

Achieving Replacement-Level Fertility in Egypt: Challenges and Potential Opportunities

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SUMMARY

This study considers the prospects for achieving replacement-level fertility in Egypt in the near future. Replacement-level fertility, the fertility rate consistent with a population growth rate of zero (i.e., a stationary population), can be regarded as 2.1 births per woman.

A transition from Egypt's current fertility rate of 3.2 births per woman to the replacement level will require reductions in both wanted and unwanted fertility. For the country as a whole, and for those segments of the population with relatively low fertility at present (urban areas, educated women, wealthier households), the required reductions in wanted and unwanted fertility are roughly equal. In those segments of the population where fertility is currently relatively high (rural areas, less educated women, poorer households), the reduction in wanted fertility will need to be about twice as large as the reduction in unwanted fertility. Neither reduction in wanted fertility nor reduction in unwanted fertility alone will be sufficient; reductions in both are required. A second, equally important point is that replacement-level fertility will be difficult to achieve unless most Egyptians accept two children as their childbearing goal.

Data collected for the Slow Fertility Transition project reveals that widespread acceptance of a two-child norm is lacking at present. Among currently married women of all ages, slightly less than one-half (46 percent) express a desire for two or fewer births. Even among married women under age 30, the fraction is not far above one-half (57 percent). Of particular relevance for the future, among young, never-married women and men, the percentage wanting two or fewer births is 61 percent and 53 percent, respectively. In other words, among younger adults who are in the early stages of their reproductive lives or are about to begin childbearing, a substantial fraction still considers three or more children to be desirable.

This lack of widespread acceptance of a two-child norm is the most notable obstacle to the achievement of replacement-level fertility. Other obstacles revealed by this study include the following:

- Few women perceive much gain from having a large number of children and most acknowledge the advantages of having just two children. Nevertheless, a substantial fraction desires three or more children. Apparently “intellectual assent” to the benefits of a small family is not, in itself, sufficient to lower fertility.
- Attachment to stated fertility goals appears to be weak. For example, among women who express a desire for two children, about two-thirds say it would matter “not at all” or “a little” if they had a third child.
- Most Egyptians wish to have both a son and a daughter. This sex preference on balance works against replacement-level fertility, because one-half of the couples with two children will lack either a son or a daughter.
- Women who are more stressed financially and women who are more anxious about their own or their children's future economic prospects are more likely to want two or fewer children. By implication, improved economic conditions in Egypt might actually have a pronatalist effect.

- Unwanted fertility remains relatively high. About one-quarter of recent births and pregnancies are unwanted, according to prospective estimates provided by the Slow Fertility Transition project.
- Negative perceptions of contraception persist, in particular perceptions that the most common methods cause negative health side effects. These perceptions serve as a disincentive to the adoption of contraception and, more importantly, to effective and continuous use of contraception.

The above findings highlight the need for national policies that aim at reducing both wanted and unwanted fertility. More specific policy recommendations include:

- Policies and programs that persuade couples of the desirability of a two child family, regardless of their sex, should be developed and strengthened;
- Improving contraceptive continuation through adequate counseling and effective management of side-effects;
- Policies to encourage girls' education and employment;
- Promoting more egalitarian gender attitudes, especially among younger men and women.

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ABBREVIATIONS

CIDA	Canadian International Development Agency
EIDHS	Egypt Interim Demographic and Health Survey
SFT	Slow Fertility Transition
SRC/AUC	Social Research Center / American University in Cairo
TFR	Total Fertility Rate
USAID	United States Agency for International Development

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BACKGROUND

Following a period of relatively rapid decline in the 1980s and early 1990s, the Egyptian fertility decline stalled during the later part of the 1990s. The 2003 Egypt Interim Demographic and Health Survey [EDHS] provided estimates of the Total Fertility Rate [TFR] – births per woman over a reproductive career – of roughly 3.25 births. The levels in some segments of the population (e.g. rural Upper Egypt) are substantially higher. In the segments of the population where fertility is highest, unmet need for contraception (non-use among women wishing to avoid pregnancy) remains a significant problem. However, in most segments of the population, unmet need has dropped precipitously during the past fifteen years to relatively low levels. This means that at this juncture assessing the state of the fertility decline in Egypt and the prospects for further decline is above all a matter of understanding fertility desires. Why do a majority of Egyptians desire three or more births? Are these aspirations likely to persist into the future?

This report addresses critical questions about the current status of the fertility decline in Egypt and the prospects for a further decline to replacement-level fertility. Replacement-level fertility, the value consistent with zero population growth (or a stationary population) over the long run, is a TFR of 2.1. The analysis in this report draws on data collected by the Egypt Interim Demographic and Health Survey in 2003 (EIDHS) and by the Slow Fertility Transition (SFT) project in 2004.

PROJECT

The Slow Fertility Transition project has been co-funded by USAID, the Mellon Foundation, CIDA, and the Population Council. The main objective of the project is to better understand the current slow pace of fertility decline in Egypt and to identify policies that might facilitate decline to replacement level. The first phase of the project involved collection and analysis of data. The second phase, which was sponsored by the FRONTIERS Program with funds from USAID, involved dissemination of findings and identification of policies and programs that would help the Egyptian government achieve replacement level fertility by the year 2017.

The Slow Fertility Transition project re-interviewed a sub-sample of 3,286 currently married women who were interviewed in the 2003 EIDHS. In the follow-up interview, which occurred on average eleven months after the EIDHS interview, these women were asked about their reproductive experience in the period since the EIDHS interview, their attitudes about childbearing and related issues, and some questions about household economics.

Two further samples were also interviewed in 2004: a sample of unmarried women aged 18-29 (917 respondents in total), and a sample of unmarried men aged 18-29 (945 respondents in total). These respondents were selected from the EIDHS household sample. These young women and men were asked many of the same questions as the ever-married women about their attitudes towards childbearing, and in addition they were asked their attitudes and expectations about marriage. These data offer an exceptional opportunity to explore the family aspirations of the younger generation that will determine the future course of fertility in Egypt.

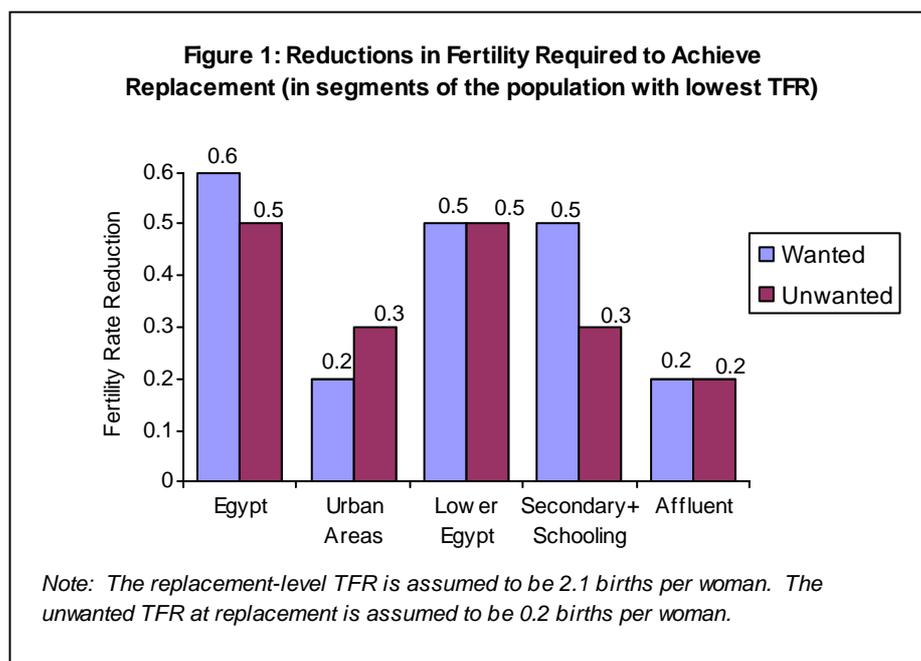
FINDINGS

Achieving Replacement-Level Fertility: Reductions in Wanted and Unwanted Fertility

A variety of pathways to replacement-level fertility exist, involving different mixes of wanted and unwanted fertility. The achievement of the replacement-level fertility would be facilitated if a fraction of women did not marry and therefore remained childless. If, for example, 10 percent of Egyptian women remain childless, then the TFR for those women who marry and bear children could be about 2.3, yielding an overall TFR of 2.1 births per woman. But the data collected by the Slow Fertility Transition project, from both married and young, never-married women, show that virtually no women want to remain childless (or, for that matter, limit themselves to just one child). This evidence is reviewed below. It is clear that an overwhelming majority of Egyptian women aspire to have at least two children. Because a two-child norm is consistent with replacement-level fertility, an appropriate goal for national population policy is to assist women in having no more than two children.

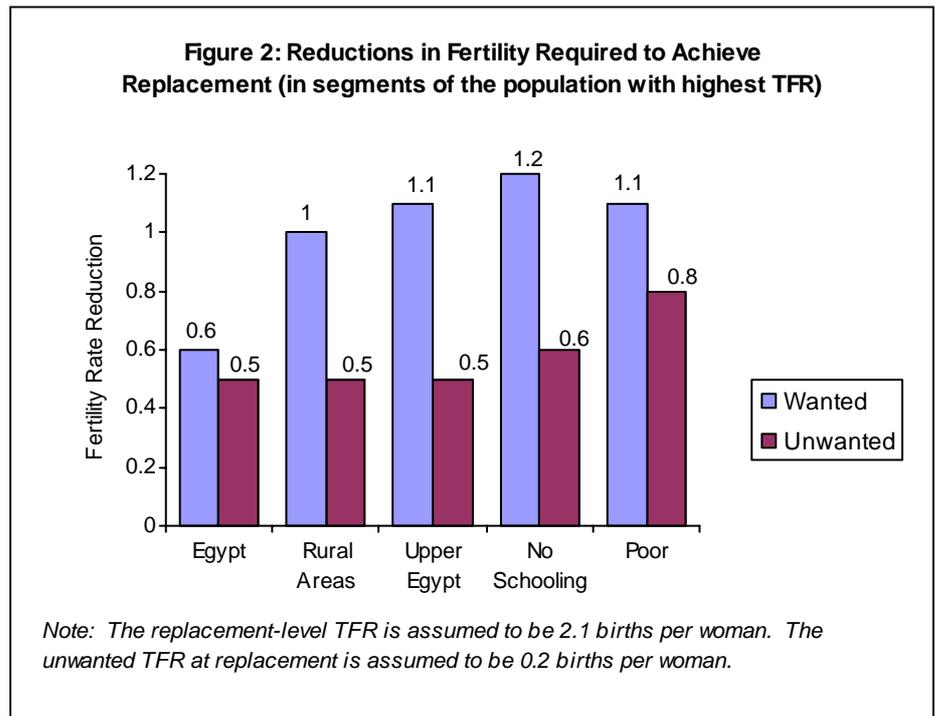
Achieving this goal will require reductions in both wanted and unwanted fertility. It is clear that reductions in unwanted fertility alone will not be sufficient: in the three years preceding the Egyptian Interim DHS, the TFR was 3.2 births per woman and the wanted TFR (the TFR calculated on the basis of wanted births only) was 2.5 births per woman. In other words, eliminating unwanted fertility (0.7 births per woman) would still leave fertility about one-half birth above the replacement level. Equally, replacement-level fertility cannot be reached through reductions in wanted fertility alone, because an unwanted TFR of 0.7 births per woman would have to be accompanied by a wanted TFR of 1.4 births per woman. Given the evidence reviewed below on fertility desires, a wanted TFR substantially below two births per woman is not plausible anytime soon, unless a large fraction of women do not marry or a large fraction marry too late to achieve their childbearing goals.

What amounts of decline in wanted and unwanted fertility would, together, lead to replacement-level fertility? This question is addressed in Figures 1 and 2. In this analysis, the minimum achievable value of the unwanted TFR is assumed to be 0.2 births per woman. This is equivalent to one out of five women having one unwanted birth during their reproductive years; it seems unlikely that unwanted fertility can fall below this level. To reach this low level of unwanted fertility will require a reduction in the unwanted TFR of 0.5 births per woman; under this scenario, replacement-



level fertility would be achieved if the wanted TFR fell by 0.6 births per woman. Together, these roughly equivalent reductions would result in a decline in the TFR from 3.2 births per woman to 2.1 births per woman. Figure 1 repeats this analysis for those segments of the population where the TFR is currently lowest: urban areas, Lower Egypt, women with secondary schooling or higher, and women in more affluent households (defined as the highest quintile of household wealth). In these segments of the population, the required reductions in wanted and unwanted fertility are roughly equal, as is the case for Egypt as a whole.

But in those segments of the Egyptian population where fertility is highest – rural areas, Upper Egypt, women with no schooling, women in the lowest quintile of household wealth – achieving replacement-level fertility will require far larger declines in wanted than unwanted fertility, as Figure 2 shows. Some of these subgroups represent small fractions of Egyptian society; nevertheless, if their fertility remains well above replacement level, the TFR for the country as a whole can only fall to



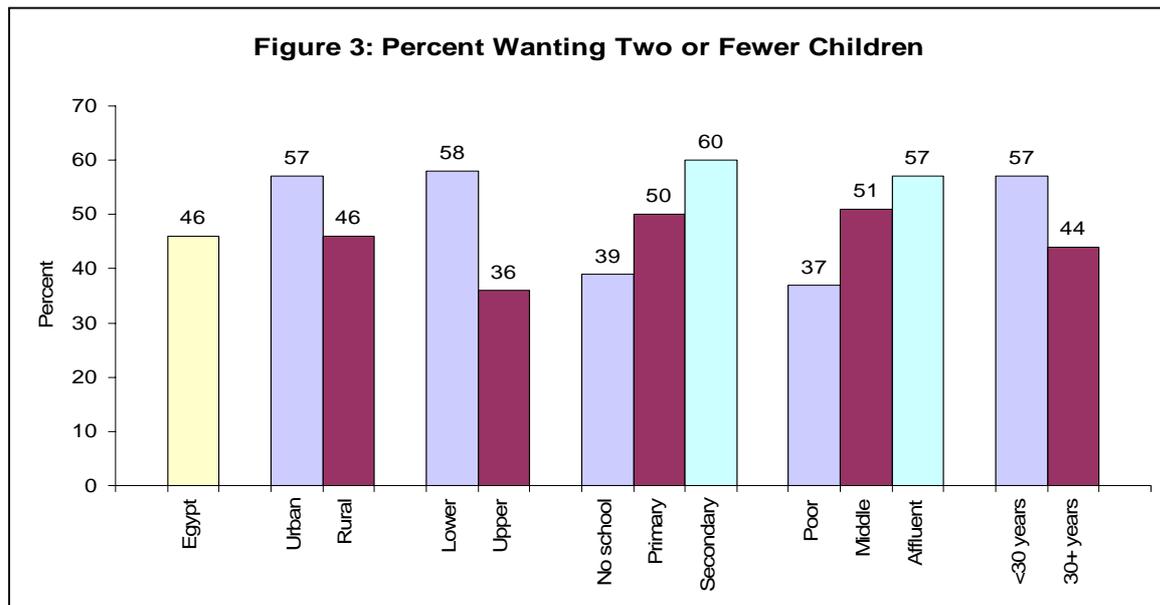
two births per woman if subgroups of equivalent size average less than two births per woman. Given prevailing fertility desires, this would be an undesirable outcome, because it would mean that many Egyptian couples would arrive at the end of their reproductive years without having fulfilled their childbearing aspirations.

Fertility Desires

The optimal pathway to replacement-level fertility would be the widespread adoption of the goal of having only two children, combined with unwanted fertility falling to a minimum level. Figure 3 shows the percentage of currently married women who want two or fewer children. The percentage for Egypt as a whole is about one-half (46 percent). Even among those in urban areas, the best educated, and the wealthiest, this does not exceed 60 percent, and in some segments of the population, the percentage falls below 40 percent. Evidently a large fraction of Egyptian women would still like to have three or more children.

Especially significant is the fact that among women under age 30, 57 percent want two or fewer children. And, although not shown in Figure 3, among women with 0-1 living children and with two living children the percentages are 67 and 60, respectively. That is, among Egyptian women in the younger reproductive ages and among women who have not yet had more than two children, at least one-third would like to have three or more children. (Note

that about three-quarters of the women with two or fewer living children are under age 30). Moreover, when women were asked in the Slow Fertility Transition interview whether they would mind having one more child than their ideal, most expressed little distress about this prospect. For example, among women whose stated ideal is two children, two-thirds said it would matter “not at all” or “little” if they had one child more than this ideal. When asked what they consider the maximum number of children acceptable for an Egyptian couple, the SFT respondent’s most common response was three. Women’s acceptance of having one child in excess of the number desired is matched by an acceptance of having one child less than desired, if that happens to be the reproductive outcome. The respondents were also asked whether couples could largely control the number of children they have; over 40 percent of women said this is beyond the control of couples.



Note: Whether women want two or fewer children is determined as follows. For women with fewer than two children, this is determined by the number of additional births they desire. For women with two children, this is determined by whether or not they desire to have another birth. For women with more than two children, this is determined by their stated ideal number of births.

These data reveal a weak attachment to expressed fertility ideals. In all likelihood the underlying belief that childbearing cannot be fully controlled by a husband and wife -- that actual reproductive outcomes are unpredictable -- leads to an acceptance of unwanted births (i.e., births in excess of the couple’s desired number).

A further reason for the lack of widespread acceptance of a two-child norm is preferences concerning the sex of children. A common assumption is that son preference is a pervasive obstacle to lowering fertility to replacement level in Egypt, and the data confirm that an absence of sons increases a woman’s willingness to have at least three children. But the data also document a strong desire to have both a boy and a girl. Among women wanting two children, the overwhelming preference is to have one of each. And among women who have two living children, it is the women with a son and a daughter who are most likely to express a desire to stop childbearing. It is sometimes overlooked that a desire to have children of both sexes can be a greater impediment to achieving replacement-level fertility than a desire to have at least one son. This is because the biological probability of having a boy and a girl are essentially equal. Hence one-half of women with two children will have one son and one daughter, whereas the other half will have either two sons or two daughters. Consequently

only one-quarter of women with two children will lack a son and only one-quarter will lack a daughter, but both these groups of women -- one-half of all women with two children -- lack either a son or a daughter. The two-child norm requires that couples be prepared to accept any outcome related to the sex composition of their children; couples must no longer act on their preferences for sex of children.

Attitudes toward Large and Small Families

Because commitment to a two-child norm is essential if fertility in Egypt is to decline to replacement level, the Slow Fertility Transition project contained an extensive set of questions about women’s attitudes toward large and small families. Given the pattern of fertility desires presented above, with a substantial fraction of women wanting three or more children, one would expect to find that women perceive some gains from having more than two children and are far from convinced of the benefits of restricting childbearing to two children. In the event, the SFT data run counter to these expectations.

Table 1: Attitudes about Having Large Number of Children: Married Women

	Percent agreeing
Parents should have many children so that they will not be lonely when they are old	15
Having many children is not an obstacle for parents to achieve what they would like to achieve	10
Having more children will increase the family's income	10
Having many children is good because they provide help to parents in household tasks	15
Parents can raise all their children properly, even if they have many children	13
Having many children does not affect their educational attainment	9
Having many children does not increase the financial pressure on the family	7
If people had more income, they could have more children	27
Parents feel alive after death when they have many children because their name will be continued	17
Families must have more children to increase the power of their family and tribe	19
Having many children does not cause many disagreements and problems between husband and wife	19
A person with many children is looked up to in the community more than a person with 1-2 children	10
A man with more brothers has better opportunity in life	27
A man with many relatives has better opportunity in life	38
Help from extended family is essential for success in life	43
Percent disagreeing with all the specified benefits of having a large number of children	21
Percent agreeing with at least half of the specified benefits of having a large number of children	6
Percent agreeing with all the mentioned benefits of having a large number of children	< 1

In one block of items, women were read 15 statements that describe reasons couples might want to have many children. The 15 statements and the percentage of women agreeing with each are shown in Table 1. None of the statements garnered agreement from as many as one-half of the women, and agreement was below 25 percent for 11 of the statements. Indeed, 21 percent of the women agreed with none of these stated advantages of having many children, and less than 1 percent agreed with all of them. The two items that received the highest agreement (around 40 percent) state that help from extended family and having “many relatives” lead to more success in life. Presumably when responding to these items, women were thinking of economic gains accrued through kin connections. Note that these two items

do not explicitly refer to couples having moderate to large numbers of children, although of course over the long run such childbearing is necessary if large kin networks are to be maintained. The lowest agreement in Table 1 is with the two statements that “having many children does not increase the financial pressure on a family” and that “having many children does not affect their educational attainment.”

On balance, Table 1 shows that Egyptian women do not regard a large number of children as an effective strategy for attaining family and personal goals. On the contrary, these data suggest that women are keenly aware that large family size can hinder the attainment of cherished goals for their children’s schooling, family financial security, and so forth.

The respondents were also asked two sets of questions on the critical issue of whether childbearing should be limited to two children. One set asked about the advantages, and the second set about the disadvantages, of having only two children. Nine possible advantages

were read to the women, and eight possible disadvantages. Women’s responses were decisive and unambiguous: as summarized in Table 2, virtually all women agreed with the specified advantages and rejected the specified disadvantages.

Table 2: Advantages and Disadvantages of Having Only Two Children: Married Women

	Percent
Advantages^a	
Percent disagreeing with all 9 advantages	1
Percent agreeing with at least 5 advantages	99
Percent agreeing with all 9 advantages	91
Disadvantages^a	
Percent disagreeing with all 8 disadvantages	70
Percent agreeing with at least 4 disadvantages	6
Percent agreeing with all 8 disadvantages	1

^a The advantage and disadvantages presented to the respondents were as follows:

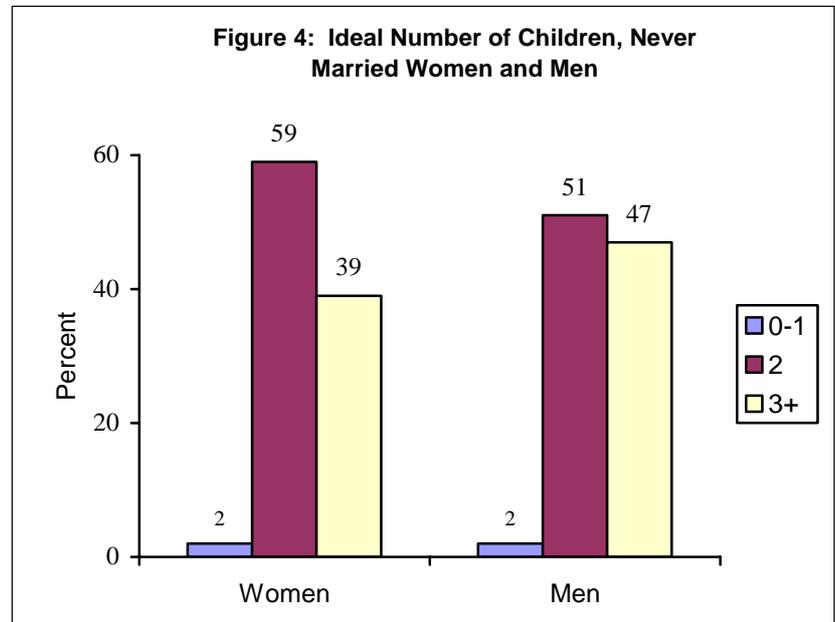
<i>Advantages</i>	<i>Disadvantages</i>
A less crowded household	Less help from children in household work
A better living standard	Less contribution to household income
Children raised more properly	Insufficient support in old age
Children can have more schooling	Feeling of a strong family is lost
Children are healthier	Husband less tied to family
Less stressful to woman’s health	Family name is weakened
Easier for woman to work and enjoy herself	Risk of shortage of sons or daughters
Reduce population explosion in Egypt	Risk of not enough children surviving to adulthood
Household is happier	

How does one reconcile the findings in Tables 1 and 2 with the evidence presented earlier that many women either desire to have more than two children or appear to regard such an outcome as perfectly acceptable? This puzzle is indicative of a degree of uncertainty and confusion about childbearing in Egypt at this time. There seems to be an intellectual assent to the notion that two children is the optimal childbearing outcome. What is lacking is a corresponding commitment to two children as each couple’s own childbearing goal, as revealed by women’s expressed fertility desires and their apparent willingness to accept having more than two children. Perhaps women perceive that most of the recognized advantages of having only two children, and the very few recognized disadvantages, apply equally well to having three children. While the distinction between two and three children may be inconsequential in women’s minds, in the aggregate this distinction implies sharply different long-range population growth rates for Egypt.

The Younger Generation

Any analysis of the prospects for further fertility decline in Egypt must consider the fertility desires and attitudes of women and men under age 30. In demographic terms these cohorts are relatively large, and their fertility behavior over the next decade or two will determine the trajectory of population growth in Egypt.

The ideal number of children for never-married women and men (aged 18-29) is presented in Figure 4. While a majority of both women and men indicated that two (or fewer) children are ideal, 39 percent of women and 47 percent of men regarded three or more children as ideal. This is a significant finding: those young adults who are about to enter their childbearing years have by no means fully adopted a two-child norm. Recall that among married women, 54 percent want three or more children (Figure 3). While the corresponding figure for never-married women is lower (39 percent), it is striking that such a large fraction of young, unmarried women consider three or more children to be a desirable outcome.



And yet, consistent with the pattern observed among married women, never-married women and men perceive few benefits from having many children, and they perceive many advantages and few disadvantages to having only two (Table 3). Hence the same puzzle described for married women applies to young unmarried adults: there is a recognition of the compelling rationale for a two-child family, but also an acceptance by a substantial fraction of the possibility of having three or more children.

With the availability in the SFT of data on never-married women and men, a number of interesting comparisons can be made. In brief:

Comparing never-married women and men: A larger fraction of women favor the two-child norm, but in general the gender differences in fertility desires and attitudes toward childbearing are slight. Young women and men differ most in their attitudes about gender roles (another subject of inquiry in the SFT project), with men less supportive of gender equality, instead favoring clear separation of the roles of men and women.

Comparing never-married and currently married women under age 30: There are few noteworthy differences in fertility desires and attitudes toward childbearing between the married and unmarried. Contrary to expectations, those women who marry early are not distinctly more pronatalist.

Comparing married women under age 30 and 30+: Once again the differences are slight, indeed so slight in most instances as to be nonexistent. On balance, younger and older married women resemble each other more closely, in their desires and attitudes, than do unmarried and married young women.

Table 3: Childbearing Attitudes: Young Never Married Men and Women

	Women	Men
Attitudes toward Having a Large Number of Children		
Percent disagreeing with all the specified benefits of having a large number of children	24	16
Percent agreeing with at least half of the specified benefits of a large number	4	5
Percent agree with all the specified benefits of having a large number of children	0	0
Advantages of Having Only Two Children		
Percent disagreeing with all 9 advantages	0	1
Percent agreeing with at least 5 advantages	99	98
Percent agreeing with all 9 advantages	95	86
Disadvantages of Having Only Two Children		
Percent disagreeing with all 8 disadvantages	80	83
Percent agreeing with at least 4 disadvantages	1	2
Percent agreeing with all 8 disadvantages	0	0

The Desire to Have Two or Fewer Children: Some Correlates

Some of the women who have two or fewer children wish to have no more than two children. This group includes the majority of never-married women. Other women with two or fewer children desire three or more children. It is important to ascertain what distinguishes these two sets of women, so that policies and programs can be developed to address the reasons why some women desire three or more children.

The Slow Fertility Transition project gathered extensive information on women's attitudes toward childbearing, their perceptions of the costs and benefits of children, their attitudes toward related familial issues, such as gender roles and concerns about their household's economic situation. Table 4 relates a subset of this large number of items to the desire to have two or fewer children. (Note that all the differences in this table are statistically significant at the .01 level).

Women who perceived zero or one benefit to having a large number of children were far more likely (68% vs. 40%) to want to limit their childbearing to two or fewer children than women who perceived many benefits to having a large number. Similarly, women who perceived no disadvantages to having only two children were far more likely (67% vs. 38%) to want two or fewer children than women who perceived many disadvantages. These large differentials, while entirely expected, underscore the importance of persuading women that there are few benefits to having a large family and few disadvantages to having a small family.

More intriguing is the association evident in Table 4 between gender attitudes and the desire to have two or fewer children. The respondents were asked about changes in gender roles that are assumed to be underway in Egypt: women having more authority in household decisions, husbands doing more domestic chores, and women occupying more leadership positions in

society. Consistently, those women who considered these changes in gender roles to be a positive development were more likely to favor limiting their childbearing to two children.

Table 4: Correlates of Wanting Two or Fewer Children: Percentage of Women Wanting Two or Fewer Children, According to Various Attitudinal and Economic Variables ^a: Married Women with Fewer than Three Children and Never-Married Women

	Percent Wanting Two or Fewer ^a
Benefits of a Large Number of Children	
Agrees with zero or one benefit	68
Agrees with six or more benefits	40
Disadvantages of Having Only Two Children	
Agrees with none of the eight disadvantages	67
Agrees with one or more disadvantages	38
Attitudes toward Social Change in Gender Roles	
Wives having more power in household decisions:	
Good development	63
Bad development	53
Husbands doing more domestic chores:	
Good development	63
Bad development	54
More women occupying leadership positions:	
Good development	63
Bad development	47
Economic Stress and Anxiety	
Number of household goods and services ^b had difficulty paying for during last month	
0	59
3 or more	69
Number of household goods and services ^c concerned about paying for during next year	
0	59
5 or more	69
“How about your children in the future? Do you think it will be easier, harder, or about the same to cover the costs of food and housing?”	
Easier or Same	58
Harder	64

^aAll differences in this table are statistically significant at the .01 level.

^bFrom among six goods and services: food and daily household supplies; rent; medical expenses for an adult; infant/child care and medical expenses; children’s schooling; installments and debt repayment.

^cSame as in footnote b, with addition of: clothing; saving for children’s marriage.

Finally, the respondents were asked whether their household’s economic situation was improving or worsening, whether the household struggled to cover the costs of basic goods and services, and whether the respondent was optimistic or pessimistic about the future. As indicated in the final panel of Table 4, women who reported more difficulty in paying for basic goods and services – either during the most recent month or as they look ahead to the next year – were more likely to desire two or fewer children. Similarly, women who worried that their children will struggle to cover basic goods and services were more likely to want to limit their family to two or fewer children. This suggests that economic uncertainty is a motivating factor for limiting fertility. Conversely, women who felt less stressed financially and more optimistic about the future were less likely to want two or fewer children. Elsewhere in the interview, women were asked whether they agree or disagree that “If people had more income, they would have more children.” One-quarter of the women agreed with this statement, and these women were less likely to want to limit their childbearing to two children.

Evidently, the association between childbearing aspirations and household economics is not straightforward. As shown in Figure 3, the likelihood of wanting two or fewer children increases with household wealth. On the other hand, the Slow Fertility Transition project also provides evidence that economic stress and anxiety lead to a desire for fewer children. Increases in household wealth would of course be a welcome development and, it seems, will lead to lower fertility. In contrast, it appears that reduced economic stress and anxiety – also desirable outcomes -- will, if anything, hinder the decline of fertility to replacement level.

Unwanted Fertility

The optimal pathway to replacement-level fertility in Egypt will entail roughly equal reductions in wanted and unwanted fertility rates. Hence, although the Slow Fertility Transition project invested more effort in exploring fertility desires and attitudes toward childbearing, information was also collected on unwanted fertility and its correlates.

Project staff interviewed women in 2004 who had previously been interviewed in the Egypt Interim Demographic and Health Survey. With this longitudinal design, an analysis of unwanted fertility can be conducted that has distinct advantages over the usual approach. Rather than

Table 5: Unwanted Birth/Pregnancy Rates by Selected Socio-demographic Characteristics

28 32	Urban Rural	Residence
30 31 31	Urban Gov. Lower Egypt Upper Egypt	Governorates
41 31 23	No Education Primary Secondary+	Education
44 26 34	Lowest wealth 2 nd – 4 th wealth Highest wealth	Wealth
18 66	Less than 30 years 30+ years	Age
0 4 54	0-1 children 2 children 3+ children	Parity

determining retrospectively whether births are wanted or unwanted, a procedure that is known to be biased (because of women’s reluctance to declare children unwanted), births that occurred between the two interviews can be classified as wanted or unwanted according to women’s desires to have another birth (or not) as stated in the original interview. The elapsed time between interviews was 11 months on average, and 416 live births and pregnancies that occurred during this period could be classified. Of these, about one-third (31 percent) are unwanted, judging from the woman’s expressed desires at the EIDHS interview. This is a substantially higher fraction than the fraction obtained using the standard DHS methodology to classify retrospectively births that occurred during the years preceding the EIDHS --17 percent is the estimate of the percent unwanted obtained using this standard approach.

A key policy question that can be addressed through analysis of these 416 births/pregnancies is which segments of the population have relatively low and high rates of unwanted births/pregnancies. This is examined in Table 5. As would be expected, the highest rates are among older women and women who already have three or more living children; among these women, more than half of the births/pregnancies that occurred were unwanted. A sharp differential according to women’s education is also apparent, with the rate among women

with no education almost twice as high as the rate among women with secondary or higher education. There is also a pattern according to household wealth (quintiles of household wealth); interestingly, the higher rates are found among both the poorest and the wealthiest households, with lower rates among the sixty percent of household in the middle. Finally, rates of unwanted births/pregnancies do not vary by place of residence – neither by urban-rural nor by region. This latter result is something of a surprise, as one might expect rural women and women in Upper Egypt to have higher rates.

Obstacles to Using Contraception

To reduce unmet need for contraception and to increase the adoption and continued use of contraception, the obstacles that discourage Egyptian women from using contraception must be overcome. The Egyptian Interim DHS contains some information on this topic. To supplement the 2003 survey, the Slow Fertility Transition project inquired more rigorously and systematically about the reasons why women choose not to practice family planning despite a stated desire to avoid becoming pregnant (either temporarily or indefinitely).

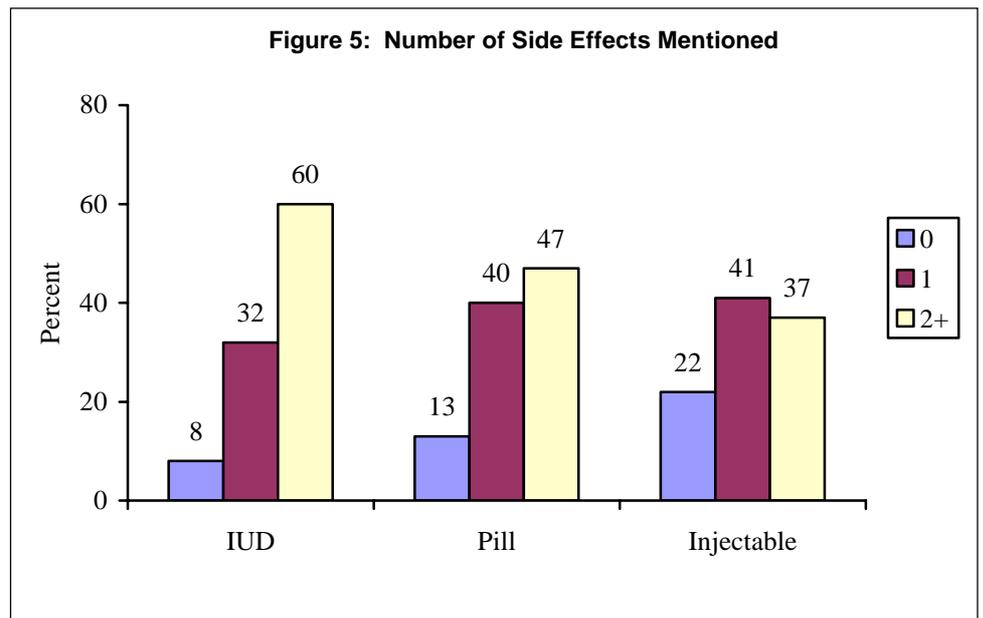
Consistent with other recent research, the data indicate that concerns about health side effects are a major deterrent to contraceptive use. This is the most common reason given for nonuse, apart from reasons related to a low likelihood of becoming pregnant (such as infecundity, infrequent sex,

postpartum amenorrhea, or current breastfeeding).

Of course, some of the women who give this latter set of reasons may be incorrect in believing they are at low risk of pregnancy, but for the most part they are probably correct.

In the Slow Fertility Transition project, all women were asked what they believed to be the health side effects attributable to three

contraceptive methods: the IUD, oral contraceptive, and injectable. These questions were asked of all women, users and nonusers alike. The number of health side effects mentioned by the women for each method is shown in Figure 5. (The various side effects mentioned are listed below.) It is striking that very small minorities of women cited no side effects, especially for the two most popular methods in Egypt, the IUD and the pill. The vast majority of women believed these methods are the cause of one or more health side effects; indeed, 60 percent named two or more side effects of the IUD, the most commonly used contraceptive method in Egypt.



The List of Side Effects is as Follows:

- | | | |
|----------------------|---------------|--------------------------------|
| ▪ Excessive bleeding | ▪ Headaches | ▪ Makes infertile |
| ▪ Irregular periods | ▪ Dizziness | ▪ Delays pregnancy |
| ▪ No period | ▪ Back pain | ▪ Infection |
| ▪ Swelling/bloating | ▪ Fatigue | ▪ Interferes with lactation |
| ▪ Weight gain | ▪ Weight loss | ▪ Contraceptive failure likely |

In addition to ascertaining what side effects Egyptian women associate with each of the main contraceptive methods, the project pursued women’s health concerns through further questioning (Table 6). When women were asked whether they had heard of anyone in the community experiencing side effects, a majority responded affirmatively for all three methods, with three-quarters responding affirmatively with respect to the IUD. When asked whether they believed the method makes women physically weaker, roughly one-third responded affirmatively for the IUD and

Table 6: Indicators of Health Concerns about Contraception: Married Women

	Percent
Has heard of someone in the community experiencing side effects	
IUD	75
Pill	64
Injectable	58
This method make women physically weaker	
IUD	37
Pill	63
Injectable	30
It is more difficult to become pregnant after using this method	
IUD	17
Pill	18
Injectable	55

injectable and almost two-thirds for the oral contraceptive. Finally, when women were asked whether they believed it is more difficult to become pregnant after using a method, one-half responded affirmatively for the injectable and smaller fractions did so for the IUD and oral contraceptive. Even so, the fact that nearly 20 percent of the women believed that the IUD and pill threaten future fertility undoubtedly discourages some of these women from using these methods.

CONCLUSIONS

A transition from Egypt’s current fertility rate of 3.2 births per woman to the replacement level will require reductions in both wanted and unwanted fertility. For the country as a whole, and for those segments of the population with relatively low fertility at present (urban areas, educated women, wealthier households), the required reductions in wanted and unwanted fertility are roughly equal. In those segments of the population where fertility is currently relatively high (rural areas, less educated women, poorer households), the reduction in wanted fertility will need to be about twice as large as the reduction in unwanted fertility.

Reviewing all the project data on fertility attitudes and desires, gathered from both married and unmarried respondents, one senses that childbearing in Egypt has reached a transitional stage. There is widespread recognition that many factors – both economic and social – favor the two-child family. Yet there is reluctance among many women to commit themselves

wholeheartedly to the achievement of this goal. Egyptian women evidently do not perceive a sharp distinction between having two children and having three.

Additionally, an important conclusion that emerges from the data on young never-married adults is that replacement-level fertility in Egypt will not occur automatically through generational succession, i.e. the replacement of older cohorts by younger (and, it is often assumed, more “progressive”) cohorts. The empirical data reveal that, similar to married women of all ages, young adults who have yet to marry and start childbearing are not fully convinced that two children is the ideal outcome. If Egypt is to achieve replacement-level fertility during the next few decades, these younger cohorts must become more fully committed to the two-child norm, and they must be supported in their efforts to attain this goal.

On the whole, the differences according to women’s marital status and age are minor. Far larger are differences according to social position, as defined by residence in urban versus rural areas, residence in Lower versus Upper Egypt, educational attainment, and household wealth. If one asks what accounts for variation in fertility desires and attitudes in Egypt, then socioeconomic and cultural factors appear to be of far greater importance than whether women are married or unmarried and whether women are old or young.

Unwanted fertility remains relatively high. About one-third of recent births and pregnancies are unwanted, according to prospective estimates provided by the SFT project. Also, negative perceptions of contraception persist, in particular perceptions that the most common methods cause negative health side effects. These perceptions serve as a disincentive to the adoption of contraception and, more importantly, to effective and continuous use of contraception.

POLICY AND PROGRAM IMPLICATIONS

The findings reviewed above have many policy and programmatic implications. Some of the key implications are highlighted here.

With the aim of achieving replacement-level fertility, policies should place roughly equal weight on the reduction of wanted and unwanted fertility. However, in those segments of the population where fertility is highest (rural areas, Upper Egypt) priority should be given to policies and interventions designed to reduce the number of children that couples wish to have.

Replacement-level fertility will be difficult to achieve unless most Egyptians accept two children as their childbearing goal. Policies and programs that persuade couples of the desirability of a two-child goal should be developed and strengthened. What is required are policies and programs that reinforce women’s and men’s positive attitudes towards small families (maximum two children), highlight the costs of childbearing and parents’ responsibility for the future well-being of their children, and which counteract any attitudes or beliefs that weaken the commitment to having a small family. It is also important to promote gender equality and to show that boys and girls are equally good and could have similar benefits to parents.

Efforts to strengthen commitment to a two-child norm might stress those advantages of two children already recognized and most often cited by the respondents, namely that in two-child

families the children can be raised more properly and have better schooling, the household can have a higher standard of living, and there will be less stress on women's health. And the disadvantages of two-child families that are most often cited need to be counteracted, namely that not enough children will survive to adulthood, a shortage of sons or daughters will result, and the husband will be less tied to the family.

Furthermore, strengthening commitment to a two-child norm requires the emphasis of other advantages of smaller families that may be less well recognized. These could include each couple's social responsibility to contribute to slowing national population growth, the benefits to children's health of small families and birth spacing, and the potential positive effects on women's lives. It is important that all members of society (women, their husbands, their parents and other relatives, and youth) be made aware of the personal and societal advantages of small families.

The unwanted pregnancies are concentrated in certain sub-groups of the population. Of particular programmatic significance, a majority of unwanted pregnancies occur to women who were recent contraceptive users (less than one year prior to the conception). This underscores the critical importance of improving contraceptive continuation through adequate counseling and effective management of method side-effects.

The Slow Fertility Transition project documents more thoroughly than the Egyptian Interim DHS (and previous DHS surveys) the pervasive concerns about the health effects of contraception among Egyptian women. Yet, continued efforts are required to provide accurate information and appropriate counseling on this important and sensitive issue. For those women who wish to avoid pregnancy (temporarily or indefinitely) but nevertheless do not use any method of family planning, the foremost concern that should be addressed is fear of health side effects. Other important obstacles to using contraception include a belief that their husbands are opposed and concerns about the religious acceptability of family planning.

Young men and women deserve special attention as they represent the parents of the future. Efforts should be made to establish the two-child norm among this group. It is also important to promote more egalitarian gender attitudes and to enable women to have control over different aspects of their lives, including child-bearing. Last but not least, reduction of wanted and unwanted fertility can not be achieved without policies that encourage girls' education and employment. Women who *know* their rights and responsibilities towards their children are more likely to desire a smaller family and to act on their decisions.