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AN EVALUATION OF THE IMPACT OF THE POPULATION
DEVELOPMENT PROGRAM BASED ON DATA FROM
THE 1980 CONTRACEPTIVE PREVALENCE SURVEY

BY

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DRAFT REPORT
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**An Evaluation of the Impact of
The Population and Development Program (PDP),
Based on Data from the 1980
Contraceptive Prevalence Survey**

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April 1981.**

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PREFACE

The data presented in this report are drawn from the results of the Egyptian Contraceptive Prevalence Survey conducted by the Population and Family Planning Board in November, 1980 - January, 1981. The survey is part of the ongoing worldwide CPS project designed to institutionalize the monitoring of levels of contraceptive knowledge, use, and availability in order to provide an improved data base for the management and evaluation of family planning programs. The CPS project is being administered by Westinghouse Health Systems under a technical support contract with the Office of Population, Bureau for Technical Support, U.S. Agency For International Development (Contract No. AID/DSPE-C-0052). Financial assistance for the survey was also provided by USAID/CAIRO.

For purposes of comparability, the report is similar in format to an earlier evaluation of the Population and Development Program prepared by a consultant to the UNFPA. The present report provides a more extensive, but still preliminary, assessment of the program.

The findings presented here should be considered tentative pending publication of the final survey report. The figures contained in this report are not to be cited without the permission of the Population and Family Planning Board.

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**An Evaluation of the Impact of Population and
Development Program Based on Data From
1980 Contraceptive Prevalence Survey**

INTRODUCTION

The national population and family planning policy in Egypt seeks to: (1) reduce population growth through lowering the birth rate; (2) slow the trend of rural to urban migration; and (3) improve population characteristics, particularly those related to health, education and the status of women.

To achieve these goals, the Population and Family Planning Board has adopted what may be termed a "developmental approach" to Egypt's population needs. This approach is aimed at inducing, or even precipitating, behavioral changes consistent with small family norms through the implementation of community-oriented socio-economic projects. In keeping with this strategy, the Board launched the Population and Development Program (PDP) in 1977.

The PDP is a community-based program which, through a number of interrelated developmental projects, attempts simultaneously to: (1) increase the quality of health, social and family planning services; (2) improve sanitation; (3) raise the status of women; (4) promote small-scale industry and the mechanization of agriculture; (5) facilitate access to urban areas; (6) institute cultural activities; and (7) promote information dispersion and communication through community institutions. Essential elements in this program are the upgrading of the managerial capabilities of local councils and officials as well as the encouragement of community participation in project activities.

A number of projects have been designed and implemented over the past three to four years as part of the PDP; activities in the program are currently increasing in number and magnitude. In 1977-78 the program

was introduced in 250 village councils; it now includes over one-half of the rural population.*

In late 1980, the Population and Family Planning Board fielded the Egypt Contraceptive Prevalence Survey as part of an effort to evaluate the effect of the activities of the Population and Development Program. The survey was implemented at a time when the PDP was rapidly increasing its coverage of the 4,000 villages in rural Egypt; data from the survey are, therefore, also intended to serve as baseline measures in an on-going research program focused on periodically monitoring changes in family planning use and fertility behavior in program and nonprogram areas.

Utilizing initial findings from the Egypt CPS, the present report addresses the questions: Does the Population and Development Program (PDP) have an impact on changing some of the intermediate variables -- particularly attitudes toward family planning and family size norms -- affecting fertility? Is that impact -- if any -- in the right direction?

In considering these questions, this paper will first review whether there is any indication that the population in villages in which the PDP has been implemented is consistently different from that in other villages with respect to a number of basic socio-economic indicators. Evidence that the population in PDP villages does differ from that in other villages in rural Egypt would clearly confound any subsequent analysis of variations in the behavioral and attitudinal measures between program and nonprogram areas.

After addressing this issue, the report will consider whether there are any differences between PDP and nonPDP areas on a number of indicators of fertility and family planning behavior and attitudes. In examining the relationship between these indicators and PDP status, controls for the region of residence (Upper and Lower Egypt) and the duration of PDP activities (more than 2 years, 2 years or less) will be introduced.

*This description is based on the "National Strategy Framework of Population and Family Planning", Population and Family Planning Board, Cairo, December, 1980.

There are recognized social, economic and cultural differences between Upper and Lower Egypt which are assumed to influence the fertility and family planning measures. Program duration is also expected to be related to these measures since it is assumed that longer exposure to the program would strengthen its impact.

In addition, the report will examine the influence of the Raiydas, the program's female family planning outreach workers. The level of awareness of and contact with the Raiydas, as well as the extent of knowledge about the activities of the FP committees in PDP areas, will be considered. Finally, the report explores, in a very tentative fashion, the issue of whether PDP appears to have had some influence on the level of outmigration from the villages in which it has been implemented.

THE CPS SAMPLE

The design for the Contraceptive Prevalence Survey (CPS) called for a self-weighting sample of all ever-married women aged 15-49 living in rural Egypt. The village was the primary sampling unit in the three-stage design. Unlike the Rural Fertility Survey, whose results were used in an earlier preliminary evaluation of the Population and Development Program (PDP)*, participation in the PDP was an explicit criterion in the selection of the villages included in the CPS sample. The design of the sample for the CPS also took into account the duration of exposure to the PDP as well as region of residence. Table 1 presents the distribution of the 124 villages included in the CPS sample. The selection of villages in each stratum was done independently from that in the other strata and villages were chosen systematically with probabilities proportional to their population size in 1976.

*"Early Impact Measurement of the Egyptian Population and Development Program, Based on Data from the 1979 Rural Fertility Survey", UNFPA Consultant's Report to the Population and Family Planning Board, December, 1980.

TABLE 1
THE DISTRIBUTION OF VILLAGES SELECTED IN THE SAMPLE FOR THE CONTRACEPTIVE
PREVALENCE SURVEY BY REGION AND POPULATION AND DEVELOPMENT (PDP) STATUS,
RURAL EGYPT, 1980

PDP STATUS	Region		Total
	Upper Egypt	Lower Egypt	
PDP	25	36	61
More than 2 years	12	13	25
2 years or less	13	23	36
NONPDP	26	37	63
TOTAL	51	73	124

In the second stage of sample selection, maps were obtained for each of the 124 villages in the sample, and each map was divided into small areas or segments. In each village, the segments were enumerated in a serpentine order from North to South, and a sample was selected with probability proportional to the size of constructed area in the segment. The number of segments chosen in each village varied from 2 to 6. After each selected segment was updated and a household listing obtained, a systematic random selection of households was carried out. This final stage of the sample selection process resulted in the selection of 5,227 households. In each of these sampled households, all ever-married aged 15-49 women were interviewed. Table 2 presents the distribution of the eligible women interviewed by strata. The nonresponse rates for the survey were low, both in the case of households (3.6 percent) and eligible women (3 percent).

BACKGROUND MEASURES

On average, the women interviewed in the Egypt CPS were 30 years old. Table 3 presents a number of indicators of the socio-economic status of these women. Reflecting the rural composition of the survey population, the educational level of the respondents was generally low; less than 7 percent had completed primary school and almost 90 percent were illiterate. Relatively few of the women (7.5 percent) were working at the time of the survey. Among those who were employed, 31 percent worked in the agricultural sector. The majority (94.6 percent) were Moslem.

Ninety percent of the women were married at the time of the survey. Although their husbands were generally better educated than the respondents, Table 3 suggests that the illiteracy rate among males in rural areas is high and that proportionately few males have completed at least a primary education. Among husbands who were working at the time of the survey, approximately one-half were employed in the agricultural sector.

Looking at household characteristics, roughly one-third of the households did not own any land. Overall, the landholdings of the households included in the sample averaged about 0.6 feddans.

TABLE 2
THE DISTRIBUTION OF SAMPLE POPULATION^a BY REGION AND POPULATION AND DEVELOPMENT
PROGRAM (PDP) STATUS, RURAL EGYPT, 1980

PDP STATUS	Region		Total
	Upper Egypt	Lower Egypt	
PDP	1,174	1,472	2,646
More than 2 years	635	514	1,149
2 years or less	539	958	1,497
NONPDP	1,311	1,358	2,669
TOTAL	2,485	2,830	5,315

^a Ever-married women aged 15-49.

TABLE 3
SELECTED BACKGROUND CHARACTERISTICS BY REGION, RURAL EGYPT, 1980

SELECTED BACKGROUND CHARACTERISTICS	Region		
	All Egypt	Upper Egypt	Lower Egypt
Respondents^a			
Average Age (in years)	30.3	30.8	31.2
% Currently Married	91.2	91.7	90.9
% Illiterate	86.9	89.8**	84.4**
% Completed Primary Ed. or Higher	6.3	5.8**	6.9**
% Employed	7.5	5.8**	9.0**
% Employed Women Working in Agricultural Sector	31.4	25.0**	34.9**
% Moslem	94.6	89.1**	99.1**
Husbands^b			
% Illiterate	60.7	68.6**	53.2**
% Completed Primary Ed. or Higher	21.5	16.8**	25.8**
% Employed	88.0	84.7**	90.8**
% Employed Husbands Working in Agricultural Sector	47.0	47.7	46.4
Households			
% Landless	30.4	27.7	32.8
Average Size of Landholding ^c (in feddans)	.60	.49	.70
Total Ever-Married Women	5,315	2,485	2,830

**Differences between regions significant at the .01 level.

^aAll ever-married respondents.

^bInformation provided by currently-married respondents.

^cIncludes landless households.

Upper and Lower Egypt

As discussed earlier, the region of residence is an extremely important background characteristic with social, economic and cultural implications. Table 3 shows that there are clear differences between the characteristics of the population living in Lower and Upper Egypt. Although educational levels and the rate of female labor force participation are low in both regions, women in Lower Egypt seem to be slightly better educated and to participate somewhat more frequently in the labor market, particularly in the agricultural sector.

Similarly, there are a number of differences in the socio-economic characteristics of husbands in the two regions (Table 3). Lower Egypt's male population seems to have a lower illiteracy rate and a higher proportion of males who have completed a primary education. Furthermore, the proportion of husbands participating in the labor market is somewhat higher in Lower than in Upper Egypt.

The majority of households in both regions are Moslem but there are a sizeable number of Christian households in Upper Egypt (10.9 percent). The proportion of landless households is slightly higher in Lower Egypt (27.7 percent) than in Upper (32.8 percent) Egypt. Even when the landless are considered, however, the average landholding is larger in Lower Egypt (0.7 feddans) than in Upper Egypt (0.5 feddans).

The differences in background characteristics between respondents from Lower and Upper Egypt summarized in Table 3 indicate that there is justification for the assumption that these regions should be considered separately in the later analysis of fertility and family planning attitudes and behavior.

PDP and NonPDP Areas

The process of selecting villages in which the Population and Development Program (PDP) was established was not randomized and, thus, it is important to consider whether there are significant differences in

TABLE 4
SELECTED BACKGROUND CHARACTERISTICS BY REGION AND POPULATION AND DEVELOPMENT
PROGRAM (PDP) STATUS, RURAL EGYPT, 1980

SELECTED BACKGROUND CHARACTERISTICS	All Egypt		Upper Egypt		Lower Egypt	
	PDP	NONPDP	PDP	NONPDP	PDP	NONPDP
Respondents^a						
Average Age (in years)	30.7	30.8	29.9*	31.3*	30.6	31.0
X Currently Married	91.6	90.9	92.4	91.0	91.0	90.7
X Illiterate	86.3	87.5	89.2	90.3	84.0	84.8
X Completed Primary Ed. or Higher	7.2**	5.5**	7.6**	4.1**	6.9	6.9
X Employed	7.5	7.4	6.9*	4.7*	8.0	10.0
X Employed Women Working in Agricultural Sector	38.3**	24.4**	37.8	- ^d	38.6	31.7
X Moslem	95.7**	93.4**	91.1**	87.9**	99.4	98.8
Husbands^b						
X Illiterate	60.6	60.8	66.0*	70.9*	56.1**	50.2**
X Completed Primary Ed. or Higher	23.7*	19.3*	20.4**	13.6**	26.4	25.1
X Employed	88.0	87.9	84.7	84.8	90.7	90.8
X Employed Husbands Working in Agricultural Sector	46.8	47.2	48.5	47.0	49.8	50.0
Households						
X Landless	27.6**	33.2**	24.8**	30.2**	29.8**	36.0**
Average Size of Landholding ^c (in feddens)	.57	.64	.54	.44	.59**	.82**
Total Number of Ever-Married Women	2,646	2,669	1,174	1,311	1,472	1,358

*Differences between PDP and NONPDP within region category significant at the .05 level.

**Differences between PDP and NONPDP within region category significant at the .01 level.

^aAll ever-married respondents.

^bInformation provided by currently-married respondents.

^cIncludes landless households.

^dNumber of cases less than 25.

the social and economic characteristics of program and nonprogram areas. Table 4 controls for region (Upper and Lower Egypt) in considering the variation in major socio-economic characteristics between PDP and nonPDP areas.

The differences between the PDP and nonPDP areas are more frequent and generally more substantial in Upper than in Lower Egypt. In Upper Egypt, PDP villages have significantly higher proportions of men and women with a primary education than nonPDP villages. Moreover, PDP areas in that region have a lower proportion of landless households. Overall, the average size of landholdings does not vary significantly, however, between program and nonprogram areas.

In Lower Egypt, the differences between PDP and nonPDP areas are generally not very substantial; furthermore, where differences do exist, they do not consistently favor either area. For example, while nonPDP areas have relatively more landless households than PDP areas, the average size of a landholding is, nevertheless, larger in nonPDP than in PDP areas (Table 4). Other differences between these areas are not sizeable except for the proportion of illiterate husbands which is greater in PDP villages (56 percent) than in nonPDP (50 percent) areas and the proportion of working women employed in the agricultural sector which is also greater in PDP than in nonPDP areas (38.6 percent and 31.7 percent, respectively).

There are some significant variations in background characteristics between PDP and nonPDP areas, particularly in Upper Egypt. There is, nevertheless, no evidence that PDP villages are consistently more -- or less -- developed than nonPDP villages. In examining the relationship between program status and indicators of fertility and family planning attitudes and behavior, it is necessary to continue to control for differences in these background characteristics; the absence of any substantial and consistent socio-economic variation between PDP and nonPDP areas indicates, however, that the relationship between program status and these outcome measures has not been influenced by any clear selection bias in the villages which were included in the program.

TABLE 5

FERTILITY INDICATORS BY REGION AND
POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS,
RURAL EGYPT, 1980

REGION AND PDP STATUS	Average Number of Children Ever Born ^a	Average Number of Living Children ^a	Percent Currently Pregnant ^b
<u>All Egypt</u>			
PDP	4.6	3.3	16.5
More than 2 years	4.7	3.4	15.8
2 years or less	4.6	3.3	17.1
NONPDP	4.6	3.3	16.3
TOTAL	4.6	3.3	16.4
<u>Upper Egypt</u>			
PDP	4.7	3.2	17.0
More than 2 years	4.9	3.3	14.5
2 years or less	4.4	3.0	20.0
NONPDP	4.7	3.1	15.1
TOTAL	4.7	3.1	16.0
<u>Lower Egypt</u>			
PDP	4.6	3.4	16.1
More than 2 years	4.5	3.5	17.4
2 years or less	4.6	3.4	15.4
NONPDP	4.6	3.4	17.4
TOTAL	4.6	3.4	16.7

^a Calculated for ever-married women aged 15-49

^b Calculated for currently-married women aged 15-49

FERTILITY AND FAMILY PLANNING: BEHAVIOR AND ATTITUDE MEASURES

Fertility Behavior

Table 5 shows that women in rural Egypt have had, on average, 4.6 live births. Current family size averages 3.3 children, suggesting that families in rural Egypt have experienced the death of at least one child.

In examining Table 5, it is apparent that there are no differences between PDP and nonPDP areas in either the average number of children ever born (CEB) or average family size even when duration of PDP is considered. Differences in age composition between program and nonprogram areas are not significant, and adjustment by age does not influence the relationship between these measures.

Some decline in the average number of children ever born is expected as a result of PDP activities. CEB is not, however, a sensitive measure of short-term change in fertility; therefore, other measures must also be used to assess the program's effect on overall fertility. One indicator that may help show PDP's impact on future fertility is the percentage of currently pregnant women. There are problems associated with this measure, however, simply because many women are not sure if they are pregnant or not. Although the overall bias is likely to be toward underreporting of current pregnancies, nothing is known regarding the variation in the bias between areas or population groups.

Table 5 shows no significant differences in the percentage of pregnant women between PDP and nonPDP areas for all rural Egypt. However, there are differences between these areas -- in opposite directions -- in both Lower and Upper Egypt. In the latter region, the somewhat higher percentage pregnant in program (17 percent) than in nonprogram (15 percent) areas seems to be due to the unusually high proportion of pregnant women in PDP areas with duration less than 2 years. One may be tempted to infer from this relationship that a decline in the pregnancy

TABLE 6

KNOWLEDGE AND EVER USE OF FAMILY PLANNING AMONG EVER-MARRIED WOMEN AGED 15-49 BY REGION
AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980

REGION AND PDP STATUS	Any Modern Method			Pill			IUD			Condom			Total Number Ever-Marr. Women
	% Know Method	% Know Source	% Ever Users	% Know Method	% Know Source	% Ever Users	% Know Method	% Know Source	% Ever Users	% Know Method	% Know Source	% Ever Users	
All Egypt													
FDP	91.3*	73.1**	30.3**	91.0	69.9	27.2**	73.4**	44.1	5.7**	10.5**	5.4	0.7**	2,646
More than 2 yr. 2 years or less	92.2	73.2	29.4	91.8	69.9	26.4	72.9	43.4	5.2	11.1	6.4	0.3	1,149
NONPDP	90.7	72.9	31.4	90.5	69.9	27.9	73.9	44.6	6.1	10.0	4.7	0.9	1,497
NONPDP	89.2*	68.3**	23.6**	88.8	65.6	21.4**	63.4**	37.5	3.1**	12.2**	6.1	0.8**	2,669
TOTAL	90.3	70.7	26.9	89.9	67.7	24.3	68.4	40.8	4.4	11.4	5.8	0.7	5,315
Upper Egypt													
FDP	84.7	58.9*	20.2**	84.2	56.0	18.0*	60.2**	26.6	2.7**	5.8**	3.6	0.7**	1,174
More than 2 yr. 2 years or less	88.0	64.3	22.4	87.4	60.6	20.2	61.8	28.2	2.5	5.2	3.3	0.5	635
NONPDP	80.7	52.7	17.6	80.5	50.6	15.4	58.2	24.7	3.0	6.7	3.9	0.9	539
NONPDP	82.1	54.9*	12.3**	81.6	51.9	11.3*	44.0**	21.4	0.9**	9.1**	3.9	0.5**	1,311
TOTAL	83.3	56.8	16.0	82.9	53.8	14.4	51.7	23.8	1.8	7.5	3.7	0.6	2,485
Lower Egypt													
FDP	96.7	84.3*	38.4*	96.4	81.0	34.6	84.0	58.0	6.1	14.1	6.9	0.7	1,472
More than 2 yr. 2 years or less	97.3	84.2	38.1	97.3	81.3	34.0	86.4	62.3	8.6	18.3	10.3	0.2	514
NONPDP	96.3	84.3	38.5	96.0	80.8	35.0	82.8	55.7	7.8	11.9	5.1	0.9	958
NONPDP	96.1	81.2*	34.5*	95.7	78.8	31.1	82.1	53.1	5.2	15.3	8.2	1.0	1,358
TOTAL	96.4	82.8	36.5	96.1	79.9	33.0	83.1	55.7	6.7	14.6	7.5	0.8	2,830

*Differences between FDP and NONPDP significant at the .05 level.

**Differences between FDP and NONPDP significant at the .01 level.

rate is associated with the duration of PDP. This assertion is not supported in the case of Lower Egypt. The percent pregnant is less (16.1) in program areas than in nonPDP areas (17.4). Moreover, the percent pregnant is higher in areas with longer PDP duration (17.4) than in areas where PDP is of recent origin (15.4).

In sum, the impact of PDP on fertility is not clear and the relationship between program status and fertility measures differs in Upper and Lower Egypt. It is probably too early to assess PDP impact on fertility objectively; in addition, fertility measures more refined and sensitive to change must be used in this connection. All in all, the differences in the measures presented in Table 5 are neither substantial nor significant.

Knowledge and Ever Use of Family Planning

Overall, there is little difference between program and nonprogram areas in the percent of women knowing a modern contraceptive method (Table 6) with one exception -- the level of awareness of the IUD is significantly higher in PDP than in nonPDP areas. Knowledge of a source where modern contraceptive methods could be obtained is also somewhat greater in PDP villages.

The level of ever use of family planning is clearly greater in program than in nonprogram areas; 30.3 percent of ever-married women in PDP villages in rural Egypt have used a modern contraceptive method compared to only 23.6 percent in nonPDP villages (Figure 1A). Ever use of the pill and the IUD are also positively associated with program participation.

Considering regional differences, Table 6 shows that, in Lower Egypt, there is little difference in the proportion of women who have knowledge about contraceptives (96.7 and 96.1 percent for PDP and nonPDP areas, respectively). The percent of women who know a source where a modern method could be obtained also differs only slightly between PDP and nonPDP areas in this region (84.3 and 81.2 percent, respectively). As to ever use of contraceptives, the impact of PDP is significant in

FIGURE 1A

PERCENTAGE OF EVER USERS OF MODERN METHODS AMONG ALL EVER-MARRIED WOMEN BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980

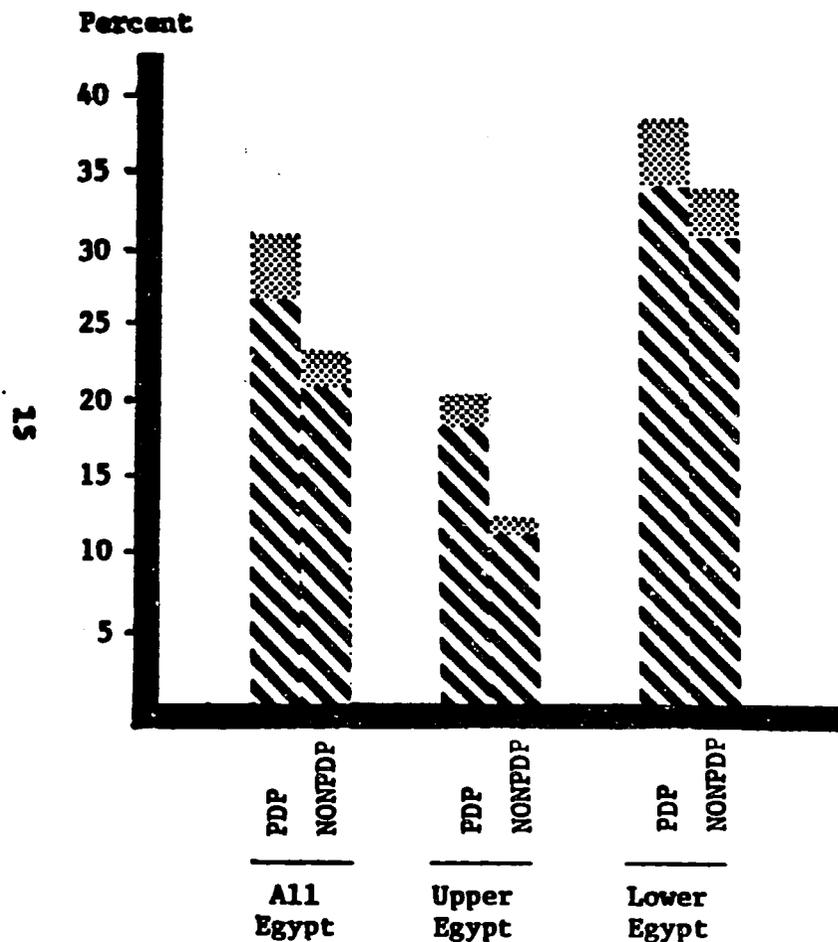
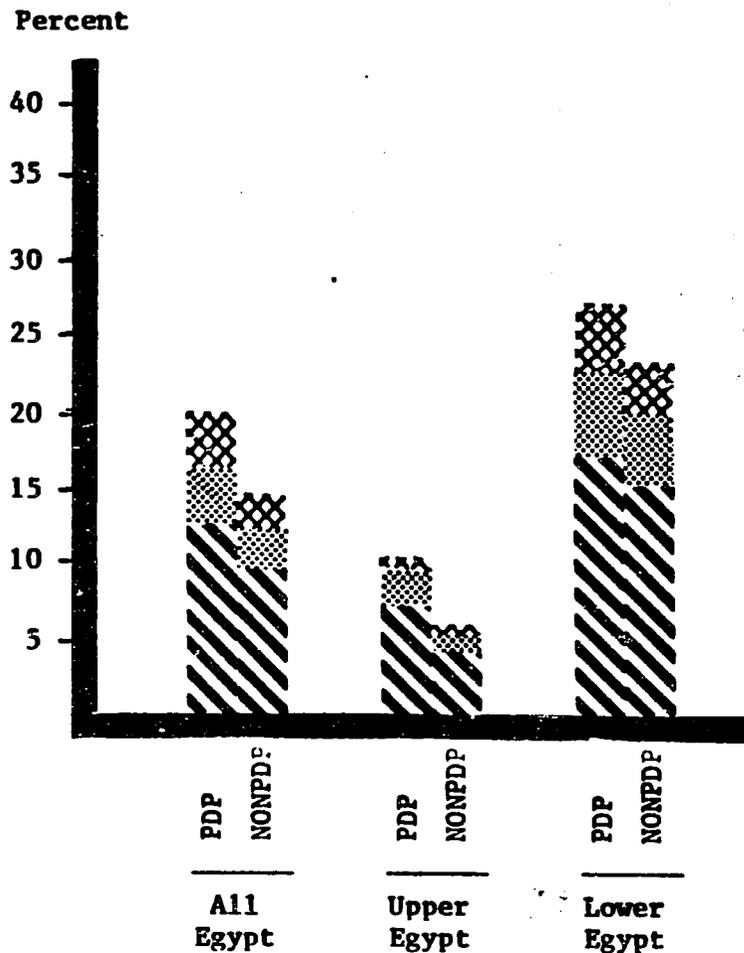


FIGURE 1B

PERCENTAGE OF CURRENT USERS OF MODERN AND TRADITIONAL METHODS AMONG CURRENTLY MARRIED WOMEN BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980



 Traditional Methods
 All Other Modern Methods
 Pills Only
 } Modern Methods

Lower Egypt; 38.4 percent of women in PDP villages in Lower Egypt report ever use of some modern method compared to 34.5 percent in nonPDP villages (Figure 1A and Table 6).

It appears that one major PDP effect in Lower Egypt is in the increased use of IUDs. While the percentage of ever users of IUD is 8.1 in PDP villages, it does not exceed 5.2 in nonPDP villages (Table 6).

The impact of PDP on ever use of contraceptives is even more pronounced in Upper Egypt. Only 12.3 percent of women living in nonPDP areas have ever used a modern contraceptive method compared to 20.2 percent of women in villages where PDP is operating. Again, as in Lower Egypt, the PDP effect appears most clear in increasing IUD use.

Table 6 also shows that condoms are not popular, in general, in Lower or Upper Egypt, either in PDP or nonPDP villages. The overall percentage of ever users of the condom is only 0.7 in all rural Egypt.

Considering the question of the influence of the duration of PDP, there is no evidence in Lower Egypt to support the conclusion that longer duration (PDP more than 2 years vs. PDP 2 years or less) has a significant overall impact on the knowledge and ever use of modern methods, although the relationships are in the right direction in the case of the IUD. In Upper Egypt, duration of PDP has a clear impact on both knowledge and ever use of contraceptives, particularly the pill (Table 6).

Current Use

Increasing the level of current use of modern contraceptive methods is one of the major objectives of PDP as a first step to reducing fertility. Overall, although the level of family planning use among married women remains low in rural Egypt--17 percent were reported to be using at the

TABLE 7

**CURRENT USE OF FAMILY PLANNING AMONG CURRENTLY-MARRIED WOMEN AGED 15-49 BY TYPE OF METHOD,
REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980**

REGION AND PDP	Type of Method				Total Number of Currently Married Women
	Total Using	Using Modern	Using Traditional	Not Using	
<u>All Egypt</u>	%	%	%	%	
PDP	19.6**	16.8	2.8	80.4	2,423
More than 2 years	18.7	16.4	2.3	81.3	1,065
2 years or less	20.4	17.2	3.2	79.6	1,358
NONPDP	14.5**	12.4	2.1	85.5	2,424
TOTAL	17.1	14.6	2.5	82.9	4,847
<u>Upper Egypt</u>					
PDP	10.5**	9.7	0.8	89.5	1,083
More than 2 years	11.5	10.6	0.9	88.6	587
2 years or less	9.5	8.7	0.8	90.5	496
NONPDP	6.0**	5.3	0.7	94.0	1,193
TOTAL	8.1	7.4	0.7	91.9	2,276
<u>Lower Egypt</u>					
PDP	27.0*	22.6	4.4	73.0	1,340
More than 2 years	27.6	23.6	4.0	72.4	478
2 years or less	26.6	22.0	4.6	73.3	862
NONPDP	22.8*	19.3	3.5	77.2	1,231
TOTAL	25.0	21.0	4.0	75.0	2,571

NOTE: Percentages may not add to totals due to rounding.

* Differences between PDP and NONPDP significant at the .05 level.

**Differences between PDP and NONPDP significant at the .01 level.

time of the CPS--there is some evidence that PDP has had an impact on the contraceptive prevalence level. Figure 1B shows that the level of current use of family planning is roughly 35 percent higher in PDP than in nonPDP areas; 19.6 percent of married women in program areas are using some family planning method compared to 14.5 percent in nonprogram areas. Much of the difference in the overall prevalence level is owed to differences in the percentage of women using modern contraceptive methods; 16.4 percent of married women in PDP villages are using modern methods compared to only 12.4 percent in nonPDP villages.

Considering regional variations in the level of family planning use, the percent of currently-married women using modern contraceptives is substantially higher in Lower than in Upper Egypt (21.0 percent and 7.4 percent, respectively). In both Lower and Upper Egypt, currently-married women in PDP villages are using modern contraceptives in higher proportions than those in nonPDP villages. For example, Table 7 indicates that, while 23.6 percent of currently-married women in PDP areas in Lower Egypt are using modern methods, this was true of only 19.3 percent of women in nonPDP villages. In Upper Egypt, the percentages of current users of modern methods are also higher for PDP than nonPDP areas (9.7 percent and 5.3 percent, respectively).

Looking at the level of use of specific modern contraceptive methods, it is clear that the pill is the preferred method among current users in rural Egypt (Table 8). Eleven percent of all currently-married women--roughly two-thirds of all current users--are relying on the pill. Overall, use of the pill--and the IUD--appears to be greater in PDP than in nonPDP areas. The relationship between use of these methods and PDP is, moreover, similar in both Lower and Upper Egypt, although the differences between PDP and nonPDP areas are relatively greater in Upper than in Lower Egypt. Finally, the level of current use of other modern methods--female sterilization, the condom and vaginal contraceptive methods--is low in both Lower and Upper Egypt and, while there are differences in the use of sterilization and condoms between PDP and non-PDP areas, they are not generally sizeable.

TABLE 8

PERCENTAGE OF CURRENTLY-MARRIED WOMEN AGED 15-49 USING SPECIFIC MODERN CONTRACEPTIVE
METHODS BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS,
RURAL EGYPT, 1980

REGION AND PDP STATUS	Method				
	Pill	IUD	Female Sterilization	Condom	Female Scientific
All Egypt					
PDP	12.7	2.8	0.9	0.2	0.2
More than 2 years	12.0	2.8	1.2	0.2	0.2
2 years or less	13.3	2.7	0.7	0.2	0.2
NONPDP	9.9	1.7	0.5	0.2	0.1
TOTAL	11.3	2.2	0.7	0.2	0.1
Upper Egypt					
PDP	7.4	1.7	0.5	0.2	-
More than 2 years	8.2	1.4	0.9	0.2	-
2 years or less	6.5	2.0	-	0.2	-
NONPDP	4.4	0.5	0.2	0.3	-
TOTAL	5.8	1.1	0.3	0.2	-
Lower Egypt					
PDP	17.0	3.7	1.3	0.2	0.4
More than 2 years	16.7	4.6	1.7	0.2	0.4
2 years or less	17.2	3.1	1.2	0.2	0.3
NONPDP	15.4	2.9	0.7	0.2	0.2
TOTAL	16.2	3.3	1.1	0.3	0.3

NOTE: Differences between PDP and NONDPD were not tested for significance.

TABLE 9

INDICATORS OF FAMILY SIZE ATTITUDES AMONG CURRENTLY-MARRIED WOMEN AGED 15-49 BY REGION
AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980

REGION AND PDP STATUS	Desire for More Children		Birth Spacing Attitudes ^b	Family Size Desired		Ideal Family Size ^e	Desired Age at Marriage and Family Size for Daughter	
	Percent not Wanting More	Average Additional Children Desired ^a	Average Birth Interval Desired	Percent Considered Family Size Desired ^c	Average Number of Children Desired	Average Number of Children Desired	Average Desired Age at Marriage	Average Desired Number of Children
All Egypt								
PDP	56.2	2.3	25.3	25.7	2.9	3.4	17.5	3.0
More than 2 years	54.9	2.2	25.0	24.8	2.9	3.5	17.3	3.0
2 years or less	57.8	2.6	25.4	26.4	2.9	3.4	17.7	3.0
NONPDP	52.4	2.7	26.2	26.6	3.2	3.7	17.3	3.2
TOTAL	54.4	2.6	25.7	26.2	3.1	3.6	17.4	3.0
Upper Egypt								
PDP	46.1	2.8	23.8	15.8	3.2	3.8	17.0	3.5
More than 2 years	47.5	2.5	23.9	16.6	3.1	4.0	16.8	3.4
2 years or less	44.5	3.1	23.6	14.9	3.4	3.9	17.3	3.7
NONPDP	40.4	3.1	24.9	24.0	3.7	4.2	16.7	3.8
TOTAL	43.1	3.0	24.4	20.1	3.5	4.1	16.8	3.6
Lower Egypt								
PDP	65.0	2.1	26.3	33.7	2.8	3.1	17.9	2.7
More than 2 years	63.9	1.9	26.2	34.9	2.8	3.1	17.8	2.7
2 years or less	65.6	2.2	26.4	33.1	2.7	3.1	17.9	2.7
NONPDP	64.2	2.3	27.4	29.1	2.9	3.2	17.9	2.8
TOTAL	54.6	2.2	26.9	31.5	2.8	3.2	17.9	2.7

^aCalculated only for those women wanting more children.

^bCalculated only for those respondents giving numerical answers.

^cRespondents were asked if they had ever considered the question of the total number of children they would like to have.

^dThe average number of children was calculated only for women who reported they had considered the question of family size.

^eRepresents the ideal number of children the respondent thought a couple like her husband and herself should have.

Regarding the effect of the duration of PDP activities, Tables 7 and 8 indicate that there is no clearcut relationship between the length of program activities and either the overall prevalence level or the level of use of specific methods.

Attitudes Toward Family Size

One of the major objectives of PDP is to induce behavioral changes consistent with lowering fertility through strengthening attitudes favoring smaller size families. Table 9 presents a number of indicators of attitudes toward family size including: the percent desiring more children, the average interval desired for birth spacing, desired family size and ideal family size. Moreover, information on the respondent's aspirations for her daughter are reviewed as these data may reflect her own ideals in this direction.

In general, attitudes toward family size in rural Egypt favor a moderate or large size family. Currently-married women in Lower Egypt do have attitudes more favorable toward smaller family size than women in Upper Egypt. They are more likely to want to cease childbearing and to desire to have a smaller number of additional children in higher proportions than women in Upper Egypt (Figures 2 and 3). In addition, women in this region have considered the question of family size more frequently and desire fewer children on the average than those in Upper Egypt. Both the ideal family size and the number of children desired for daughter also are smaller in Lower than in Upper Egypt.

In Lower Egypt, PDP does not seem to have a substantial impact on the proportion of women desiring to stop childbearing or on the average number of additional children desired. However, although the differences are not important in value, the duration of PDP does appear to have some influence on the latter measure; while women living in areas with 2 or more years exposure to PDP desire, on the average, 1.9 more children, the means are 2.2 and 2.3 in villages in which PDP has been active less than 2 years and in nonPDP villages, respectively. Similarly, the program impact, though in the right direction, is small

FIGURE 2

PERCENTAGE OF CURRENTLY MARRIED WOMEN WHO DESIRE TO CEASE CHILDBEARING
BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS,
RURAL EGYPT, 1980

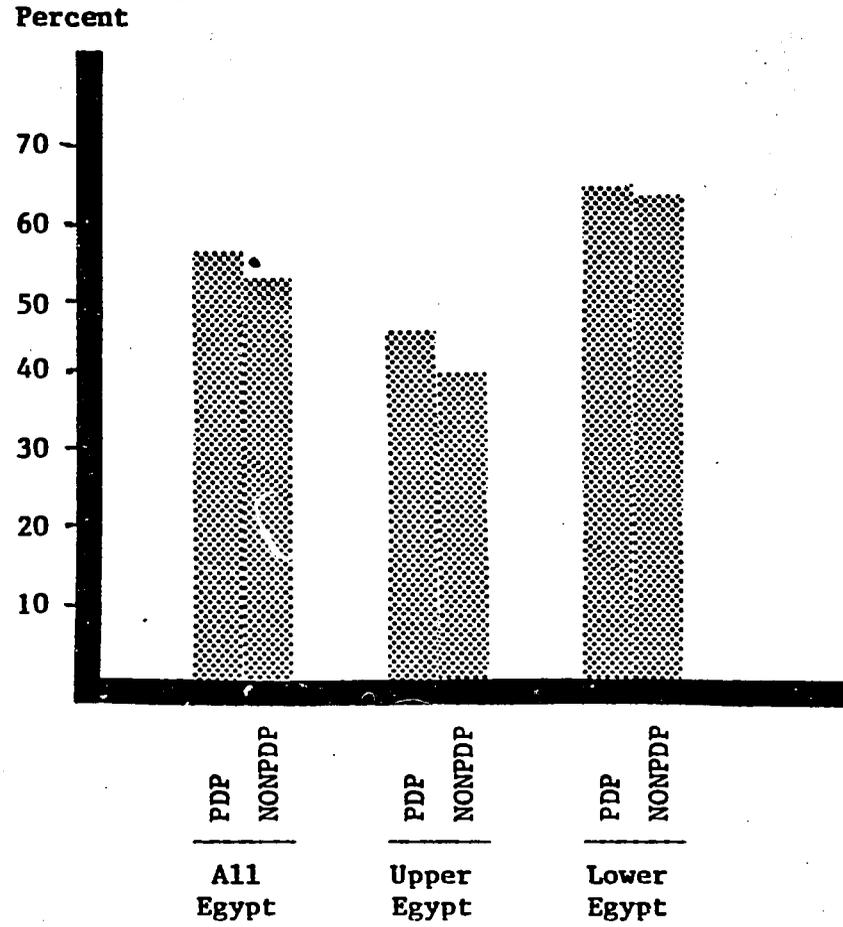


FIGURE 3

MEAN NUMBER OF CHILDREN EVER BORN (CEB) AND MEAN IDEAL NUMBER OF CHILDREN
BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS,
RURAL EGYPT, 1980

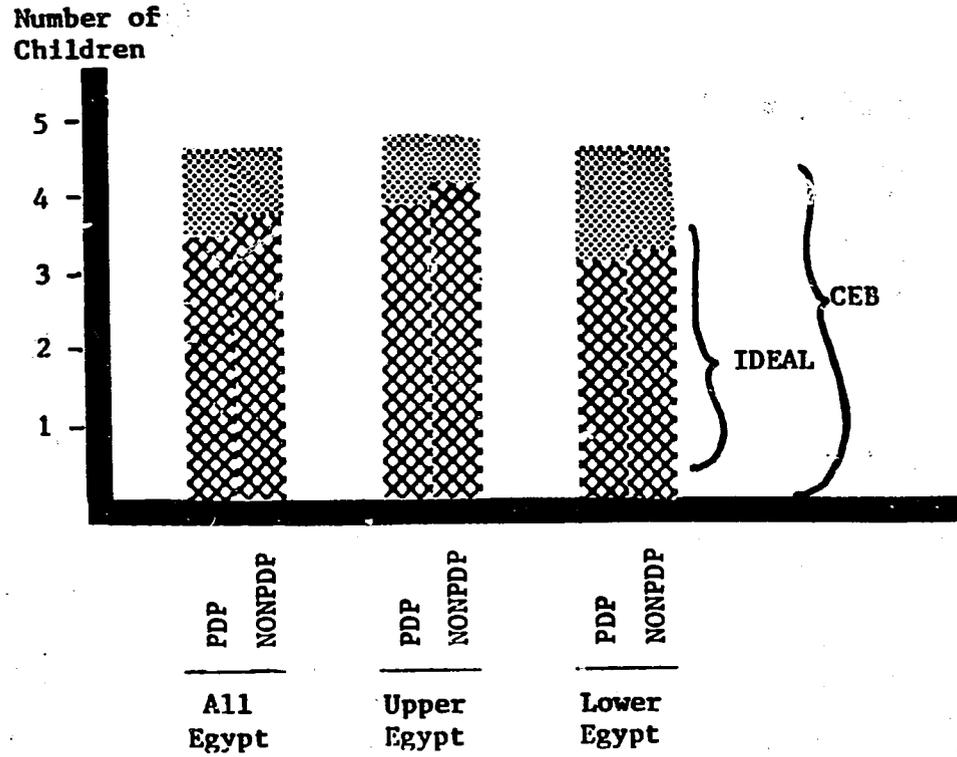


TABLE 10

**ATTITUDES TOWARD FAMILY PLANNING AMONG CURRENTLY-MARRIED NONUSERS BY REGION
AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980**

REGION AND PDP STATUS	Attitudes Toward Family Planning			Total Number of Cases
	Approval		Percent Intend to Use Family Planning in Future	
	Percent Approve	Percent Disapprove		
<u>All Egypt</u>				
PDP	82.4**	12.2**	57.6	1,764
More than 2 years	80.6	11.7	56.6	793
2 years or less	83.9	12.7	58.4	973
NONPDP	77.1**	18.2**	54.2	1,850
TOTAL	79.7	15.3	55.8	3,616
<u>Upper Egypt</u>				
PDP	74.7**	17.3**	50.6	821
More than 2 years	74.1	16.1	50.1	459
2 years or less	75.4	18.8	51.2	362
NONPDP	65.8**	26.4**	47.4	934
TOTAL	70.0	22.2	48.9	1,755
<u>Lower Egypt</u>				
PDP	89.2**	7.8**	63.9	943
More than 2 years	89.6	5.7	65.8	334
2 years or less	89.0	9.0	62.9	609
NONPDP	88.7**	9.7**	61.4	916
TOTAL	88.9	8.8	62.7	1,861

**Differences between PDP and NONPDP significant at the .01 level.

with respect to the average interval of preferred spacing between successive births (26.3 and 27.4 months for PDP and nonPDP areas, respectively, in Lower Egypt). Somewhat greater differences are found in the percent of women motivated to consider the question of family size. While 33.7 percent in PDP villages in Lower Egypt have considered the question, only 29.1 percent of women in nonPDP areas have thought about the number of children they would like to have.

In Upper Egypt, PDP has a relatively stronger, although still minor, impact on the attitudinal indicators. Women in PDP villages are more likely than women in nonPDP areas to want to cease childbearing, to desire a smaller number of additional children, to have considered the question of family size more frequently and to desire a smaller total number of children, and finally, to have a smaller ideal family size. With respect to a daughter's age at marriage, women in PDP areas in Upper Egypt desired a slightly higher average age at marriage for their daughters than the women in nonPDP villages; they also desire a slightly smaller number of children for their daughters.

Table 9 also indicates that duration of program activities seemed to have a greater effect on the attitudinal indicators in Upper than in Lower Egypt. Generally, women in areas in Upper Egypt exposed to the PDP for a longer duration had attitudes more favorable to smaller size families. Both ideal family size and attitudes about the daughter's desired number of children were exceptions. In the case of almost all the indicators, however, the differences according to the duration of the program were generally minor.

Attitudes Toward Family Planning

For all rural Egypt, attitudes toward family planning are relatively favorable. Table 10 indicates that 80 percent of all currently-married women not using family planning at the time of the CPS approved of using contraceptives. There remain, however, about 15 percent who disapprove

TABLE 11

REASONS FOR NOT USING FAMILY PLANNING AMONG CURRENTLY-MARRIED NONUSERS BY REGION
AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS, RURAL EGYPT, 1980

REGION AND PDP STATUS	Reasons for not Using						Total Number of Cases
	Wants More Children	Husband/Other Relative Wants More Children	Health Reasons	Fear of Side Effects	Not Exposed ^a	Other	
All Egypt							
PDP	16.8	2.4	8.4	2.8	37.2	32.4	1,764
More than 2 years	15.8	2.6	8.7	2.8	36.6	33.5	793
2 years or less	17.7	2.2	8.2	2.9	37.8	31.2	973
NONPDP	21.0	2.9	7.5	3.4	34.8	30.4	1,850
TOTAL	19.0	2.6	8.0	3.1	35.9	31.4	3,616
Upper Egypt							
PDP	18.4	1.8	11.3	2.6	34.1	31.8	821
More than 2 years	16.6	2.8	11.5	2.8	32.3	34.0	459
2 years or less	20.7	0.6	11.0	2.2	36.4	29.1	362
NONPDP	23.8	2.8	8.5	3.9	31.5	29.5	934
TOTAL	21.3	2.3	9.7	3.2	32.7	30.8	1,755
Lower Egypt							
PDP	15.5	2.9	5.9	3.1	40.0	33.0	943
More than 2 years	14.7	2.4	4.8	2.7	42.6	32.8	334
2 years or less	15.9	3.1	6.6	3.3	38.6	32.5	609
NONPDP	18.1	2.9	6.8	2.8	37.6	31.8	916
TOTAL	16.8	2.9	6.3	3.0	38.8	32.2	1,861

^a Includes currently pregnant and women considering themselves infecund.

NOTE: Differences between PDP and NONPDP were not tested for significance.

using contraceptives and about 5 percent who are not sure or undecided in this respect. Approval of contraceptive use is significantly higher in Lower Egypt than in Upper Egypt. This is a matter of importance to policy makers; more attention should be directed to Upper Egypt in this regard.

Table 10 suggests that PDP has a strong impact on the level of family planning approval in Upper Egypt. Nonusers living in PDP villages appear to disapprove of family planning practice less often than nonusers in nonPDP areas (17.3 and 26.4 percent disapproval in PDP and nonPDP villages, respectively). Furthermore, duration of PDP has a small effect in decreasing the proportion of women who disapprove. In Lower Egypt, where the proportion of approval is initially high, PDP has no significant impact on the level of approval. However, the longer duration of PDP appears to decrease slightly the proportion of women who disapprove of the use of contraceptives (Table 10).

Generally speaking, a higher proportion of currently-married nonusers in Lower Egypt reportedly intend to use contraceptives in the future than those in Upper Egypt (62.7 percent and 48.8 percent for Lower and Upper Egypt, respectively). Table 10 shows that PDP has a minor positive impact on intention for future use in both Lower and Upper Egypt. In Upper Egypt, 50.6 percent of all nonusers intend to use in the future in PDP areas compared 47.4 percent in nonPDP areas. In Lower Egypt, these percentages are 63.9 and 61.4 for PDP and nonPDP areas, respectively. Duration of PDP also has some positive influence in the latter region.

With respect to the reasons for not practicing family planning among currently-married nonusers, about one out of three was not exposed to the risk of pregnancy, either because she was already pregnant (20 percent) or because she reported impairment to pregnancy for one reason or another (Table 11). Other reasons given by this group for not using family planning include her desire to have children (19 percent), her belief that use is not compatible with her health (8.4 percent), and fear of side effects of methods (3.1 percent).

TABLE 12
REGRESSION RESULTS FOR FIVE DEPENDENT VARIABLES USING ALL BACKGROUND VARIABLES
AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS BY REGION, RURAL EGYPT,
1980

DEPENDENT VARIABLES	Upper Egypt			Lower Egypt		
	Final R ²	Beta for PDP	F for PDP	Final R ²	Beta for PDP	F for PDP
Children Ever Born	.587	.012	.72	.622	.007	.28
Ever Use	.092	.058	7.73**	.138	.027	1.70
Current Use	.062	.086	17.39**	.079	.036	3.06*
Ideal Number of Children	.049	-.078	13.92**	.024	-.043	4.12*
Approval of F.P. Use	.042	.054	5.92*	.026	.013	.38
Number of Cases in Equation	2,017 ^a			2,137		

*Significant at the .05 level.

**Significant at the .01 level.

^aOnly currently-married women with no "not stated" in any of the variables were included in the regressions.

NOTE: Background variables included: wife's current age, wife's age at marriage, wife's work status, wife's educational level, husband's educational level, husband's occupation.

In Upper Egypt, women living in nonPDP areas give wanting more children as a reason more frequently than those in PDP areas. Duration of PDP also has an inhibiting effect on that reason for not currently using. This same conclusion is true in Lower Egypt although the difference is smaller in this region than in Upper Egypt.

MULTIVARIATE ANALYSIS

Table 4 shows that even within each region there is still some socio-economic variation between PDP and nonPDP areas. Regression analysis permits a comparison of the impact of PDP within each region while holding other variables constant. This is needed to interpret whether differences between PDP and nonPDP can be attributed at least partially to PDP intervention.

Regression analysis was employed for each of the following dependent variables (regressed): children ever born, current use, ever use, approval of use, and ideal family size. A set of regressors was selected including:

Wife current age (WAGE)

Wife's age squared (WAGSQ)

Wife's age at marriage (WAAM)

Wife's work (WWORK)

Wife's educational level taken as two variables as follows:

WEDUC1: if illiterate, 1; if can read or completed primary or more, 0

WEDUC2: if has primary or more, 1; otherwise, 0

Husband's educational level: same as wife

Husband's occupation taken as:

HOC1: agricultural, 0; otherwise, 1

PDP Status taken as

PDP3: PDP, 1; NonPDP, 0

Land owning status taken as:

OWNLAND: ownland, 1; landless, 0.

Results of the five regressions are presented in Table 12.

TABLE 13

LEVEL OF OUT- AND IMMIGRATION BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS,
RURAL EGYPT, 1980

REGION AND PDP STATUS	Outmigration ^a		Immigration ^a
	Percent of Households with at Least One Outmigrant	Percent of Households Having Someone Planning to Migrate	Percent of Households with at Least One Inmigrant
<u>All Egypt</u>			
PDP	10.1	3.7	2.9
More than 2 years	8.7	4.7	3.4
2 years or less	11.2	3.0	2.6
NONPDP	13.1	3.5	1.6
TOTAL	11.6	3.6	2.3
<u>Upper Egypt</u>			
PDP	9.7	5.3	2.9
More than 2 years	8.4	6.6	3.9
2 years or less	11.2	3.7	1.8
NONPDP	16.4	3.3	2.1
TOTAL	13.1	4.2	2.5
<u>Lower Egypt</u>			
PDP	10.4	2.6	3.0
More than 2 years	8.9	2.5	2.9
2 years or less	11.2	2.6	3.0
NONPDP	10.3	3.6	1.2
TOTAL	10.3	3.1	2.1

^a Computed for all households in the sample (N=5,025) including those in which no eligible women were interviewed.

NOTE: Differences between PDP and NONPDP were not tested for significance.

Children Ever Born

The impact of PDP on CEB is the same as indicated in the cross-tabular analysis. PDP has no significant impact in either Lower or Upper Egypt.

In Upper Egypt, PDP is introduced in the equation in the 8th step with positive Beta and $F = .722$ (not significant at .05 level). The final R^2 in this equation equals 58.7 percent, which is relatively high. Wife's age alone has R^2 of 49.9 percent. If wife's age at marriage is introduced along with her current age, these two variables alone explain 54.9 percent of the variation.

In Lower Egypt, R^2 is higher and equals 62.2 percent, with age and age at marriage having R^2 of 59.2 percent. Again, PDP is not significant although its impact is positive on CEB.

Ever Use And Current Use Of Contraceptives

Use of contraceptives, as indicated earlier, is an area where PDP has a major success. The regression analysis shows a stronger impact in Upper than in Lower Egypt. In the former region, the impact of PDP on both ever and current use are highly statistically significant (Table 12). In Lower Egypt, the impact of PDP is stronger on current use than on ever use.

In Upper Egypt, husband's work in agriculture is the most significant variable after age in explaining ever use and current use. Together, they explain 5 percent of the variance in ever use. PDP is highly significant (Beta = .086 and $F = 17.4$) as a positive determinant for current use in Upper Egypt. PDP is also highly significant as a positive determinant for ever use (Beta = .058 and $F = 7.73$).

In Lower Egypt, the most significant variables in the equation are current age, age at marriage and wife's illiteracy. (These three explain 12.9 and 7.5 percent of the variance for ever use and current use, respectively.) PDP also has an impact on both ever and current use

and is highly significant as a positive determinant of current use (Beta = .036 and F = 3.06).

Ideal Family Size

In both Lower and Upper Egypt, R^2 is very low (2.4 and 4.9 percent respectively). In Upper Egypt wife's illiteracy and husband's type of work are the two most significant variables. The third most significant variable is PDP (Beta = -.078 and F = 13.92). Its impact is very strong and is comparable in magnitude to wife's illiteracy and husband's work type. The beta is negative indicating PDP has an inhibiting effect on ideal family size.

In Lower Egypt, wife's age, husband's work type and age at marriage are the most significant variables. PDP is also significant and has a negative impact on ideal family size (Beta = -.043 and F = 4.12).

In sum, holding the other socio-economic variables constant, PDP has a significant impact in changing women's ideals about family size and promoting the idea of smaller family size.

Approval of the Use Of Contraceptive Methods

As indicated earlier in the cross-tabular analysis (Table 10), the impact of PDP is highly significant in Upper Egypt and not in Lower Egypt. This is probably due to the initially high approval rate in Lower Egypt. Regression analysis does not alter this conclusion. The impact of PDP is positive and significant in Upper Egypt (Beta = .054 and F = 5.92). Husband's illiteracy and his type of work are the most significant variables. PDP is comparable in magnitude to wife's education as a positive determinant of more favorable attitudes toward contraceptive use. In Lower Egypt, PDP impact, though positive, is insignificant.

EVALUATION OF THE RAIYDA'S ROLE IN PDP VILLAGES

The CPS collected data to directly evaluate the role of the Raiydas-- family planning extension workers within PDP villages. Results suggest these workers play a relatively minimal role in the villages. In Upper Egypt, only 15 percent of all women in PDP villages reported they were aware of the Raiyda's presence. Only one-half of these women had ever met her (7.5 percent of all women). Among those who had actually had contact with the Raiyda, 60 percent merely obtained family planning information from her, while 20 percent received contraceptive supplies (4.4 and 1.6 percent of all women in PDP villages, respectively).

In Lower Egypt, the Raiydas are relatively more active; about one-fourth of all women in PDP villages are aware of the Raiyda's presence. Roughly 60 percent of the women who had heard about the Raiyda actually had met her (14 percent of all women). Among women who had ever met a Raiyda, one-half had obtained information on family planning from her and about 20 percent had received methods (7.5 and 3 percent of all women in PDP villages, respectively).

As to the awareness of the existence of PDP in their villages, only 12 percent of the women in PDP villages in Upper Egypt and 16 percent in Lower Egypt have ever heard of committees related to family planning (2.6 percent of all women). Only 5 women in the whole Upper Egypt PDP sample of more than 1,100 have ever participated in such committees and only 10 women of the total Lower Egypt PDP sample of more than 1,450 have ever been involved in the activities of such committees.

MIGRATION

It must be noted in the analysis of migration that the data are for households and not individuals. For example, as indicated in Table 13, 11.6 percent of the households interviewed in the sample had at least one member who outmigrated. It is possible that there was duplication

TABLE 14
 CHARACTERISTICS OF OUTMIGRANTS BY REGION AND POPULATION AND DEVELOPMENT PROGRAM (PDP) STATUS,
 RURAL EGYPT, 1980

REGION AND PDP STATUS	Characteristics of Outmigrants ^a				
	Percent Male	Percent Went to Urban Areas in Egypt	Percent Went Abroad	Percent Left to Work Elsewhere	Percent Intend to Come Back
<u>All Egypt</u>					
FDP	83.1	27.7	58.4	75.2	66.3
More than 2 years	88.5	17.2	67.0	81.6	80.5
2 years or less	79.8	33.9	51.8	70.5	60.7
NONPDP	78.8	38.9	46.6	71.0	63.4
TOTAL	80.1	34.5	51.7	72.4	65.5
<u>Upper Egypt</u>					
FDP	81.4	32.0	48.5	74.2	63.9
More than 2 years	85.7	20.2	61.9	79.8	79.8
2 years or less	76.8	40.0	36.6	68.8	50.9
NONPDP	84.1	36.6	50.6	74.4	69.5
TOTAL	83.2	35.1	50.4	74.0	67.9
<u>Lower Egypt</u>					
FDP	84.6	24.0	66.3	76.0	70.2
More than 2 years	92.1	13.5	78.7	85.4	83.1
2 years or less	81.3	28.6	60.7	71.4	65.2
NONPDP	70.9	42.3	41.7	66.0	55.3
TOTAL	77.6	34.0	54.4	70.9	63.1

^a Characteristics of the most recent person to leave a household for those households reporting outmigration.

NOTE: Differences between PDP and NONPDP were not tested for significance.

in responses to the question of whether someone in the family had migrated from the village in the past year, i.e., a son in one family may be reported again as a brother in another. Although the data permits refinement of biases of this kind, this is not considered in the present paper. Thus, caution must be exercised in interpreting these results.

More households in Upper than Lower Egypt have at least one outmigrant (13.1 percent and 10.3 percent, respectively). In Upper Egypt, nonPDP areas have significantly higher portions of households with at least one outmigrant than PDP villages (16.4 and 9.7 percent, respectively) although this is not the case in Lower Egypt where PDP has no impact on outmigration.

Duration of PDP does seem to inhibit outmigration. This is true in both Lower and Upper Egypt. Figures show that there are fewer households with at least one outmigrant in villages exposed to PDP for longer durations than in villages with PDP for less than 2 years.

Outmigration is male selective (Table 14). This is the case in both regions irrespective of PDP. Overall, 80 percent of households with at least one outmigrant report that the most recent outmigrant was a male.

Two major destinations are reported -- abroad (probably mainly Arab countries) and urban areas in Egypt. The former is the destination in the case of almost one-half of the most recent outmigrants; the latter destination accounts for more than one-third of outmigrants. This finding is consistent in both regions. However, in Lower Egypt, outmigration in nonPDP areas is directed almost as often to urban areas as abroad (42.3 percent to urban areas and 41.7 percent abroad), while among PDP villages outmigration is clearly skewed to destinations outside Egypt (24.0 percent to urban areas compared to 66.3 percent abroad).

No systematic evidence exists as to any relationship with respect to PDP and plans to migrate. Overall, 3.6 percent of the households included in the sample had at least one member of the household planning to migrate.

In sum, it seems that PDP is related to lower outmigration in Upper Egypt but not in Lower Egypt. PDP may have, however, an impact on the destination of migration in Lower Egypt which was not the case in Upper Egypt. Interpretation of these results is speculative and other factors must be taken into consideration before reaching any final conclusion on the relationship between PDP and the level of outmigration from villages in rural Egypt.

CONCLUSIONS

There are clear discrepancies between the socio-economic characteristics of women in Upper and Lower Egypt. The generally higher socio-economic characteristics of women in Lower Egypt led to considering Lower and Upper Egyptian villages separately in this analysis. These socio-economic differences were probably responsible for the marked differences between Upper and Lower Egyptian women in terms of attitudes and behavior related to fertility and family planning.

In comparison with Upper Egyptian women, women in Lower Egypt tend to be more knowledgeable about contraceptive methods, to have used family planning more often both in the past and currently, to be more likely to want to cease childbearing and to have considered the question of family size. They generally desire smaller families on the average. Their ideal family size is also smaller. Furthermore, women in Lower Egypt are also more likely to approve of contraceptive use and to intend in higher proportions to use family planning in the future.

Within each of the two regions, differences between PDP and nonPDP areas in these indicators were also considered. Based on duration, two groups of villages were considered in PDP areas, namely villages with

PDP for more than 2 years and those with PDP for 2 years or less. In general, it seems that socio-economic differences between PDP and nonPDP women are not substantial within each region, and so it was justifiable to compare demographic impacts of PDP within each region.

No impact of PDP was found on fertility either in Upper or Lower Egypt. Probably it is still too early to anticipate a change in fertility, considering that PDP is generally of recent origin. No significant differences were found between the two PDP duration groups.

In Upper Egypt, the impact of PDP on knowledge, ever use and current use is substantial. It is worth mentioning that use of IUD, in particular, is generally significantly greater in magnitude in PDP than in nonPDP areas. PDP women also are more likely to desire to cease childbearing and to idealize more often a smaller family size. Those who approve of family planning methods were found significantly more often in PDP villages than in nonPDP areas.

In Upper Egypt, duration of PDP seems to have some effect on knowledge of contraceptive methods, ever use and current use of these methods. It also increases the proportion of women who approve of family planning. Duration had no effect, however, on the consideration of the question of desired or ideal family size.

In Lower Egypt, the effect of PDP was negligible on knowledge and approval of contraceptive use - which were initially high. The effect was also negligible on attitudes toward birth spacing and desired family size. However, the PDP impact is significant on ever use as well as current use, particularly with respect to the use of IUD.

Duration of PDP in Lower Egypt seems to be related to somewhat greater knowledge of condoms and IUD and it had some effect on increasing current use of these methods. Duration was also negatively related to the level of or disapproval of family planning and positively associated with the intention to use contraceptives in the future.

Holding variables other than PDP constant, by multiple regression analysis, and considering five dependent variables -- namely children everborn, ever use, current use, ideal family size and approval of contraception -- it was clear that the PDP impact is stronger in Upper than Lower Egypt. PDP impact, in Upper Egypt, was found to be highly statistically significant with respect to ever use, current use, ideal family size and approval of family planning. In Lower Egypt, a significant effect was found only for current use and ideal family size.

In PDP villages, results suggest that the Raiyda's role is still minimal. Only a small fraction of ever-married women in PDP areas have been aware of her presence or have ever met her. Among those who have met the Raiyda, she mainly provided family planning information. Similarly, awareness of the existence of the family planning committees is not extensive; moreover, few women have ever participated in committee activities.

Considering migration, it seems that PDP has an inhibiting effect on outmigration only in Upper Egypt. PDP's impact in Lower Egypt is greater with respect to the destination of migrants rather than on their numbers. No systematic evidence exists in connection with the impact of PDP on plans to migrate in the future. It should be remembered that the interpretation of migration results must be viewed with caution.

Overall, the evaluation of PDP shows a favorable effect in both Upper and Lower Egypt. One danger signal is with respect to duration of PDP which appears to have little or no consequence. Women in PDP areas of 2 years or less responded as well as women in PDP areas of more than 2 years. This may mean that program exposure should continue intensively for longer periods rather than achieving only initial successes.