

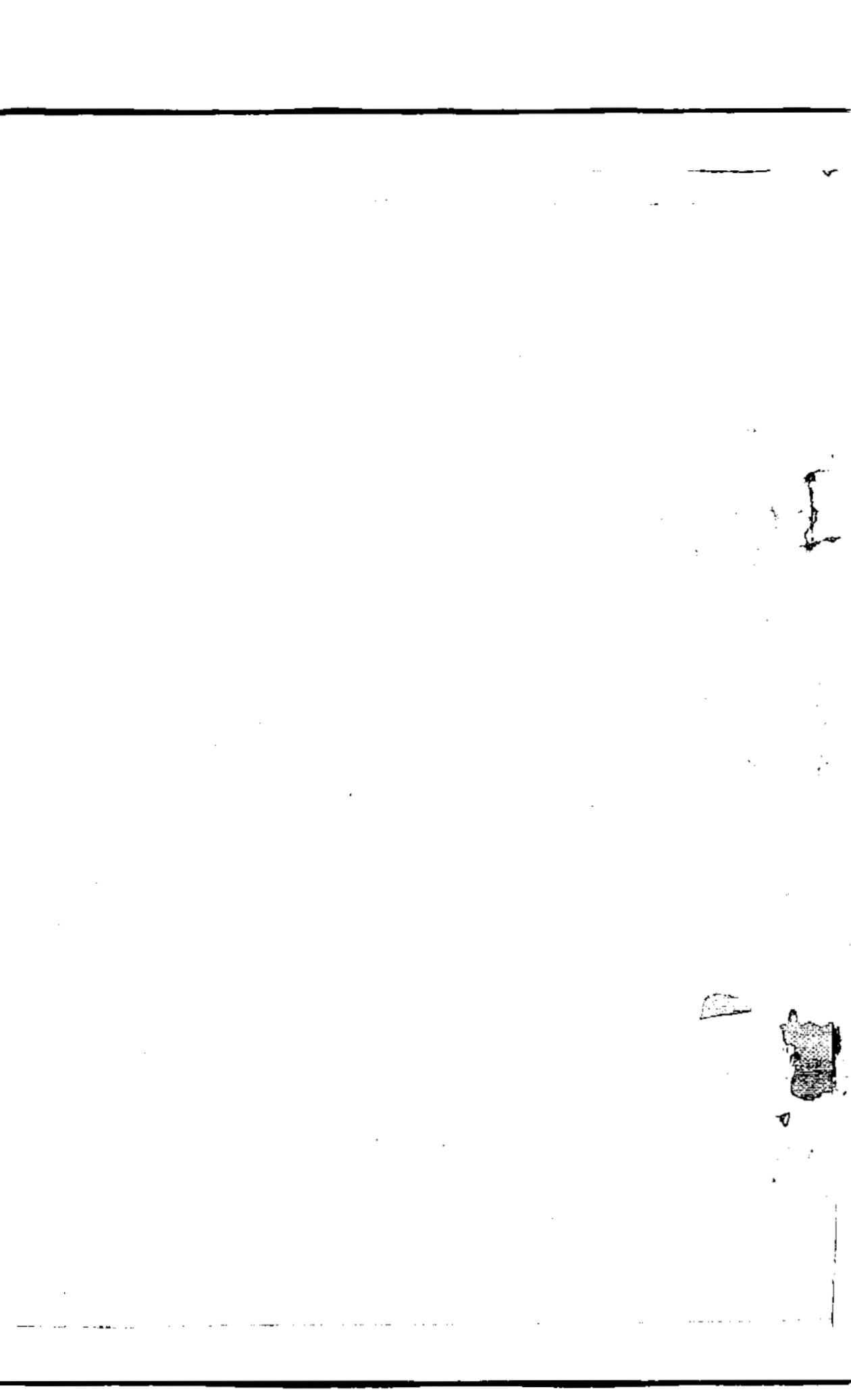
Geographic Differentials of Fertility levels
in Some Villages of the Newly Reclaimed Area
of Sugar Beet, South of Alexandria

By

Dr. Fayez Mohammed El Essawy

*Assistant Professor at
the Geography Dept.,
Faculty of Arts, Alexandria University*

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Introduction:

There has been a significant decline in the total fertility rate in Egypt since 1980. The total fertility rate dropped from 5.28 children per woman in 1980 to 3.7 in 1995, indicating 29 percent decline for the whole period, or an average of 1.9 per cent decline per year (Abd El Maksoud, M. 1998) —

Vital statistics, which have been made accurate only recently, refer to a persistent high birth rate of about 29 per thousand inhabitants. The general fertility rate was about 3.6 children per women in 1997. Evidently these are very high (nearly the double) rates compared with the rate of the developed countries (U.N. 1997).

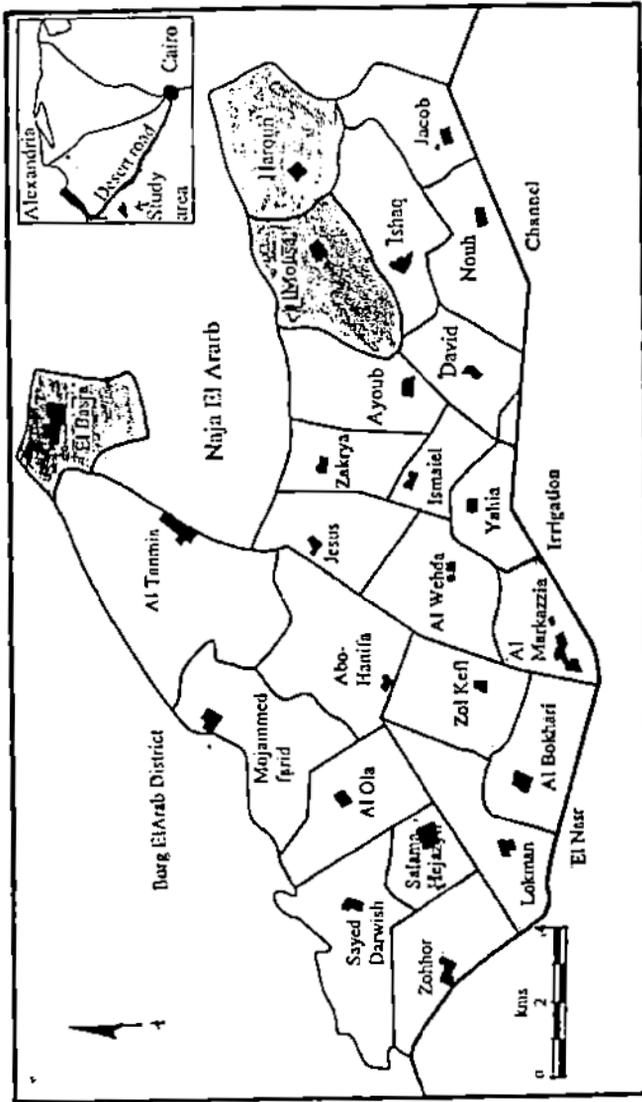
Population growth and pressure had an overbearing influence on the development programmes of Egypt. The death rate is decreasing to its lowest level (7 per thousand), and the birth rate is high (28 per thousand) in 1997. The result is a high natural increase rate and a high growth rate of population. Rapid population growth contributes to stagnation or even lowers the socio-economic standards in the country. At the same time Socio-economic factors are the main reasons responsible for the high fertility rates. This is one of the topics which should be examined by population geographers

Objectives of the Study

The main objectives of the study can be outlined as follows:

- I - Estimating the total fertility rate and describing the shape of age specific fertility rates.
- II- Investigating the effect of some of the major socio-economic and demographic factors relating to fertility in this new rural area .

* Assistant Professor at the Geography Dept. Faculty of Arts, Alexandria University



Source: Egyptian General Survey Authority (EGSA), Topographic Map Sheet No N105-L6d (King Maryout, Egyptian Series 1:50000)

Fig (1) The Study Area and the villages of the Sugar Beet Area, South of Alexandria.

III- Examining the attitudes of wives towards family planning and the desired number of children.

Sources of Data

The data upon which this research is based was obtained by fieldwork studies conducted in February 1998. A detailed questionnaire of 16 questions was designed and distributed to obtain information about year at marriage, educational attainment of husband and wife, occupation of husband and wife (if any), numbers of pregnancies, live births, marital status, and a variety of other relevant information. 523 questionnaires distributed to cover the study area as follows: 200 for El Basra, 167 for Prophet Mousa village and 147 questionnaires for Prophet Haroun village. A full enumeration of all the population of the selected villages has been carried out between 16 – 27 of February 1998.

Areal Units:

The researcher has chosen three villages of the newly reclaimed land which called "Sugar Beet Project" or graduates' villages (27 villages). As shown in Fig. (1), this area is located southern to Alexandria city, 40-50 Kms. away from the city on the desert highway of Alexandria-Cairo. The selected villages are El-Basra (7 kms to the west of Cairo-Alexandria desert highway), Prophet Mousa or the village no. 6 (12 kms., to the west of the desert highway) and Prophet Haroun or village no. 7 (14 kms. to the west of the desert high way) as shown in Fig. (1).

Some geographic characteristics that have been illustrated in table (1) and Fig (2) to facilitate the interpretation of fertility levels in the study area.

Table (1) Some Geographic Characteristics of The Study Area, 1998.

Villages	Cultivated Area (feddan)	Land's Ownership %		Total Population "Persons"	Establishing Year
		Graduates	Utilizers		
El-Basra	1206	33.2	66.8	2370	1964
P. Mousa	1182	26.8	73.2	1722	1986
P. Haroun	1095	22.1	77.98	1138	1986

Source: Computed from the field work study conducted in February 1998.

The population of this area consists of migrants who come from upper Egypt and The Nile deltaic governorates, mainly from Alexandria,

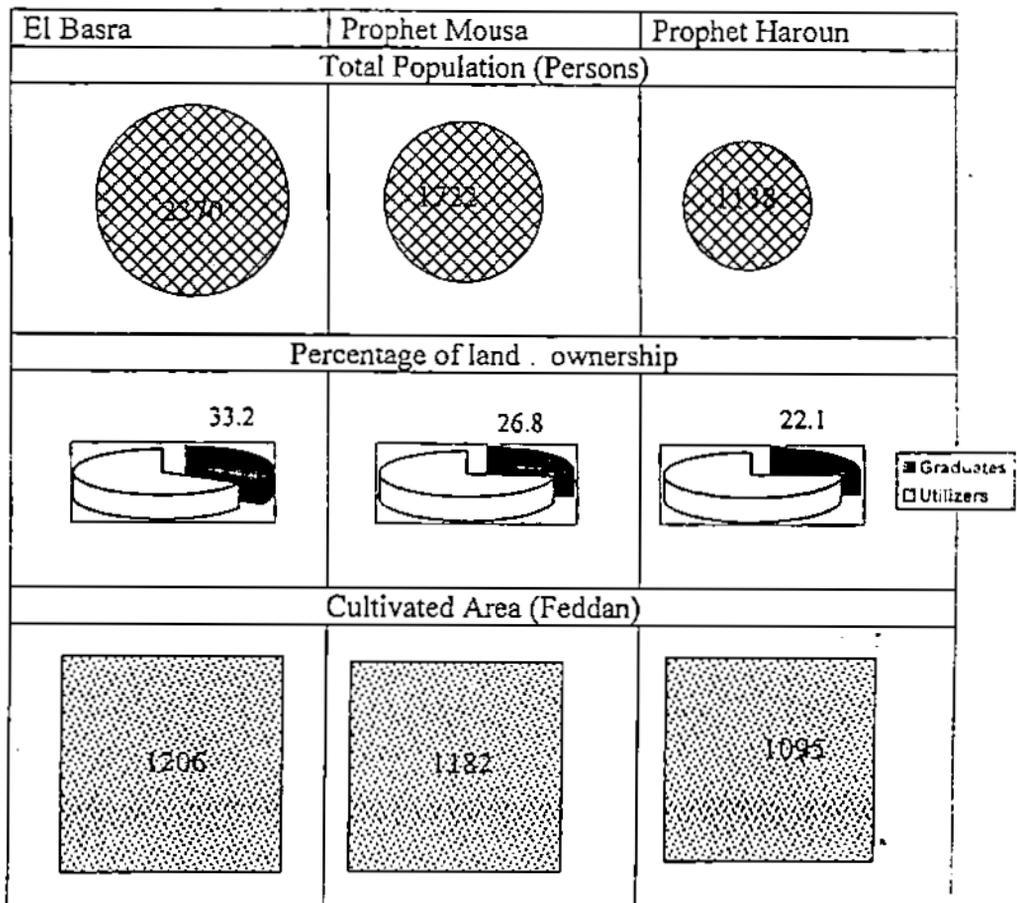


Fig. (2) Some Geographical features of the study area

Behira, Kafr El Shiekh, Cairo, Menoufiya, Sohag, Dakahliya and Suez. Some of these migrants come from Urban centers while the extreme majority from rural areas. Some of them are university graduates and others are farmers called (utilizers). This cultural mosaic of migrants affected the level of fertility in the study area as shown later

I – Age Patterns of Fertility

There are various methods of measuring the fertility of population such the: crude birth rate, age-specific fertility rate (ASFR), total fertility rate (TFR), Child-woman ratio or child ever born (Omran 1980).

The age specific fertility rate (ASFR) requires the knowledge of the number of birth, in different age groups of women, between 15 to 49 years. The total fertility rate (TFR) is derived from the ASFR and the average number of births per women during their entire reproductive span.

Age-specific fertility rates reveal two facts about the productive behaviour of population, namely the area and the shape of the fertility curves presented by these rates. The shape of fertility curve is determined by biological and social factors (Nassef, A., 1971). It also reflects the geographical circumstances of the population.

Comparing the age patterns of fertility with the population of the study area as shown in table (2), we can conclude that there are little significant differences between the three villages of the study area. The total

Table (2) Age-Specific Fertility rates in villages of Sugar beet Area, 1996

Age – Groups	Age Specific Fertility Rates			
	El Basra	P. Mousa	P. Haroun	Rural Egypt
15 – 19 years	6.3	9.2	10.1	7.4
20-24	24.3	27.1	27.1	25.5
25-29	25.7	28.4	27.9	27.6
30-34	21.8	19.5	19.5	20.7
35-39	13.1	11.0	12.8	12.3
40-44	7.6	4.4	2.1	4.8
45 and more	1.2	0.4	0.5	1.7
Total %	100	100	100	100
Total fertility	3.5	3.8	3.9	4.1

Source: calculated according to the field work study

Data of rural Egypt: (Abd El-Maksoud, 1996)

fertility rate ranges from 3.5 live birth in El Basra to 3.8 and 3.9 children/woman in P. Mousa and P. Haroun respectively. The TFR in the areas is lower than that of rural Egypt (4.1 children/woman).

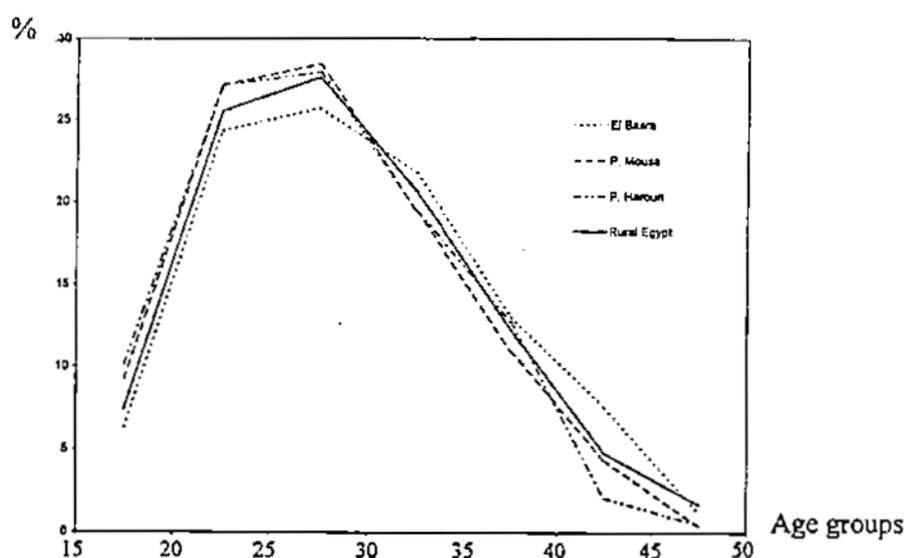


Fig. (3) Age Specific Currently Married Fertility Rates by Age of Women in the Study Area, 1998.

As shown in Fig. (3) the pattern of age specific fertility rate of the study area belongs to broad peak type (Age specific fertility rates in age groups 20-24 and 25-29 differ only slightly). The maximum fertility rate is that of age group 25-29 followed by 20-24 (Table 2) in the both of P. Mousa and El Basra villages, while in P. Haroun the maximum is in age groups 20-24 followed by 25-29.

It is clear that the relative concentration of the fertility distribution at different ages in the study area is high in the young age groups, (between 15-29). Villages of P. Mousa and P. Haroun, do not differ greatly in their fertility pattern, where 64.7 and 65.1 per cent respectively, concentrated in the young age groups. In El Basra village there are some variations where only 56% of its fertility concentrated in the age group 15-29. This decline is due to its low percentage of married woman in young ages (Table 3).

The Effect of Some Socio-Economic factors on Fertility in the Study Area

The study of fertility differentials is an important part of fertility study to geographers. The aim of this study is to find out the relation between fertility and socio-economic level.

There are several indicators of economic and social development. In Population Bulletin of the United Nations No. 7, 1963, about twelve indicators were used to study the relationship between level of fertility and development (Hanaa, B. 1971).

This paper will examine and investigate the effect of the major socio-economic on demographic factors relating to fertility in three villages of a new reclaimed area. These villages considered good case study that represent the whole country, where its population derived from many governorates. These villages have been taken as a sample to show the extent to which manipulation of these factors could account for corresponding change in reproductive behaviour of couples in the new rural societies.

This study, will declare and approve the relationship between some fertility determinants and socio-economic variable and their relation with children ever born. These chosen variables are:

- 1 – Age at marriage
- 2 – Female's education
- 3 – Occupational status of husbands

1 – Age at marriage

Age at first marriage has been recognised as an important factor affecting human fertility. Since the reproductive period of men is longer than that of women, and since the fertility measures are always based mainly on the reproduction of them. Women who marry late (toward 25 or 30 years old) tend to have fewer children than those who marry early (less than 20 years old). Late marriage reduces the growth rate of the population because it results in a shortening of the fecund period when pregnancies are possible, and also in spacing (lengthening of" the period between births. (Mosley, W. and Becker, S. , 1982).

Before we deal with age at marriage as a factor affecting fertility, the researcher, will try to throw some light on the pattern of marriage according to the questionnaire's data which has been conducted on the

villages of the study area. Many facts can be derived about the distribution of women's age according to their marital status as:

- 1- The overwhelming majority of female at age (15-49) are married. More than 90 percent of the total females are married (P. Mousa 90.2% , P. Haroun 91.5 and El Basra 88.6%) during the child-bearing ages.

Table (3) Percentage of Ever Married Women
by Age in Graduate's Villages, 1998

Villages	Less than 20 years	20-24	25 and more	Total	
				%	No.
El – Basra	64.0	33.5	2.5	100	200
P. Mousa	81.5	17.8	0.7	100	176
P. Haroun	88.1	11.2	0.7	100	147

Source: Computed according to the field work study.

- 2- As shown in Table (3) and Fig. (4), the percentage of Ever married women in the age group less than 20 years is high. It is a salient phenomena among the females in both Prophet Haroun village (88.1%) and Prophet Mousa village (81.5%). The percentage is quite lower in the village of El Basra (64%). That is because the majority of them are illiterate. Woman who delay marriage because exposed, through education or employment to certain influence that provide alternatives to childbearing with an affect that their fertility desires are reduced (Zaid, M., 1997).

Women who married younger at less than 20 years are more fertile than those who married at older age . Table (4) shows that the percent age of the women who have children ever born between 1–3 children is between 34–39.1% compared with 62.6 and 46 percent if they marry at 20–24 years old, and reach between 80 – 100 per cent if they marry at 25 years old and more in the study area. Women who marry at age below 20 years and have (8 children and more) represent 21.% in El – Basra village, 23.5 % in Prophet Mousa village , and 26.1 % in Prophet Haroun village. These percentage are higher than that of those who marry at age between 20-24 years old which represent 4.5 %, 15 .2 and 26% (respectively).

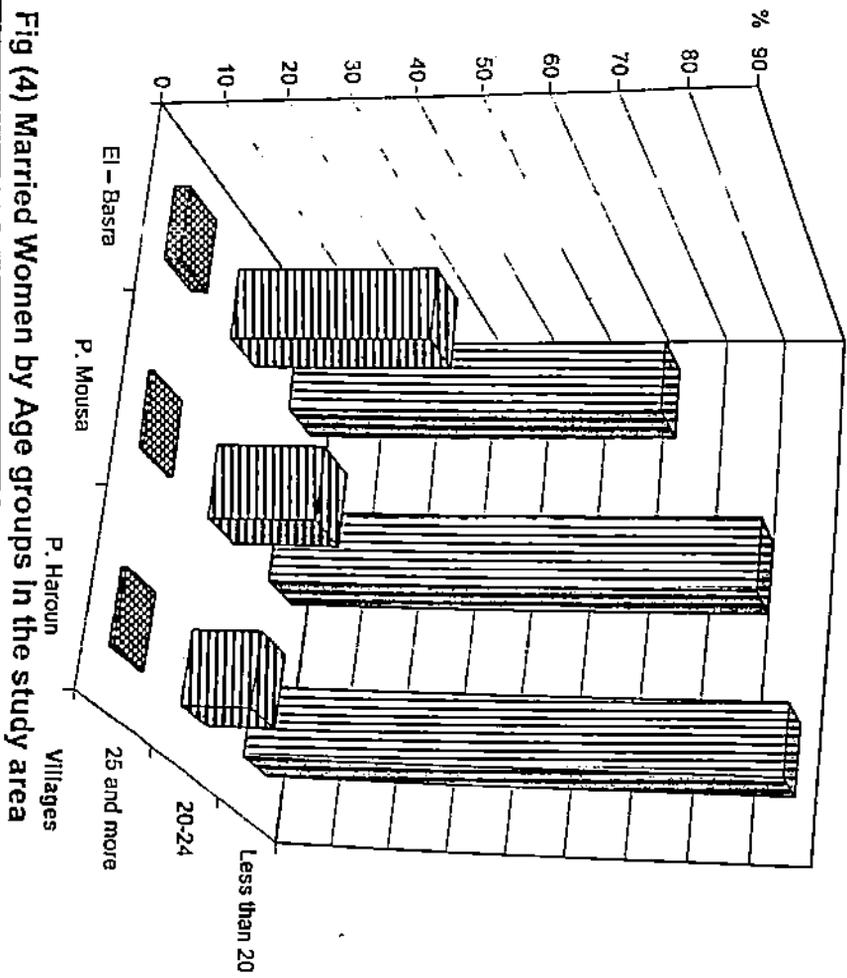


Fig (4) Married Women by Age groups In the study area

■ 25 and more
 ▨ 20-24
 □ Less than 20

Table (4) Distribution of Married Women by Children Ever Born and Age at Marriage in the Study Area , 1998

Age At Marriage		1-3	4-5	6-7	8 children and more	No. Of women	% Total
El-Basra	>20	39.1	24.2	15.6	21.1	128	100
	20-24	62.6	28.4	4.5	4.5	67	100
	25 and more	80.0	-	20.0	-	5	100
P. Mousa	>20	34.0	22.0	20.5	23.5	143	100
	20-24	46.0	31.1	7.7	15.2	31	100
	25 and more	100	-	-	-	2	100
P. Haroun	>20	37.0	19.3	17.6	26.1	119	100
	20-24	29.7	25.1	19.2	26.0	26	100
	25 and more	70.0	30.0	-	-	2	100
Egypt	>20	40.4	26.4	18.7	14.6	6418	100
	20-24	61.9	23.9	9.6	4.6	2601	100
	25 and more	80.1	16.2	2.6	1.1	798	100

Source : (1) computed according to the field work study
(2) Data of Egypt : (Zaid , M., 1997)

As a result of the large number of females that get married at young ages in the area compared with the whole of Egypt, the percentage of women who marry at age below 20 years old and have 8 children and more are higher. The percentage of Egypt as a whole was lower than those of study area (only 14.6) as shown in table (4).

The study of the average number of children ever born by woman's age at marriage reveals that women who married younger at less than 20 years of age have approximately 4.2 children per women in El- Basra , 5.1 children per woman in P. Mousa village and 5.3 children / woman in P. Haroun village Fig (5).

Women who are married at age 20-24 years old have lower number of children. The mean number of children ever born by woman's age at marriage is fluctuating between 3.7 in P. Mousa village and 3.1 in El-Basra, while it is 3.4 in Haroun village. Women who get married at late

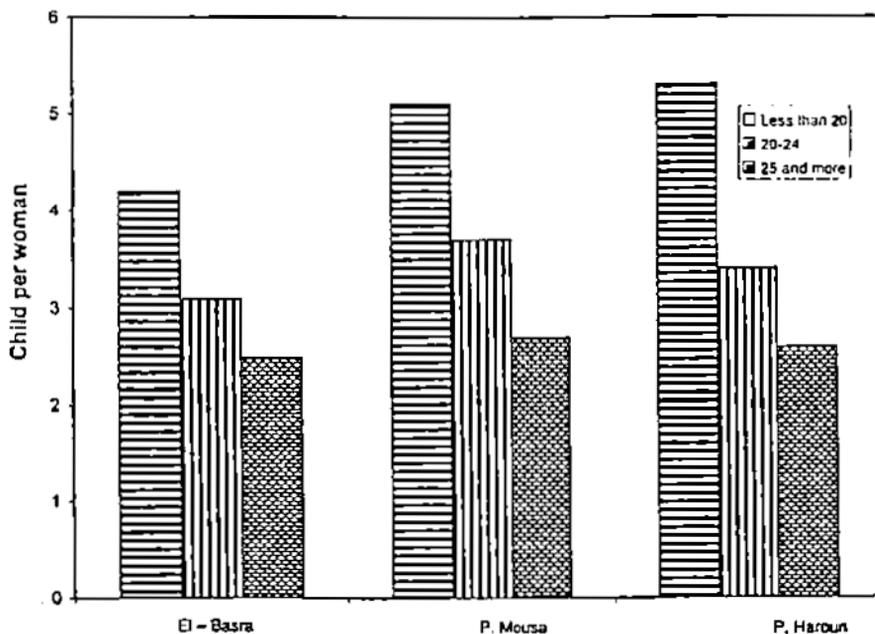


Fig (5) Average Number of Children Ever Born by Women's Age at Marriage in the Study Area, 1998.

age 25 years old and more have (nearly the same) 2.5 children per women, and decreases to less than 1.7 for those of 30 years or more . However , age at marriage showed a clear effect on fertility variation in the study area. There is a strong negative relationship between age at marriage and number of children ever born according to Sperman's correlation coefficient (0.78 and more) in the villages of the study area .

2 – Female's Education

Research has demonstrated that education particularly of females is inversely related to fertility. This correlation is higher than that of other variables. (De Tray, D., 1980).

There is a strong positive correlation between educational attainment and the average number of children ever born per married woman. This is particularly clear in the case of a long period of marriage, for after a period of 30 years of marriage we find that illiterate women have nearly the double number of children rather than that of women with university education. The correlation coefficient reaches not less than 0.95 among the villages of the study area.

Before dealing with the effect of education on fertility of this newly reclaimed area., the researcher will try to emphasize some facts about levels of education among females in the study area as follows:

1- Except for El - Basra (55%), more than 80 per cent of women in the other two villages are illiterate .

Table (5) Educational Status of Wives in the Study Area , 1998

Educational Status	El - Basra	P. Mousa	P. Haroun
Illiterate	55	80.7	86.3
Read & Write	18.5	13.1	8.2
Prep. & secondary	21.0	5.6	4.8
University	5.5	0.3	0.7
Total %	100	100	100
Total NO. Of wives	200	176	147

Source : computed from the questionnaire data conducted in February 1998 .

- 2- The preparatory and secondary school educated women represent not more than 6% in the villages of P. Mousa and P. Haroun, While it reaches 21 percent in El- Basra villages .
- 3- The percentage of university educated women is very low in both P. Mousa and P. Haroun (0.3 – 0.7% respectively), but the percentage rose to 5.5 among women in El-Basra village .
- 4- The proportion of literate female was less than 6% in previous two villages , but it increases to more than one quarter of the total female of El-Basra villages due to some of the cultivated land was distributed to some university graduates (most of them are married literate wives). It is worth noting that the overwhelming majority of the graduates has deserted the villages of P. Mousa and Haroun and hired their cultivated land to farmers. In contrast with many of them who are still living in El-Basra villages.

There is an obvious relation between educational status of female and the mean number of children ever born per married women . Table 6 shows that the literate woman is more productive than the illiterate .

The figures of table (6) can be restricted to two categories: The First includes illiterate and woman who can read and write, The second includes the literate women (Prep., secondary and university).

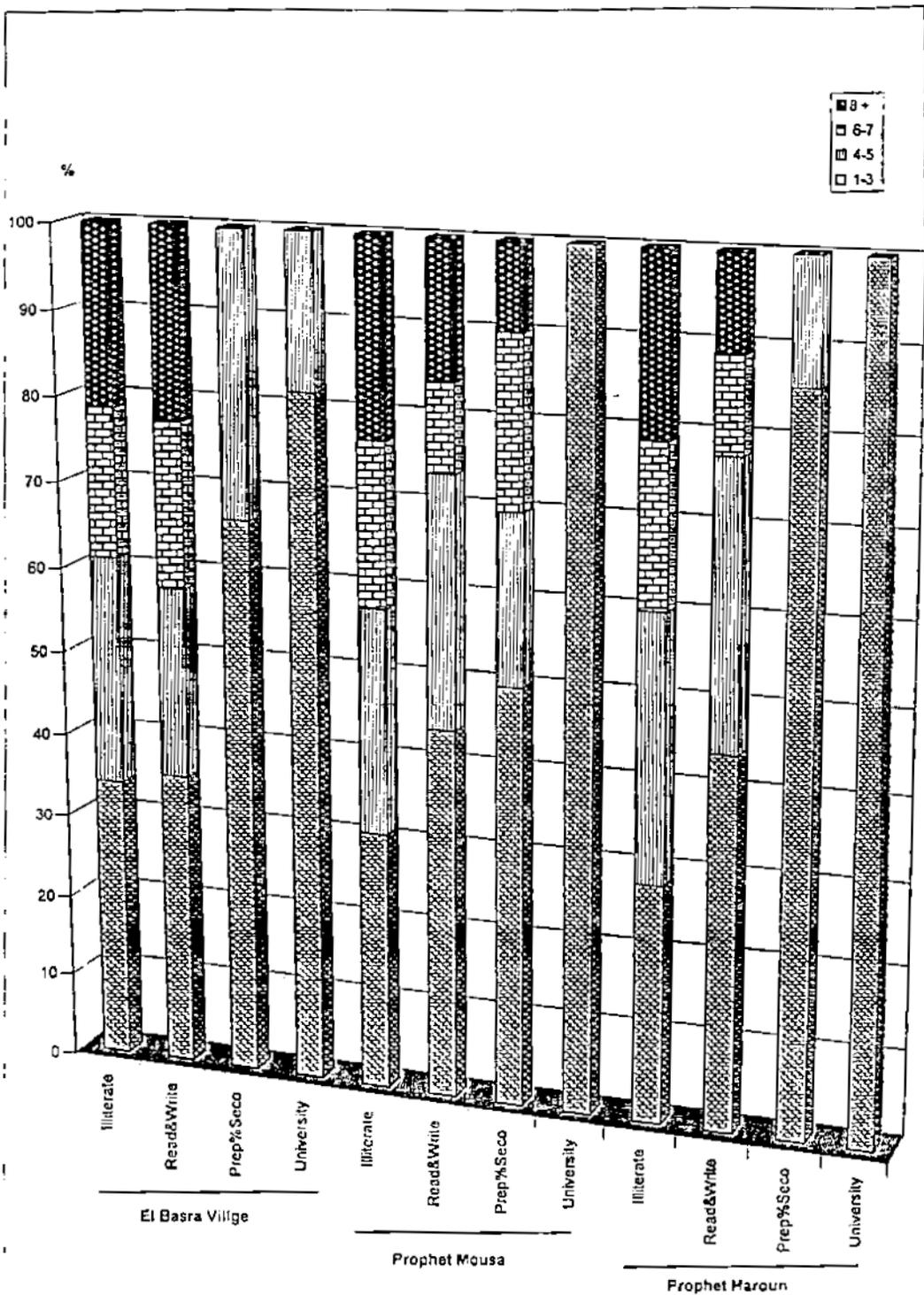


Fig. 6. Married Women by Children Everborn and educational status

The percentage of women who have 1-3 children increase with the level of education, the lowest level is connected with illiterate and women who can read and write (the first category) in all villages (between 28.5 to 44.5%), In contrast, with that the highest percentage among the literate (the second category) in all villages reached 100% among the university graduates .

Table (6) Distribution of Married Women by Children Everborn and Educational Status in the Study Area , 1998.

Village	Educational Status	1-3	4-5	6-7	8 Children and more	Total %	No. of women
El-Basra	Illiterate	34.0	27.1	17.5	21.4	100	110
	Read & Write	35.4	22.6	19.4	22.6	100	37
	Prep.&Secon.	66.7	33.3	-	-	100	42
	University	81.8	18.2	-	-	100	11
P. Mousa	Illiterate	31.0	26.8	19.0	23.2	100	142
	Read & Write	44.2	29.5	10.3	16.0	100	23
	Prep.&Secon.	50.0	20.0	20	10.0	100	10
	University	100	-	-	-	100	1
P. Haroun	Illiterate	28.5	31.7	18.7	21.1	100	126
	Read & Write	44.5	33.3	11.1	11.1	100	13
	Prep.&Secon.	85.7	14.3	-	-	100	7
	University	100	-	-	-	100	1

Sourse : Computed from the questionnaire data conducted in February , 1998

The percentage of women who have more than 6 children ever born, is high among illiterate (between 39 in El-Basra and 42% in P.Mousa village). On the other side it disappeared among women with high education .

This means that the small size family is preferred among the educated wives, by contrast the large number of children ever born connected with the illiterate .

According to the data conducted form the field work study , the researcher found that the percentage of illiterate wives who have more

than 10 children ever born fluctuated between 9% in Basra and 13.5% in P. Haroun villages.

With increase in educational status, the average number of children ever born declined. Illiterate women had an average of 4.9 children in El-Basra, 5.0 and 5.2 children in P. Mousa and Prophet Haroun respectively (the average of Egypt is 4.5). Women who have any educational level have a lower average of children. The data conducted from the questionnaire as presented in Fig (7) shows that women who are able to read and write have an average of children between 3.3 and 3.8. Wives with a higher level of education have less average number of children ever born. It is about 3.0 children per women for preparatory and secondary levels.

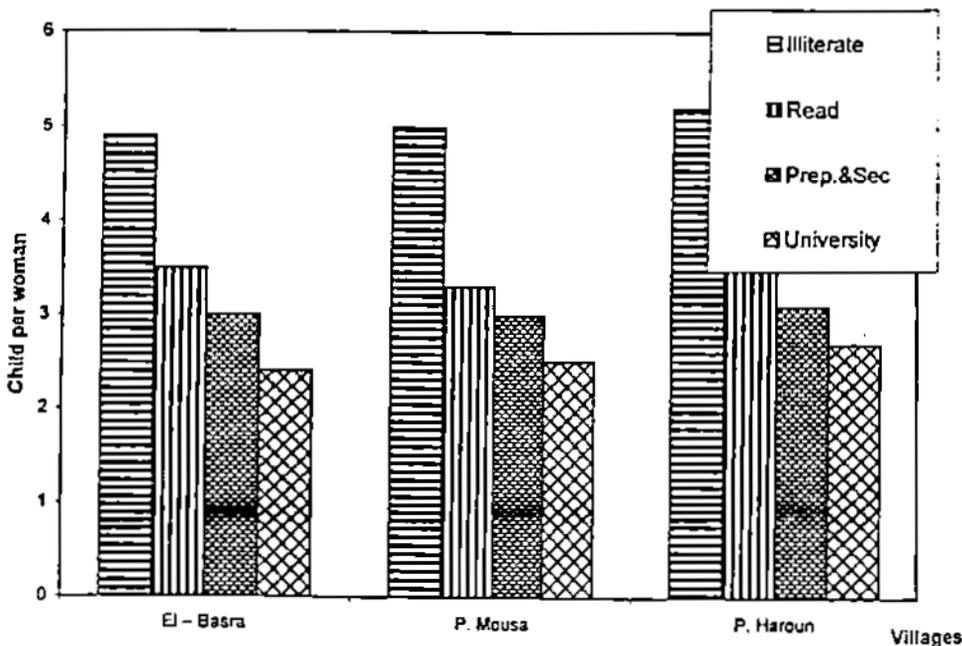


Fig (7) Average number of children ever born by educational status of wives in the study area, 1998.

The lowest average of children is among wives of higher education, it is nearly the half of that are of illiterate. It is fluctuating

between 2.4 and 2.7 children per woman . Meanwhile the average number of Egypt as a whole is 2.2 children per woman.

Comparing the average number of living children according to educational levels of women and educational levels of husbands, the later seems to have less effect on the average number of children than that of women.

It is worth noting that women's fertility varies greatly according to the different social, demographic and economic factors. Among the factors affecting these rates is the education level of women, for the educated wife is more apt to believe in family planning and to realise its importance and its advantage to her small family.

3- Fertility Differentials by Occupation

Occupation, especially of the husband, has been long used as an index of socio-economic status in the study of fertility differentials. There are some Demographers who maintain that occupation delineates style of life more sharply than does education (Grabill, W. et. al , 1958)

The economy of the chosen village of the newly reclaimed area of Sugar Beet depends basically on agriculture. Hence agriculture is the dominant occupation. About 89% of the house holders of Prophet Haroun village engaged in the agrarian activities. Most of them are farmers migrated from El. Behira, Kafr El Sheikh and Dakahliya governorates (85% of the total farmers in the village).

The proportion of workers who work in agriculture in P. Mousa village is estimated according to the questionnaire data of about 84.9%. most of them are migrants from El-Behiera, Dakhliya, Kafr El Sheikh , Alexandria and Menoufia governorates

In El-Basra village, the researcher observed that farmers and graduates who work in agrarian activity constitute about two thirds of the total labour force in the village. Most of them migrated to the area from Alexandria, EL Behiera, Sohag and Cairo governorates.

The average number of children ever born of married women by current occupation of husbands was computed for each village of the study area. It is obvious from table (7) that the group of agricultural occupation has higher fertility than that of the group of non-agricultural occupations.

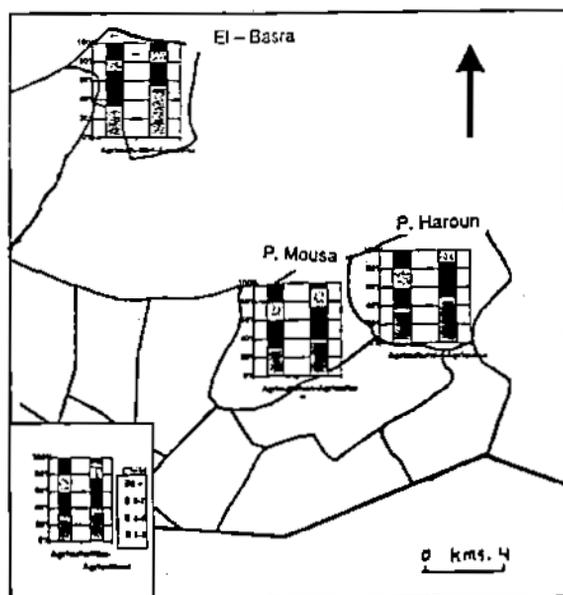


Fig (8) Percentage of Children Everborn of Married Women by husband's working in Agricultural works

Table (7) Percentage of Married Women by children Ever born and Husband's Occupation in the study area

Village	Occupation	1-3	4-5	6-7	8 children and more	Total
El-Basra	Agricultural	37.7	36.6	11.9	17.8	100
	Non-Agricultural	55.0	24.4	11.6	8.9	100
Prophet	Agricultural	30.3	29.4	19.3	21.0	100
Mousa	Non-Agricultural	57.6	24.5	13.5	4.4	100
Prophet	Agricultural	36.7	22.2	21.4	19.7	100
Haroon	Non-Agricultural	69.2	23.1	7.7	-	100

Source: Computed from the questionnaire data conducted in February 1998

The percentage of the wives of men working in Agricultural activity and has more than 6 children ever born is high. More than 40% of them have large-size family in both of P. haroun and P. Mousa villages (Fig. 8). In El-Basra village the percentage is quite lower (29.7). That is due to many percentage is quite lower (29.7). That is due to many graduates still live in this village and naturally prefer the small size family.

In the other side, the percentage of married women by non-agricultural occupations and that have more than 6 children ever born is lower. Not more than 12% of three wives have large family (P. Mousa 11.8% and Haroun village 7.7). As shown in fig(8) and table (7) the percentage of El Basra village is higher, it reached about fifth of the total number of the wives.

Data conducted from the questionnaire showed that wives of husbands working in non-agricultural works who have children ever born between 1-3 Children is more than 55 per cent are the total and vice versa. The percentage is lower among the wives of husbands in agrarian activities. The percentage does not exceed one third of them.

It is obvious that there are some differences in women fertility according to the previous occupational groups. Wives of farmers and agricultural works have the highest average number of children (except for the agrarian engineers 2.75 child/woman). As shown in fig (9) the

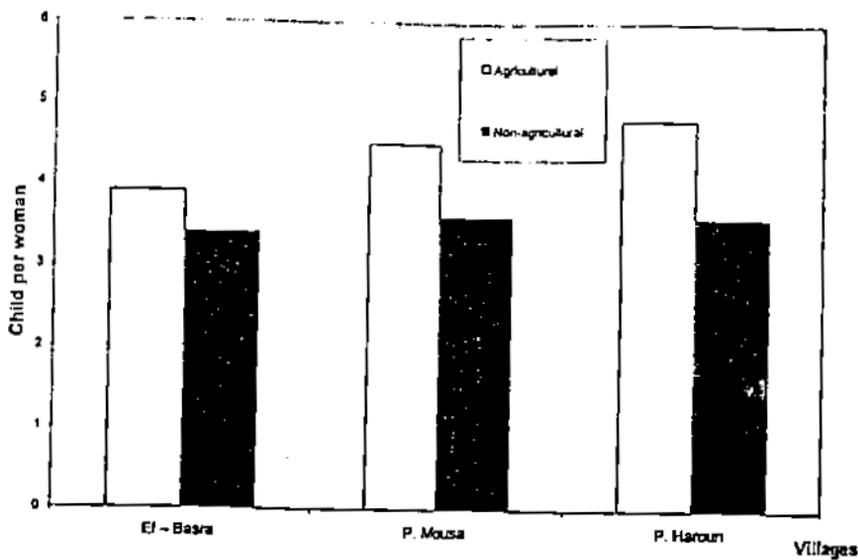


Fig. (9) Average Number of Children Everborn by Wives Of agricultural and Non-Agricultural Activities in the Study Area

average is fluctuating between 3.9 child/women in El Basra, 4.5 in P. Mousa, and 4.8 Children per woman in haroun village. The average of El Basra is the lowest due to the decreasing average among the graduates which constitute about one third of the total housholders in the village (Table 1).

Wives of men working in non-agricultural works have relatively low average, it is nearly the same in the three villages, whereas this category includes teachers, doctors, governmental employees, sales men and some craftsmen etc. They always have the same characteristics.

Woman's work participation

The chance of women to work outside the house in good professional positions is rare in the study area. The overwhelming majority of women is housewives, the percentage of women employed outside the home in some jobs (teachers-nurses-doctors) is not more than 2.0 in P. Haroun and P. Mousa villages, and 6 per cent in El-Basra villages.

The relationship between women's work and fertility is likely to be negative. Women employed outside the home (on non-farm workers)

usually have lower fertility. For women who have good professional and more prestige positions, these effect will be even greater (U.N, 1984).

By studying fertility levels among working women (especially teachers and doctors) in EL-Basra village, the researcher found that the average number of children ever born for these women which 2.6 is lower than that of the housewives 5.8 children/woman. At the same time most of the women employed have a small size family. About 65% of them have less than 3 children per woman and who has more than 6 children/woman is only 7 percent of them. This lower fertility may be related to:

- Work experience of women may alter their views of their roles reducing their desires to have many children,
- Work of the woman gives her no opportunity to care for large number of children and there are alternative means for that care, then there is a conflict between the roles of mother and worker which may be resolved either by her not having children or not working and finally, work may increase women's exposure to family planning influences (Mohamed, G., 1998).

Briefly, fertility is widely affected by different socio-economic factors. These differentials in fertility are more obvious between age of marriage, and educational status (especially among females) than that of occupational status.

The geographical variations between El Basra village , and the other two villages is a result of the great differentiation of the migrants characteristics and their place of origin either rural or urban areas.

III- Desire to Have more Children

There is a clear decline in total fertility rate in Egypt as a whole. That is because the increasing attendance of female at educational, improving standard of levels and delaying of females age at marriage. In fact, despite the decreasing rates of fertility in Egypt as a whole and the study area, the rate of the area is still nearly the double of that in the developing countries

This raises a question. Is there a hope in reducing this high fertility rate in the newly reclaimed area of Sugar Beet?

To find an answer to that, the researcher asked parents throughout the questionnaire about their satisfaction of the present number of children they have, and do they want to have more children or not?

More than 70% of the total married women have no desire for more children as shown in table (8).

Table (8) The Desire of Married Women to Have More Children .

The villages	Yes	No
El- Basra	26.6	73.4
Prophet Mousa	29.4	70.6
Prophet Haroun	23.7	76.3

Source : Computed from the questionnaire data conducted in February, 1998.

The highest percentage of women who stated that they do not want more children is found in P. Haroun village (76.3) followed by El-Basra (73.4), and the lowest is among the married women of P. Mousa village.

The study of desired number of children according to the present size of family is calculated in table (8). The data indicates many facts as follows:

- Small family (not more than 3 children per women) is preferred among the married women of the area. The percentage of women in this category who desires to have more children is ranging between 30 in El-Basra and 42.2 in P. Mousa village. In fact women in the reproductive age are in favour of smaller families than those who had passed the stage of reproduction indicated the tendency of the younger generation to use family planning .

Table (9) Percentage of Married Women Who Desire to Have More Children According to the Present Size of Family:

villages	Desire	Small size of family	Medium size of Family	Large size of family
El – Basra	Yes	30.1	18.0	13.3
	No	69.9	82.0	86.7
Prophet Mousa	Yes	42.2	24.0	14.8
	No	57.8	76.0	85.2
Prophet Haroun	Yes	33.3	20.0	12.7
	No	66.4	80.0	87.3

Small family : 1-3 Medium 4,5, large 6 children and more

Source : Computed from the questionnaire data .

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- More than 75 per cent of married women in the study area considered the present size of children they have (4 and more) is suitable to their circumstances. At the same time the percentage of women who want to have more than 4 children is fluctuating between only 18 in El-Basra to 24% in P. Mousa village. This figures could be taken as an evidence of the tendency of young generation of married women to behave in favour of smaller family size. Actually the main reason for that is the use of contraceptive methods among a large number of women in the study area. Seeking contraceptive methods could be for the purpose of spacing children or for the purpose of limiting family size. Most of the married women in the study area who do not want more children use methods of contraceptives for the purpose of terminating child bearing rather than spacing children. They had already the number of children they wanted.

Despite the fact that more than 70 per cent of the total married women do not want more children as shown in table (8), but the current users of contraceptives are only 52.5% in El-Basra, 59.2 in P. Mousa and 60.8% in P. Haroun village. The majority of the users has a number of living children between 4-6 children. Therefore we can say there is a hope in reducing the level of fertility in the area in the near future with more high level of education of female and developing the geographical environment of this newly reclaimed area .

Conclusions

There is a great shortage in the geography population literature about the new reclaimed area in Egypt. The researcher aimed to fill a gap, and throw some lights on level of fertility among the females in the chosen villages of the study area as a case of study.

The study has revealed that total fertility rate is higher in the area than that of Egypt as a whole is due to:

- 1- The overwhelming majority of population is working in agriculture.
- 2- The percentage of illiteracy is high especially among female
- 3- Large number of females marries at early ages (under 20 years).
- 4- Despite the fact that most of married women were in favour of small size family (1-3children), but more than 30 per cent of them desire to have more than 3 children .

The high fertility rate in the area in particular and in all new reclaimed area may be reduced by adopting developmental programmes. Raising the standard of living of population and overcoming problems facing the agricultural production is a great necessity. Unfortunately the area and population are away of the attention of the governmental authorities, therefore the researcher had been shocked to see the deterioration of levels of all governmental services such as education, health, security, production inputs ... etc. Hence, there is no wonder to find most of the graduates deserted their lands and hired them to landless farmers. So the new reclaimed land of South Alexandria became a traditional society with high fertility rate.

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