
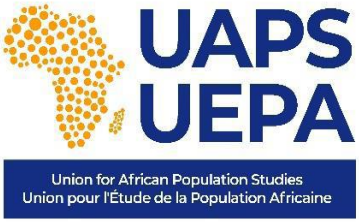


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# *Towards Reducing Fertility*

# *A Continuing Policy Challenge in Egypt*

**Themes: Fertility / Sexual and Reproductive Health - 30 years after Cairo**

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## *I. Introduction*

Egypt formulated its first notional population policy in 1966, aiming at reducing the high rate of population growth as an ultimate goal. To achieve such goal, the country adopted a national family planning program targeting married couples to use contraceptives in order to reduce the high fertility levels. Since the middle of 1980s fertility level started to show considerable steady decline up to early 1990s, Unfortunately, the last decade has shown a plateau in the fertility level as no considerable decline was observed.

Monitoring the change in fertility levels has been one of primary reasons for conducting a series of demographic surveys in Egypt during the last two decades. As in many other developing countries, the prevailing norms in Egypt for a long period appreciated greatly large families especially in rural areas; however, the results of successive demographic and health surveys conducted in Egypt have shown a significant declining trend in fertility associated with considerable changes in the reproductive pattern. This has been meanly due to the successful implementation of family planning programs in Egypt. Under such circumstances, it seems that reaching the replacement level as a policy goal in 2032 will not be achieved unless the population has reduced the fertility and realized 2 child family size.

In this context, the present study focuses mainly on examining recent trends of fertility decline in order to through some light on the extent to which the targeted population is moving to the achievement of replacement level as a policy goal. The study attempts to understand fertility transition towards two-child family size or replacement level in Egypt, more specifically.

## *II. OBJECTIVES:*

The study attempts to understand fertility transition towards two-child family size or replacement level in Egypt, more specifically, the study will meet the following objectives:

1- To examine the recent trend of fertility decline in Egypt.

2- To identify the demographic and socio-economic differentials of the transition towards low fertility level
3- To investigate obstacles to achieving replacement fertility level in Egypt in the near future.

### *III. Source of Data and their limitation:*

The present study depends mainly on the data provided from the successive Egypt Demographic and Health Surveys (EDHS) of 2000, 2005 and 2008, 2014, Egypt family & health survey, 2021, and Egyptian Household Health Survey.in addition. Other related surveys and studies on the subject will be utilized to understand reasons of installed fertility level experienced in Egypt during the last decade like The Slow Fertility Transition project has been co-funded by USAID, the Mellon Foundation, CIDA, and the Population Council. The main objective of the project is to better understand the current slow pace of fertility decline in Egypt and to identify policies that might facilitate decline to replacement level.

### *IV. Methodology:*

The present study depends on both descriptive and analytical approaches. The descriptive part of the study will include calculation the relative rates, ratios to examine levels and pattern of fertility decline, and cross tabulated proportional distribution tables will be also used to identify the major Demographic and Socio- economic differentials of fertility decline in Egypt.

As regards the analytical approach, the study will apply westoff & bankole model for estimating TFR if unmet need was satisfied (1966). This model utilizes the high correlation between CPR and TFR that has been repeatedly been documented across countries. The overall correlation coefficient 0.94 will be applied using the following equation:

$$\mathbf{TFR}i = \mathbf{7.1789 - 0.0682(CPR)}i + \mathbf{e}i$$

**Where:**

**TFR**i: is the estimated total fertility rate if unmet need is satisfied.

**CPR**i: is estimated contraceptive prevalence rate.

**e**i: is error factor rate if unmet need is satisfied for the difference between actual number and estimated number.

### *V. Review of Literature:*

Many studies examined levels and trends as well as the important determents of fertility in Egypt. Among these studies education urban rural resident, participate in labor force, standard of living when found to be significant determinants of fertility decline. However, the recent years have shown stalled level of fertility. Some studies examined the new direction in such phenomenon.

Salvini (1997) studied the marked decline in fertility in Egypt in the 1980s. He

found that the decline from 6 to 4 children per women is clear. He found also that household wealth, education of women; employment status and place of residence and age at first marriage are important factors in fertility transition.

In Egypt the greater family is accessed by significant low education. Education is related to entry into both married life and child bearing. Girls who have completed secondary school are more likely to delay marriage and childbearing, their children trend to be healthier, and their joined to the labour force is relatively higher (UN 1995).

EL-Zanaty (2004) indicated that there is a difference of many years in the median age at first marriage between women who have never attended school and women having got higher education level. When they have their first child, highly educated women are also older than women who never went to school the reduction in wanted fertility will need to be about twice as large as the reductions in unwanted.

Clark (2000) studied the term "son preference "as usually used to refer to the attitude that sons are more important and more valuable than daughters. Extensive literature documents that in countries where the son preference is prevalent there exist a commonly accepted strategy to stop having children – selective birth control. Practicing selective birth control makes for a negative relationship between the proportion of sons and family size.

Macaroni, Salvini, and Vignola (2005), studied the Urbanization as another central aspect that influences women's reproductive choices: In urban areas, the socio-demographic transition and, more specifically, fertility transition is accelerated.

Gusty and Vignola 2005, 2006, studied differentials of the region and the urban-rural type of residence particularly if considered jointly in fertility in Egypt. They contributed to the greatest part of variability in contraceptive behavior, as they synthesized many contextual factors related to inequalities in the access to the Structures of family planning.

Dalla Zuanna and Leone (2001) studied the Families who have a preference towards a son are likely to continue having children until they reach the desired number of sons, while Arnold (1997) studied also son preference in Egypt. He found that the Evidence of the son preference is well documented for Egypt regarding fertility behavior, including contraceptive use. (The son preference is often institutionalized, in particular in patriarchal societies (such as Egypt): Male progeny is wanted as males carry on the family line and the family name. Moreover, sons are often thought to enhance the power and prestige of a family. Male are usually favored over women owing to economic considerations: they can help out in the family business.

The study (Abdel Qader: 2002) indicated the direct and indirect factors affecting on Fertility and its trends, and studying the differences in the influence of economic and social factors on the factors affecting fertility between regions in Egypt, and the study showed that the average number of births tends to increase to a decline in all regions of

Egypt except Upper Egypt, which is the highest decline in live births, it appears in the age group of 18 years and above in the Lower Egypt region among women Previously, they had to use regulatory methods, and it was found that the average number of live births was for uneducated women Higher than educated women in all regions of Egypt in 1980 and 2000. The study shows Higher age at first marriage, longer period of breastfeeding and dependence on it, and education for men and women, women's work before marriage reduces fertility levels.

The study of (Abdel Qader: 2002) also addressed the effect of age at first marriage on fertility at the age of 35 years and over in Egypt in 1991, identifying the effect of age at first marriage Show the relationship between a fertility in Egypt, the median age at first marriage and women's fertility and education, and studying the differences between the main regions and between urban and rural areas, and the study explained there is an inverse relationship between age at first marriage and women's fertility, that is, the higher the age at The first marriage, the lower fertility, and the existence of a direct relationship between age at marriage The first is women's education. The study also showed that women's fertility decreases if they participate in the labor force this was compared to women who do not work before marriage, and it was found that women in rural governorates do get married at younger ages than women in urban governorates, and therefore women's fertility is lower Rural areas have a higher fertility rate than women in urban areas.

The study (Hassan: 2012) also addressed the repercussions of poverty on the factors that affect fertility in Egypt. This study focused on identifying and explaining the impact of poverty on education, which in turn affects education Fertility level. The study showed that poverty negatively affects the education of women and their husbands, which It affects the decrease in age at marriage and thus increases the number of years in the period of high ability to marry Childbearing, as the study showed that poverty affects the housing conditions of the family, so the family lives in Poor housing conditions, which leads to a high rate of child mortality and thus women's reluctance to live Using family planning methods to replace missing children with some increase in compensation To combat the possibility of other deaths.

As for the study (Hassan: 2012) of fertility levels in Egypt during the period 2011-2011, The study aimed to identify total fertility levels in Egypt and its trends during the period That period, and knowing age-specific fertility rates and the changes that occurred during the same period over time, as well as the impact of prevailing economic and social factors on fertility levels in Egypt, the study shows a decline in crude birth rates in 1999 compared to 2011.

There was also a decline in specific fertility rates for all age groups, but the decline was greater in Older age groups are more difficult among women in younger groups, and there is also an inverse relationship between Women's education level and total fertility rate, as well as the decrease in women's total fertility level Female wage workers compared to women who do not work.

### *VI. Country Background*

Egypt occupies the northeast corner of the African continent. It is bounded in the north by Mediterranean Sea, in the south by Sudan, in the east by the Red Sea and in the west by Libya. The surface area of Egypt is approximately one million square kilometres. About 95% of the total area, mainly the Nile valley and the Delta.

Administratively, the country is divided into 29 governorates. Four of these governorates are major 4 urban ones as to: Cairo, Alexandria, Port Said and Suez 10, governorates are located in Lower Egypt, 10 are located in Upper Egypt, and five are frontier governorates, Egypt's population reached almost 95 million in 2017. The population growth rate decreased from 2.8% during the period 1976-1986 to 2% in the period 1996-2006, and increased again during the period 2006-2017 to reach 2.56%. For the children under 15 years of age constituted 34.2% of the population.

People aged 15-64 years were 61.9%, whereas those 65 years and older were 3.6% of the population. The crude death rate dropped from about 6.3 per thousand in 2006 to 5.7 per thousands in 2017. The crude birth rate increased from 25.7 per thousand in 2006 to 26.8 per thousand in 2017. The total fertility rate declined from 5.2 births per women in 1980 to 2.9 birth per women in 2017. Life expectancy at birth rose from 60 years in 1986 to 68.8 years in 2017 for males, and from 63 years in 1986 to 73.8 in 2017 for females. In 2017 the population density was 92.1 persons per square kilometre for the total area. It was about 903.2 persons per square kilometre in inhabited area. Urban population increased from 33.5% in 1974, to reach 42.4% in 2017.

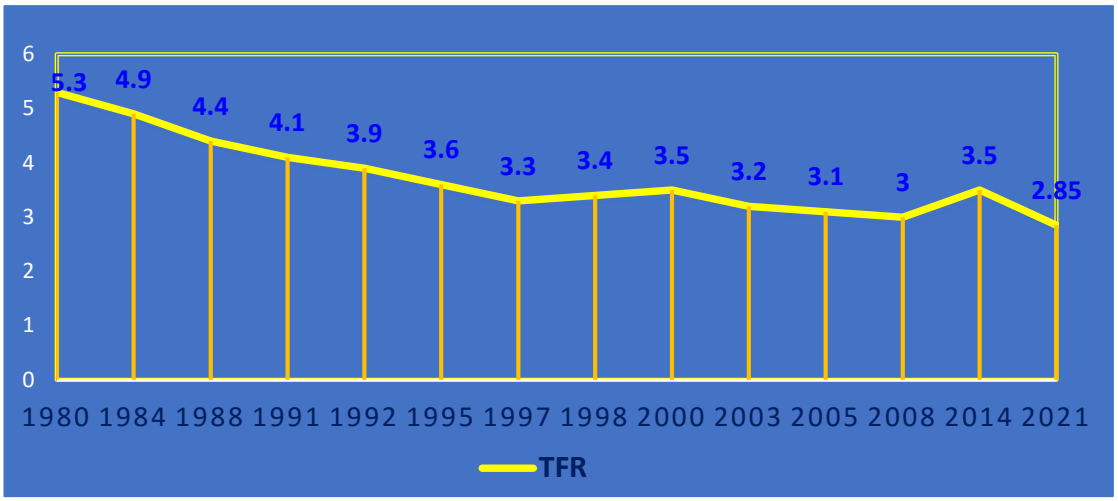
## *II Recent trends and Differentials of Fertility decline in Egypt:*

### *2-1 trends of Fertility decline in Egypt*

Monitoring the change in fertility levels has been one of primary reasons for conducting a series of demographic surveys in Egypt during the last two decades. As in many other developing countries, the prevailing norms in Egypt for a long period appreciated greatly large families especially in rural areas; however, the results of successive demographic and health surveys conducted in Egypt have shown a significant declining trend in fertility associated with considerable changes in the reproductive pattern. This has been meanly due to the successful implementation of family planning programs in Egypt.

Figure (2.1) shows the trend of total fertility rate in Egypt during the last three decades. Total fertility rate dropped from a high level of 5.3 children in 1980 to reach 3.5 births per women in 2000, such a decline of 1.8 births in 20 years. The rate continued to decrease with slower pace to reach 3.1 in 2005, however, the result of EDHS 2008 has shown no further considerable fertility decline as TFR three children, the final results of the Egyptian Family Health Survey 2021, the preliminary results of which were announced in August 2022, showed that the total birth rate for previously

married women in the age group (15-49 years) reached 2.85 children per woman in




2021 compared to 3.5 children per woman of the year 2014.

**Figure (2.1) The trend of total fertility rate in Egypt, 1980-2021**

Source: EDHS 1980- 2014, Egypt family & Health survey 2021

## *2-2 Transition from Second to Third Birth, according to Selected Socio Demographic Variables*

Table 2.1 presents Percentage Distribution of currently married women who have 2 or less children, and those who have three or more children according to selected demographic and socio-economic characteristic in EDHS 2014, 2021. The table shows that the percentage of women having got 3 or more children is high in rural areas compared to urban, while the percentage of women having got up to only 2 children is higher in urban areas compared to rural. This reflects that urban women tend to get less children compared to rural in both EDHSs.

As regards age at first marriage in 2014 and 2021, the table shows that the percentage of women who have 2 or less children is considerably higher to reach of two-third women married at high ages 26+, compared to only one-third for women married at age less than 20. This indicates that as age at first marriage increases the percentage of women having got two or less children also increases.

As expected, the educational composition of the population is important predictor of fertility change. The table indicated that almost one third of women with either no education or those who have primary education have up to two children, while the other two thirds have three or more children. On the contrary, two thirds of those who have university education have up two children while only one third have three or more children in 2014 and increase to reach almost 60% in 2021.

The table shows also that, contrary to what may be expected, the percentage of women who have 3 or more children is by higher among women working for cash with a level of 57.0 %, 59.6%, compared to 51.3%, 50.9 % for women, who are not working in 2014 and 2021 previously.

As regards wealth index, it is clear from the table that as the wealth index increases,

the percentage of women who have up to 2 children increases in which only 34.4 % in 2014 and 26.1% in 2021 of the Richest women have 2 or less children compared to 57.3% and 51.3% among the richest women in 2014 and 2021 previously. This means that higher properties of rich women seem to be satisfied with 2 child family size.

**Table (2.1)**
**Percentage Distribution of Currently Married Women Who Have 2 or Less Children and Those Who Have More Children According to Selected Demographic and Socio-Economic Characteristic, EDHS 2014-2021**

| Socio-demographic variables | Women having 2 or less (%) | Women having 3+ (%) | Women having 2 or less (%) | Women having 3+ (%) | Total |
|---|---|---|---|---|---|
| | 2014 | | 2021 | | |
| **Typo of Place of residence** | | | | | |
| Urban | 51.1 | 48.9 | 43.5 | 56.5 | 100.0 |
| Rural | 46.0 | 54.0 | 38.2 | 61.8 | 100.0 |
| **Age at first marriage** | | | | | |
| Less than 20 | 38.9 | 61.1 | 42.2 | 57.8 | 100.0 |
| 20-22 year | 50.7 | 49.3 | 50.0 | 50.0 | 100.0 |
| 23- 25 | 59.0 | 41.0 | 50.0 | 50.0 | 100.0 |
| 26 + | 70.3 | 29.7 | 60.0 | 40.0 | 100.0 |
| **Women's Educational level** | | | | | |
| No education | 28.9 | 71.1 | 23.6% | 76.4% | 100.0 |
| Primary | 36.6 | 63.4 | 33.7% | 66.3% | 100.0 |
| Secondary | 53.9 | 46.1 | 44.0% | 56.0% | 100.0 |
| Higher | 65.9 | 34.1 | 44.1% | 55.9% | 100.0 |
| **Employment Status** | | | | | |
| Not working | 48.7 | 51.3 | 49.1 | 50.9 | 100.0 |
| Working | 43.0 | 57.0 | 40.4 | 59.6 | 100.0 |
| **Wealth Index** | | | | | |
| Poorest | 34.4 | 65.6 | 26.1 | 73.9 | 100.0 |
| Poorer | 41.3 | 58.7 | 35.6 | 64.4 | 100.0 |
| Middle | 50.3 | 49.7 | 39.5 | 60.5 | 100.0 |
| Richer | 53.9 | 46.1 | 47.0 | 53.0 | 100.0 |
| Richest | 57.3 | 42.7 | 51.6 | 48.4 | 100.0 |

Source: Calculated by SPSS from EDHS2008,2014, Egypt family & Health survey 2021

Table 2.2 presents the percentage distribution of currently married women who have 2 or less children, and those who have 3 or more children according to contraceptive practice and desire for more children in Egypt 2014-2021. The table shows that the majority of non-users (53 percent) have 2 or less children Compared to (47 percent) having 3 or more children in 2014 and 2021 respectively. The non-use of contraceptives among women with 2 or less children means that they still desire to get more children. In the same time the low percentage (29 percent) of users of modern methods who have two or less children indicates also high potentiality to get the third

child. On the other hand, 64 &71 percent of women who already got 3 or more children are using contraceptive in EDHSs 2014, 2021 respectively.

**Table (2.2)**

**Percentage Distribution of Currently Married Women who have 2 or Less Children, and those who have 3 or more Children according to Contraceptive Practice and Desire for more Children, 2014-2021**

| Socio-demographic variables | 2014 | | | 2021 | | |
|---|---|---|---|---|---|---|
| | Women having 2 or less (%) | Women having 3+ (%) | Total | Women having 2 or less (%) | Women having 3+ (%) | Total |
| **Current use Method Type** | | | | | | |
| No method | 53.2 | 46.8 | 100.0 | 52.9 | 47.1 | 100.0 |
| Traditional method | 44.5 | 55.5 | 100.0 | 40.7 | 59.3 | 100.0 |
| Modern method | 36.4 | 63.6 | .0100 | 29.2 | 70.8 | .0100 |
| **Intention to use** | | | | | | |
| Use later | 61.7 | 38.3 | 100.0 | 62.3 | 37.7 | 100.0 |
| Unsure about use | 54.4 | 45.6 | 100.0 | 63.5 | 36.5 | 100.0 |
| Does not intend | 39.2 | 60.8 | 100.0 | 50.0 | 50.5 | 100.0 |
| Total | 53.3 | 46.7 | 100.0 | 58.2 | 41.8 | 100.0 |
| **Desire for More Children** | | | | | | |
| Wants soon | 77.6 | 22.4 | 100.0 | 47.6 | 52.4 | 100.0 |
| Wants later | 82.4 | 17.6 | 100.0 | 76.9 | 23.1 | 100.0 |
| Wants no more | 27.1 | 72.9 | 100.0 | 21.2 | 83.8 | .0100 |

Source: Calculated by SPSS from EDHS2008,2014, Egypt family & Health survey 2021

With regard to intention to use contraception among non-users, the table indicates that the majority of women who wanted to use later or unsure, have 2 or less children with a level of 61.7 & 62.3 percent, comparing to only 39.2% & 50 % among those who don`t intend to use in 2014 & 2021 respectively. This reflects a positive means after they got another child.

As regards the desire for more children, the table indicates that the desire for another child soon is low among women who have 3 or more children (22.4 percent) in 2014 increase to (52.4 percent) in 2021. Furthermore, only 27 percent of women who want no more children have 2 or less children in 2014 compared to rise in this ratio to 21.2 percent in 2021, this reflecting the trends of families in Egypt to accept small family size which results in reduced fertility but still far, (when 73 & 83 percent) of them have 3 or more children respectively.

All these directions indicate that the attitude of currently married women in Egypt is still far from achieving small family size norm.

## III. ACHIEVING REPLACEMENT LEVEL FERTILITY THROUGH SATISFYING THE UNMEET NEED FOR FAMILY PLANNING

### *3.1 Estimation of Potential Level of Contraceptive Prevalence if Unmeet Need was satisfied:*

One of the important programmatic questions in family planning is how to satisfy the unmet need of family planning particularly when it stands at high levels, in order to achieve the policy goals of fertility decline. The levels of unmet need for family planning in the late 1980s and early 1990s were approaching 28 percent, which means that more than one fourth of currently married women were not using any method of contraception while they wanted to space or terminate their childbearing. The recent data from EDHS 2008 indicate that the level of unmet need for family planning has decline considerably to about 9 percent and increase to reach 12.6 in 2014. This section is devoted to test whether Egypt can reach the replacement level of fertility if the unmet need for family planning was satisfied. The controversial question of potential fertility decline that would result from satisfying the unmet need for contraception is of fundamental importance for population policy (Westof & Bankle,1996).

In this part of the study levels of contraceptive prevalence will be examined through the reference period of the study parallel with the trend of the unmet need to estimate the potential contraceptive prevalence rate if the unmet need was satisfied, then an estimation of TFR that would be achieved under the assumption of satisfying the unmet need.

In an earlier study, Abdel-Maksoud (1999) utilized the EDHS data of 1988 and 1992 to estimate the potential contraceptive prevalence if the unmet need for family planning was satisfied. He assumed three models of satisfaction due to the high level of unmet need at that time (27.8 percent) as recommended by Westof & Bankole (1996). However, as a result of the considerable decline observed for the unmet need in Egypt for the recent years it appears satisfactory to apply one assumption model only as the maximum model considering that all the unmet need would be satisfied.

This study focuses mainly on transition towards two child family as an Ultimate Population Policy, Goal in Egypt in order to ensure the sustainability of fertility decline to the replacement level. The main concluding remarks and recommendations are as follows:

Table (3.1) shows those levels of contraceptive prevalence rate and the unmet need for family planning among currently married women in the reproductive age as well as the estimation of the assumed contraceptive prevalence rate if the existing unmet need satisfied by regions the period 2008-2021. The table indicates that Egypt has achieved a minimal level of unmet need during the recent period as it increases from 9.2 percent in 2008 to reach 12.6 percent in 2021. increased in the last three years from 60.3 in 2008 percent to 70.8 percent in 2021.The potential contraceptive prevalence rate that would be achieved if unmet need was satisfied reaches a level of about 70 percent in both 2008 & 2014 and 83.4 percent in 2021.

As regards the regional variations, the lowest level of potential CPR was observed in Frontier governorates region and rural Upper Egypt Regions followed by urban Upper Egypt

Region. Other regions have shown a close level between 62% and 72 %. From this table, it became clear consensus idea research with results that have been extracted, therefore; lower the level of fertility upon the assumption that all women to use contraception.

**Table (3.1) Levels of Contraceptive Prevalence Rates,**
**Unmet Need and Potential Contraceptive Prevalence Rates if**

| Region | 2008 | | | 2014 | | | 2021 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Unmet need | CPR | Exp. | Unmet need | CPR | Exp. | Unmet need | CPR | Exp. |
| Urban governorate | 5.9 | 65.2 | 71.1 | 11.1 | 62.6 | 73.7 | 12.6 | 70.8 | 83.4 |
| Lower Egypt | 7.4 | 64.3 | 71.7 | 10.4 | 63.8 | 74.2 | 11.6 | 71.4 | 83 |
| Urban Lower Egypt | 6.4 | 65.5 | 71.9 | 10.9 | 62.5 | 73.4 | 13.3 | 70.3 | 83.6 |
| Rural Lower Egypt | 7.7 | 63.9 | 71.6 | 10.3 | 64.1 | 74.4 | 11.1 | 71.8 | 82.9 |
| Upper Egypt | 13.1 | 52.7 | 65.8 | 16 | 50.3 | 66.3 | 16.8 | 59.1 | 75.9 |
| Urban Upper Egypt | 8.0 | 62.4 | 70.4 | 13.5 | 58.9 | 72.4 | 14.9 | 63.1 | 78 |
| Rural Upper Egypt | 15.4 | 48.4 | 63.8 | 17 | 46.7 | 63.7 | 17.5 | 57.4 | 74.9 |
| Frontier Governorates | 10.0 | 52.3 | 62.3 | 11 | 55 | 66 | 12.2 | 65.3 | 77.5 |
| Total | 9.2 | 60.3 | 69.5 | 12.6 | 58.5 | 71.1 | 12.6 | 70.8 | 83.4 |

Source: Calculated by SPSS from EDHS2008,2014, Egypt family & Health survey 2021

After having estimates of the potential use of family planning under the maximum assumptions and the amount of unmet need that might be satisfied, the remaining task is to derive the TFRs that would be reached by those levels of use, to do so, the mentioned high correlation between CPR and TFR that has repeatedly been documented across countries is utilized here the following regression equation (westoff & bankole, 1966).

$$TFRi=7.1789-0.0682(CPR)i + ei$$

Substitution of the potential prevalence estimates for CPR in the above equation will give the TFRs that would be prevailing if the unmet need for contraception was satisfied.

Table (3.2) presents the reduction in fertility that would be realized by satisfying unmet need using the estimate model. In 2008 the highest reduction in fertility would be in Frontier Governorates and rural Upper Egypt, where it would be reduced from 2.9 live births per woman to 2.1 and 1.9 respectively. The lowest reduction would be in Urban Lower Egypt from 2.4 in 2008 to 1.9 in 2021, The overall reduction for whole Egypt in 2021 would be higher than 2008, 2014. where in 2008 it declined from 2.4 live births to 2.3 live birth per woman to reach 1.5 in 2021.

In conclusion, the data presented in the table show that, after the unmet need would be satisfied under the estimate assumption in 2008, the region which was more than to the replacement level of TFR would be in all governorates (2.3 -2.9 live births per woman). But rural Upper Egypt and Frontier Governorates was still very far from the replacement where TFR would be 2.9 live births in 2008. As regards TFR that would be reduced after the estimated model is adopted in 2014, it would become close to the replacement, with TFR of (2.8 -2.7) live births per woman respectively. When using the model, the total fertility rate differed in 2021 and reached the replacement level or less in all governorates. This means that it important for decision – maker and planner to pay more efforts to convince Egyptian couples to accept the two-child family size in order to accomplished the national fertility goals.

**Table (3.2)**
**CPR with Satisfied Unmet Need, Actual TFRs and Estimated TFRs if Unmet Need is satisfied, 2008-2021**

| Region | 2008 | | | 2014 | | | 2021 | | |
|---|---|---|---|---|---|---|---|---|---|
| | CPR with Satisfied Unmet need | Actual TFR | TFR if Need is satisfied | CPR with Satisfied Unmet need | Actual TFR | TFR if Need is satisfied | CPR with Satisfied Unmet need | Actual TFR | TFR if Need is satisfied |
| Urban governorates | 71.1 | 2.6 | 2.3 | 73.7 | 2.5 | 2.2 | 83.4 | 2.18 | 1.5 |
| Lower Egypt | 71.7 | 2.9 | 2.3 | 74.2 | 3.4 | 2.1 | 83 | 2.66 | 1.5 |
| Urban Lower Egypt | 71.9 | 2.6 | 2.3 | 73.4 | 3.0 | 2.2 | 83.6 | 2.41 | 1.5 |
| Rural Lower Egypt | 71.6 | 3.0 | 2.3 | 74.4 | 3.6 | 2.1 | 82.9 | 2.75 | 1.5 |
| Upper Egypt | 65.8 | 3.4 | 2.7 | 66.3 | 3.8 | 2.7 | 75.9 | 3.3 | 2.0 |
| Urban Upper Egypt | 70.4 | 3.0 | 2.4 | 72.4 | 3.2 | 2.2 | 78 | 2.52 | 1.9 |
| Rural Upper Egypt | 63.8 | 3.6 | 2.9 | 63.7 | 4.1 | 2.8 | 74.9 | 3.63 | 2.1 |
| Frontier Governorates | 62.3 | 3.3 | 2.9 | 66 | 3.9 | 2.7 | 77.5 | 3.41 | 1.9 |
| Total | 69.5 | 3.0 | 2.4 | 71.1 | 3.5 | 2.3 | 83.4 | 2.18 | 1.5 |

Source: Calculated by SPSS from EDHS2008,2014, Egypt family & Health survey 2021

## *IV:* CONCLUSION AND RECOMMENDATIONS

This study focuses mainly on transition towards Reducing Fertility. A Continuing Policy Challenge in Egypt, in order to ensure the sustainability of fertility decline to the replacement level. The main concluding remarks and recommendations are as follows:

### *4.1 Conclusion*

- After a long history of high fertility in Egypt, an actual and persistent decline in its level has been observed during the 1980s and 1990s.Total fertility rate dropped from a high level of 5.3 children in 1980 to reach 3 births per women in 2008, such a decline of 2.3 births in 28 years.
- Demographic and socio-economic differentials of fertility decline reflect considerable differences in the percent ages of women with small family size of 2 or less children by type urban rural residence. The percentage of women having got 3 or more children is still high in rural areas compared to urban, while the percentage of women having got up to only 2 children is higher in urban areas compared to rural.
- The age at first marriage indicates that the percentage of women who have 2 or less children is considerably higher of about two-thirds among women who married at high ages 26+, compared to only one-third for women married at age less than 20. This indicates that as age at first marriage increases the percentage of women having got two or less children also increases.

- The educational composition of the population is important predictor of fertility change. Only one third of women with either no education or those who have primary education have got up to two children, while the other two thirds have three or more children. On the contrary, two thirds of those women who have university education have got up two children while only one third of them have got three or more children.
- As regards participation in labor force, it is surprising that the replacement family size it shows for this factor that the percentage of women who have 3 or more children is higher among women working for cash with a level of 59.6 percent, compared to50.9 percent for women not working.
- As regards wealth index, the study indicated that as the wealth index increases, the percentage of women who have up to 2 children increases in which only more than one third of the poorest women have 3 or less children compared to 53.0 percent among the rich women. This means that higher proportion of rich women seem to be satisfied with 3 children.
- As regards contraceptive practice and Desire for more children. The majority of non-users have 2 or less children Compared to those who having 3 or more children. The non-use of contraceptives among women with 2 or less children means that they still desire to get more children. In the same time the low percentage (29.2 percent) of users of modern methods who have two or less children indicates also high potentiality to get the third child.
- One positive sign among nonusers of contraceptives who intend to use in the future is that two-third have only 2 or less children. In the same time women who have 3 or more children and want no more children represent 83.8 percent, while only 23.1 percent want later more child.

### *4.2 Recommendations*

- Replacement-level fertility will be difficult to achieve unless most Egyptians accept two children as their childbearing goal. Policies and programs that persuade couples of the desirability of a two-child goal should be developed and strengthened. What is required are policies and programs that reinforce women's and men's positive attitudes towards small families (maximum two children), and highlight the costs of childbearing and parents' responsibility for the future well-being of their children. It is also important to promote gender equality and to show that boys and girls are equally good and could have similar benefits to parents.
- Efforts to strengthen commitment to a two-child norm might stress the advantages of two children namely that in two-child families the children can be raised more properly and have better schooling, the household can have a higher standard of living, and there will be less stress on women's health.
- Satisfying the unmet need for the family planning is the most appropriate means for achieving future decline in fertility levels to approach the

replacement level. Special program IEC should be designed to target and motivation couples in the unmet need for contraceptives to use such methods.

- More operations research on unmet need may give a better understanding of the dynamics of the process of fertility and family planning decision – making in Egypt and, in particular, of identifying the principal barriers to the use of family planning by Egyptian women. The family planning program in Egypt is expected to use this information to design interventions to assist women in need of family planning to overcome barriers to the use of contraceptive methods.

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