment, which added several major new components, also contained a brief and highly critical review. The tone was surprisingly negative: “The population problem in Egypt is serious and getting worse... little discernable impact on fertility reduction [can be seen]... it is appropriate to raise the fundamental question of whether the current USAID population program is appropriately designed to overcome the basic problem of high fertility” (USAID, 1987). It then identified four constraints to fertility control: policy constraints (e.g., legal and administrative supports for high fertility that remained in place); human constraints (e.g., restrictive socio-cultural and religious traditions); institutional constraints (e.g., weak health and family planning programs); and technical constraints
(e.g., insufficient method mix). Top leadership of USAID/Cairo was disturbed by the tone of this review as well as by the slow progress and came close to ending USAID’s involvement in population and family planning activities in Egypt.

Having stated this case, the Project Amendment then considered and rejected an entirely new approach based on changes in values or socioeconomic variables (the so-called “beyond family planning approach”) and chose instead a renewed effort to improve contraceptive services. It stressed the need to make the existing system do a better job rather than any major new programmatic departures: “It is mostly all there...it just doesn’t work very well....”

From 1987 on, the USAID portfolio of subprojects grew rapidly, as did the volume and scope of GOE and private sector activities. It seems fair to say that this period marked the coming together of the program. Success lay just ahead even though this was not clear at the time. In retrospect, the strategy of making existing components work better was absolutely correct and finally began to pay off. USAID also added several major new initiatives affecting services in both the private and public sectors.

1) Private Sector Initiatives

The Clinical Services Improvement Subproject (CSI) was launched in 1987 and was “designed to overcome EFPA’s major weaknesses through establishing new and upgrading existing physical facilities and equipment, establishing effective management systems..., developing effective systems of community outreach.” It was ultimately to extend to some 112 clinics in all the urban areas of 20 governorates, including many in Upper Egypt. These services were on a fee-for-service basis, with the proceeds being used for recurrent costs, including salary and performance bonus payments to the health-care providers making up the staff. The subproject aimed at ultimate self-sustainability (Cobb et al., 1993b).

The management of the Contraceptive Social Marketing Subproject (CSM) was changed in 1991 to the EFPA from the troubled FOF (SOMARC, 1993). The FOF Association, however, began legal proceedings that hampered the progress of the new CSM. These disputes slowed down but did not stop the flow of commodities and services. The CSM activity continued to grow rapidly, and it is now under the management of two commercial private sector distributors after the GOE requested USAID to discontinue its implementation through EFPA.

USAID subprojects also provided training and supplies to numerous other private sector groups and institutions to bring them into family planning service provision. These included: Private Practitioners Family Planning Project with the Egyptian Junior Medical Doctors Association (EJMDA) to train physicians and their assistants in family planning (JHU, 1994a); Comprehensive Family Care Project with the Coptic Association for Social Care (CASC) to establish and maintain clinics and outreach activities; Rural Community-Based Family Planning Project with the Coptic Evangelical Organization for Social Services (CEOSS) for community-based work in 50 rural villages; Governor’s Council of Women for the Development and Family Planning Training Project with the Institute for Training and Research in Family Planning (ITRFP) in Alexandria to develop leadership skills and family planning knowledge among women leaders from across Egypt; and Training Professionals in Family Life Education and Counseling with ITRFP to train teams of family planning counselors for work with EFPA in 12 governorates; and Demonstration Family Health Clinics with Al Azhar University. Work with these three small demonstration projects in family planning was implemented by Family Planning International Assistance (FPIA), but USAID/Cairo took over direct funding of these projects when FPIA became ineligible for USAID funds. In addition, the U.S.-based group CEDPA provided technical assistance to the ITRFP in implementing an activity called “Expanding Family Planning Service Delivery through Community Outreach and Distribution.” CEDPA also worked with the Bishopric for Public Ecumenical and Social Services (BPESS) in implementing the Upper Egypt Family Planning and Community Development Project.
2) **Public Sector Initiatives**

During the same period, dramatic expansion and improvements took place within the Ministry of Health’s service delivery network under the Systems Development Project (SDP), which initially covered 400 MOH health units and 158 general and district hospitals. Proving the great potential of working with the public sector, SDP / MOH over four years was able to renovate, equip, and supply family planning clinics in 21 governorates, provide contraceptive technology training to approximately 9,000 doctors and 11,000 nurses, develop management systems, and develop a motivated and skilled cadre of full-time family planning service providers. Most important, SDP / MOH provided family planning services to over 500,000 clients a year for the period 1988-1991. In 1992 over 600,000 clients were served.

MOH’s work in training through the Teaching Hospitals Organization subproject was continued and new service delivery and supply subprojects were begun through the Cairo Health Organization and the Health Insurance Organization, organizations already in the health care business (MOH, 1994; USAID, 1993).

As noted above, in 1985 the National Population Council was created and an Institutional Development Subproject (IDP) was developed with NPC to assist in the creation of an NPC planning and coordination office in each of the 21 governorates and to help create an effective management and research capacity in NPC / Cairo (Wawer and Levine, 1992). A subproject with NPC also helped create a Regional Center for Training in Family Planning and Reproductive Health (RCT) at Ain Shams University to train public sector and private sector health-care providers.

Support for experimentation with the introduction of new contraceptive methods into Egypt has also been under the guidance of NPC. The Egyptian Fertility Care Society (EFCS) from 1988 undertook clinical trials and training in surgical contraception, but this program attempted to move too fast and was also widely misunderstood. As a result, surgical contraception as a legitimate option fell under a cloud and is presently available only as a health measure for high-parity, high-risk women. The Norplant® long-lasting contraceptive implant underwent clinical trials by EFCS and now is being introduced into the national program.

NPC received support for both the first (1988) and second (1992) Demographic and Health Surveys. Another subproject produced a series of detailed demographic projections for Egypt under different scenarios (OPTIONS, 1992). Related research projects were undertaken with CAPMAS, to insure the timely and complete publication of the 1986 population census, and with the Cairo Demographic Center in connection with the conduct and analysis of other surveys.

This is an impressive list of subprojects. It can not be said that the focus was really narrowed following the suggestion of the earlier evaluation. All of the activities support at least one of the four pillars—public and private services, research, policy input, and IEC. Within each category, however, it could be said that the USAID strategy in this period was to “let a thousand flowers bloom.” Most importantly perhaps, by the end of the decade, the program was finally providing three major modern methods—pills, IUDs and injectables (though injectables were restricted to use by Ob-Gyn specialists in hospitals at this point), with surgical contraception available for medical indications, condoms available, and Norplant® on the horizon.\(^\text{12}\)

**Population/Family Planning III Bilateral**

The third USAID project, POP / FP III, was launched in 1992. The design of POP / FP III reflected a consideration of past achievements and an assessment of future needs. Prior to 1992 USAID had provided approximately $158 million of assistance to the Egyptian family planning program, about 75 percent of all donor support. These funds were used to develop effective population policies, to expand and improve the quality of family planning services in the public and private sectors, to assure adequate contraceptive commodities and related supplies, to increase the

\(^{12}\) See the Population/Family Planning Project Assistance Completion Report for a detailed review of each of the subprojects, their successes and failures, as well as an assessment of the overall impact of the project.
number and quality of a wide range of family planning messages (IEC) delivered through various media, and to improve the management capability of key organizations involved in the family planning effort.

Since 1980, the CPR among married women has increased from 24 percent to 47 percent according to the 1992 EDHS. The crude birth rate has dropped from 38 in 1980 to 29 in 1992, and the total fertility rate now stands at 3.9, down from 5.3 in 1980. Reasons for this success seem clear. In 1993, external evaluations of USAID-funded subprojects highlighted widespread accessibility of family planning services: 96 percent of women live within 5 kilometers of a family planning source. Family planning services were also affordable: women did not report that the cost of services or supplies was a constraint to usage, and many women reported that they would be willing to pay more for services than they were currently paying. Women also reported almost universal knowledge of at least one modern method of family planning (virtually everyone has access to television).

Despite these accomplishments, the assessments identified important challenges for strengthening family planning services in Egypt. The need for further improvements was indicated by the fact that there was substantial "unmet need:" in 1992, one in five currently married Egyptian women wanted no more children or wanted to delay the next birth, but was not using contraception. Furthermore, discontinuation rates were relatively high, and many women were not using their method correctly.

Thus, POP/FP III was designed to address the following needs: to improve the quality of family planning services with an emphasis on provider training and counseling; to educate women through media messages about correct contraceptive usage and to develop messages aimed at reaching special groups where contraceptive usage remains low; to strengthen the management systems in many implementing agencies; and to reduce policy constraints and regulatory barriers that inhibit access to a wide range of contraceptive methods.

POP/FP III is a large umbrella project funded at $62 million that will be implemented during the period from April 1992 to June 1997. The project is composed of eight subprojects that will be implemented by three GOE agencies and the private sector. The agencies and their planned activities are described below.

1) MINISTRY OF HEALTH (MOH)

The public sector's role in the national family planning program is to provide services to those least able to pay for them. POP/FP III is supporting three subprojects under the auspices of the MOH.

The Systems Development Subproject (SDP) is improving the MOH management system for family planning service delivery through training courses and workshops. The SDP is also supporting improvements in the quality of family planning services provided by MOH units and hospitals, through continued training in contraceptive technology and counseling, the strengthening of IEC activities, and a modest amount of continued clinic renovation and equipping.

The Contraceptive Commodity Subproject (CCP) is providing IUDs, condoms, Norplant®, and injectables for distribution to the public sector and to selected nonprofit NGOs that are providing family planning services.

The Teaching Hospital Organization Subproject (THO) is continuing to provide clinical family planning service delivery through its family planning units that serve as models for hospital-based clinical family planning service delivery. THO training centers are providing practical experience in provision of injectables and Norplant®, in addition to the more usual contraceptive technology experience with pills and IUDs, including postpartum IUD insertion.

2) NATIONAL POPULATION COUNCIL (NPC)

The Institutional Development Subproject (IDP) is continuing the development of the capability of the NPC to plan, coordinate, and report on family planning activities at the national and the local level. Governorates will be provided with a development support fund
that will be used for activities aimed at broadening the base of community support for family planning. Support is being provided to the Research Management Unit (RMU) of the NPC to enhance its ability to plan, solicit, and fund applied biomedical, policy and programmatic studies. Finally, the NPC’s role in policy outreach is being strengthened in regard to such issues as medical restrictions, private sector constraints, and obstacles to sustainability.

Through an agreement with the NPC, the Regional Center for Training in Family Planning and Reproductive Health Subproject (RCT) of Ain Shams University is continuing to provide high quality clinical family planning training to physicians, nurses, and trainers. RCT activities focus on training and support, for public as well as private physicians; information development and dissemination; and technical assistance to the various implementing agencies.

The Clinical Services Improvement Subproject (CSI) of the Egyptian Family Planning Association (EFPA) was initiated under POP/FP II to develop a network of EFPA family planning service centers throughout Egypt (112 clinics have been opened in 18 governorates), introduce quality assurance management systems and procedures, and establish systems to finance continuation of the centers after the cessation of donor support. POP/FP III, through an agreement with the NPC, is assisting CSI in supporting its family planning and reproductive health services, as well as in guiding it to complete the transition to self-sufficiency.

3) MINISTRY OF INFORMATION

The Family Planning Information, Education, and Communication Subproject (IEC) with the State Information Service (SIS) will continue support for mass media demand creation and information messages, as well as interpersonal IEC approaches with local opinion leaders and religious leaders. It will also pay increased attention to coordinating IEC efforts among the various project implementing agencies, and will, in cooperation with the Ministry of Health, launch a special program to promote the “quality-upgraded” MOH clinics and service providers.

4) SPECIAL INITIATIVES FOR THE PRIVATE COMMERCIAL SECTOR

USAID is also supporting a cluster of activities designed to improve the quality of care provided by private sector pharmacists and physicians, thereby enhancing contraceptive use effectiveness. Family planning continuing education programs are being conducted for about 4,000 pharmacists and 600 doctors in governorates where contraceptive use effectiveness is low. Activities are designed to strengthen and expand the linkage between pharmacists and physicians. Mass media messages are being developed that will promote the services of participating pharmacists and physicians; and IEC materials are being developed to improve provider/client communication and contraceptive use.

Thus, the successful combination of increasing the flow of public and private clinic-based services, high-intensity IEC activity, and utilization of the private sector for supply of commodities is continued. Two new methods are being brought on line: the injectable, which is currently being expanded from limited availability to availability throughout the whole system; and Norplant®, which is currently being introduced in a phased manner. Expansion of medically-indicated surgical contraception for high-risk women is also planned.

As of 1995 the Egyptian program is, for the first time, truly a “cafeteria” approach. A client can, in nearly all parts of the country, without expending an enormous amount of either time or money, have access to the IUD, the oral pill, and the condom, and the injectable. Norplant® should also be available through hospitals within the next year.

We have explored the various components of the three major USAID/Cairo population/family planning projects at length because they have been the heart of much of the expanded activity by the Egyptian program in the last 10 to 15 years. (Box 5 summarizes the three USAID projects.) The working relationship between the GOE and USAID in this area has been close and harmonious. In some cases, USAID has supported activities already underway or selected by the GOE. In other cases, USAID has proposed or sponsored new activities that GOE accepted and adopted. Essentially, the story of Egypt’s suc-
cess is the story of USAID’s success in Egypt as well. This smooth cooperative working relationship is beyond question another important element in the Egyptian “success story.”

**Box 5**

**MAJOR GOALS AND ACTIVITIES UNDER USAID PROJECTS**

**FAMILY PLANNING I: 1977-1987**

**Purpose:** To strengthen family planning services and increase the availability and variety of contraceptive devices nationwide so that more couples practice family planning.

**Description:** The program was coordinated by the National Population Council (NPC) and implemented by the Ministry of Health (MOH), Ministry of Social Affairs (MOSA), the State Information Service (SIS), Central Agency for Public Mobilization & Statistics (CAPMAS), the private sector Family of the Future (FOF), and other organizations. Subactivities were designed to improve the administration and outreach of Egypt's Family Planning program, and demographic data collection and analysis.

| Duration: | FY 77 - FY 87 |
| Total Project Funding: | $65.1 Million |

**Accomplishments:**

- A family planning information, education and communication program initiated by the State Information Service has been promoting family planning awareness through mass media nationwide.

- A social marketing program conducted by Family of the Future supported promotion and distribution of contraceptive devices in the commercial sector throughout the country covering virtually all of Egypt's 7,500 pharmacies and most private physicians.

**POPULATION/FAMILY PLANNING II: 1983-94**

**Purpose:** To strengthen and expand Egypt’s population/family planning activities so as to increase family planning practice among married couples of reproductive age.

**Description:** Implementing organizations for the Population/Family Planning II Project are: the Ministry of Health (MOH), the National Population Council (NPC), the State Information Service (SIS), the Central Agency for Public Mobilization and Statistics (CAPMAS), Family of the Future (FOF), the Egyptian Family Planning Association (EFPA), the Ministry of Social Affairs (MOSA), and other government and private agencies. These organizations implement activities to expand and improve the administration and outreach of Egypt’s family planning program. This second grant project (263-0144) is a continuation of activities initiated under the previous Family Planning I Project (263-0029).

| Duration: | FY 83 - FY 94 |
| Funding to Date: | $113.5 Million |
Accomplishments:
- In January 1985, President Mubarak created the NPC to coordinate all population/family planning activities. NPC prepared a national population strategy that served as input to the 1992-1997 Five-year Plan.
- Promotion and distribution of contraceptive devices through pharmacies and private physicians were encouraged through a social marketing program conducted by Family of the Future, a PVO, completed in 1992. USAID has transferred activities previously supported by FOF to the private commercial sector.
- Family planning clinics in about 700 MOH rural and urban health units and 158 general and district hospitals were renovated to meet specifications for simple quality clinics. Over 1,200 managers/supervisors, 9,000 physicians and 12,000 nurses have been trained to provide quality family planning services. Policy and procedure training manuals have been developed as well as training manuals for each of the systems in order to expand service delivery and to improve quality.
- The EFPA's Clinical Services Improvement Project has expanded high-quality fee-for-service family planning services: 112 clinics have been opened in 18 governorates.
- Through the SIS IEC subproject, major media campaigns promote the practice and proper use of contraception. These are broadcast regularly on TV and radio on air time donated by the GOE. Survey data indicate that knowledge of family planning is virtually universal in Egypt.

POPULATION/FAMILY PLANNING III: 1992-1997

Purpose: Increase the level and effective use of contraception among married couples in Egypt.

Description: The Population/Family Planning III Project is composed of eight subprojects which will be implemented by three GOE implementing agencies and the private sector. The National Population Council (NPC) will implement the Institutional Development subproject and will oversee the implementation of the Regional Center for Training (RCT) subproject of Ain Shams University and the Clinical Services Improvement (CSI) subproject of the Egyptian Family Planning Association. The Ministry of Health (MOH) will implement the Systems Development, Contraceptive Commodities, and Teaching Hospital Organization subprojects. The Ministry of Information will implement the Family Planning Information, Education, and Communication (IEC) subproject with the State Information Service (SIS). Special initiatives for the private commercial sector, such as training private physicians and pharmacists, will also be carried out. An institutional I/C&S contract will provide management and technical support for overall project activities. This project represents a strategic consolidation and continuation of activities initiated under the previous Population/Family Planning I and II Projects.

Duration: FY 92 - FY 97
Approved Total Funding: $62.0 Million
Total Funding to date: $30.0 Million
Contraception, or the deliberate purposeful effort by couples to break the usual biological links between coitus, conception and birth, is nearly always present in some form among some groups in even pre-modern populations. Available evidence suggests that prior to 1960, any efforts of Egyptian women to limit reproduction affected such a small segment of the population as to leave little or no trace on the national level of contraceptive use. With a TFR of over seven, contraception could not have been widely practiced.

There is scattered empirical and anecdotal evidence to this effect. Cleland's pioneering book on the population question in Egypt, written in the 1930s, contains not one single mention or reference to "contraception," "birth control," or "family planning," all terms known and used elsewhere even in the thirties. The same is true of all the other sociological or economic treatments of population growth in this period. Contraception probably existed among some of the ethnically foreign communities—the Jews or Greeks, for example—and among a very small, educated, urban, high socioeconomic status elite, but not among the Egyptian population at large.

Only in the post-World War II period do we begin to get estimates of contraceptive usage for the general population. The first such estimate comes from 1966 program data reporting that contraceptive pill users were 3 percent of the total married female population. At about the same time, the first contraceptive survey was conducted in an area of Cairo and in several villages by Rizk who found the percentage of couples who had ever-used some method of attempting to prevent pregnancy was a surprising 25 percent overall. The rate was even higher for highly educated men or women and was as high as 9 percent among illiterates. These rates seem high but reflect what would now be termed "ever-use, any method" and it is possible that the actual fertility impact was modest. Other pioneering studies found similar scattered evidence that contraception was becoming established.

The official family planning program dates from about this same time period, so it seems clear that these early efforts were taking place with supplies flowing from the private sector, notably private physicians and pharmacies. As the official program gained momentum, the prevalence rates implied by the supply of contraceptives to clients also increased. By the early 1970s, the program was reporting prevalence rates of 10 percent and higher. These rates were not based on survey data, but were derived from information on the amount of supplies being distributed. Thus it is impossible to know with certainty the actual level of prevalence at this time.

Reliable data on prevalence becomes available from the series of national contraceptive prevalence and fertility surveys beginning with 1974–75 (see Table 18). The NFS yielded an estimate of 26 percent usage, which fell to 24.2 in the 1979–80 EFS, rose again to 30.3 in the 1984 ECPS, to 37.8 in the 1988 EDHS and finally to 47.1 in the 1992 EDHS. Thus, contraceptive prevalence has been rising more or less steadily ever since it was first measured accurately in Egypt, about 30 years ago. During this time prevalence has increased fourfold, from under 10 percent to about 50 percent, a remarkable increase by any standard.

Both the increase in contraceptive prevalence (and the accompanying decline in fertility) have been unevenly spread across the population of Egypt (see Figure 10). These dramatic changes have been concentrated in the Cairo–Alexandria urban megalopolis, the surrounding rural areas of Lower Egypt and the smaller urban places of Upper Egypt. These changes have, in effect, built on the emerging differentials by education, residence and income first revealed in studies carried out in the early 1960s.
### TABLE 18
TRENDS IN CURRENT USE OF FAMILY PLANNING BY REGION
(Percent of Currently Married Women Currently Using a Family Planning Method by Urban-Rural Residence and Place of Residence)

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</thead>
<tbody>
<tr>
<td>Urban-Rural Residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>45.4</td>
<td>40.4</td>
<td>45.1</td>
<td>51.8</td>
<td>61.4</td>
<td>57.0</td>
</tr>
<tr>
<td>Rural</td>
<td>12.9</td>
<td>12.1</td>
<td>19.2</td>
<td>24.5</td>
<td>38.4</td>
<td>38.4</td>
</tr>
<tr>
<td>Urban Governorate</td>
<td></td>
<td>44.0</td>
<td>49.6</td>
<td>56.0</td>
<td>64.0</td>
<td>59.1</td>
</tr>
<tr>
<td>Lower Egypt</td>
<td></td>
<td>23.9</td>
<td>34.1</td>
<td>41.2</td>
<td>53.0</td>
<td>53.5</td>
</tr>
<tr>
<td>Urban</td>
<td>45.4</td>
<td>42.6</td>
<td>47.6</td>
<td>54.5</td>
<td>61.5</td>
<td>60.5</td>
</tr>
<tr>
<td>Rural</td>
<td>12.9</td>
<td>18.0</td>
<td>28.5</td>
<td>35.6</td>
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<td>50.5</td>
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<td>7.9</td>
<td>11.5</td>
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<tr>
<td>TOTAL</td>
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<td>30.3</td>
<td>37.8</td>
<td>47.6</td>
<td>47.1</td>
</tr>
</tbody>
</table>

Source: As indicated in column headings

### FIGURE 10
CURRENT USE OF FAMILY PLANNING METHODS BY PLACE OF RESIDENCE, 1992
(Currently Married Women 15-49)

The urban contraceptive prevalence rate (CPR) was the first to move sharply upward. The 1974-75 NFS reported 51.2 percent current use of contraception by married women of childbearing ages in Cairo and Alexandria, 42.8 for other urban places of Lower Egypt and 31.9 for urban places in Upper Egypt. Risk's more scattered estimates collected 10 years earlier seem to have been low, if anything, since the 1974-75 current use rate is double his ever-use rate. The fact that the other urban areas, in both Lower and Upper Egypt, were also participating in this emerging trend is more surprising. By the mid-1970s, urban Egypt was well-launched into contraceptive use.

Although Egypt is a highly urbanized country, these rapid increases in contraceptive use rates in urban areas were partially offset by much slower rates in the rural areas of Egypt. Between 1974-75 and 1984 the rural CPR rose only slightly from 12.9 to 19.2. The 1988 EDHS reported an increase to 24.5 percent, but the most dramatic increase occurred in 1992 when a CPR of 38.4 percent was recorded. Cutting across this well-known ur-
Urban/rural distinction is the equally pervasive distinction between Upper and Lower Egypt. Lower Egypt, the Cairo-Alexandria agglomeration and the smaller cities and rural areas of the Nile Delta, show consistently higher CPRs than Upper Egypt. Urban Upper Egypt started with a lower CPR than urban Lower Egypt in 1974-75 and this difference, of roughly 12-13 points, remains in the 1992 EDHS as well. Similarly, the CPR in rural Lower Egypt is consistently more than double rural Upper Egypt during the entire 20 years for which we have these data. Rural Upper Egypt had reached a CPR of about 24 by 1992, about equal to the national average in 1974-75. Cairo-Alexandria and the smaller urban places of Lower Egypt recorded CPRs of about 60 percent in 1992, while rural Lower Egypt had a CPR of 50 percent.

Major differences continue to be observed in the spread of contraceptive practice in Egypt among regions and strata of the population. Urban Lower Egypt has spearheaded the change, while rural Upper Egypt has lagged behind. This pattern of regional differences in the CPR reflects the basic reality of Egyptian economic and social development during this period. Such regional differentials are a part of the fertility transition in many countries and are by no means unique to Egypt.

As overall prevalence has risen, the mix of various contraceptive methods being used has also changed (see Table 19). In 1980 pill users made up nearly two-thirds of all users. By 1992 pill users were only about one-quarter of all users, as the IUD became more widely available. This shift in the method mix is expected as a program evolves. Indeed, further changes in the method mix will be required to reach the ambitious program goals.
### Table 19
Current Use of Contraception by Method and Region, 1980-1992

<table>
<thead>
<tr>
<th>Region</th>
<th>Pill</th>
<th>IUD</th>
<th>Condom</th>
<th>Other Modern Method</th>
<th>Any Traditional Method</th>
<th>Total</th>
</tr>
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<td></td>
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<td>1984</td>
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<td>2.3</td>
<td>47.1</td>
</tr>
</tbody>
</table>

Source: See Table 18
VIII. FUTURE CHALLENGES TO EGYPT’S PROGRAM

The total fertility rate in Egypt is now well below four births per woman, or about 40 percent below the rate of 7.1 prevailing when the population policy and program was adopted. About 50 percent of all married women in the reproductive ages are currently practicing family planning as opposed to 10 percent in 1960. There appears to be no reason why this trend can not continue. Desired family size is now, on the average, only three children per couple and this indicator of preferences has been falling over time. Projections indicate that when the current contraceptive prevalence rate reaches 74 percent (see Figure 11), this will result in a total fertility rate of 2.1, or replacement level fertility.

Assuming a continuation of the same rates of change that have occurred in the recent past, replacement level fertility will be reached in about 20 years, or the year 2015. Total population will then reach 80 million, as compared to 60 million today, and will continue to grow as the age distribution gradually becomes that implied by replacement level fertility. Egypt will reach a zero growth situation by the year 2069 with a population of roughly 108 million. This may be put in perspective by noting that had fertility in Egypt remained at its 1980 level, total population in the year 2069 would be over 600 million and still growing. (Table 20 gives the details of these alternative scenarios.)

This is a plausible scenario for Egypt’s demographic future, but it is not automatic. What actually occurs will depend in many ways on the ability of the Egyptian family planning program to rise to the new challenges inherent in the present situation. The matter can be put in the following way: the success of the program thus far has created a demand for smaller families and hence a demand for family planning services. Recent surveys indicate that substantial “unmet need” for family planning exists; approximately 20 percent of the respondents in the 1992 EDHS indicate a desire for no more children but are not currently contracepting (Stover and Heaton, 1995). If this 20 percent is added to the 50 percent already being served by the program, the total prevalence is almost exactly that required to attain replacement level fertility. So it would appear that the necessary latent demand is already present. The challenge for the program is to identify and eliminate the barriers that presently are preventing those with “unmet need” from obtaining the services they want. In other words, it will be necessary to add whatever is needed to the program to reach these new groups while continuing to serve its present clients (NPC, 1994b).

Analysis of unmet need strongly suggests that the problems are quality of the service, method choice, difficulty of access to services and resupply for women in remote areas (see Box 6). NPC is sensitive to these needs and its most recent plan calls for several new initiatives in the next phase of the program, which are described below.

---

**Figure 11**

PROJECTED TFR AND REQUIRED CPR, 1990-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>TFR</th>
<th>CPR (%)</th>
</tr>
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<tr>
<td>1990</td>
<td>3.7</td>
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</tr>
<tr>
<td>1995</td>
<td>3.1</td>
<td>51%</td>
</tr>
<tr>
<td>2000</td>
<td>2.9</td>
<td>62%</td>
</tr>
<tr>
<td>2010</td>
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<td>74%</td>
</tr>
<tr>
<td>2015</td>
<td>1.5</td>
<td>80%</td>
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</table>
TABLE 20  
FUTURE POPULATION OF EGYPT UNDER VARIOUS FERTILITY ASSUMPTIONS

<table>
<thead>
<tr>
<th>Year</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant TFR 5.3 (1980 value)</td>
<td>Constant TFR 3.9 (1992 value)</td>
<td>TFR Reaches 2.1 in 2015 and Constant thereafter</td>
</tr>
<tr>
<td>1980</td>
<td>43,746</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1988</td>
<td>55,109</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1992</td>
<td>62,010</td>
<td>55,057</td>
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<tr>
<td>2000</td>
<td>77,956</td>
<td>65,525</td>
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</tr>
<tr>
<td>2015</td>
<td>120,640</td>
<td>90,474</td>
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</tr>
<tr>
<td>2069</td>
<td>657,756</td>
<td>283,190</td>
<td>108,389</td>
</tr>
</tbody>
</table>

Note: The same gradual increase in expectation of life, (such that e(0) = 75 by 2045) is assumed for all variants. The 1980 age-sex distribution of the baseline population is based on CAPMAS estimates from the 1976 and 1986 censuses.

Source: Projections done by the Research Triangle Institute under the RAPID Project.

1. Client choice must be broadened further by making the injectable and Norplant® more widely available and offering better access to surgical contraception when it is medically or psychologically indicated.

2. More emphasis will be placed on staff training and retraining particularly in the areas of counseling, client-provider interaction and follow-up. Requirements for newly-joining staff will be increased.

3. Services must be taken to the villages in the remote rural areas of Upper Egypt and the Frontier Areas where the existing network of clinics is thin. This will involve greater use of mobile teams and also more use of local community groups to consolidate demand.

4. NPC plans a more decentralized administrative structure with program targets and goals geared to local (governorate) capabilities and requirements. At the same time

**Box 6**  
**STEPS NEEDED TO REACH REPLACEMENT LEVEL FERTILITY**

- Further broaden client choice by adding more methods as quickly as possible and making the methods appropriate to the couple’s situation
- Continue to improve the quality of family planning and MCH services through additional and improved training and clinical improvements
- Increase outreach and educational efforts, particularly in rural Upper Egypt
- Develop specific local plans and goals for contraception and fertility geared to reach the overall national goal of replacement level fertility by 2015
- Ensure adequate and sustained resources are committed to family planning
- Support parallel social programs for female education and employment, particularly in rural areas
performance reporting procedures will continue to give the Ministry of Population and Family Planning in Cairo a better current picture of what is going on in the field so that problems can be corrected swiftly.

5. Long-term commitment for adequate funding is needed from all present donor sources and possibly from new donors as well. Over the long run, the goal is to move to greater sustainability from local resources. To this end, it will be important to let the private sector supply contraceptives at commercially viable prices, thereby assuring ongoing availability of supplies.

6. There is a need in Egypt for parallel supporting programs in the areas of women's education, employment and home-based income generation activities, if women are to reap the full benefits of their reduced fertility. It is anticipated that new initiatives in these areas will be implemented by NGOs, and a revitalized NGO Committee is being created to spearhead this program.

The new steps should mean that the program moves forward and attains replacement level fertility by 2015. Reaching this goal will by no means solve all of Egypt's economic, social and environmental problems, but it will make solving them much easier than would be the case if rapid population growth continued into the indefinite future. The changes in the age distribution that accompany this rapid decline in fertility are striking (see Figures 12a-c). The future burden of education, health and other social services will be greatly reduced compared to the high-fertility past. Egypt, like other mature, fully-developed nations, can shift resources to other social needs, including those of an aging population.
IX. CONCLUSIONS AND LESSONS TO BE LEARNED

Ten years ago the Egyptian family planning program had been branded a failure and plausible explanations were advanced for why this was so. Egypt was taken as "proof" that family planning could not work in the culture of Middle Eastern countries. Yet today Egypt is well on its way to replacement level fertility. Fertility reduction has been a long, difficult and complicated process. When Egypt began its family planning program it had no textbook to guide it, and few if any earlier "success stories" to which it could look for instruction. Thus, common-sense programmatic initiatives were undertaken on the basis of perceived institutional and socio-cultural constraints of the Egyptian situation. These early judgements and decisions were, of course, influenced by "state-of-the-art" technical advice from international assistance groups and leading professional experts.

In retrospect, the program made some false starts and did some things wrong. It also did many things right. The review we have undertaken above makes both of these points clear. Perhaps we can step back a bit now from this detailed chronology and summarize the "lessons" we feel can be learned from Egypt's experience (see Box 7).

1) LEADERS MUST LEAD

The top political leaders of the country must strongly, wholeheartedly and repeatedly endorse and support the family planning policy and program efforts. This must include clear, forceful public speeches and messages and also routine cabinet-level briefings and discussions of the program's objectives and accomplishments so as to leave no doubt within the structure of government that the commitment is real.

The Egyptian program has, since its beginning, had the official support of the nation's top leaders, but for at least the first decade, this support struck most observers as a formality without any real underlying enthusiasm or day-to-day administrative commitment. The middle- and lower-level government officials responsible for implementing the program also seem to have perceived the matter in this light and thus felt no great urgency about their work (Ibrahim, 1994). Other ministries, most notably the Ministry of Planning and Development, clearly were ambivalent. As late as 1980, official government economic planning documents still talked of "the three solutions to overcrowding," with family planning listed as co-equal with population re-

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**Box 7**

**LESSONS LEARNED FROM EGYPT'S EXPERIENCE**

- National leaders must lead the program
- Quality of services is vital
- The more methods available the better
- IEC is a necessary component for success
- Effective programs are not cheap
- The private sector must be involved
The five-year plans have consistently cited rapid population growth as a major barrier to development but have hardly mentioned family planning except in the most offhand fashion. The level of disinterest and lack of precision is indicated by the following quotation from the most recent plan: "The high population growth rate results from a continuous reduction in mortality...with birth rates staying at the same relatively high levels...the reason for this lack of success is that birth rates are affected by a number of demographic and social factors, including the age composition of females, marriage ratios and fertility rates, all of which are difficult to change over the short term." (Ministry of Planning, 1987, p. 180).

The high-level policy boards were, of course, designed to enlist all ministries in the program, with the Population and Family Planning Secretariat providing leadership and technical guidance. In reality the Supreme Council (or board) seldom met and, with no budgetary or other administrative control over the member-ministers, could do little to ensure their cooperation. Official ambivalence naturally was reflected by the public. Many opinion leaders—journalists, teachers, writers—expressed doubts about the need for or the prospects of the population policy efforts. As late as the early 1980s, Al-Ahram Newspaper prominently published a debate among leading Egyptian intellectuals on whether population growth posed a problem for Egypt.

This weak, half-hearted support can be partly explained by the continued opposition of conservative religious leaders to the program. There was, and perhaps still is, a certain political risk in the government taking too strong and totally unambiguous a stand. The PDP approach, it seems clear in retrospect, was attractive partly because it did not require such a strong stand on family planning by the government. Yet this is what was required for the program to finally begin to move. Only after President Hosni Mubarak had fully endorsed the program and began making strong, persistent public supporting statements, did the program begin to move forward rapidly.

2) QUALITY OF SERVICES IS VITAL

Quality of family planning services is vital to winning and retaining satisfied clients who are then also good agents for the program among other prospective clients. These days this is fairly obvious and perhaps even trivial. Yet this was not true in the early years of the Egyptian program, or other "first-generation" programs. "Quality" means many things. To some extent, it is a subjective notion having to do with the clients' expectations and previous experiences. Yet several useful typologies or frameworks for understanding "quality" have been proposed that have moved us closer to an objective definition. It now seems clear that quality includes: client information and counseling; courteous, reasonably prompt service; privacy and non-threatening clinic situations; the largest possible choice of methods; convenient hours and reasonable access to service locations; and freedom from any implicit or explicit coercion.

To achieve all these elements requires a non-coercive policy to begin with. It requires further that a program have sufficient resources to provide method choice, a well-functioning organizational structure and enough locations to guarantee access and availability to all clients. It also requires a qualified, well-trained and content staff who understand and accept the mission of the program. Egypt has achieved the first of these elements, that is, it has avoided the mistake of using any implicit or explicit pressure on prospective clients.

But the first phase of the program was in many ways a false start. The understandable desire to quickly and cheaply create a working program led to the decision to treat family planning as an add-on to the existing health network. This created a nationwide network of over 3,000 service points meeting the goal of availability and accessibility. However, the facilities were mostly used part time and after hours. Moreover, the staff were not given adequate training in their new duties, supplies were limited to one or two methods, and no IEC or client counseling was undertaken.

Thus, quality of services was poor, continuation rates among users were low, and a generally negative image resulted.

The PDP initiative did little to change this situation. The village field-workers were not
adequately trained in any of their duties and did not emerge as outreach family planning workers or resupply sources for clients. The much-heralded "new approach" was another false start.

A series of changes occurred in the middle- and late-1980s. USAID support was refocused on expanding and improving the quality of clinical services. The Clinical Services Improvement Project (CSI) of the EFPA and the Systems Development Project (SDP) with the Ministry of Health upgraded the quality of services by extensive training of service providers and by renovation of facilities. The SDP facilitated the introduction on a large scale of the Copper-T IUD, which had a great cumulative effect on the quality of services. As the reputation and image of the program improved, new acceptors rose sharply.

The Egyptian program experience thus shows clearly that quality of services is important in building a program even from its very first day of operation. Had Egypt engaged in a systematic effort at staff training and facilities development before expanding to a nationwide service program, it might well have avoided the "plateauing" that occurred in the 1970s and saved time and money.

3) **IT IS IMPORTANT TO HAVE ADEQUATE CHOICE OF METHODS**

A choice among several modern contraceptive methods for potential clients is essential. Family planning clients have contraceptive method preferences and needs based on individual intentions and goals, different physiological concerns, and different family situations and lifestyles. They may want to space births very precisely, to postpone births for some time, or to end childbearing altogether. If a program is to effectively serve all its potential clients, it must offer a diversified method choice with appropriate counseling and follow-up for each method as well as adequate and reliable supplies.

These conclusions have emerged from program experience in many other countries. Overall prevalence rates generally rise when a new method is added to a program. Egypt's experience fully supports this conclusion. The dramatic increase in the CPR in the mid- to late-80s in Egypt was largely due to adding the IUD to the "menu" for clients. The injectable may have a similar effect in the late-90s. Future increases in the CPR required to reach program goals will also be built partly on the introduction of additional contraceptive methods to the existing mix.

4) **NOTHING CAN REPLACE A WELL-DESIGNED PUBLIC IEC CAMPAIGN**

Egypt was slow in starting meaningful public information and educational work in family planning. Even with a firm government endorsement of the program, family planning was still considered controversial. Many opposed any public discussion of the issue on religious grounds. Others felt such a program would not change deeply-rooted values and, hence, would achieve nothing and merely waste government resources. Luke-warm support from the top leaders probably partly stemmed from such feelings, but over time it also reinforced them.

The first IEC project implemented by the State Information Service (the SIS/IEC) did not start until 1979, nearly 15 years after the service program had been launched. Even this was controversial and some foreign advisors urged that the program keep a low profile. The first few years of the IEC effort took a very general "population education" approach, focusing on overcrowding, environmental problems, and long-run issues. These early IEC efforts did, however, make use of television, radio and other mass media. Evaluations of the impact of these messages made clear that they had increased knowledge and favorable attitudes among the viewers or listeners but had not led to modified behavior. Prevalence rates had not risen as a result of the campaign.

The second phase of IEC, from roughly 1985, focused more sharply on family planning specifics. Various methods, their advantages and disadvantages, were discussed frankly, and the link between smaller families and family economic circumstances was stressed. The revised campaign also made use of a wide variety of formats—"soap operas,"
musical variety shows, interview programs, and poetry readings—to carry the messages. These approaches proved enormously popular and continue to be today.

Egypt's situation was ideal for such a campaign. By the 1980s nearly the entire country was reached by the mass electronic media. When a carefully-designed, well-focused, attractive IEC campaign was launched, it yielded enormous returns. The low profile of the early years may or may not have been necessary for political reasons, but there is no question that this contributed to the frustration of the 1970s. There is no substitute for "advertising" when a new service or product is being put on the market.

5) An effective program will not be cheap

Egypt has spent considerable money on its family planning efforts, but it has spent far more on agricultural or industrial development to much less obvious return. It has undertaken some projects or initiatives that seemed promising but that did not achieve their objectives. Nonetheless, that Egypt had the resources to take risks and attempt a variety of approaches without putting total reliance on any single approach was a large part of the emergence of the success story in the 1980s.

The matter can be put another way. The first phase of the program promised to be very cost-effective because family planning was a "piggy-back" activity on top of the existing health network. This program cost relatively little incrementally. It did accomplish results, but these achievements quickly played-out and the program stagnated. The cheap solution proved illusory and no real solution at all.

The PDP experience points to a similar conclusion. Family planning activities were to be part of a multipurpose field project, once again holding out the hope that costs would be spread over many subprojects minimizing the cost of any specific activity. The PDP experience also turned out to be unfeasible, and it is questionable whether any of the goals of the PDP were accomplished, making its ultimate cost-effectiveness very poor indeed.

The experience of Egypt is that family planning works best when there is a clear and distinct activity with a dedicated staff, infrastructure and support system, concerned with quality of services. For this to occur, the program required an earmarked, adequate and reliable resource base on which to operate. The sharp increase in the level of international donor support that occurred in the late 1980s undoubtedly played a major role in guaranteeing this resource base. Egypt was thus able to act on the lessons of her previous experience, to launch new initiatives, and even to make mistakes.

6) The private sector must be involved

Organized family planning efforts in Egypt began with private sector family planning associations in Cairo and Alexandria and this has continued. The Egyptian Family Planning Association (EFPA) has consistently played a major role in providing services in urban areas. Its presence helps explain why the urban prevalence rates became so high so early in the program history. EFPA has also shown the way by being innovative in procedures and methods. Even though the EFPA has a more direct link with the government than is true of private associations in other countries, it has been able to pursue a more flexible, pragmatic strategy than the MOH or the NPC. A private association is responsible to its clients and its donors and not to the larger political forces dominating a country in the way that a government ministry must be. This is a great advantage. Even if the government program does not "need" a parallel private effort, it is useful to have one because it can be the path-breaker and the risk-taker.

The private sector in Egypt has also included "contraceptive social marketing" (CSM) schemes, such as the Family of the Future and its successor organizations, which subsidized a network of private distributors of contraceptive supplies and services. These date from the early 1980s. Such outlets now account for the ma-
The majority of the total contraceptives used by couples throughout Egypt. This program was another important factor in the sharp upsurge in the prevalence rate in the last decade. Thus, private associations have always been a bright spot in the overall picture in Egypt and have led the urban areas to high prevalence relatively early. Involving the for-profit providers of contraceptive services and commodities was an important innovation in program strategy that sharply increased urban prevalence and continuation rates.

In sum, Egypt shows that family planning success has been achieved by a broadly-based, public plus private sector, service provision program that enjoys the strong, public support of its top leaders, that concerns itself with quality of services, that offers an expanding method choice, that uses well-designed, explicit family planning media campaigns, and that has adequate resources to ensure continuity and intensity of effort. Egypt's program lacked many of these elements in its first and second decades. But, as it achieved them and put them in place, one by one, the critical minimum was finally achieved and the breakthrough occurred. All these elements seem to have been necessary for the success story to occur, but it is not clear that order or sequence mattered. Perhaps these things could have been done earlier. The political and financial realities of Egypt's situation can not be totally ignored in understanding the program history.
A. CENSUS AND REGISTRATION DATA

Egypt is blessed with a wealth of demographic data for the last hundred years, foremost among which are the decennial censuses (see Table A-1). The first modern census was taken in 1882, and the second in 1897 was the beginning of a more or less continuous and regular series of decennial population enumerations that have continued through the present. The 1986 count was the eleventh in the series. The census questionnaires have typically collected data on number of persons (grouped by household), and the age, sex, marital status, place of birth, labor force status and education of household members. More recently, censuses have also collected data on children ever born by married women, migration, age at marriage and other socioeconomic background characteristics (see Table A-2).

Like most censuses, including those in highly-developed nations, the Egyptian enumerations have probably underestimated the population by some 3 to 5 percent. Thus, the reported national totals are usually “adjusted” upward based on the estimate of the undercount in order to obtain a more accurate picture of population size.

The registration of births and deaths has been required by law since 1912; marriage and divorce registration has been required since 1924. As might be expected, the completeness of registration was poor in its early years and varied widely by region of the country; the data for rural areas being considerably less accurate than for cities. Beginning in the 1930s, the government rural health bureaus included birth and death registration as part of their duties, and birth and death rates for these areas were typically higher than those for other areas suggesting more complete registration. For the 1930s and 1940s, the registered births and deaths for large cities and the rural health bureau areas, used in conjunction with midyear base populations interpolated from the censuses, present the most plausible picture of the trend in natural increase. In the more recent past, efforts to increase the coverage and accuracy of registration have continued. A study in 1960 suggested that 10 percent of births and 17 percent of deaths were missed by the system, but by 1986 omission rates had fallen to

| Table A-1 |
| List of the Exact Dates of Each of the Censuses |

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Date</th>
<th>Census Year</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1897</td>
<td>1st June 1897</td>
<td>1960</td>
<td>20/21th Sept. 1960</td>
</tr>
<tr>
<td>1907</td>
<td>29th April 1907</td>
<td>1966</td>
<td>31th May 1966</td>
</tr>
<tr>
<td>1917</td>
<td>7th March 1917</td>
<td>1976</td>
<td>22/23rd Nov. 1976</td>
</tr>
<tr>
<td>1927</td>
<td>18/19th Feb. 1927</td>
<td>1986</td>
<td>18/19th Nov. 1986</td>
</tr>
<tr>
<td>1937</td>
<td>26/27th March 1937</td>
<td>1996</td>
<td>18/19th Nov. 1996 (scheduled)</td>
</tr>
</tbody>
</table>
TABLE A-2
LIST OF DATA COLLECTED BY THE 1986 CENSUS

<table>
<thead>
<tr>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Building and Housing Data</td>
</tr>
<tr>
<td>2 Establishment Census</td>
</tr>
<tr>
<td>3 Housing Condition</td>
</tr>
<tr>
<td>4 Population Data</td>
</tr>
<tr>
<td>Name, relation to the head of household, sex, religion, nationality, age and birth data, education status, work status, the name of establishment in which individual works, occupation, material status, number of wives in union, place of visitor’s stay, place of birth, place of work or study, reasons of changing the place of last stay, the length of current stay</td>
</tr>
<tr>
<td>5 Data on Married, Divorced and Widowed Women</td>
</tr>
<tr>
<td>Age at first marriage, duration of marriage, rank of last marriage, number of living births of each marriage, number of surviving children</td>
</tr>
</tbody>
</table>

3 percent of births and 10 percent of deaths (Zaghloul, 1991; Eskarous, 1992).

Registration of marriage and divorce is now thought to be nearly 100 percent, but there is substantial doubt about age reporting for brides. The legal minimum age at which girls can marry is now 16, but there is substantial evidence that marriage in rural areas frequently takes place earlier than this (Ahmed, 1988; Coale, 1982).

Responsibility for conducting censuses and compiling vital statistics, as well as other data collection and publication, rests with the Central Agency for Public Mobilization and Statistics or CAPMAS. Prior to 1952, this agency was known simply as the Department of Statistics. The Ministry of Health, the Ministry of Education and other service-generating government agencies also collect and report certain types of program data, but these are coordinated and reported through CAPMAS. In general, CAPMAS has done an excellent job of collecting and reporting these basic demographic data. However, like many agencies of this type, it has operated with a limited budget and frequently has been unable to tabulate and publish much of the data it collects.

Similarly, it has been able to create only limited internal ability to fully analyze these data. Thus, the full potential of population censuses and vital statistics as tools for program planning and evaluation has never been realized. This is true in other programmatic areas as well.

B. NATIONAL SURVEYS

As the population program gained momentum and significance, the need for detailed data on contraceptive use patterns became more and more apparent. Other existing data sources were considered inadequate to provide detailed, current estimates of fertility needed for program purposes. This led to a series of national surveys, beginning in 1974, which have provided Egypt with a rich database for the analysis of fertility and contraceptive behavior (see Table A-3). Given their importance, it is appropriate to say a few words about each of the surveys.

1) THE NATIONAL FERTILITY SURVEY, 1974-75

Small-scale, local field surveys of a few villages or urban areas go back to the 30s, but the first truly national survey was the Na-
### TABLE A-3
**MAJOR DEMOGRAPHIC SURVEYS IN EGYPT, 1974-1992**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Year</th>
<th>Objectives</th>
<th>Sample</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt Demographic and Health Survey (EDHS)</td>
<td>1992</td>
<td>The survey aimed to provide information on levels and trends in fertility, family planning, use, infant and child mortality and maternal and child health indicators. In addition, the husband's survey obtained data on male knowledge and attitudes toward family planning and views concerning the role of their wives in fertility.</td>
<td>More than 1000 households were contacted in which 9864 ever-married women aged 15-49 were interviewed. Interviews were also conducted with 2466 men who were married to women eligible for the EDHS.</td>
<td>NPC and Macro International, Inc.</td>
</tr>
<tr>
<td>Egypt Male Survey (EMS)</td>
<td>1991</td>
<td>The main objective was to collect information for Upper Egypt and Cairo (as a control group) relating to male attitudes and behavior with respect to family planning.</td>
<td>A total of 580 eligible married men aged 20-54 were identified in Cairo of whom 469 were successfully interviewed, and a total of 1115 eligible men (653 urban, 462 rural) were identified in Upper Egypt of whom 1053 (621 urban, 432 rural) were interviewed.</td>
<td>CDC and Macro International, Inc.</td>
</tr>
<tr>
<td>Egypt Maternal and Child Survey (PAPCHILD)</td>
<td>1991</td>
<td>The major objective was the provision of an integrated set of reliable information for formulating, implementing, monitoring and evaluating national maternal and child care, health and development policies and programs in a cost-effective manner.</td>
<td>11,074 households were contacted for the household survey, in which 9862 women were interviewed for the reproductive health survey and 8160 children were covered for the child health survey.</td>
<td>CAPMAS and League of Arab States</td>
</tr>
<tr>
<td>Egypt Demographic and Health Survey (EDHS)</td>
<td>1988</td>
<td>The main objective of this survey was to study fertility behavior and its determinants, especially contraceptive use. Also it provided recent data for analysis of many fertility and family planning indicators previously included in the 1980 EFS and 1984 ECPS.</td>
<td>9805 households were contacted and 8911 ever-married women were interviewed.</td>
<td>CDC and NPC</td>
</tr>
<tr>
<td>Egypt Contraceptive Prevalence Survey (ECPS)</td>
<td>1984</td>
<td>The main objective of this survey was to investigate fertility levels and their determinants, especially the use of contraceptive methods.</td>
<td>A total of 10,474 households were contacted in which 10,152 eligible women were found and 10,013 were successfully interviewed.</td>
<td>PFPB</td>
</tr>
<tr>
<td>Egypt Contraceptive Prevalence Survey (ECPS)</td>
<td>1980</td>
<td>The main objective was to fill the gap in data required to monitor and evaluate major population parameters, especially contraceptive behavior and attitudes, in rural Egypt.</td>
<td>5049 of households were contacted and 5313 ever-married women aged 15-49 years living in rural Egypt were interviewed.</td>
<td>PFPB and Westinghouse Health Systems</td>
</tr>
<tr>
<td>Egypt Fertility Survey (EFS)</td>
<td>1980</td>
<td>The survey was designed to serve two purposes: to estimate trends, differentials, and levels of nuptiality, fertility, infant and child mortality, and contraceptive knowledge and use; and to provide information on the basic factors known to affect population growth in Egypt.</td>
<td>The survey contacted 10,079 households and completed interviews with 8788 ever-married women in the first phase of the survey, with 2482 households for the economic survey, and with 2312 husbands in the second phase of the survey.</td>
<td>CAPMAS</td>
</tr>
<tr>
<td>National Fertility Survey (NFS)</td>
<td>1974</td>
<td>It aimed at securing data and basic information necessary for the study of fertility levels, patterns and differentials by socioeconomic variables, the knowledge of family planning and contraceptive use, factors affecting views of both husbands and wives about family planning and attitudes toward the ideal number of children for both males and females.</td>
<td>The sample covered 12,446 households and 15,678 ever-married women from all governorates except the Suez Canal and Sinai governorates.</td>
<td>CAPMAS</td>
</tr>
</tbody>
</table>

NPC= National Population Council  
CDC= Cairo Demographic Center  
CAPMAS= Central Agency for Public Mobilization and Statistics  
PFPB= Population and Family Planning Board (which became the NPC in 1985)
tional Fertility Survey (NFS) conducted in 1974-75 by CAPMAS. The NFS aimed at securing current data on fertility levels, patterns and differentials, on knowledge, attitudes and practice of contraception and on related socioeconomic variables. A secondary purpose was to provide an independent check on the accuracy of the vital statistics compiled by CAPMAS. The survey took place in several stages during 1974-75 and involved over 12,000 households and nearly 16,000 ever-married females in all.

2) THE EGYPTIAN FERTILITY SURVEY, 1979-1980

The Egyptian Fertility Survey (EFS) was conducted by CAPMAS as part of the World Fertility Survey (WFS) program with collaboration and technical assistance from the London-based WFS staff and financial support from the World Bank. The survey was designed to estimate levels, trends and differentials in fertility, nuptiality, contraceptive practice and infant and child mortality, and to provide data on socioeconomic factors affecting these demographic processes. In the first phase of the survey, some 10,000 household questionnaires and 9,000 ever-married female questionnaires were collected. In the second phase, about 20 percent of the households were revisited and a husbands questionnaire was administered.

3) THE FIRST CONTRACEPTIVE PREVALENCE SURVEY, 1980

In 1980 the Population and Family Planning Board (PFPB) fielded a contraceptive prevalence survey (the ECPS) covering approximately 5,000 households and 5,300 ever-married females in the rural areas of Egypt with technical assistance from Westinghouse Health Systems and financial assistance from USAID. The scope of this survey was more limited than the EFS; it yielded its results more quickly and focused exclusively on rural areas.

4) THE SECOND CONTRACEPTIVE PREVALENCE SURVEY, 1984

A 1984 follow-up to the first ECPS was also conducted by the PFPB (which was soon to become the National Population Council) with technical assistance from Westinghouse Health Systems and financial support from USAID. Roughly 10,000 households and slightly over 10,000 ever-married females were contacted in both rural and urban areas. Greater emphasis was placed on availability and accessibility of family planning services in the second ECPS.

5) THE FIRST EGYPTIAN DEMOGRAPHIC AND HEALTH SURVEY, 1988

By 1988, interest in Egypt (and worldwide) had shifted to issues of maternal, child and infant health in addition to fertility and contraceptive practice. The Egyptian Demographic and Health Survey (EDHS) reflected this shift. It was undertaken by NPC with technical help from Westinghouse's Institute for Resource Development (IRD) (which later became part of Macro Systems International) and financial support from USAID. Approximately 10,000 households and 9,000 ever-married women were questioned in considerable detail on nuptiality, fertility, contraceptive behavior, infant and child mortality and morbidity experience and health-care practices, and perceived availability of family planning and health services. This survey was designed to yield estimates of the key variables for each of the 21 major governorates of the nation (excluding only the Frontier Areas). It yielded a far richer data set than was available in any of the earlier surveys.

6) THE SECOND EGYPTIAN DEMOGRAPHIC AND HEALTH SURVEY, 1992

The second EDHS was essentially a follow-up to the first, once again with technical assistance from IRD/Macro and financial support from USAID, and once again conducted by NPC. It contacted just over 10,000 households and nearly that many ever-married women with essentially the same questionnaire as that used in the 1988 survey. A male questionnaire was also administered in about 25 percent of the households.
7) THE EGYPT MATERNAL AND CHILD HEALTH SURVEY (PAPCHILD), 1991

The PAPCHILD Survey was carried out in 1991 by CAPMAS under a regional research program undertaken by the League of Arab States, with collaboration of the Arab Gulf Fund of the United Nations Development Program, the United Nations Fund for Population Activities, the United Nations Children's Fund, the World Health Organization, and the United Nations Statistical Office. It was nationwide in scope and reached over 11,000 households, 10,000 women and 9,000 infants and children. The survey's major objective was the provision of a current, reliable data set for formulating, implementing, monitoring and evaluating maternal, infant and child health-care policies and programs in a cost-effective manner. These goals were related to Egypt's participation in the UN-led "Health for All by 2000" program.

8) OTHER SMALLER-SCALE SURVEYS (VARIOUS DATES)

Several other surveys covering more restricted areas have also been undertaken from time to time by various agencies. These include: (1) two Rural Fertility Surveys undertaken by PFPB in 1979 (RFS I covered 85 villages) and in 1982 (RFS II covered 122 villages) of selected rural areas in which the Population and Development Project (PDP) was underway; (2) two IEC-impact studies conducted for the Family Planning Information and Education Center of the State Information Center (IEC/SIS) in 1980 and 1982; (3) two extensive studies of several villages in the Governorates of Menoufiya (1979) and Beni-Suef (1982) by the Social Research Center of the American University in Cairo; and (4) numerous studies of single villages or urban neighborhoods for graduate-level research or other social purposes.

CAPMAS also conducted national surveys of household expenditure patterns in 1958/59, 1964/65, 1974/75, 1981/82 and 1990/91, and since 1956 has collected quarterly and annual labor force and employment data. All the CAPMAS-connected data are published in at least summary form in the Annual Statistical Yearbook issued by that agency.

The family planning program itself has, of course, produced program output and service statistics. Under the PFPB an annual report of the family planning program was also published that reported various program performance statistics such as acceptors and couple-years of protection. These data over time have fluctuated in coverage and accuracy. The prevalence rates reported in this series are based on converting program inputs—numbers of IUDs inserted, pill supplies distributed, etc.—into couple-years-of-protection based on standard assumptions pertaining to use-rates and effectiveness and applying this ratio to estimates of the population of married women of reproductive ages extrapolated from the most recent census data.

Under the Supreme Council for Population and Family Planning, numerous publications based on these data were issued and a regular family planning journal, Population (in Arabic), was launched. The timely publication of these data languished during the early years of NPC because of concern over their accuracy. The entire system for collecting and reporting service statistics has recently been completely revamped and, since 1994, a new computer-based information system has begun operation.

Thus, the demographic database in Egypt is rich, and it is possible to obtain a reasonably accurate picture of the underlying trends. While not without problems that beset demographic data collection systems in developing countries, the data in Egypt are more than adequate to establish the general level and trend changes in that level, and nearly all the data sources agree on these salient features.
A. THE PROXIMATE DETERMINANTS FRAMEWORK

Fertility is a complex socioeconomic as well as biological process. Various frameworks have been developed for measuring and analyzing the relative importance of the biological, societal and behavioral factors determining the actual level of fertility in a given population. Bongaarts (1978) has shown that the actual fertility of a population of women is never as high as the maximum biological potential. Actual fertility can be seen as the potential lifetime fertility of 14 to 17 births per woman after the intermediating effect of the four main proximate factors has been taken into account. This is the logic of the familiar “proximate determinants” framework (Bongaarts, 1978; Bongaarts and Potter, 1984; Hill, 1985). The difference between the actual and the potential depends for the most part on: (1) the proportion of women currently “in-union” (married or otherwise exposed to the risk of becoming pregnant); (2) the proportion of women, on average, not currently fecund by reason of postpartum lactational amenorrhea; (3) the proportion of women currently using some means of contraception to avoid pregnancy; (4) the proportion of women on average experiencing a deliberate pregnancy termination per year. (Other factors such as the incidence of both male and female sterility, variations in the spontaneous interuterine fetal mortality rate, nutrition or disease-connected effects on fecundity, and coital frequency can also affect actual fertility, but these typically have only negligible impact compared to the four main proximate determinants listed above.)

B. ESTIMATES OF THE PROXIMATE DETERMINANTS IN EGYPT

In pre-1960 Egypt, the period of the high "plateau" of fertility, the TFR was about seven, which is well below the potential of 14 that might have been expected. This means that one or more of the intermediate factors (or proximate determinants) was at work lowering fertility by about 50 percent. The assumption may be plausibly made that abortion was all but non-existent in Egypt in these years, so this factor is not considered. Prior to the 1970s, there were no solid data on the proportion of women making deliberate effort to avoid pregnancy using traditional methods (abstinence, male withdrawal, or crude female barrier methods) or such modern methods as were available. We can reasonably assume that it was a very small proportion, 10 percent or less nationwide.

Marriage is not a universal state for all women throughout their entire fecund period. Compared to some developing countries, marriage occurs at a relatively late age in Egypt, 18 years or above on average. Many women are widowed well before completing their entire fecund period, thus removing them from the risk of further childbearing. Separation of spouses was also common, when husbands in rural areas sought temporary employment in urban areas during the fallow period of cultivation. Thus, the proportion of women currently in union and hence at risk was probably relatively low. Coale found that only about 75 percent of women in 1960 aged 15 to 49 were currently exposed to the risk of pregnancy as a result of being currently married and living with their spouse. Thus marriage factors explained about 60 percent of the difference between actual and potential fertility.

The remaining determinant is postpartum infecundability arising for the most part from lactational amenorrhea. Prolonged breastfeeding of newborns was universal in Egypt and until very recently, the median duration of breastfeeding in Egypt was 18 to 24 months. This would have had a powerful restraining effect on fertility, keeping women from becoming pregnant for up to a full year after each birth.
Thus, on balance, in the long period of high and constant fertility before 1960, actual fertility was about half of the potential level of fertility. Some 60 percent of this difference was due to a relatively late age at marriage and the effect of widowhood and separation, and about 30 percent due to prolonged breastfeeding and its contraceptive effect. Deliberate contraception and all other factors accounted for the remaining 10 percent of the potential not achieved. Thus, two proximate determinants, proportion not currently in union and prolonged breastfeeding, explain almost all the difference between observed and potential fertility. This is consistent with and provides indirect support for the belief that deliberate contraception was playing a minor role prior to the early 1960s.

Beginning around 1965, it seems clear that deliberate control of fertility through the use of contraception began to play an ever-increasing role. In 1960, the TFR was seven, but by 1990 it had declined to four, a reduction of about 40 percent. Age at marriage continued to rise modestly during this period, but the average duration, and hence the contraceptive impact, of breastfeeding may well have lessened. All measures of contraceptive use have shown sharp and steady increases since 1960. Several efforts have been made to assess the relative importance of the proximate determinants based on the various fertility surveys conducted since 1974-75. Using data from the 1980 Egyptian Fertility Survey (EFS), Nawar and Hobcraft (1988, p. 90) concluded that "...the various proximate determinants combine to bring about [a] 60.4 percent reduction in overall fertility from the potential. Slightly over half of the total reduction is delay of first marriage... and marriage dissolution is responsible for...nine percent of overall fertility reduction... [for a combined total of some 60 percent by reason of women not being in current union]...Lactational infecundity is responsible for a further 16 percent... [while] contraception contributes almost a quarter of the total reduction...in fertility from the potential." Thus, between 1960 and 1980, the effect of contraception probably doubled, the marriage effect remained about the same and the breastfeeding effect fell slightly.

More recently Osheba (1993) has analyzed the changing effects of the proximate determinants by averaging the variables from the 1975 NFS and the 1980 EFS and comparing them to the average of the 1988 EDHS and the 1991 PAPCHILD Survey. He concludes "...for Egypt as a whole, the TFR decline of 18.3 percent between (1975-80) and (1988-91) can be decomposed into a 7.8 percent decline due to a decrease in the proportion of women married... a 7.6 percent increase due to a shortening of the duration of lactational infecundability... [and] a 25.7 percent decline due to an increase in contraceptive use..." He estimates that all other factors (reduced interuterine mortality, sterility and increasing fecundity due to nutrition and general socioeconomic improvements) may have contributed as much as a 10.8 percent increase in the potential TFR (p. 21). Thus, the effect of contraception has increased sharply, the effect of marriage delay or dissolution has fallen relative to the effect of contraception while still remaining positive, and the effect of lactational and other factors actually support rising not falling fertility. (Table A-4 presents estimates of the proximate determinants based on the 1980 EFS, 1988 EDHS, and 1992 EDHS.)

C. Assessing the Relative Importance of Contraception

On balance, the sharp increase in contraceptive use has been responsible for most of the recent measured decline in fertility. Accounting for all the other possible proximate determinants simply strengthens this conclusion. Survey data support this conclusion. About half the married women in the reproductive ages now report current use of some method of fertility control and nearly three-fourths report "ever-use" of a method. A contraceptive prevalence rate this high would be totally inconsistent with fertility as high as traditional levels. The Egyptian CPR and TFR fit nicely on a regression line derived from the experience of many other developing nations undergoing fertility transitions (Westoff, 1990).

Egypt's transition to reduced fertility is the story of rising contraceptive use and the family planning program that is behind the
TABLE A-4
ESTIMATES OF PROXIMATE DETERMINANTS OF FERTILITY BY REGION, 1980-1992

<table>
<thead>
<tr>
<th>Region</th>
<th>Cm: index of marriage delay</th>
<th>Cc: index of contraceptive effect</th>
<th>Ci: index of postpartum infecundability</th>
<th>Actual TFR</th>
<th>Implied TFR (assuming TF=15.3)</th>
<th>Implied TF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Gov.</td>
<td>.50</td>
<td>.45</td>
<td>.47</td>
<td>.54</td>
<td>.42</td>
<td>.40</td>
</tr>
<tr>
<td>Lower Urban</td>
<td>.55</td>
<td>.55</td>
<td>.50</td>
<td>.53</td>
<td>.43</td>
<td>.37</td>
</tr>
<tr>
<td>Lower Rural</td>
<td>.68</td>
<td>.65</td>
<td>.60</td>
<td>.81</td>
<td>.63</td>
<td>.47</td>
</tr>
<tr>
<td>Upper Urban</td>
<td>.69</td>
<td>.55</td>
<td>.53</td>
<td>.74</td>
<td>.57</td>
<td>.50</td>
</tr>
<tr>
<td>Upper Rural</td>
<td>.76</td>
<td>.73</td>
<td>.73</td>
<td>.95</td>
<td>.88</td>
<td>.75</td>
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supply of these modern methods. We reviewed many of policy/program initiatives undertaken in the last 10 to 15 years. The number of methods available has increased, the number of facilities has expanded several-fold, quality of services has improved, and the private sector has been involved. Is it possible to say definitively, therefore, that the program has "caused" the fertility decline? This question must be addressed in a broader conceptual framework.

D. THE SUPPLY VS. DEMAND PARADIGM IN EGYPT

In the recent literature on family planning programs, a distinction is made between the influence of contraceptive supply (the "supply effect") and of rising levels of general socioeconomic development, which are usually assumed to lead to decreases in the desired number of children (the "demand effect") (Zohry, 1993). Critics of public contraceptive supply programs have argued that demand effects must lead the way and in fact dominate. Moreover, when demand effects are strong, no supply is needed since couples always have access to traditional ("folk") methods of avoiding pregnancies or births. The critics go further and suggest that even when a supply program seems to have been successful (that is, fertility falls), it must represent in reality the strength of an underlying demand effect that would have achieved the same result without the program intervention. The program simply substitutes one method mix for another or at best speeds up the fertility decline slightly through the use of more modern methods (Pritchard, 1994).

What can be said about this argument with respect to the case of Egypt? Several points need to be made. First, economic development in Egypt has been uneven and by no means strikingly large even in the advanced urban sectors. The quality of public and social infrastructure—transport, communications, energy—has definitely risen even in relatively remote rural areas. So has the quality of human capital thanks to education and health programs from the public sector. The general setting for economic development is now much more favorable because of this increase in the underlying human and capital infrastructure. In terms of measured income or consumption per capita, however, it is difficult to make a strong case that the average standard of living is appreciably higher now than it was several decades ago.

In many rural areas it is almost certainly worse. Landlessness is higher now than before the 1952 Revolution and the overall indicators of economic inequality (the Gini Coefficient) tell the same story. Thus, it is problematic to
assert that a rising level of economic affluence has led Egyptian couples to begin choosing “quality” over quantity in their family size, or that the fertility transition underway is totally demand-induced. Attitudes almost certainly have changed, but the cause of the change may well be the combination of rising levels of education, the nationwide penetration of the electronic media, and the new information reaching people via the SIS IEC effort. Rising levels of income probably have little to do with it.

Second, changing contraceptive attitudes and behavior seem very widely dispersed throughout Egypt. Rural Upper Egypt has been as much a part of this trend as urban Lower Egypt. In fact, in some of the areas that have experienced the least economic development, the increases in contraceptive practice have been the greatest. This suggests that the roots of rising demand can not be found in the usual economic variables.

A plausible interpretation suggests itself, however. Rising levels of social and human capital have resulted in the spread of new ideas and new values throughout Egypt. In short, an “ideational change” has occurred, creating a receptivity to the notion of smaller families and contraceptive practice. The family planning supply program was able to tap into this latent demand and supply the technology necessary to implement these changing aspirations and goals. As the program became more effective and improved its quality, the impact of this supply grew and the combined impact of both the supply and demand factors became sharply visible by the mid-1980s.

Which factor, supply or demand, was the most important? Without the structural transformation that occurred, it is quite likely that the supply program would have had a much more limited impact, even now. Without the supply program, however, it is unlikely that the latent demand for smaller families created by the ideational change could have been so quickly implemented by couples. Perhaps the Egyptian experience shows that the time has come to stop thinking in artificial “demand versus supply” terms. The same social transformation powers both. Neither succeeds without the other.


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