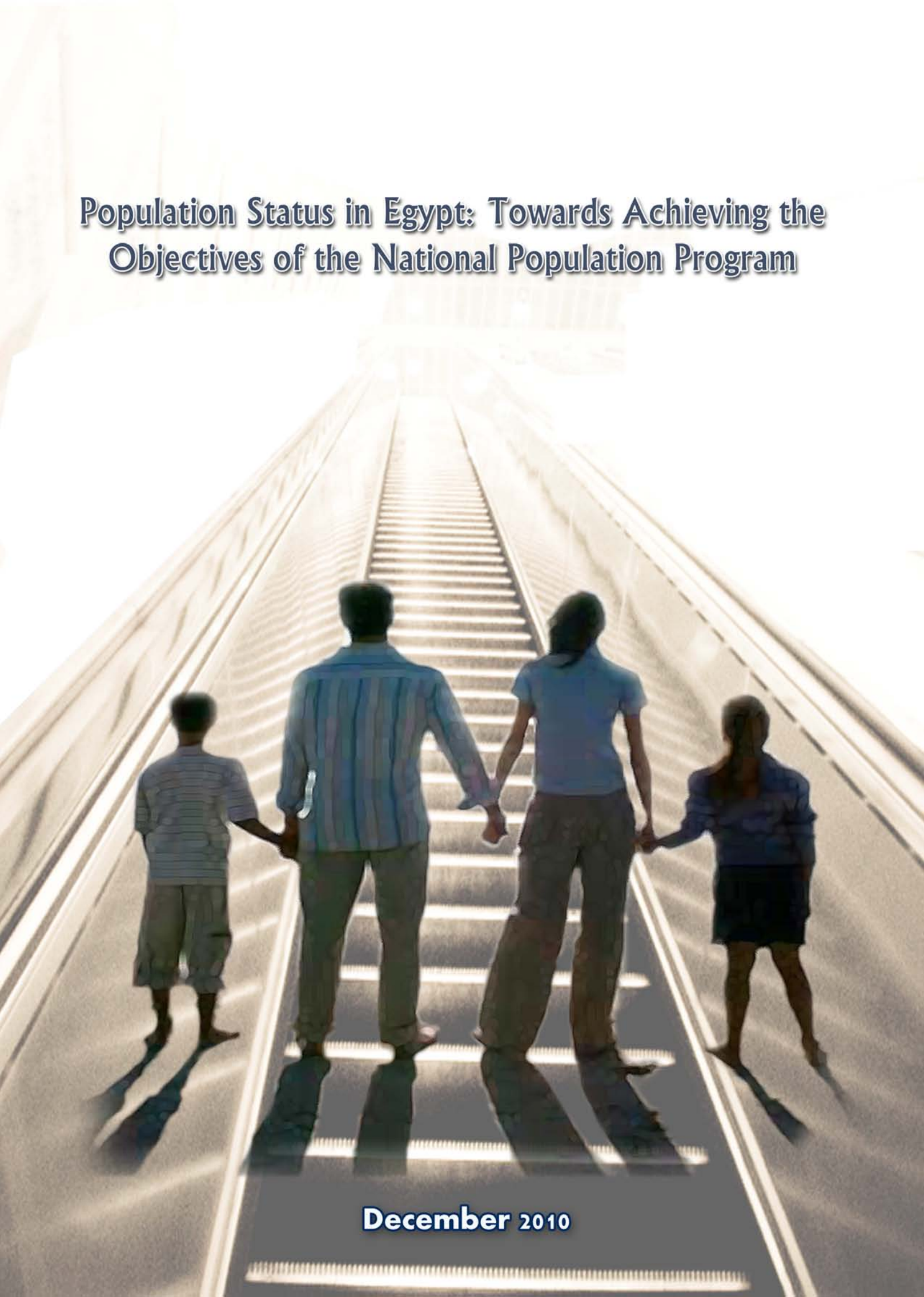
Population Status in Egypt: Towards Achieving the Objectives of the National Population Program



December 2010

Team Leader

Report Editor

Magued Osman, Ph.D.
Information and Decision Support Center Chairman and Project Director

Authors

Magued Osman, Ph.D.
Information and Decision Support Center Chairman and Project Director

Ramadan Hamed Mohamed, Ph.D.
Professor of Statistics, Faculty of Economics and Political Science, Cairo University, Egypt, and Research Professor, Social Research Center, The American University in Cairo

Hassan H.M. Zaky, Ph.D.
Professor of Statistics, Faculty of Economics and Political Science, Cairo University, Egypt, and Research Professor, Social Research Center, The American University in Cairo

Hanan Girgis, Ph.D.
Senior Researcher, EPDI Project

Research Assistants

Ahmad Abd Moneim
Research assistant, EPDI Project

Fatma Ramadan
Research assistant, EPDI Project

Fady Ismail
Research assistant, EPDI Project

Report Design

Peter Nagy
Web developer, EPDI Project

Fady Ismail
Research assistant, EPDI Project

GIS

Peter Nagy
Web developer, EPDI Project

Translation

Multilingua, Hany william Fahmy
Amal Samir

Introduction photo and photo on page 53 are dedicated to EPDI Project from Monica Said

Preface

Egypt's population has tripled throughout the previous century that at the beginning of 2010 it reached about 78 million. Overpopulation is the most serious problem encountered by Egypt, the impacts of which are translated clearly in individuals' living conditions and access to services. Having realized the risk this problem brings about several decades ago, Egypt has developed a set of successive population programs the purpose of which was to stop this unbridled surge. The current population program promotes a small-family concept as well as targets increased contraceptive use in order to reduce the total fertility rate to approach at the replacement level in 2017.

Diverse studies are hardly hopeful of achieving such goal in light of the levels attained so far; Egypt is currently going through a stall in fertility rates. The disparity between demographic conditions and development plans may jeopardize achievements made under MDGs as well as those of Cairo International Conference on Population and Development. UNFPA deemed it necessary to study the population status in light of this condition through different activities headed by the 5th Report on Population Status which sheds light on several points that may constitute part of the causes of stalling fertility.

This report is made available only thanks to the efforts made by the experts working on led by Professor Magued Osman, IDSC Chairman and Project director.

UNFPA looks forward to continuous collaboration with IDSC out of their belief in its highly efficient and masterful role in enriching Egypt's information systems.

Ziad Rifai

UNFPA Representative in Egypt

Preface

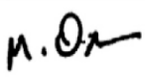
The population problem is a crucial issue for population status in Egypt, which draws a great political and academic attention. Egypt's political leaders often highlights the significance of the population problem impacts not only nationally, but also individually. Overpopulation swallows up strenuous development efforts made at different levels, particularly the socio-economic. A two-day national conference was held in June 2008 to address the different aspects of Egypt's population problem. This interest in the overpopulation problem drived many academics and think tanks to conduct in-depth studies on this issue, especially that Egypt is currently witnessing stalled fertility rates, with which, it is expected that Egypt maynot reach the 2017 targeted total fertility rate.

Information and Decision Support Center (IDSC) has been commissioned since 2008 to conduct various activities aiming following up the achievement of the Egyptian population program goals. This report which entitled "Population Status in Egypt: Towards Achieving the objectives of the National Population Program" is part of a series of reports on the population status in Egypt issued by Evidence Based Population Policy Project (EPDI). It discusses some of the issues that may hinder the achievement of Egypt's population program's aspects. Hence, it is fundamental to highlight these issues along with some recommendations which, if implemented, could help overcome such obstacles and move forward towards sustainable development.

I would like to thank the work team who dedicated themselves for the compilation of this report. Special thanks to Prof. Ramadan Hamed, Prof. Hassan Zaki, and Dr. Hanan Girgis for their efforts in preparing the chapters of this report. I would also like to extend my thanks to Dr. Ziad Refai, UNFPA Representative in Egypt, for the financial and technical support he has provided, and rather for his discussions and comments which were fundamental in finalizing the report.

By prefacing this report, I hope the scientific effort expended in it would light the path for different bodies that shouldered the responsibility for implementing the Egyptian population program, and to help better population status in Egypt

Magued Osman



IDSC Chairman
and
Project Director

Contents

List of Tables

List of Figures

Introduction

In the middle of last century, Egypt realized the great seriousness of the steady high population growth rates. Ever since, it has been developing several population programs to decrease fertility rates. In this context, Egypt has already accomplished many achievements; for instance, total fertility rates (TFR) dropped from 7.2 children per woman in the early 1960s to 3.7 in 1995. Then, Egypt has been witnessing a notable stall in fertility rates, with a total fertility rate of 3.5 children per woman in 2000, 3.1 in 2005, and finally to 3 in 2008. The Demographic and Health Survey of 2008 indicated that the first and second child represent only 60% of the total births of the five years prior to the survey.

This situation places Egypt in a critical position, as its current population program aims at promoting the concept of a small family and encouraging families to settle for two children only. The aim is to have TFR at the replacement rate (2.1 children per woman) so as to maintain a stable population, not to reduce it as propagated by some unaware voices.

The objectives of the Egyptian population program include improving population characteristics and redistribution in a way that ensures meeting people's needs and achieving maximum welfare. Accordingly, it is clear that population characteristics in Egypt are still at low standards, posing several obstacles before targeted development.

Despite Egypt's early attention to this issue and the political concern and efforts mobilized to carry out different plans, Egypt failed to be as expectedly successful as many other countries, which might have started tackling the problem after Egypt, but have dedicated the different sectors to work collaboratively and comprehensively.

Egypt's population program pivots on four main points:

1. Promote and provide reproductive health and family planning services under the basic health care system.
2. Change attitudes and behaviors to adopt the small family concept.
3. Enhance the connection between population trends and comprehensive development.
4. Activate follow-up, evaluation, and assessment systems.

Hence, the Fifth Annual Report on Population Status in Egypt was decided to discuss some problematic issues represent of Egypt's population program, which, if tackled properly, could be among the factors helping the speedy achievement of the program's objectives and a better condition for Egypt's population.

Chapter 1 reviews the population status in Egypt and focuses on the size, growth rates, distribution, marriage and fertility rates, and population characteristics, especially education and participation in the labor force.

Chapter 2 discusses the recent slowdown in fertility rate decline, and highlights some reasons that triggered such slowdown. The chapter also review Tunisia's and Iran's significantly successful experiences in controlling overpopulation.

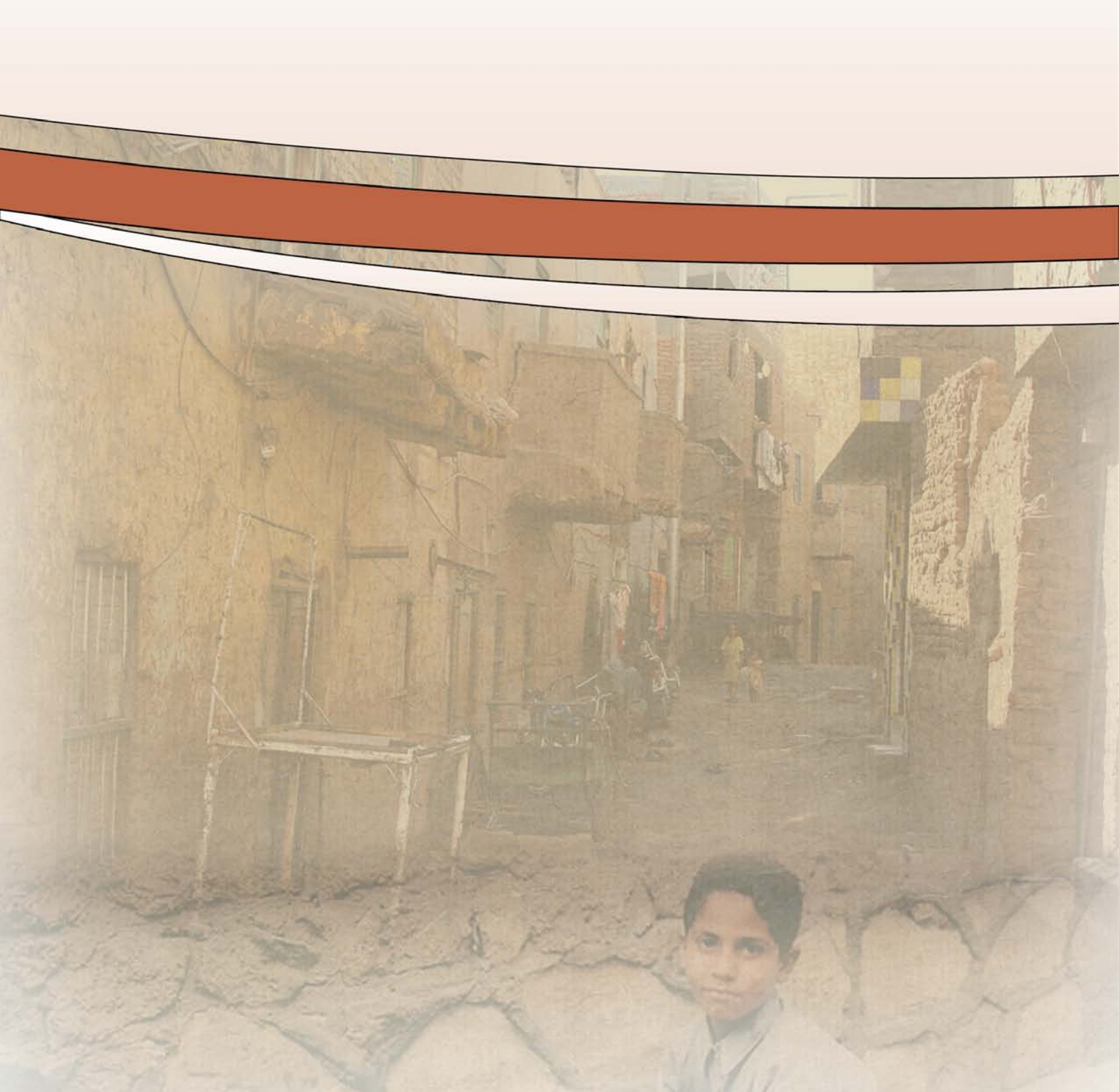
Chapter 3 focuses on disparities among different social classes through an indicator that measures access to family planning-related information and services, unmet needs and fertility rate disparities among women in differen age, education levels, regions and socioeconomic levels, using an index for level of variation.

Chapter 4 focuses on the population status in deprived areas, especially in rural Upper Egypt, the 1000 poorest villages, and slum areas. It addresses the socio-economic properties of women in these regions, fertility and its determinants as well as using family planning. It also deals – when possible – with mother and child health indicators.

Chapter 5 discusses Egyptians' perceptions of the different dimensions of the population problem, consequences of overpopulation, citizens' knowledge sources, and their viewed solutions.

Chapter 6 reviews one of the major problems that hinder Egypt's population program: lack and inaccuracy of data necessary to follow up the achivements of the program. It addresses the population information gap, demographic data sources, and data gaps according to its sources. The chapter ends up with recommendations to bridge this gap.

Chapter 7 summarizes the most important report findings, discussing the challenges facing Egypt with respect to the issues addressed by the report, and providing the relevant recommendations to these challenges.



Chapter One

Population Status in Egypt

1-1 Introduction

1-2 Population Size and Growth Rates

1-3 Geographic and Age Distribution of Population

1-4 Marriage and Fertility

1-5 Mortality

1-6 Some of the Educational and Economic Characteristics of Population

1-1 Introduction

This chapter explores the current status of Egypt's population. It consists of an introduction and five sections. The second section addresses population size and growth rates, while the third examines the geographic and age distribution of population. The fourth section covers marriage and fertility rates and the fifth covers mortality rates and deaths distribution. The sixth section however casts a brief look on the challenges faced by women in labor and education sectors.

1-2 Population Size and Growth Rates

Population growth in any society is contingent on several factors and conditions which the society experiences during a certain period of time. This includes factors of an economic, social, political, health and educational characteristics in addition to life styles, beliefs, and inherited traditions which a society, with its different groups, holds. Identification of population growth indicators as well as population size helps analyze variables relevant to such growth and examine population status. Table (1-1) shows the trend of the Egyptian population size from 1897 to 2006, population growth rates between every two consecutive censuses and population size index number, 1897 being the baseline (100%).

Table (1-1) Egypt's population size and population growth rate, 1897 -2006*

Year	Population size (million)	Population growth rate between successive censuses %	Index number %
1897	9.7		100
1907	11.2	1.43	115.7
1917	12.7	1.31	131.5
1927	14.2	1.10	149.6
1937	15.9	1.15	164.7
1947	19.0	1.75	196.2
1960	26.1	2.30	268.7
1976	36.6	2.12	378.8
1986	48.2	2.86	499.1
1996	59.3	2.06	613.4
2006	72.8	2.05	752.9

* Does not include the Egyptians who were not in Egypt in the census reference night
Source: Population censuses and statistics year book 2009, CAPMAS.

There has been over a seven-fold increase in population; it first doubled during the first fifty years of the past century. However, during the latter 50 years of the same century population experienced a six-fold hike i.e. this surge started to gain pace in the early fifties of the past century. As shown in the table, Population growth rates can be divided over three periods:

- First period: 1897-1937 when Egypt witnessed a decrease in population growth rates from 1.43% to 1.16%.
- Second period: 1937-1986 which saw a surge in population growth rates from 1.75% to 2.86%. This period was interrupted by the 1967 and 1973 Wars during which growth rates dropped as a natural result of the falling marriage and fertility rates during the interval of two wars.
- The last period: 1986-2006 which saw a steady population growth rate at 2.02%.

The Central Agency for Public Mobilization and Statistics (CAPMAS) estimated Egypt's population at home in early 2010 at 77.7 millions. Egypt ranks number 17 internationally in terms of population size, which exceeds that of the UK, France, Italy and Spain separately.

The results of the post enumeration survey that was conducted to evaluate the Egyptian 2006 census show under coverage in population count by about 8.7%. Considering this result, the accurate population size in 2006 could be estimated by 79.543 million.

1-3 Geographic and Age Distribution of Population

Egypt's total area is 1 million km^2, only 8% of which is inhabited. The inhabited area is concentrated around the strip along the River Nile from the south to the north. Given this extensive concentration of population on this narrow area, population density is exceedingly high if the inhabited areas only were considered. According to 2006 census, Population density increase from 72 persons per km^2 to 922 persons per km^2 in inhabited areas, which is a high rate if compared internationally.

Egypt is customarily divided into 4 groups of governorates; Urban governorates, Lower

Egypt, Upper Egypt and Frontier governorates. Table (1-2) illustrates the percentage distribution of population according to this division.

Table (1-2) Percent distribution of population by region of residence

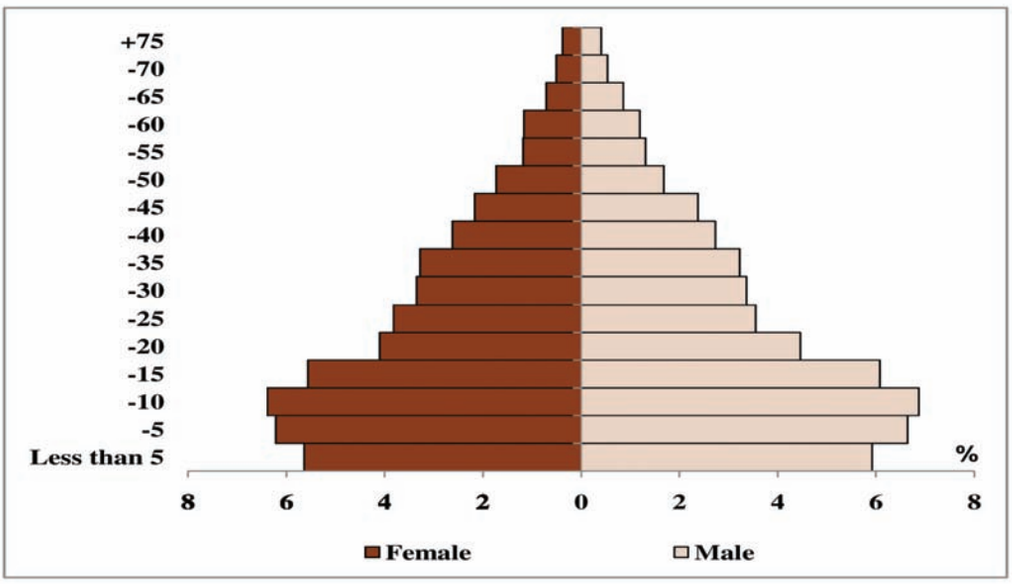
Region	1986	1996	2006
Urban Governorates	20.2	18.7	22.4
Lower Egypt	43.2	43.5	43.0
Upper Egypt	35.5	36.5	33.0
Frontier Governorates	1.2	1.4	1.8

Source: calculated from population census results, 1986, 1996 and 2006.

Noticeably, there is no palpable change in the percentage distribution of population during 1986-2006, except that the relative importance of urban governorates increased while that of Upper Egypt decreased. This is ascribed to the administrative modifications introduced upon the issuance of the decrees establishing the Sixth of October and Helwan governorates, after being cut out from Cairo and Upper Egypt, particularly Giza.

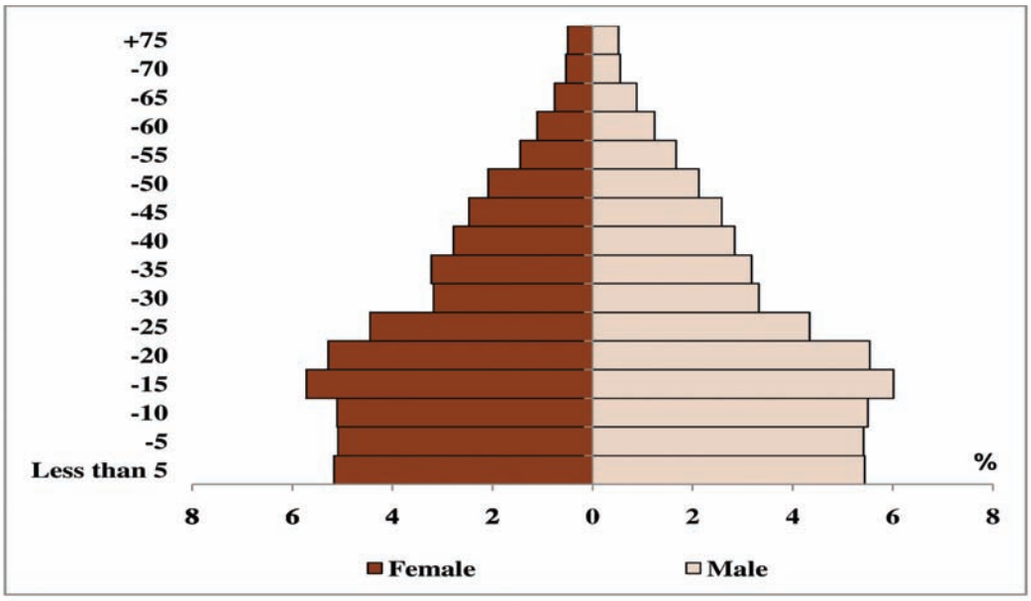
2006 census demonstrates that Cairo has the largest population (9%), followed by Al Sharkia (7%), and Dakahlia (7%). Least population governorates nevertheless are the frontier governorates, with no more than 0.5% each.

Figure (1-1) Population pyramid of Egypt (1996 census)



Source: Calculated from 1996 census results, CAPMAS

Figure (1-2) Population pyramid of Egypt (2006 census)



Source: Calculated from 2006 census results, CAPMAS

Figures (1-1) and (1-2) show Egypt's population pyramid from 1996 and 2006 censuses. It is clear that Egypt is a young country where most of the population is composed of youngsters, with a broad base narrowing towards the top. The figures show that the base is diminishing owing to changes in birth rates while the relative importance of the young age brackets falls compared to that of the labor age group. This is further demonstrated by the high median age during 1996-2006; in 1996 the median age ranged from 15-19 and increased in 2006 to range from 20-24. Moreover, there is an increase in age group ranging from 15-59 from 56% in 1996 to 62% in 2006.

Table (1-3) Percent distribution of population by age in 1996 and 2006

Age	1996	2006
Less than 5	11.6	10.8
5-	26.1	21.1
15-	46.1	49.8
45-	10.4	12.4
60+	5.8	6.1

Source: 1996, 2006 population census, CAPMAS

Change in the age structure results in the so-called demographic window of opportunity. This phenomenon has already been examined in detail in the second and fourth reports on population status in Egypt. It is expected that Egypt ushers into this "phase" during the coming ten years and remains for 20-30 years. Previous reports identified the required policies for making use of this chance, like the Asian Tigers which experienced the same phenomenon. Proper economic and health policies were in place which helped these countries to make full use of the chance.

1-4 Marriage and Fertility

Table (1-4) shows the distribution of women (15-49 years) by their marital status, according to the 2008 demographic and health survey data. Vast majority of women get married before the age of 30 since the percentage of never married women decrease with the increase of age with less than 5% for women aged 35 or more. This indicates the fact that marriage is steadily common among women in the age group (15-49). The table also indicates that the main reason for the termination of marriage is death of spouse rather than divorce.

It is expected that Egypt ushers into the demographic window of opportunity during the coming ten years and remains for 20-30 years. This needs proper health and economic policies to achieve the best utilization of this chance.

The table also shows that early marriage is widely spread in Egypt since around 14% of women in the age group (15-19) are currently or ever married.

Table (1-4) Percent distribution of females (15-49) by marital status, 2008

Age	Never married	Married	Divorced	Separated	Widow	Total
15-19	86.6	13.1	0.2	0.1	0.1	100
20-24	46.2	52.6	0.7	0.3	0.1	100
25-29	17.7	79.8	1.4	0.5	0.6	100
30-34	6.9	89.1	2.0	0.6	1.4	100
35-39	3.6	89.7	2.4	0.4	3.8	100
40-44	2.1	86.6	2.7	1.0	7.5	100
45-49	1.9	81.5	2.7	0.6	13.3	100
Total	30.7	64.5	1.5	0.5	2.8	100

Source: EDHS 2008 Report

Meanwhile, some studies reveal that there are other types of marriage such as Orfi (common law) marriage which emerged among the youth. No studies nevertheless representing the population that could indicate the prevalence of this kind of marriage in the Egyptian society are available. Most studies are conducted on specific groups of the population such as the youth, therefore they can only offer some evidence of whether this phenomenon does or does not exist, but cannot be used as a generalization. To undertake such studies, community efforts are required to assess the scale of phenomenon, if any.

Current fertility rate is one of the most crucial issues examined in this report, particularly in chapter two as it attempts to study the trends of fertility levels in Egypt and the fertility stall and its reasons. Chapter four examines fertility levels

Table (1-5) Age specific fertility rates and total fertility rates for the 3 years prior to the 2008 demographic and health survey

Age	Urban	Rural	Urban governorates	Lower Egypt	Urban Lower Egypt	Rural Lower Egypt	Upper Egypt	Urban Upper Egypt	Rural Upper Egypt	Frontier governorates	Total
15-19	32	64	24	52	25	60	60	41	68	55	50
20-24	132	196	127	180	142	191	179	130	204	160	169
25-29	175	193	166	183	173	188	197	191	201	201	185
30-34	127	117	119	105	114	101	145	154	140	147	122
35-39	61	58	61	49	58	46	71	65	74	73	59
40-44	15	19	23	8	5	10	24	10	32	23	17
45-49	2	2	2	0	0	0	5	4	6	6	2
TFR	2.7	3.2	2.6	2.9	2.6	3.0	3.4	3.0	3.6	3.3	3.0

Source: EDHS 2008 Report

and determinants in deprived areas in Egypt. This section discusses the current fertility levels in different Egyptian regions, based on the results of the 2008 Egypt demographic and health survey, as shown in table (1-5).

According to the 2008 demographic and health survey, the total fertility rate reached 3.0 live births per woman of the age group 15-49. In urban areas, the TFR arrives at 2.7 and falls in urban governorates (2.6), and urban Lower Egypt (2.6) yet soars to 3.6 in rural Upper Egypt. Age specific fertility rates show that the highest fertility rates lie in the age group (25-29) in all urban areas while the peak in rural areas is found in the age group (20-24), which underlines that fertility rates in rural areas are highest in younger age groups when compared to urban areas.

1-5 Mortality

1-5-1 Size and Geographic Distribution

In 2008, Egypt's crude death rate arrived at 6 deaths per 1000 population. It is noticed that this rate has been moving exceedingly slowly since the early 1970s until it reached 6.9 deaths per 1000 population in 1992. The period from the early 1960s until the early 1990s witnessed a remarkable fall in the death rate, as illustrated in table (1-6).

In 2008, Cairo, unexpectedly, ranked first in terms of crude death rate (8.14 deaths per 1000 population), followed by Alexandria (7.71 deaths per 1000 population). This may be attributed to a number of reasons including the level of data accuracy and how many deaths are covered by vital records at the governorate level. To check data accuracy, further studies and executive programs are needed to address deficiencies in coverage and vital record data collections.

Table (1-6) Crude death rates during the period from, 1960 to 2008

Year	Crude death rate (per 1000 population)
1960	16.9
1965	14.0
1970	15.4
1975	12.5
1980	10.4
1985	9.7
1990	7.9
1995	6.7
2000	6.3
2005	6.4
2008	5.9

Source: births and deaths statistics for several years, CAPMAS

Cairo alone stood at 12.7% of the total deaths occurred in 2008, followed by Alexandria (7.3%). The High rates recorded in these two governorates are ascribed to the relatively sophisticated health systems they have which prompts patients -especially those in critical conditions- to flow in for treatment, especially that in Egypt mortalities are recorded where they take place and not in accordance to the regular place of residence. However, the New Valley and South Sinai Governorates record least percentages of Egypt's deaths, with 0.2% each.

1-5-2 Infant and Under-Five Mortality Rates

Infant and under-five mortality comprise the major part of the total annual deaths in Egypt. Their current level and development during the latter part of the past century shall therefore be studied. Table (1-7) shows the development of Infant and under-five mortality rates during 1965-2008; infant mortality rate is shown to stand at 25 per 1000 live births. This rate improved during the latter half of the past century since in mid 1960s infant mortality recorded 141 deaths per 1000 live births and then fell by 82%, compared to the 1960s. Under-five mortality had a similar pattern from 243 to 28 deaths per thousand live births but this fall occurred in the 1-4 age group compared to the under-one year group.

Table (1-7) Trends of infant and under five mortality rates during the period from, 1965 to 2008

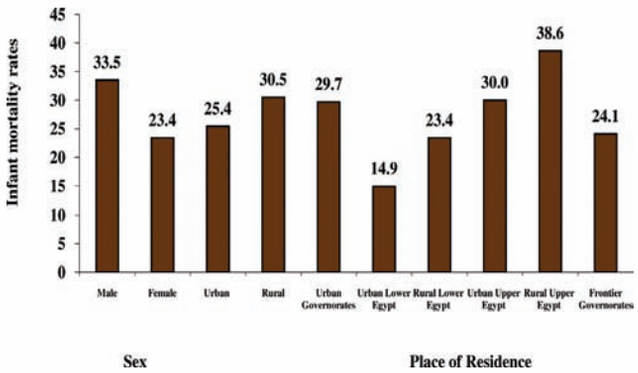
Period	Infant mortality rate	Under five mortality rate
1965-1969	141	243
1970-1974	146	238
1975-1979	132	191
1979-1983	120	167
1984-1988	73	102
1988-1992	62	85
1994-1998	41	54
1996-2000	44	54
2001-2005	33	41
2004-2008	25	28

Source: EDHS 2008 Report

The 2008 DHS indicates the dramatic discrepancies in male and female mortalities and also in rural areas compared to urban areas, particularly in rural upper Egypt, as shown in figures (1-3) and (1-4).

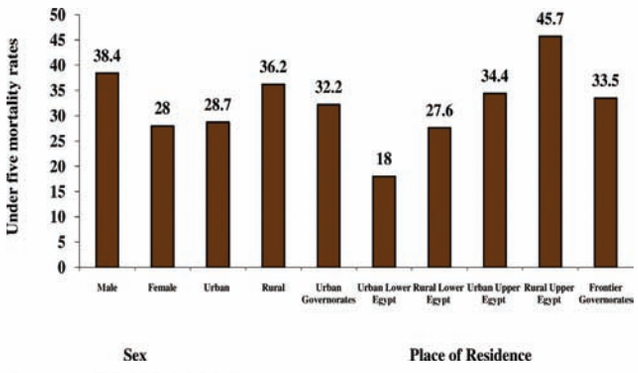
It is neccesary to conduct more studies about maternal mortality to measure its rate and to shed light on its main reasons.

Figure (1-3) Infant mortality rates by sex and place of residence, 2008



Source: EDHS 2008 Report

Figure (1-4) Under five mortality rates by sex and place of residence, 2008



Source: EDHS 2008 Report

1-5-3 Maternal Mortality

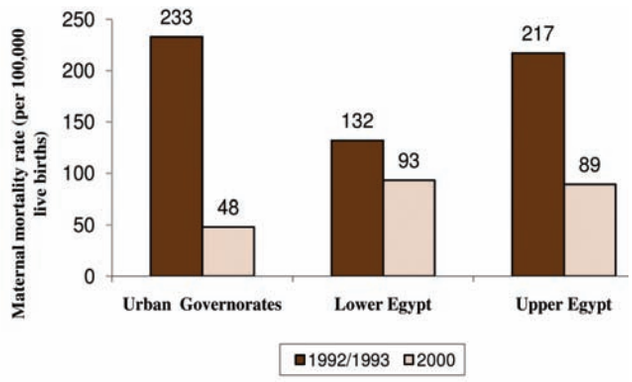
Maternal mortality caused by pregnancy or childbirth are one major cause for female mortality. In 1992/1993 the Ministry of Health (MoH) conducted a study on maternal mortality rate estimates which showed that the rate stood at approximately 174 per 100,000 live births in 1992/1993. In 2000, the MoH undertook the same study which recorded a dramatic decline in maternal death rate to 84 per 100,000 live births, with a reduction rate of 52% of compared to 1992/1993 rate. This puts Egypt almost in a middle

position among other countries in the region as maternal mortality estimates range between 350 deaths per 100,000 live births in Yemen, and 3 deaths per 100,000 live births in United Arab Emirates.

These studies indicated that 77% of mortality was caused by direct complications of pregnancy such as hemorrhage, blood pressure, and uterine rupture, while 20% of maternal death was indirectly linked to pregnancy. The causes for the remaining deaths were unidentified. Egypt however is faced by the challenge of cutting this rate, the hardest part of which lies in addressing the lack in the care women receive during delivery.

The decline in the maternal mortality rate is prevalent across Egypt, particularly Upper Egypt and urban governorates as illustrated in figure (1-5).

Figure (1-5) Maternal mortality rates in 1992/93 and 2000



Source: The national maternal mortality study, 2000, ministry of health,

Such improvement is attributed to several factors, foremost among which is the gradual improvement of maternal care in Egypt and the shift from child delivery at home to hospitals. The 2008 demographic and health survey denotes that 71% of child deliveries are performed in places where health care is offered, approximately two thirds of childbirth received pregnancy care, mothers of 81% of births received a tetanus shot at least once, and mothers of 79% of births received medical assistance during labor. Nevertheless it was a diametrically different situation in mid 1990s when the percentage of births whose mothers received regular care during pregnancy did not exceed 29%, whereas births whose mothers received medical assistance during delivery arrived at 40.7%.

1-5-4 Mother and child nutrition

The Nutrition mothers receive during pregnancy -particularly Vitamin A and iron supplements- is a defining factor for the health of mother and child. Supplementary iron which women take during the term of pregnancy protects both mother and infant from developing anemia.

Table (1-8) includes a number of indicators of maternal nutrition such as receiving sufficient amounts of Vitamin A and iron, and iodized salt, and percentage of overweight and obese women.

Table (1-8) Indicators of maternal nutrition

Indicator	(%)
Consuming foods rich in vitamin "A"	52.8
Consuming foods rich in iron	86.3
Given vitamin "A" after delivery	56.9
Given iron supplement during the last pregnancy	43.7
Using sufficiently iodized salt	77.2
Overweight women	38.4
Obese women	39.6

Source: EDHS 2008 Report

The first indicators focus on the percentage of women who have children under the age of three and stated that they had foods rich in Vitamin A and iron in the 24 hours prior to the survey. Results of the 2008 demographic and health survey point out that 8 out of 9 mothers of young children consumed food rich in iron (meat, fowl, fish and eggs) during the day prior to the survey. About 53% had fruit and vegetables rich in Vitamin A. meanwhile, a little more than half of the women said that they took supplementary Vitamin A tablets after the birth of their last child. As for supplementary iron, only less than half of the women who gave birth during the five years prior to the survey mentioned that they took iron pills or syrup during their pregnancy with their last live birth. Remarkably, the salt consumed by 8 out of 10 women who gave birth to children during the five yeas prior to the survey contained sufficient amounts of iodine.

Data indicate high levels of overweight or obese women among those who were married but did not get pregnant or had two months elapsed after their recent childbirth (38.4, 39.6 respectively), i.e. about 78% of women are overweight or obese.

Table (1-9) reveals trends of child malnutrition according to data from the demographic and health surveys conducted in 1992, 2000, and 2008. Indices used were height-for-age, weight-for-height and weight-for-age. Height-for-age index reveals deficiency in growth, indicating prolonged malnutrition. Weight-for-height index assesses body mass and its relation to height. It is an indicator of whether a child gets enough food or has suffered from successive diseases during the period preceding the survey, while weight-for-age is a compounded index combining height-for- age and weight-for-height.

Statistics show progress in nutrition level among children between 1992 and 2000, followed by a fallback between 2000 and 2008. Thus levels of children with malnutrition, according to height-for-age and weight-for-age indices, are higher than those levels recorded in 1992.

Table (1-9) Trends of children's nutritional status during the period from, 1992 to 2008

Nutritional status indicators	EDHS 1992	EDHS 2000	EDHS 2008
Percentage of malnourished children according to height-for-age index	26.0	18.7	28.9
Percentage of malnourished children according to weight-for-height index	3.4	2.5	7.2
Percentage of malnourished children according to weight-for-age index	9.9	4.0	6.0

Source: EDHS 2000, 2008, Reports

1-6 Some of the Educational and Economic characteristics of Population

Education is a major driver of progress for any nation. In modern Egypt, in the early 19th century Mohammed Ali was concerned with promotion of education, sending missionaries and the construction of schools, focusing on quality of education. Scarcely had this resurgence taken place than calls by Taha Hussein for the right of education for each citizen resounded. Despite the fact that Egypt had a long history of trials of upgrading education, Egypt is faced by a number of challenges which hinders it from competing against other nations. Most prominent challenge is the illiteracy rate which is still high in spite of its decline in the past fifty years.

One of each three Egyptians is illiterate, which is a high percentage if compared internationally.

Illiteracy and education are among the factors which put Egypt relatively behind in the Human Development Index.

Table (1-10) illustrates changes in illiteracy rate among population of the age group 10 or more, by gender and place of residence during the period 1907-2006.

The table shows a remarkable decline in illiteracy rate for both sexes and in rural as well as urban areas. Illiteracy rate however is still high, with 1 out of 3 Egyptians, which is a high percentage if compared internationally. This rate is higher among females in rural areas (10+) to approximately 47%. Data indicate a wide gap between males and females in Upper Egypt, yet this gap narrows in urban governorates and Lower Egypt. Further efforts are therefore needed in individual development to address many fundamental issues, particularly with respect to population such as reproduction and health; promotion of education -especially among females- will have a tangible effect on their reproductive and health behavior regarding themselves and their children as well.

The 2008 demographic and health survey data reveal that 88% of girls aged 6-15 go to school. A huge discrepancy is nonetheless noticed in rates of girls attending schools by the governorate; rates of girls attending schools in urban governorates and lower Egypt are higher than those in upper Egypt, particularly Fayoum (75%), and Beni Swif

Table (1-10) Trends of illiteracy rate among population aged 10 years or more by type of place of residence and sex

	Urban			Rural			Total		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
1907	–	–	–	–	–	–	87.0	98.6	92.7
1917	–	–	–	–	–	–	84.8	97.7	91.2
1927	–	–	–	–	–	–	76.0	95.4	85.7
1937	–	–	–	–	–	–	76.6	93.9	85.2
1947	–	–	–	–	–	–	66.6	88.8	77.7
1960	40.0	68.9	54.1	68.6	93.4	81.1	56.9	84.7	71.3
1976	26.8	53.4	39.7	55.9	88.0	71.8	42.7	72.6	57.3
1986	26.3	45.4	35.6	47.1	77.2	61.9	37.6	62.8	49.9
1996	19.9	33.9	26.7	36.4	63.3	49.6	29.1	50.3	39.4
2006	16.0	24.9	20.4	27.4	47.1	37.0	22.3	37.3	29.6

Source: (1) Egypt's population in the 20th century, Cairo Demographic Center, 2003
(2) 2006 population census, CAPMAS

(79%). Rates of girls attending schools increased during the last decade in most of the governorates except for Dakahlia, Gharbeya, Menofeya and Isamalia, all of which witnessed no progress.

Contribution to labor force and job structure reflects the status of women in society. Within this context, women are faced by a number of challenges in this area, including low contribution to labor force, high rates of unemployment and the kind of jobs women take part in. Findings of labor force survey suggest improved levels of women contribution to the economic activity during (1984-2002), increasing from 18% in 1984 to around 22% in 2008.

Such research moreover indicates a surge in women's labor force aged (15-64) from 3.9 millions to 5.5 millions, with a 1.9% annual growth rate.

According to data from the 2008 labor force survey, rates of unemployment among women are three times the rates among men, with 19% among women vs. 6% among men. Moreover there is high unemployment rate among women in urban areas (24%) compared to women in rural areas (16%).

Distribution of working women by the economic activity reveals that 85% of women -compared to only 48% of men- work in the agricultural and service sector. This suggests that the society promotes employment of women but only in limited fields such as agriculture, teaching and nursing. Meanwhile, educational level, which affects the kind of employment and the sector both sexes join, is low among women. Half of working women are in the informal sector (48%), which is informally operated, is not subject to control of state and does not enjoy any kind of social security nor provide any benefits for workers. This rate is much higher in rural areas where it reaches 72% -given its agricultural nature- yet falls to as low as 13% in urban areas.

Chapter Two

Stalling Fertility: Trends and Causes

2-1 Introduction

2-2 Fertility Rate Trends During 1980-2010

2-3 Stalling Fertility Factors

2-4 Some Regional Countries' Experiences to Encounter Overpopulation

2-1 Introduction

This chapter deals with a phenomenon that prevailed in Egypt during the past fifteen years; stall of fertility. Initially, it reviews fertility rate trends during the last thirty years (1980-2010) at different regional levels in Egypt in an attempt to know the regions most hit by the phenomenon. The third section states some reasons for such stall, such as fertility preferences and family planning. Finally, the most significant characteristics of population policies and programs, which proved successful in reducing fertility rates in neighboring countries to the levels required in Egypt to meet the Egyptian demographic strategy goals, are reviewed.

2-2 Fertility Rate Trends During 1980-2010

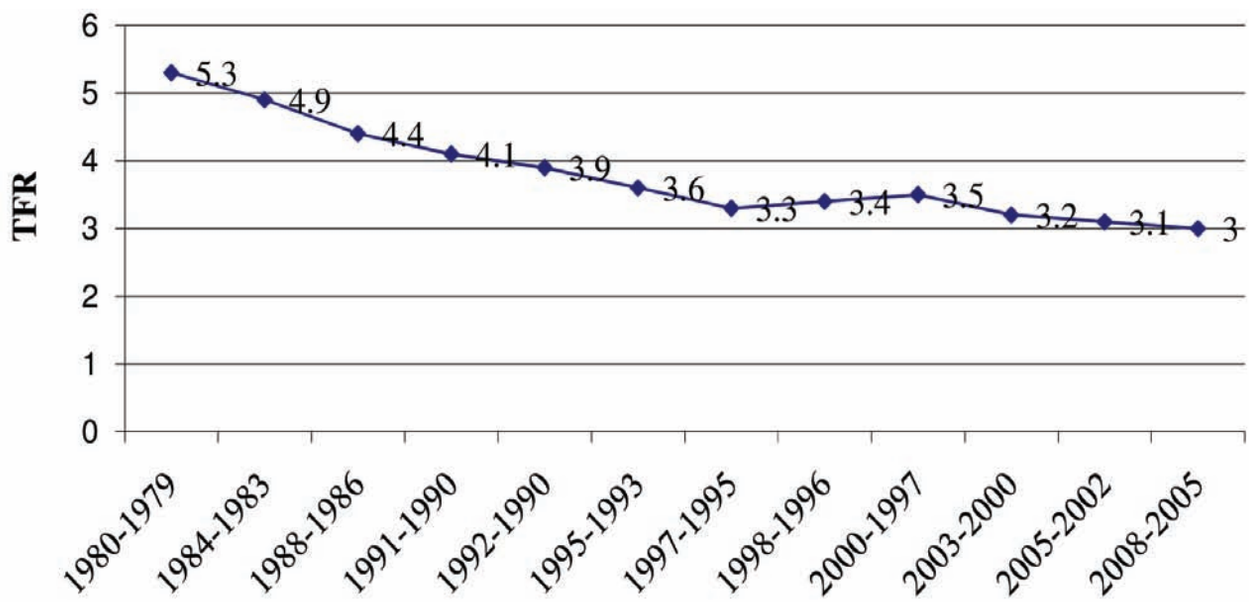
Figure (2-1) shows total fertility rate (TFR) estimates calculated from the series of field surveys conducted in Egypt during 1979-2008. TFRs are shown to be reduced from 5.3 during 1979-1980 to 3.3 during 1995-1997, i.e. a reduction of 2 live births within 18 years at an annual reduction rate of 0.11 births. Then, TFR decreased in the next period to be 3 live births in 2008, i.e. 0.3 live-birth reduction during 1997-2008 at an annual reduction rate of 0.02 births. These data assert TFR stall in Egypt, especially when considering a TFR of 3.1 live births in 2005.

Studies state that all age groups have participated in the reduction of fertility rates; however, the reduction was faster in older age groups than in the younger.

Table (2-1) shows TFR trends according to residence in the period between the demographic and health survey of 1988 and that of 2008. Urban fertility rates decreased during 1988-1997 from 3.5 to 2.7, i.e. some 0.8 live births. The following period (1997-2008) on the other hand did not see the least reduction; only TFR fluctuations which might be attributed to sampling error.

In return, the reduction in rural rates during 1988-2008 continued from 5.4 children/woman to 3.2 children/woman, though reduction rates were faster in the first period (1988-1997) than those in the second (1997-2008), especially in rural Upper Egypt. As for the residence, fertility was observantly reduced across all areas during the first period and continued in rural areas during the second, while fluctuating between rising and stability in urban areas.

Figure (2-1) Trends of TFR during the period from, 1988 to 2008



Source: EDHS 1992, 2008 Reports

Table (2-1) Trends of TFR by residence during the period from, 1988 to 2008

Main Characteristics	EDHS 1988	EDHS 1992	EIDHS 1997	EDHS 2000	EDHS 2005	EDHS 2008
Urban / Rural Residence						
Urban	3.5	2.9	2.7	3.1	2.7	2.7
Rural	5.4	4.9	3.7	3.9	3.4	3.2
Place of Residence						
Urban Governorates	3.0	2.7	2.5	2.9	2.5	2.6
Lower Egypt	4.5	3.7	3.0	3.2	2.9	2.9
Urban Lower Egypt	3.8	2.8	2.6	3.1	2.7	2.6
Rural Lower Egypt	4.7	4.1	3.2	3.3	3.0	3.0
Upper Egypt	5.4	5.2	4.2	4.2	3.7	3.4
Urban Upper Egypt	4.2	3.6	3.3	3.4	3.1	3.0
Rural Upper Egypt	6.2	6.0	4.6	4.7	3.9	3.6
Frontier Governorates	N.A	N.A	N.A	3.8	3.3	3.3
Egypt	4.4	3.9	3.3	3.5	3.1	3.0

Source: EDHS 2008 Report

2-3 Stalling Fertility Factors

This section is about some demographic factors that may cause TFR stall, which are suggested to be dealt with promptly in an attempt to overcome such stall seen by Egypt during the past fifteen years. These factors include:

- Fertility preferences
- Family planning
- Contraceptive use discontinuation and unmet need for family planning.

2-3-1 Fertility preferences

Desired, unplanned and unwanted births are fundamental indicators for measuring fertility demands. The demographic and health survey of 2008 showed that about 59% of the ever married women who responded digitally desired 3 children at least. Furthermore, many women had children more than the number desired; 32% of women with 3 children desired 2 or less children, and 43% of women with 4 children wanted 3 children or less.

Table (2-2) shows the average ideal number of children for ever married women according to some background characteristics. It is observed that the average ideal number was fixed at 2.9 children during 1988-2008. The table shows that all women, regardless of their background characteristics, desired more than 2 children in average. However, it is noteworthy that this average rises to more than 3 children if a woman was among the poorest, did not go to school/had some primary education, and lived in a rural area, especially in rural upper Egypt.

Table (2-2) Mean ideal number of children by womens' main characteristics

Main characteristics	EDHS 1988	EDHS 2000
Urban / Rural Residence		
Urban	2.7	2.8
Rural	3.2	3.0
Place of Residence		
Urban Governorates	2.6	2.7
Lower Egypt	2.7	2.8
Urban Lower Egypt	2.5	2.8
Rural Lower Egypt	2.8	2.9
Upper Egypt	3.4	3.2
Urban Upper Egypt	2.9	2.9
Rural Upper Egypt	3.6	3.3
Frontier Governorates	N.A	3.4
Education		
No education	3.1	3.3
Some primary	2.8	3.1
Primary/ some secondary	2.7	2.9
Secondary/ higher	2.5	2.7
Work status		
Working for cash	2.6	2.8
Not Working for cash	3.0	3.0
Wealth quintile		
Lowest	N.A	3.3
Second	N.A	3.1
Middle	N.A	2.9
Fourth	N.A	2.8
Highest	N.A	2.7
Egypt	2.9	2.9

Source: EDHS 1988, 2008 Reports

Additionally, the desired number of children rose among specific women's groups during 1988-2008 such as those in urban Lower Egypt (from 2.5 to 2.8), those who completed secondary and higher education (from 2.5 to 2.7), and those who worked for cash (from 2.6 to 2.8). This result in its own right expresses the society's remaining wish to have three children and that all promotional campaigns during this past period calling for reducing children's number and settling for two children per family were fruitless.

Comparing TFR with the desired TFR, the unwanted TFR is about 0.6 births as per the demographic and health survey of 2008, i.e. about 20% of the TFR. The gap between desired and achieved TFR is at its peak in rural areas, especially in rural Upper Egypt (1 unwanted child), and among women who did not go to school or complete their primary education (0.8), and women among the poorest quintile (0.9) as stated in Table (2-3).

The 2008 demographic and health survey also indicated that about 14% of births during the five years prior to the survey were unwanted during pregnancy, that about a third of births (from among four and more) were unwanted, and that about half births occurring to women of 40-44 years of age were unwanted.

2-3-2 Family planning

Contraceptive use in Egypt has developed greatly during the past 30 years (1980-2010). Current Contraceptive Prevalence Rates (CPR) have multiplied from 30% in 1984 to 60% in 2008, which is quite an achievement in a short term. However, considering the change during this period, the following can be noted (Table 2-4):

- Urban CPR narrowly moved from 57% to 64% since early 1990s to date.
- CPR witnessed big leaps initially from 19% in 1984 to 56% in 2003, then rose to 60% in 2008.
- Urban governorates moved narrowly during 1992 to 2008 from 59% to 65%, and urban lower Egypt in a range from 61 to 66% during the same period.
- Upper Egypt, especially rural areas, lead the total CPR rise, as the CPR doubled in rural upper Egypt about 6 times from 8% in 1984 to 48% in 2008. However, it is noteworthy that CPR in rural Upper Egypt ranged between 40% and 48% during 2000-2008, which indicates a clear stall in increasing CPR.

The unwanted TFR is about 0.6 births as per the demographic and health survey of 2008, i.e. about 20% of the TFR.

Table (2-3) Unwanted TFR by womens' main characteristics, 2008

Main characteristics	Unwanted TFR
Urban / Rural Residence	
Urban	0.5
Rural	0.7
Place of Residence	
Urban Governorates	0.4
Lower Egypt	0.5
Urban Lower Egypt	0.5
Rural Lower Egypt	0.5
Upper Egypt	0.9
Urban Upper Egypt	0.7
Rural Upper Egypt	1.0
Frontier Governorates	0.7
Education	
No education	0.8
Some primary	0.8
Primary/ some secondary	0.7
Secondary/ higher	0.5
Wealth quintile	
Lowest	0.9
Second	0.8
Middle	0.6
Fourth	0.5
Highest	0.4
Egypt	0.6

Source: calculated from EDHS 2008

Considering the current use pattern during 1980-2010 indicates that the IUD has become the principal contraceptive used where one third of current users opt for it as per 2008 demographic and health survey, while pills were the principal contraceptive used in 1980 as per the Egyptian fertility survey stating that one of every six Egyptian women were using the pills then. Data also indicate a very small percentage of women who used contraceptives before the first child, where less than 1% of women who did not have any children used a contraceptive as per 2008 demographic and health survey. CPR rise with the number of children; half of the women used contraceptives after the first child and about two thirds after the third, which emphasizes that the main reason for using contraceptives is unwillingness to have more children, and not child spacing.

Table (2-4) Trends of CPR by residence, 1984-2008

Main characteristics	ECPS 1984	EDHS 1992	EDHS 2000	EIDHS 2003	EDHS 2008
Urban / Rural Residence					
Urban	45.1	57.0	61.2	65.5	64.3
Rural	19.2	38.4	52.0	55.9	57.5
Place of Residence					
Urban Governorates	49.6	59.1	62.7	68.5	65.2
Lower Egypt	34.1	53.5	62.4	65.2	64.3
Urban Lower Egypt	47.6	60.5	64.9	66.3	65.5
Rural Lower Egypt	28.5	50.5	61.4	64.8	63.9
Upper Egypt	17.3	31.4	45.1	49.4	52.7
Urban Upper Egypt	36.8	48.1	55.4	59.8	62.4
Rural Upper Egypt	7.9	24.3	40.2	44.7	48.4
Frontier Governorates	N.A	N.A	43.0	N.A	52.3
Egypt	30.3	47.1	56.1	60.0	60.3

Source: EDHS 2008 Report

2-3-3 Method discontinuation and unmet need

In continuation of factors potentially causing fertility stall, this section tackles the volume of contraceptive discontinuation as well as unmet needs.

Table (2-5) Unmet need among women (15-49) by women's main characteristics

Main characteristics	Unmet need for family planning
Urban / Rural Residence	
Urban	6.7
Rural	10.9
Place of Residence	
Urban Governorates	5.9
Lower Egypt	7.4
Urban Lower Egypt	6.4
Rural Lower Egypt	7.7
Upper Egypt	13.1
Urban Upper Egypt	8.0
Rural Upper Egypt	15.4
Frontier Governorates	10.0
Education	
No education	10.8
Some primary	9.8
Primary/ some secondary	9.4
Secondary/ higher	7.8
Wealth quintile	
Lowest	12.8
Second	10.4
Middle	9.3
Fourth	7.8
Highest	6.1
Egypt	9.2

Source: EDHS 2008 Report

The 2008 demographic and health survey indicated that women stopped contraceptives within 12 months after initial use in almost quarter of the usage periods during the five years prior to the survey. Side effects and health considerations were the main causes of discontinuation of 9% of the users; others stopped for other reasons related to childbirth or the desire to get pregnant (8%) followed by contraceptive failure (3%). Observing discontinuation percentage trends, 1 of every 3 women stopped use within 12 months since the

initial use, as per the demographic and health survey of 1988, i.e. 33%, which decreased to about 29% in 2000. This high percentage occurred as well due to the same factors (side effects, desire to get pregnant, contraceptive failure).

This shows that the family planning program is encountered by a huge challenge of a relatively high discontinuation percentage for reasons potentially attributed to service providers such as side effects and contraceptive failure. This was also emphasized by other studies highlighting a sort of failure when providing counsel on contraceptives by service providers, especially under the health reform program system.

Identifying the size of unmet demand of contraceptives and women in need of family planning services is one main factor in an attempt to remedy fertility stall in Egypt. The 2008 demographic and health survey data show that the total unmet needs was about 9%, the desire to space the second child was about one third of the needs, while the rest went for the desire to limit childbirth, which meant that contraceptive unmet demands were about 13% of the total demand which reached 70% of the total married women in 2008.

Unmet need for contraceptive rose in rural Upper Egypt to 15% and among those who did not go to school (11%) as well as those at the poorest quintile (13%) (Table 2-5). It is noteworthy that around 30% of currently married women did not use contraceptives and desired to delay pregnancy or not to have any more children mentioned that non-use was attributed to reasons related to contraceptives such as health considerations and fear of side effects.

Table (2-6) Method discontinuation, unmet need and unsatisfied demand of contraceptives

Indicator	1988	2000	2008
Method discontinuation	33%	29.5%	25.9%
Unmet need	N.A	11.4%	9.2%
Unsatisfied demand	N.A	16.4%	13%

Source: EDHS 1988, 2000, 2008 Reports

The unmet demand trends study indicated that the unmet need percentage was 11% in 2000, while the unmet demand was 16%, which points to a slight improvement during the current decade in meeting this part of the demand, which requires more effort.

Around 30% of currently married women did not use contraceptives and desired to delay pregnancy or not to have any more children mentioned that non-use was attributed to reasons related to contraceptives such as health considerations and fear of side effects.

2-4 Some Regional Countries' Experiences to Encounter Overpopulation

Tunisia's and Iran's experiences in encountering overpopulation are the most successful regionally where fertility rates decreased to record levels equal to or less than the replacement rate; the one Egypt aims at by 2017, though it is hard to expect based on the current change in fertility rates. This section attempts a presentation of Tunisia's and Iran's experience and projection on Egypt so that it can achieve required demographic goals. It is noteworthy that such successful experiences were coupled by an increased interest in education, which had led to quite an improvement in individuals' educational characteristics; however, women's empowerment levels varied in both countries. Following is a brief presentation of women's status development in both countries, especially Tunisia, then the health and political perspectives of the experiences.

In Tunisia, women enjoy a distinct socio-economic status across the Arab region; Tunisia ranked 44th among 113 countries on an index of empowering women to access economic participation, according to a report issued in July 2010 by the Economic Information Unit of the British journal "The Economist". Tunisian women have achieved much during the past two decades, which have brought them to new horizons where they could access all sectors; hence, optimize their role to real participation with men. Education has been the main driving force for women's development and optimization. Indicators show that Tunisia has attained one of the highest school

enrollment percentages worldwide; 6-year old girls' enrollment in education percentage exceeded 99%, about 78% in secondary education, and 59% in higher education. Furthermore, girls' participation in vocational training rose to 37% and illiteracy among females (15 years and older) retreated heavily within a few years; 35% in 2004 although almost nil among females (15-24 years) in 2007 (UNESCO).

In parallel, Tunisian women could heavily access knowledge community as well as economics and politics. The most positive reflection of such educational development was that they could assume advanced roles in public life. Their presence in the government developed as much as in the rest of the political arena such as the Parliament, political parties, and national associations; 23% of the House of Representatives for the legislative session of 2004 were women; more than one third of the total participants in non-governmental organizations are currently women, and more than 25% of the Tunisian labour force are women, female workers in the agricultural sector account for 23%, in the industrial sector 40%, in the trade and services sector 37%. Similarly, women's occupation of public professions rose to 23% and teachers in higher education and doctors to 40% in 2004. Tunisian women in the last decade have assumed a number of important positions, most significantly Public Attorney, General Manager of the Supreme Judiciary Institute, First President of the Court of Appeals, and Heads of Districts. Woman judges account for 28% and lawyers for 31%.

On the other hand, Iran has greatly improved in terms of women's education where female illiteracy (15 years or more) was about 23% in 2005, while nil among females (15-24 years) (UNESCO, 2007). However, women's participation in the economic activity is not effective where their participation in the labor force in 2006 was no more than 20% .

2-4-1 Tunisian experience

Tunisia is currently advanced in demographic transition from high to low birth and mortality rates; crude birth rate (per 1000 people) dropped from 51 in 1956 to 17 in 2007; infant mortality rates (per 1000 live births) dropped from 158 in the early 60s to 19 in 2007; and crude death rates (per 1000 people) dropped from 25 in 1956 to 5 in 2007. Accordingly, normal increase rates dropped heavily, which has led to a new balance in population. Furthermore, total fertility rate dropped during the last three decades from 6 live births per fertile woman in 1978 to 2 births per woman in 2005, while average age at first marriage rose to 33 years in males and 29 in females. The CPR reached 60% in mid 90s.

All such successes resulted from a set of historic actions adopted as early as the 60s when President Burqeiba pointed out the population problem, linking it to poverty and women's health. Afterwards, all institutions in the early 60s adopted a family planning program, then the National Union for Tunisian Women suggested a set of regional committees to provide and publish information on family planning methods. The Tunisian Family Planning Association (TFPA) was established in 1968. TFPA created several health units for family planning in many Tunisian areas, especially the remote. Then, in 1973, the National Board for Family and Population (ONFP) of the Public Ministry of Health was established, including 9 Ministries and 3 national authorities. In 1974, the Supreme Council for Family and Population was developed, presided over by the Prime Minister. Ever since 1979, the Ministry of Education has been following a policy of including demographic messages in educational curricula. Daly (1969) indicated six principles for the Tunisian family planning program:

- Women's legal status,
- Right to access information on contraceptives,
- Limiting the State's family grant to 3 children only,
- Raising marriage age,
- Preventing polygamy,
- Allowing abortion for social reasons during the first trimester of pregnancy.

Since early 1994, ONFP developed a partnership program with governmental and non-governmental organizations across all fields connected to sexual and reproductive health

targeting school and non-school youth through different activities. Youth and Reproductive Health Project was set up during the last ten years, as well as another on Prevention against Sexually Transmitted Diseases (STDs) which targeted Greater Tunisia Region students, and a program on reproductive and sexual health for adolescents and youth to raise the awareness of 2 million male and female youths on their appropriate health services. Thanks to such successes, ONFP ranked excellent in population in 1994 by the United Nations Population Fund (UNFPA).

The National Family Planning Program has been developed to the National Program for Reproductive Health, including new elements targeting different social segments, especially fertile people. Elements of reproductive health were included into the population policy, and the program contained clear monitoring and evaluation principles.

The political will and the previously mentioned legal framework have synchronized with family conditions since the Independence. Several pieces of legislation were drafted: the Personal Status Code of 1956 regulated marriage and divorce, allowed abortion, and granted women several rights. The socio-cultural movement was pro-women, where women were equaled with men. These movements have led to a change in Tunisian families from extended to nuclear ones; studies indicated that 75% of families live separately from the older family (PAPFAM, 2001). The State gives women several rights and sees them as exact equal partners to men.

2-4-2 Iran

During the 1970s, TFR in Iran was about 8 live births per woman. The population in 1976 was about 34 million, with an average annual growth rate of about 4%, 75% of which was due to normal growth, and the rest (25%) was a result of migration; consequently, the population was 50 million in 1986. Such big population rise accompanying the Islamic Revolution (1976-1986) was followed by a big fall in population growth rate during 1986-1996 of around 2% annually. Currently, Iran grows at a rate no more than 1.2% annually. This big fall in the population growth rate was due to the decrease in the TFR from 5.6 live births per woman in 1985 to 2 live births per women in 2000, an indicator which, in its own right, shows the successful Iranian experience in achieving population goals. Some of the causes and effects of the Iranian model were a contraceptive usage of 74% in 2000 compared with 37% in 1976, and higher average female age at first marriage from 19.7 years in 1976 to 22.4 in 1996.

The family planning program of Iran went in parallel with a branched network of rural health services, which led to more than 16,000 health units, so that each unit will extend services to 1500 rural persons.

Iran has started to introduce family planning since the 1960s where the Iranian government adopted the first family planning policy in 1966 that Tehran Declaration of 1967 recognized family planning as a right for all society individuals, stressing relevant socio-economic benefits for a family and the whole society. However, with the Iranian Revolution of 1979, this program retreated and was no more a subject of concern; rather, the new government encouraged population growth, the importance of which was proven during the 8-year Iraqi-Iranian War (1980-1988). After the end of the war, and with the State's tendency to re-construct the society, lowering population growth rates surfaced again, which led to holding the Conference on Population and Development in September 1988. The most significant message in the conference was that Iran's annual population growth rate was very high, which would lead to significant impacts on the economy. After the conference, the Supreme Legislative Council declared no religious reservation on using contraceptives (Roudi-Fahimi, 2002; Shavazi et al., 2009), and a new family planning program was announced in December 1989 with 3 goals:

- Encouraging families to delay the first birth and space births,
- Dissuading birth for women less than 18 years or more than 35 years of age,
- Limiting the number of children to 3 per family.

This synchronized with the announcement of providing contraceptives unlimitedly to all married men and women, along with promoting small families.

To emphasize religion's support to family planning, a religious fatwa (legal opinion) was issued in 1990, allowing male and female sterilization as a legitimate contraceptive, which has made sterilization the contraceptive mostly opted for in Iran. In 1993, all benefits of large families were repealed.

The family planning program went in parallel with a branched network of rural health services, which led to more than 16,000 health units in Iran, so that each unit will extend services to 1500 rural persons. Each unit includes male and female service providers. In addition to providing medical services, the medical team in the unit plays a role to survey zone inhabitants so as to know their needs.

This experience stresses the importance of political commitment to the problem, financial support, provision of contraceptives, which can collectively lead to a quick increase in contraceptive use and lowering fertility rates. Officials in charge of implementing the Egyptian program must examine the Tunisia and Iranian experiments in depth to know how each experience was successful in such a record time.

Chapter Three

Inequity of Access to Contraceptives in Egypt

3-1 Introduction

3-2 Strategies and Procedures of Reducing Inequity

3-3 Methodology for Measuring Inequity

3-4 Inequity in Access to FP/RH Information and Services

3-5 Conclusion and Recommendations

3-1 Introduction

Egypt developed its first population strategy in 1962, adopting family planning. Ever since, successive programs have been in place with more comprehensive objectives. In 1986, a new national program was developed to deal with the three aspects of the population problem: overpopulation, population distribution and population characteristics. This program was expanded in 1992 to include 9 strategies to be implemented during 1992-2007, which covered family planning services, childhood and motherhood care, women and development, information, education and communication (IEC), labor, youth, environment, education and illiteracy, and population distribution. In 2000, the program shifted focus from family planning (FP) to reproductive health, including adding new activities concerning improving reproductive health. Successive programs and strategies addressed eliminating unequal access directly and indirectly.

In 2008, Egypt held a 2-day national conference to promote a societal evidence-based dialogue on population issues. One of the most important recommendations focused on eliminating unequal access to different services and activities of the population program.

Egypt is one of the countries in the late mid-transition stage (Bongaarts, 2003). Total fertility rate (TFR) decreased in Egypt from 5.3 children per woman in 1980 to 3.5 in 2000. It decreased then to 3.1 in 2005 and 3 in 2008, reflecting a status of fertility stall associated with another in the demand on contraceptives (Contraceptive use, unmet need and method failure) at 70%, with a slide change as 1.1% of the women moved from contraceptive unmet need to contraceptive use between 2005 and 2008. Recently it was also associated with a stall in wanted TFR (2.3 children per woman in 2005 and 2.4 in 2008).

The low demand on contraceptive suggests an in-depth analysis of unequal access to reproductive health and family planning information and services in the past two decades to reveal whether such trend can explain the stalled fertility.

The purpose of this chapter is to demonstrate whether Egyptian population strategies and programs succeeded in eliminating access to family planning and reproductive health services with a focus on contraceptive use. It presents the strategies and procedures that aimad at redcing inequity and measures the trends of inequity in Egypt from 1995 to 2008 with a focus on inequity in access to modern contraceptive use.

The chapter discusses differentials in 3 main aspects:

1- Knowledge of modern contraceptives and exposure to family planning messages,

2- Modern contraceptives prevalence rate and inequity in accessing modern contraceptives public sources,

3- TFR and unmet needs.

Finally, the chapter presents actions that should be taken into consideration when setting the population program priorities in order to eliminate inequity if any.

3-2 Strategies and Procedures of Reducing Inequity

Successive population strategies and programs focused on increasing contraceptive as well as decreasing inequity in access to contraceptives and family planning and reproductive health services and information in order to reduce fertility rates. This section introduces the strategies and procedures for decreasing inequity.

3-2-1 Strategies aimed at reducing inequity

a. Population strategy document (1992-2007):

The population strategy document included a strategy to reduce the demographic and socio-economic unequal access among different population groups and different geographical regions. This strategy aimed at ensuring achieving universal access to contraceptives in addition to other objectives, with the following objectives:

1- Specifying and prioritizing regions with low demographic characteristics in population and development programs,

2- Promoting evidence-based decisions in deprived areas by developing databases that allow monitoring the trend of their demographic indicators,

3- Encouraging conducting a set of field surveys covering deprived areas to solve their problems,

4- Considering new programs for development,

5- Promote the private sector's role in efforts to develop deprived areas.

b. National Population Program (2007-2012):

Plans to implement the national population program included an objective of supplying deprived regions and groups with family planning and reproductive health services. This objective included:

1- Ensuring full coverage of deprived areas with health units providing reproductive health services,

2- Increasing the number of mobile units and distributing them on different regions according to their needs,

3- Promoting NGOs and private sector roles in providing reproductive health services.

Other objectives included:

1- Promoting the role of female rural guides (ra'edat rifiyat) in deprived regions,

2- Integrate family planning and reproductive health services in preliminary health care activities that will be implemented under the "Family Medical Services" system.

In fact, these objectives shed more light on decreasing unequal access among different geographic areas and did not consider decreasing unequal access among different population groups such as women with different education levels and with different wealth status.

3-2-2 Procedures taken to decrease inequity:

The most important procedures applied in Egypt are presented in this section. These included but were not limited to:

a- Increasing the budget allocated to family planning programs:

The budget allocated from profit and non-profit institutions increased from LE 45 million in 1988/89 to LE 206 million in 2002/03; about 450%. Government spending on family planning programs has been doubled six times during the same period (EPDI, 2006), which shows the increasing attention paid to family planning issue.

b- Population and development databases:

Many databases were created to address population and development data and indicators. They included the Population and Development database, EgyInfo, and some sectorial databases such as the Egyptian National Population Council system of services statistics.

These databases enable monitoring trends of different population and development indicators over time, including population characteristics and distribution, fertility - related indicators such as CPR, CYP, and TFR.

c- Ministry of Health and Population FP and mobile units:

The number of the Ministry Of Health and Population (MOHP) FP units increased from 4470 units in 2000 to 5425 in 2008. MOHP complemented the decrease in the number of FP units run by NGOs and other private and governmental sectors. The number of units providing FP services reached 6222 in 2008, 11% of which are located in urban governorates, 46% in Lower Egypt, 38% in Upper Egypt, and 5% in frontier governorates. These units are concentrated more in the rural areas (65% in rural areas vs. 35% in urban areas).

To overcome inequity in access to family planning services among Egyptian regions, MOHP employed mobile units to provide FP services, which were directed to serve deprived areas especially in Upper Egypt, rural and slum areas. Field studies showed that mobile units succeeded in outreaching deprived areas nominated by MOHP.

d- Community health workers:

In 1981, a project conducted in 12 governorates under the supervision of the Supreme Council for Family Planning recruited about 2,780 community health workers to promote contraceptive use. After this project, the National Population Council adopted a program for rural guides employing the same community health workers (TAHSEEN Project, 2004). A new program was developed by the Ministry of Population in the early 1990s to raise community awareness of FP and health issues. Since then, successive and simultaneous programs employing community health workers were developed, and their role in promoting knowledge of contraceptives, FP and reproductive health services as well as their impact on health and

quality of life among different groups in deprived areas became obvious.

3-3 Methodology for Measuring Inequity

In order to demonstrate the impact of strategies and measures for eliminating inequity, the trend of inequity in access to contraceptives, family planning and reproductive health services and knowledge is presented in this section.

Inequity was measured in this chapter through an index called "Level of Variation (LV%)". The level of variation adopts the coefficient of variation using the prevalence rate of a certain phenomenon in the country instead of the mean of the prevalence rates in different population groups.

The level of variation was calculated according to different women's characteristics. The variation of the prevalence of a certain phenomenon in different groups from the prevalence of the same phenomenon in Egypt was calculated as follows:

$$LV\% = \frac{\sqrt{\frac{\sum_{i=1}^{n}(x_i - x_E)^2}{n}}}{x_E} \times 100$$

Where (x_i) is the prevalence of the phenomenon in group (i) of the considered characteristic,
(x_E) is the prevalence of the phenomenon in Egypt,
(n) is the number of groups of the considered characteristic,

We preferred to use the level of variation due to:

1) the simplicity of its calculations and interpretation;

2) involving the prevalence in each category rather than minimum and maximum used in literatures in calculating the range as a measure for inequity; thus, the level of variation is affected by changes in the status of all population groups, not only with those in the minimum and the maximum, which is very useful in tracing the trend of inequity access, especially when the range is stable. It also correlate the value of variations with the value of the phenomenon itself in Egypt; and 3) it does not needphenomenon categories for which the index is calculated to be at least ordinal as in the case of the concentration index; thus, we can use it to calculate inequity for characteristics with nominal categories such as region or urban/rural residence, and to compare inequity according to different characteristics.

However, inequity levels should be examined and interpreted taking into consideration the phenomenon prevalence level.

Egypt DHS 1995, 2000, 2005 and 2008 data were used to study diffrentials in access to contraceptives and related aspects according to the type of the place of residence (urban/rural), place of residence (regions), wealth quintile, age groups and education level.

Wealth quintiles of 2005 and 2008 calculated by the DHS team were used in the analysis. For DHS 1995 and 2000, the wealth index was calculated using the available data about household (HH) substances and dwelling characteristics. Factor analysis was used to assign a score for each HH using principle component method. The first factor was used as an indicator for the relative economic level of the HH. HHs were then divided into 5 categories representing 5 quintiles. The category of wealth index of each HH was assigned to each of the HH members.

3-4 Inequity in Access to FP/RH Information and Services

3-4-1 Knowledge of contraceptives and exposure to FP messages

Knowledge of modern contraceptives is universal among ever-married women. Despite variations in knowledge of modern contraceptives according to different characteristics are very limited, those in exposure to family planning messages according to some characteristics are still high.

A Woman was considerd to be exposed to FP messages if she heard about FP from radio or TV, read about FP in the newspapers, or have been visited by a health facilitator during the 6 months prior to the survey.

Exposure to FP messages increased between 1995 and 2000 as a result of promoting mass media role in family planning strategies since 1992. The exposure to FP messages decreased from 96% in 2000 to 90% in 2005 then to a lower level in 2008 (61%) (Table 3-1). This could be due to The fallback of the Egyptian radio and TV against satellite channels.

The highest level of variation in 1995 was observed among women with different wealth quintiles, decreasing from 1995 to 2005 at a rate of more than 75%, then increased in 2008 to more than double its value in 2005 (7.7% in 2008 vs. 2.9% in 2005).

The level of variation between urban and rural areas decreased at a high rate from 8.6% in 1995 to 1% in 2005 then increased again to 2.3% in 2008. The decrease is attributed to a big drop in the percentage of ever married women exposed to FP messages in both urban and rural areas at very close levels. Here, we emphasise again on the fact that changes in level of variation should be judged in the light of the prevalence level of the phenomenon it self befor considering the decrease in the level of variation a positive stiuation.

The level of variation among different regions decreased between 1995 and 2000 also, but at a lower rate than in the case of urban and rural areas (8.5% in 1995 to 4.4% in 2000), then it increased to 5% in 2005, and continued to increase in 2008 to reach a level slightly higher than that of 1995.

The level of variation in exposure to FP messages among different age groups more than doubled between 1995 and 2008 (6.7% in 2008 vs. 2.9% in 1995).

The level of variation according to the educational level decreased in 2000 to about fourth of its value in 1995 then increased slightly in 2005. It then increased again to a level higher than that of 1995 to show the highest level of variation in 2008 compared with other characteristics.

Table (3-1) Percent of ever married women who were exposed to FP messages during the 6 months prior to the DHS by main characteristics

Main characteristics	1995	2000	2005	2008
Urban / Rural Residence				
Urban	92.8	98.4	88.9	59.3
Rural	78.2	94.5	90.6	62.1
LV%	8.6	2.0	1.0	2.3
Place of Residence				
Urban Governorates	93.6	98.2	82.9	55.6
Urban Lower Egypt	92.4	99.3	92.4	66.1
Rural Lower Egypt	82.1	97.3	90.7	66.5
Urban Upper Egypt	91.4	98.0	94.0	58.1
Rural Upper Egypt	73.4	91.3	90.8	55.9
Frontier Governorates	85.9	88.0	83.0	54.0
LV%	8.5	4.4	5.0	8.7
Wealth quintile				
Lowest	64.7	88.0	84.7	52.0
Second	82.3	96.6	90.3	61.1
Middle	88.5	98.2	91.6	66.1
Fourth	94.8	99.3	92.1	61.5
Highest	97.1	99.5	90.3	62.9
LV%	13.7	4.5	2.9	7.7
Age				
15-19	80.8	97.4	90.9	60.5
20-24	87.3	96.9	91.4	64.5
25-29	87.5	97.0	91.4	64.0
30-34	85.4	96.7	91.9	63.4
35-39	84.0	95.5	90.6	60.4
40-44	84.0	95.6	87.7	59.0
45-49	81.7	95.2	84.9	51.8
LV%	2.9	0.8	2.7	6.7
Education Level				
No education	76.0	93.3	86.8	53.0
Some primary	85.2	96.8	89.3	53.4
Primary/ Some Secondary	93.9	98.3	87.7	60.5
Secondary or higher	96.4	99.2	93.6	68.1
LV%	10.1	2.4	3.0	10.7
Egypt	84.9	96.2	89.9	60.9

Source: Calculated from DHS data 1995-2008

Considering the results of 2008, having a certain level of education and living in a certain region are the factors that mostly affected exposure to FP messages.

These results show also that despite the progress in variation in exposure to FP messages among different population groups between 1995 and 2005, a considerable recession occurred during 2005-2008 not only in variation in exposure to FP messages, but also in exposure to FP messages it self.

3-4-2 Modern Contraceptive Prevalence Rate

Table (3-2) shows that the highest level of variation in modern contraceptive prevalence rate (MCPR) in 2008 was among different age groups followed by the place of residence (regions) then wealth quintiles. The level of variation among different age groups decreased between 1995 and 2005 from 34% to about 29% then increased again to 31% in 2008 in favor of the women in the age group 35-39. The level of variation according to the place of residence was 25% in 1995 and decreased gradually to reach in 2008 about half of its value in 1995. The decrease occurred between 1995 and 2008, could be partially attributed to MCPR increase in rural Upper Egypt from 22.3% to 44.7%.

The highest decrease in the level of variation was observed among women with different wealth quintiles as the level of variation decreased from 23% in 1995 to 6% in 2008. The highest decrease in this variation occurred over the period 1995 to 2000.

The level of variation between urban and rural decreased from about 17% in 1995 to 5% in 2005 then increased to 6% in 2008 in favor of the urban areas.

The lowest level of variation in MCPR was observed among different educational levels, which decreased gradually from 12% in 1995 to 3% in 2008.

Table (3-3) shows that the level of MCPR variation among different governorates decreased between 1995 and 2008. However, such decrease should not be considered as a net positive situation since it was affected by MCPR decrease in 2008 in 10 governorates compared to their level in 2005 including the highest 5 governorates in MCPR in 2005.

The comparison of the level of variation according to the different characteristics showed that age affected contraceptive use more than the processes and strategies of contraceptive distribution to different regions and governorates. However, distribution strategies still have a considerable impact on contraceptive use among currently married women. This impact could be noticed from the level of variation between urban and rural areas and among the six regions.

Table (3-2) Modern contraceptives prevalence rate among currently married women (15-49 years) by main characteristics

Main characteristics	1995	2000	2005	2008
Urban / Rural Residence				
Urban	53.6	58.9	59.8	61.6
Rural	38.5	49.9	54.2	54.8
LV%	16.6	8.4	5.0	6.0
Place of Residence				
Urban Governorates	55.2	59.9	61.2	62.6
Urban Lower Egypt	56.2	63.2	62.3	63.8
Rural Lower Egypt	51.5	60.0	64.8	62.0
Urban Upper Egypt	47.6	53.3	56.1	58.4
Rural Upper Egypt	22.3	37.1	41.4	44.7
Frontier Governorates	41.4	41.4	47.2	48.6
LV%	25.4	18.5	15.1	12.9
Wealth quintile				
Lowest	29.2	43.4	50.0	51.9
Second	39.0	50.9	54.4	54.8
Middle	49.5	55.5	57.2	58.8
Fourth	54.0	59.3	60.0	59.3
Highest	57.6	61.6	59.6	62.3
LV%	22.9	12.0	6.6	6.3
Age				
15-19	15.8	22.0	24.1	19.8
20-24	30.9	40.5	41.3	40.9
25-29	45.7	54.5	54.4	56.3
30-34	56.2	64.6	66.4	64.8
35-39	58.3	66.2	71.2	72.4
40-44	54.8	61.4	67.6	70.7
45-49	30.5	40.0	45.3	50.5
LV%	34.1	29.0	28.8	30.8
Education Level				
No education	39.1	49.6	52.2	55.5
Some primary	48.2	55.4	60.5	59.6
Primary/ Some Secondary	48.5	55.0	57.9	56.4
Secondary or higher	52.9	58.5	58.4	59.0
LV%	11.6	6.1	5.6	3.0
Egypt	45.5	53.9	56.5	57.6

Source: (1) DHS Reports 1995-2005
(2) MCPR according to Wealth quintiles in 1995 and 2000 are calculated from DHS 1995 and 2000 data.

Table (3-3) MCPR among currently married women (15-49 years) by governorate

Governorate	1995	2000	2005	2008
Cairo	54.4	59.7	61.0	64.4
Alexandria	56.5	61.6	61.8	61.0
Port-Said	55.9	54.8	59.1	51.8
Suez	58.5	55.6	62.5	63.6
Damietta	53.8	57.4	62.9	63.5
Dakahlia	52.3	62.0	63.4	61.9
Sharkia	50.8	58.3	60.1	63.4
Kalyoubia	54.1	62.7	66.2	58.3
Kafr El-Sheikh	52.9	64.0	64.9	60.0
Gharbia	51.2	64.5	68.2	65.1
Menoufia	52.2	59.2	61.4	66.1
Behera	56.3	58.7	67.2	64.1
Ismailia	55.9	55.1	56.3	51.7
Giza	47.7	56.8	58.5	59.0
Beni-Suef	28.9	48.1	54.2	50.6
Fayoum	31.7	48.2	53.9	52.6
Menia	23.1	44.0	44.5	50.6
Assyout	20.2	30.5	32.7	43.2
Souhag	21.3	26.2	28.9	32.8
Luxor	–	–	–	50.9
Quena	25.1*	32.9*	44.5*	44.2
Aswan	31.6	42.8	48.1	51.4
FrontierGovernorates	41.4	41.4	47.2	48.6
Egypt	45.5	53.9	56.5	57.6
LV%	29.2	20.7	18.6	15.0

*Include Luxor

Source: DHS Reports 1995-2008

3-4-3 Distribution of Couple Years of Protection (CYP)

The period of protection of each contraceptive differs from that of others. Thus, the amount distributed from different contraceptives is transformed to Couple Years of Protection (CYPs).

CYPs are an estimate for the number of years of protection provided by all distributed contraceptives. CYPs of each contraceptive in a year are calculated by dividing the amount distributed in that year by the number of units needed by a couple to protect themselves for a year. CYPs of different contraceptives could then be summed to be used in the comparison.

Comparing the percentage distribution of CYPs in 2006 by governorate and that of married women in the age group 15-49 in 2006 by governorate showed different distribution with bias against some of upper Egypt governorates and frontier governorates (Figure 3-1). Osman and Girgis (2010) showed that the difference between the two distributions was significant, which reflects inequity in CYPs distribution on different governovates.

3-4-4 Source of modern contraceptives

The dependency on public sector as a source for modern contraceptives increased in Egypt from 36% in 1995 to 60% in 2008.

Figrue (3-1) Difference rate between the percent distribution of married women in the age group (15-49) and percent distribution of CYP by governorate, 2006

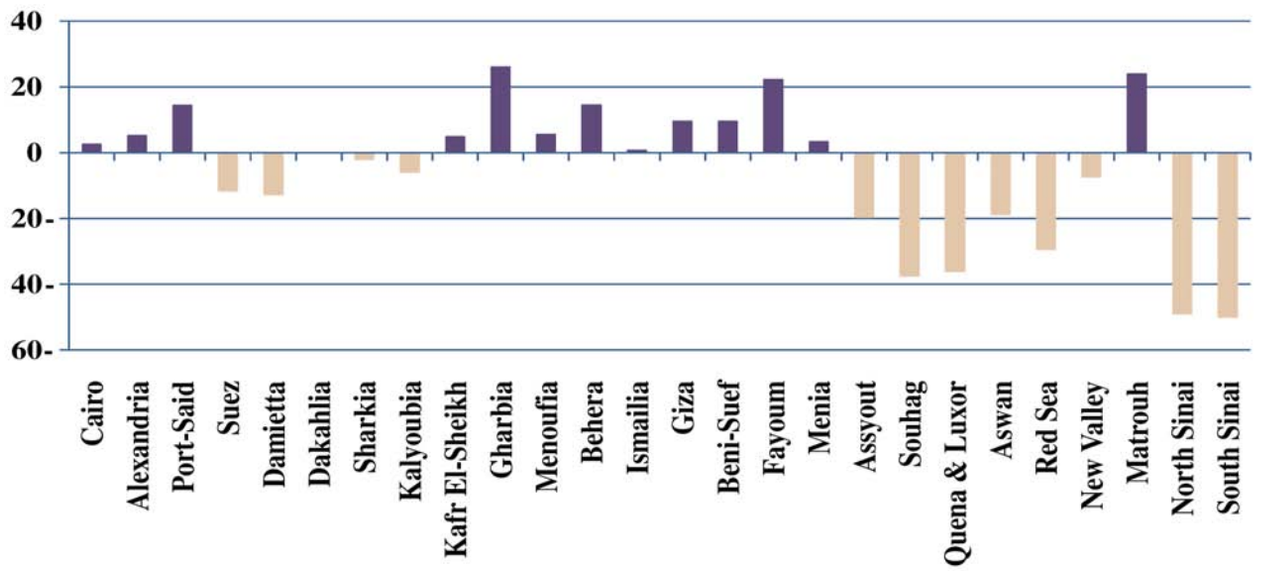


Table (3-4) Percentage of currently users of modern contraceptives who got contraceptives from Public sector by main characteristics

Main characteristics	1995	2000	2005	2008
Urban / Rural Residence(1)				
Urban	34.0	42.0	48.0	50.7
Rural	37.7	54.8	63.2	66.5
LV%	5.2	13.2	13.5	13.4
Place of Residence(1)				
Urban Governorates	39.7	43.5	54.2	55.3
Urban Lower Egypt	27.5	40.9	41.5	46.4
Rural Lower Egypt	38.6	54.1	62.6	65.8
Urban Upper Egypt	29.6	40.8	44.9	47.4
Rural Upper Egypt	34.8	56.3	64.3	67.9
Frontier Governorates	25.2	41.0	59.6	56.1
LV%	17.7	14.4	15.7	14.7
Wealth quintile(2)				
Lowest	43.8	62.8	72.4	76.0
Second	44.7	56.1	66.4	69.3
Middle	36.6	51.0	61.3	63.7
Fourth	32.1	48.5	53.7	55.8
Highest	26.5	27.1	35.8	39.3
LV%	19.6	24.8	22.5	21.3
Age(2)				
15-19	41.3	55.3	61.3	71.7
20-24	38.0	53.6	58.3	60.0
25-29	38.7	51.5	58.5	61.5
30-34	34.2	49.6	59.6	58.7
35-39	35.4	46.6	55.4	59.1
40-44	33.1	44.2	54.0	58.2
45-49	34.0	44.8	50.7	58.2
LV%	8.0	8.4	6.0	7.9
Education Level(2)				
No education	40.8	56.6	67.3	71.1
Some primary	38.4	53.5	63.7	68.1
Primary/ Some Secondary	35.5	48.4	60.1	61.6
Secondary or higher	27.2	37.8	45.5	50.2
LV%	14.4	14.7	15.3	14.5
Egypt	35.7	48.6	56.6	59.6

Sources: (1) DHS reports 1995-2008
(2) Calculated from DHS data 1995-2008

The highest level of variation in unmet needs was noticed among different regions.

Unlike other variables, the level of variation between urban and rural in the percentage of women who had access to contraceptives from public sources increased between 1995 and 2005 from 5% to 13% and remained stable between 2005 and 2008. According to the place of residence, the level of variation decreased from18% in 1995 to 14% in 2000, and fluctuated between 2000 and 2008 around the same level.

The highest level of variation was observed among different wealth quintiles. The dependency on the public sector as a source for contraceptives increased in the 5 quintiles, but the increase was higher in the lowest quintile compared to the highest quintile. Thus, the variation among wealth quintiles increased between 1995 and 2005.

The lowest level of variation in 2008 was observed among different age groups, where the level of variation decreased from 8% in 1995 to 6% in 2005, then increased again to 8%.

The variation according to the educational level also fluctuated slightly between 1995 and 2008.

3-4-5 Unmet needs

Table (3-5) shows that despite the type of place of residence and wealth quintile categories witnessed the highest level of variation in 1995 (32%), the variation according to the place of residence increased to 35% in 2008 while that according to wealth quintiles decreased to 25% in 2008. The level of variation according to the type of place of residence, place of residence and wealth quintiles increased between 2005 and 2008 also, with the place of residence demonstrating the highest level of variation among all characteristics considered in 2008.

The level of variation according to age groups decreased between 1995 and 2008 from 19% to 11%. The level of variation among different education levels increased between 1995 and 2000 from 21% to 25% then decreased in 2005 and continued decreasing to 12% in 2008. These results affirm that the place of residence and wealth status are the factors that mostly affected contraceptive unmet needs.

Figure (3-2) Trends of level of variation in unmet needs by main characteristics

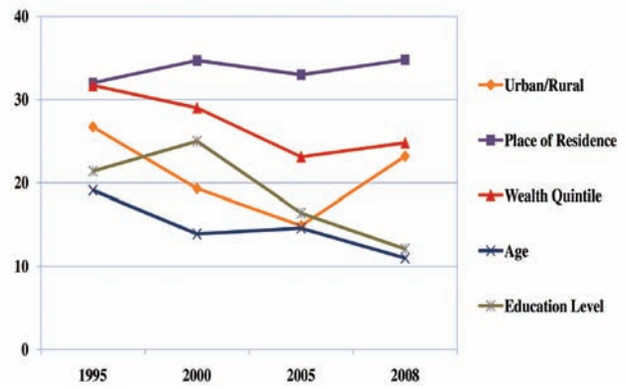


Table (3-5) Percentage of currently married women with unmet needs by main characteristics

Main characteristics	1995	2000 (1)	2005	2008
Urban / Rural Residence(2)				
Urban	11.4	8.4	8.5	6.7
Rural	19.9	12.5	11.5	10.9
LV%	26.7	19.3	14.9	23.2
Place of Residence(2)				
Urban Governorates	10.8	6.9	8.5	5.9
Urban Lower Egypt	10.2	8.6	7.3	6.4
Rural Lower Egypt	15.3	8.2	7.1	7.7
Urban Upper Egypt	14.0	10.1	9.5	8.0
Rural Upper Egypt	25.6	18.1	17.0	15.4
Frontier Governorates	15.4	12.2	9.1	10.0
LV%	32.0	34.6	33.0	34.8
Wealth quintile(3)				
Lowest	22.7	15.2	14.2	12.8
Second	19.8	12.6	11.5	10.4
Middle	15.2	10.1	10.6	9.3
Fourth	12.5	8.4	8.4	7.8
Highest	8.5	6.4	7.5	6.1
LV%	31.7	29.0	23.1	24.8
Age(2)				
15-19	15.0	9.7	9.0	7.9
20-24	18.7	10.1	10.6	9.0
25-29	18.4	10.2	11.6	9.8
30-34	18.0	10.7	11.3	10.2
35-39	15.0	12.9	10.8	9.4
40-44	13.7	12.0	9.4	8.9
45-49	9.6	8.0	7.1	7.2
LV%	19.1	13.9	14.6	11.0
Education Level(2)				
No education	19.3	13.3	12.9	10.8
Some primary	16.9	12.8	9.9	9.8
Primary/ Some Secondary	14.7	8.6	10.1	9.4
Secondary or higher	10.2	7.1	8.2	7.8
LV%	21.4	25.0	16.4	12.1
Egypt	16.0	10.7	10.3	9.2

Source: (1) Calculated from DHS 2000 data using definition 2,
(2) DHS Reports 1995-2008
(3) MCPR according to Wealth quintiles 1995 and 2000 are calculated from DHS 1995 and 2000 data

3-4-6 Total Fertility Rate

The highest level of variation in TFR was noticed among different regions (place of residence) followed by the type of the place of residence. The level of variation among different regions decreased between 1995 and 2008 to about half its value in 1995.

Table (3-6) TFR among women (15-49) by main characteristics

Main characteristics	1995	2000	2005	2008
Urban / Rural Residence				
Urban	3.0	3.1	2.7	2.7
Rural	4.2	3.9	3.4	3.2
LV%	16.3	11.3	11.4	8.5
Place of Residence				
Urban Governorates	2.8	2.9	2.5	2.6
Urban Lower Egypt	2.7	3.1	2.7	2.6
Rural Lower Egypt	3.5	3.3	3.0	3.0
Urban Upper Egypt	3.8	3.4	3.1	3.0
Rural Upper Egypt	5.2	4.7	3.9	3.6
Frontier Governorates	4.0	3.8	3.3	3.3
LV%	23.1	16.6	14.5	11.9
Wealth quintile				
Lowest	5.0	4.5	3.6	3.4
Second	4.3	3.9	3.3	3.1
Middle	3.4	3.7	3.3	3.0
Fourth	3.6	3.5	3.0	2.9
Highest	3.0	3.2	2.6	2.7
LV%	20.0	14.0	11.1	7.7
Education Level				
No education	4.6	4.1	3.8	3.4
Some primary	3.7	3.8	3.4	3.2
Primary/ Some Secondary	3.1	3.4	2.9	3.0
Secondary or higher	3.0	3.2	3.0	3.0
LV%	17.4	10.0	12.8	7.5
Egypt	3.6	3.5	3.1	3.0

Source: (1) DHS Reports 1995-2008
(2) 1995 and 2000 DHS raw data

* The project thanks Dr. Mohamed Abou El-Ela for his help in calculating TFR by wealth quitiles from 1995 and 2000 EDHS raw data.

The same pattern could be noticed in the variation according to the type of place of residence. The level of variation according to wealth quintiles decreased from 11% in 2005 to 8% in 2008 to achieve with the education level the lowest level of variation. Variation between different education levels decreased between 1995 and 2000 then increased again in 2005. In 2008, the level of variation decreased again to 8%.

EPDI project conducted a study to estimate TFR at governorate levels after treating effects of incomplete and inaccurate birth registration data. Table (3-7) shows that Upper Egypt governorates had the highest TFR. All governorates witnessed a TFR decrease between 2000 and 2005 while, most of them witnessed an increase with more than 0.1 child per woman between 2005 and 2008. The table shows that the level of variation decreased between 2000 and 2008.

Figure (3-3) Trends of level of variation in TFR by main characteristics

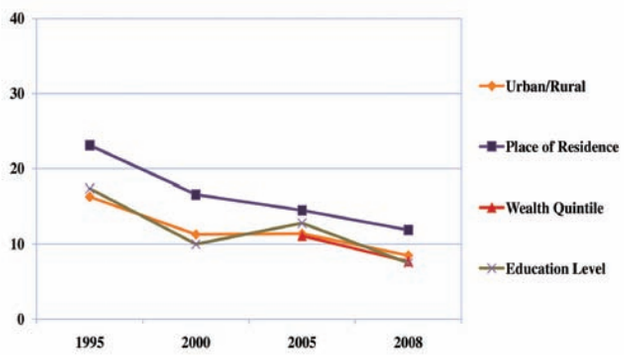


Table (3-7) TFR by governorate

Governorate	TFR 2000(1)	TFR 2005(2)	TFR 2008(3)
Cairo	3.0	2.9	3.0
Alexandria	3.0	2.6	2.8
Port-Said	3.0	2.4	3.0
Suez	3.2	3.0	3.5
Damietta	3.3	3.2	3.3
Dakahlia	3.3	3.0	2.8
Sharkia	3.9	3.2	3.2
Kalyoubia	3.3	2.6	3.0
Kafr El-Sheikh	3.1	3.0	2.9
Gharbia	3.2	2.9	2.9
Menoufia	3.6	3.0	3.2
Behera	3.3	2.7	2.9
Ismailia	3.8	3.1	3.5
Giza	3.4	2.7	3.0
Beni-Suef	4.6	3.7	3.9
Fayoum	4.6	3.5	3.9
Menia	4.9	3.8	3.8
Assyout	5.0	3.9	4.1
Souhag	4.8	3.9	3.5
Quena	4.3*	3.3*	3.4
Luxor	—	—	3.1
Aswan	3.0	2.9	2.8
Red Sea	3.5	2.2	3.1
New Valley	3.5	2.8	3.0
Matrouh	4.2	3.5	3.0
North Sinai	4.0	3.6	4.2
South Sinai	4.5	1.8	2.6
LV%	18.1	16.6	13.6
Egypt	3.7	3.1	3.2

Sources: (1) Assessment of fertility level in 2000 at governorate level, EPDI project.
(2)Assessment of fertility level in 2005 at governorate level, EPDI project.
(3)Assessment of fertility level in 2008 at governorate level, EPDI project.

3-5Conclusion and Recommendations

Despite the efforts that Egypt made to reduce inequity, especially among different regions, inequity still exists and with high level in some indicators.

Egypt has witnessed considerable changes in the components of successive population programs, which focused on expanding different population groups' access to FP/RH services including information, leading to a decrease in unequal access to services among different population groups. The unequal access was studied according to the type of place of residence (urban/rural), place of residence (regions), wealth status, age, education level and governorates whenever possible.

Considering the 5 main characteristics, table (3-8) shows that living in a certain region is always one of the two factors that mostly affected the prevalence of different indicators of access to FP/RH services and information, which suggests that the population program should focus on disadvantaged regions, especially rural Upper Egypt.

Table (3-8) Characteristics that have the highest two levels of inequity

Indicator	1st Highest	2nd Highest
Exposure to FP messages	Education	Region
MCPR	Age	Region
Source of modern contraceptives	Wealth status	Region
Unmet needs	Region	Wealth status
TFR	Region	Urban/ Rural

Egypt had succeeded in reducing inequity among different population grops in modern contraceptive prevalence rate and total fertility rate. However, Egypt couldn't achieve the same success in reducing the inequity in unmet needs according to certain characteristics, especially;

according to place of residence unmet needs still witness the highest levels of variation among other indicators.

Eliminating inequity among different regions and population groups needs reforming the population program priorities to increase the chance of those groups to access FP and RH services. The following summarizes actions that should be taken into consideration in the reforming process:

a- Re-plan the distribution of FP and RH services to increase prevalence in Upper Egypt and rural areas.

b- Re-phrase mass media FP messages to be understandable and acceptable by women with different educational levels.

c- Raise the awareness of women in different age groups about the importance of using contraceptives as a must for a healthy reproductive life not only a FP contraceptive.

d- The greatest challenge the Egyptian Government faces is the allocation of at least LE 84 million that may rise to LE 257 million by 2017 to complement the decrease in the donations allocated to FP program in Egypt. The Government must set plans to achieve this goal.

e- Provide training for physicians of health units that provide FP/RH services to be able to deal with women in different ages, different education levels and different socio-economic statuses.

f- Promote the private sector role in FP activities, especially providing contraceptives to disadvantaged areas.

g- Promote the concept of a 2-child family with different measures including positive and negative incentives.

h- Review available databases and reduce incomplete and inaccurate data to enable different authorities working on population issues to use them in the planning and implementation phases.

One of the reasons behind unequal access to FP services is the lack of data and the absence of the assessment of the population program targets at governorate levels. As a partner in the process of monitoring and evaluating the Egyptian population program, since 2008, the Egyptian Cabinet Information and Decision Support Center (IDSC) conducted a study in 2009 that assessed CPR and CYPs targets that should be achieved annually by each governorate. This demonstrates the responsibilities of each governorate and allows monitoring and evaluation of achieving them in order to allow Egypt to achieve the target of the Egyptian population program; i.e. a TFR of 2.1 by 2017.

Place of residence is one of the characteristics that highly affect access to FP/RH services and information and achieved levels of fertility.

Chapter Four

Population Status in Deprived Areas

4-1 Introduction

4-2 Population Status in Rural Upper Egypt

4-3 Population Status in the Poorest 1000 Villages

4-4 Population Status in Slum Areas

4-1 Introduction

Egypt's population grew gradually and steadily throughout the 20th Century, specifically, the second half of the 20th Century was characterized with the highest growth rates, ever witnessed by Egypt. At the turn of the 20th Century, the population of Egypt was less than 10 million people. This number almost doubled during the first half of the 20th Century, mounting up to 20 million people in 1950. During the second half of the 20th Century, the size of the population tripled. In 2000, the size of the population reached 60 million people. The Population Census of 2006 indicates that the population of Egypt accounted for 72.6 million people. In addition, the number of Expatriate Egyptians was estimated at 3.9 million people; with the overall number of population adding up to 76.5 million people.

Worth noting is that the findings of successive censuses reveal that between the two population censuses of 1976 and 1986, the population grew by 31.7%, and by 22.9% between the two censuses of 1986 and 1996. This is a relief that the Egyptian Population Program has been able to achieve significant progress, especially in terms of controlling the level of increase in population. Continuing this progress will steadily lead to stabilizing the size of the population. This maximizes the expected return from the development programs, and lessen the pressures placed on the natural resources, infrastructure, and social services.

However, the latest census shows that the increase in population between 1996 and 2006, has maintained the same level for a period of 10 years; from 1986 -1996. The population increased by 22.4% between 1996 and 2006. The growth rate of population did not decline over the last two decades. This is evidenced by the lack of any significant reduction in the fertility and birth rates over the last decade. For instance in 2006, the new births accounted for 1.9 million children, compared to 1.6 million births in 1995. This increase continued and the number of birth crossed the 2 million line.

The current birth and fertility rates in Egypt are higher than those of the developed countries as well as of other comparable countries, particularly with similar socio-economic conditions. It is worth noting that the current birth rate in Egypt (26 births per 1000 population) exceeds that in other developing countries, such as Morocco, Algeria, Malaysia, Indonesia, Turkey, Iran and Tunisia.

It is estimated that the annual number of births will decrease with about 350 thousand births if the crude birth rate in Egypt decreased to 21 births per 1000 population which is the level acheived by Morocco and Algeria, and with about 560 thousand births if the crude birth rate decreased to 18 births per 1000 population which is the level achieved by Iran.

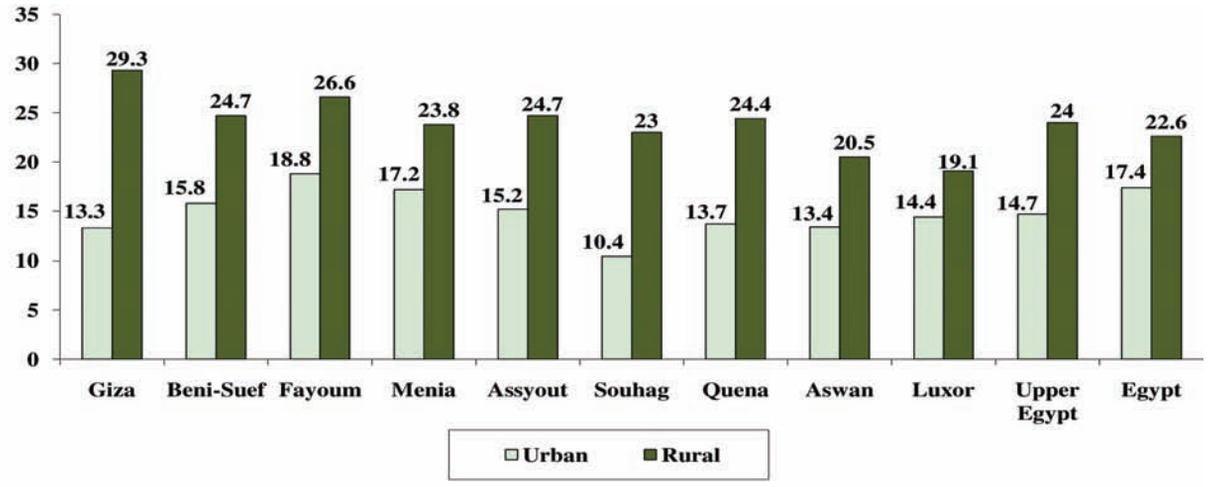
It is noteworthy that the population problem, with all its different dimensions, varies according to the region. For instance, the population problem is more pronounced in Upper Egypt especially in rural areas, as compared to other regions, as well as in slum areas. The purpose of this chapter is to shed light on the key implications and dimensions of the population problem in three deprived regions; namely, rural upper Egypt, the poorest 1000 villages, and the slum areas of Egypt. This chapter uses available information and statistics drawn from demographic and health surveys, human development reports, and bulletins and releases from the Central Agency for Public Mobilization and Statistics (CAPMAS), amongst other reports.

4-2 Population Status in Rural Upper Egypt

4-2-1 population distribution

Although the Government of Egypt continues to make efforts to enhance and boost development in upper Egypt, as each governorate in upper Egypt now have at least one new city, these governorates still wrestle with inequitable geographic distribution of population. According to the statistics drawn in 2008, the overall area of Upper Egypt is 175,367 square meters. Nevertheless, the majority of the population is densely concentrated in 7.4% of this area. The population rates in the densely populated areas mount up to 2,135 people per km^2, compared to 941 people per km^2 for the country as a whole. Worth noting is that Giza is ranked the highest in terms of the densely populated areas in Upper Egypt, with 5,393 people per km^2, followed by

Figure (4-1) Natural growth rates of population in upper Egypt governorates, 2007



Source: Statistical Yearbook, 2008, Central Agency for Public Mobilization and Statistics (CAPMAS).

Sohag and Assuit, with 2,401 and 2,237 people per Km^2, respectively.

The high natural growth rate in rural upper Egypt will impede the development in this region especially the improvement in and accessability of social services, education and health services.

Statistics indicate that the population growth rates are still high in most of the Upper Egypt governorates. The average growth rate of the population at the national level between 1996 and 2006 was 2.02%. Most of Upper Egypt governorates recorded higher rates. For example, the growth rate of the population in Giza, Luxor, and Fayoum reached 2.74%, 2.36%, and 2.33% respectively. Figure (4-1) reflects the increase in the natural growth rate in rural Upper Egypt, compared to urban Upper Egypt, at (24‰) and (14.7‰) respectively.

4-2-2 Population Socio-Economic Characteristics

The reproductive behavior of both men and women is influenced by their socio-economic characteristics and educational status. As illustrated in Table (4-1), and in general terms, rural households are larger than urban households. Household size varied from an average of 5.8 members in rural upper Egypt to 4.4 members in urban upper Egypt. The average household size in rural upper Egypt is slightly more than one member and a half compared to the average households size in urban upper Egypt, and more than one member if compared to rural lower Egypt (5.8 as opposed to 4.7 members).

Educational characteristics, among both males and females, are lower in rural upper Egypt than in urban upper Egypt and markedly lower than in rural lower Egypt. Illiteracy levels were markedly higher among ever married women in upper Egypt, especially those living in rural areas, than among other women. Table (4-1) shows that almost 60% of the women in the fertility age live in rural upper Egypt are illiterate. With regard to the other employment differentials presented in Table (4-1), less than 10% of the women, in the fertility age, living in rural upper Egypt, are employed. The remarkable decline in those characteristics, amongst others, led to a turndown in the human development index in upper Egypt, in general, if compared to other geographic regions in Egypt (0.708 in upper Egypt, compared to 0.734 in lower Egypt, and 0.731 for the country as a whole).

4-2-3 Fertility rates and determinants

Women in rural upper Egypt experienced the highest fertility rate, as compared to all other regions in Egypt. The total fertility rate (TRF) in rural upper Egypt is 0.5 births higher than the TFR in urban upper Egypt and in rural lower Egypt. Likewise, the average number of births ever born per woman is 5.5 children in rural upper Egypt, compared to 3.9 births in urban upper Egypt, and 4.2 births in rural lower Egypt. Looking at the variation in age-specific fertility rates by place of residence, rates are generally higher in rural upper Egypt.

Table (4-1) Socio-economic characteristics in urban and rural upper Egypt and rural lower Egypt

Indicator	Urban Upper Egypt	Rural Upper Egypt	Rural Lower Egypt
Average Household Size (2008)	4.4	5.8	4.7
Percentage of uneducated Males (>6 Years) (2008)	10.9	21.7	17.1
Percentage of uneducated Females (>6 Years) (2008)	20.0	42.9	30.6
Percentage of Households with Access to improved drinking Water (2008)	100.0	95.1	98.1
Percentage of Households with Refurbished Sanitation System (2008)	96.6	83.6	91.7
Percentage of Households Connected to a Public Electricity Network (2008)	99.8	98.5	99.8
Percentage of uneducated ever married women at the fertility age (2008)	21.0	54.4	34.2
Percentage of illiteracy among ever married women at the fertility age (2008)	23.3	57.5	38.4
Percentage of employed women at the fertility age (2008)	22.4	9.6	15.7
Human Development Index (2008)	0.708		0.734 Including Urban

Sources: 1- EDHS 2008 Report.
2- Egypt Human Development Report, 2010, Institute of National Planning.

Early marriage is one of the factors that raise the fertility levels in rural Upper Egypt as age at first marriage reaches 18 years in rural upper Egypt compared to 22 years in urban upper Egypt and 20 years in rural lower Egypt. This results in early childbearing.

Rural women in upper Egypt have an average of 3.6 births during her reproductive life, compared to an average of 3 births only for the country as a whole.

Data captured in Table (4-2) shows that early marriage is much more common in upper Egypt. This could be realized from the fertility rate among women in the age group (15 - 19) which reaches at the national level 50 births per 1000 women, as compared to 60 births among women per 1000 women in the same group in upper Egypt. This trend is even more pronounced in rural upper Egypt, at 68 births in rural upper Egypt compared to 41 births per 1000 women in urban upper Egypt.

Table (4-2) Fertility indicators in urban and rural upper Egypt and rural lower Egypt, 2008

Indicator	Urban Upper Egypt	Rural Upper Egypt	Rural Lower Egypt
Age-Specific Fertility Rates			
15-19	41	68	60
20-24	130	204	191
25-29	191	201	188
30-34	154	140	101
35-39	65	74	46
40-44	10	32	10
45-49	4	6	0
Total Fertility Rate (15–49)	3.0	3.6	3.0
Average Births per Woman	3.9	5.5	4.2
Birth Spacing by Month	37.8	34.1	38.7
Median Age at First Birth	23.6	20.6	21.8
Median Age at First Marriage	21.7	18.3	20.0

Source: EDHS 2008 Report

In addition, Table 4-2 shows that women in rural upper Egypt have the highest fertility rate, in general. This can be observed through the total fertility rates. Rural women in upper Egypt have an average of 3.6 births during her reproductive life, compared to an average of 3 births only for the country as a whole.

- Current Use of Contraceptives

Contraceptive use is one of the main determinants of fertility. Table (4-3) shows that contraceptive use in rural upper Egypt is the lowest. Slightly more than half the women in rural upper Egypt do not use any contraceptives. At the same time, rates of contraceptive use reached 60% in the rest of the regions. The mix of family planning methods also differ in rural upper Egypt since women in rural upper Egypt, as compared to other areas in Egypt, are more likely to use pills and injectables, where the percentage of women using each accounted for 23.5%. The IUD ranked the second at 42%, as compared to 58% in urban upper Egypt and 64% in rural lower Egypt. Data also indicate that there is a chance to increase contraceptives use in rural upper Egypt as the total unmet need for contraceptives reaches 15.4%.

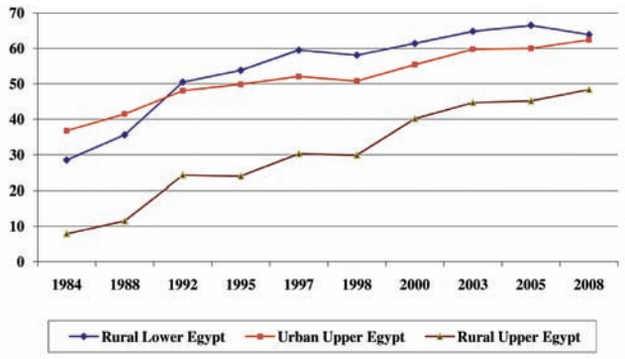
Table (4-3) CPR and method mix and percentage of unmet needs in urban and rural upper Egypt and rural lower Egypt, 2008

Indicator	Urban Upper Egypt	Rural Upper Egypt	Rural Lower Egypt
CPR			
Any Method	62.4	48.4	63.9
Any Modern Method	58.4	44.7	62.0
Method Mix			
Pills	22.6	23.5	17.2
IUD	58.2	42.1	64.3
Injectables	8.8	23.5	12.1
Other Methods	4.2	3.2	3.4
Traditional Methods	6.4	7.7	3.1
Percentage of Unmet Needs			
For Birth Spacing	2.9	5.9	2.7
For Birth Control	5.1	9.5	5.0

Source: EDHS 2008 Report

Figure 4-2 shows the trends of CPR in urban and rural upper Egypt and rural lower Egypt. The gap in CPR continue to exist between rural Upper Egypt and rural Lower Egypt, ever since 1984, although less prominent currently. Although the average of annual growth in CPR rose to 1.6% in rural Upper Egypt, compared to 1.4% in rural Lower Egypt, CPR exceeded 50% since 1992 (since 18 years) in rural lower Egypt, while it did not reach the same level in lower upper Egypt.

Figure (4-2) Trends of CPR in urban and rural upper Egypt and rural lower Egypt



Source: EDHS 2008 Report

4-2-4 Maternal Health

Table (4-4) indicates that mothers who live in urban upper Egypt and rural lower Egypt receive regular antenatal care, and see medical providers for antenatal care during pregnancy more than rural women in upper Egypt. Nearly half the pregnant women in rural Upper Egypt do not receive regular antennal care (four times or more). Likewise, almost half the deliveries did not take place in a health facility. In almost 40% of births, women were not assisted at the delivery by a medical provider or trained medical personnel (doctors or trained midwives). Nevertheless, the gap in terms of postnatal care was less pronounced among the three regions.

Table (4-4) Percentage of access to antenatal health care, safe delivery, and postnatal health care in urban and rural upper Egypt and rural lower Egypt, 2008

Indicator	Urban Upper Egypt	Rural Upper Egypt	Rural Lower Egypt
Access to Antenatal Care			
Antenatal Healthcare	81.8	59.9	72.8
Regular Antenatal Care Services (4 Visits, or more)	75.4	49.2	64.2
Safe Delivery			
Any Assistance at Delivery	78.5	49.7	75.5
Deliveries Assisted by a Medical Provider, Nurse or Trained Midwife	85.6	59.2	83.4
Postnatal Care			
Any Postnatal Care	85.9	72.1	80.5
Postnatal Checkups within Two Days of the Delivery	82.9	69.0	79.1

Source: EDHS 2008 Report

4-2-5 Child Health

The socio-economic conditions of the households and mothers influence the reproductive behaviour of the mother, as well as the child health.

By residence, the percentage of full coverage of immunization varied. Children in rural upper Egypt are less likely to receive immunization, compared to children living in rural lower Egypt and urban upper Egypt. Looking at residential differentials, diarrheal episodes were more common among children living in upper Egypt than in rural lower Egypt.

On the contrary, according to weight and height indices stunting levels increased in rural lower Egypt. Around one third of the children in rural lower Egypt, compared to one quarter of the children in rural upper Egypt are stunted.

Child Mortality (less than 5 years) is more common in rural upper Egypt than in urban upper Egypt and rural lower Egypt. In every 1000 births in rural upper Egypt, 20 deaths occurs during the first month, 19 deaths occurs between the completion of the first month and the completion of the first year, and 7 deaths occurs between age 1 and 4 years. Thus, under five child mortality rate reaches 46 per 1000 births in rural upper Egypt compared to 28 in rural lower Egypt and 34 in urban upper Egypt.

4-3 Population Status in the Poorest 1000 Villages

Reports released from the Ministry of Economic Development and the World Bank indicate that about one fifth of the Egyptians live under the line of poverty.

Thus, the government of Egypt adopted a geographical targeting program to reduce poverty in Egypt. The methodology of developing Egypt's poverty map adopt statistical methods that use surveys data and census data to get the advantages of surveys detailed data on household economic level and the high coverage of census data. This methodology uses a consumption indicator to provide estimates of poverty level at villages level according to the census adminestrative boundries.

In the context of its efforts in the area of poverty reduction, the Government of Egypt (GOE) has declared its intention to target the poorest 1000 villages (out of an overall total of around 5000 villages). The methodology of the poverty map was applied to the data of the 2006 Census in Egypt together with the data of the National Income, Expenditure and Consumption Survey of 2005. The villages were ranked according to the estimated poverty level and the poorest 1000 villages (out of an overall total of around 5000 villages) were sellected to be targeted by poverty redution programs.

There is a chance to inerease the CPR in rural upper Egypt since the unmet needs reach 15.4%

Table(4-5)Percentage of access to immunization, prevalence of diarrheal episodes during the two weeks prior to the survey, precentage of stunting, wasteing, and underweight, and child mortality rates in urban and rural upper Egypt and rural lower Egypt, 2008

Indicator	Urban Upper Egypt	Rural Upper Egypt	Rural Lower Egypt
Percentage of Children Received Immunization	90.9	87.5	93.1
Incidence of Diarrheal Episodes	12.6	10.5	6.0
%of under five children with:			
Height-for-Age Below (-3 StD) (severely stunted)	8.8	9.7	18.2
Height-for-Age Below (-2 StD) (stunted)	22.7	26.9	32.7
Weight-for-Height Below (-3 StD) (severely wasted)	2.8	2.7	3.4
Weight-for-Height Below (-2 StD) (wasted)	8.0	6.3	6.9
Weight-for-Height Below (-3 StD) (Severely underweight)	1.4	1.1	1.2
Weight-for-Height Below (-2 StD) (underweight)	7.1	6.5	5.6
Child Mortality (per 1000 births)			
Neonatal Mortality (during the first month)	19.6	20.0	15.0
Postnatal Mortality (between the first month and until the completion of the first year)	10.4	18.6	8.4
Infant Mortality	30.0	38.6	23.4
Child Mortality from 1 to less than fifth year of age	4.5	7.4	4.4
Under –Five Mortality	34.4	45.7	27.6

Source: EDHS 2008 Report

4-3-1 Characteristics of Poor Villages

• The total population of the Poorest 1000 Villages is 10.7 million people.

• The average household size is 4.8 members. This average rises to 5.9 and 5.6 members in Menia and Quena, respectively, and decreases to 3.6 members in Aswan.

• The poorest 1000 villages include 4.9 million of people live in more than one million poor household. Poor people in those villages represent about 46% of the citizens who live in those villages.

• Assyout, Menia, and Souhag include about 82% of the poor people who live in the poorest 1000 villages.

• The average illiteracy rate in these villages is about 33% while the percentage of people with university degree reaches 2.2%.

• The average rate of unemployment reaches 6.3%. This rate rises to 12% in the villages of Aswan, compared to 2% or less in the villages of Giza, Beni-Suef, Sharkia, and Quena.

• About 50% of the population living in those villages are not in labour force.

• Almost 85% of the housing units are connected to water public network, and only 6% are connected to sanitation public network.

Table (4-6) Distribution of the poorest 1000 villages, number of households, number of poor households, population size and number of poor people by governorate

Governorate	Number of poor villages	Total number of households	Number of poor households	Population size of poor villages	Number of poor people
Sharkia	55	131022	49182	606968	227576
Behera	4	2786	996	16406	5839
Giza	18	28377	10357	133601	48811
Beni-Suef	13	15542	5584	86807	31162
Menia	310	654148	272083	3049039	1270324
Assyout	234	527027	298569	2530302	1436795
Souhag	250	593151	274017	2733101	1268608
Quena	112	305470	119167	1497021	587743
Aswan	4	1803	656	6518	2391
Total	1000	2259326	1030611	10659763	4879249

Source: Geographical targeting program for poverty eradication, the poorest 1000 village in Egypt, ministry of economic development.

4-3-2 Methodology of Calculating fertility rates and determinants

To study the pattern of fertility in the poorest villages, a methodology that uses GIS in estimating the indicators of family planning, number of children ever born to women and age at first marriage was used.

This methodology was used in previous studies using DHS data of Egypt and other countries (way et al, 2003).

In this section, the methodology is briefly presented. The GIS appendix presents the estimates on the demographic and health indicators. The analysis of the results is presented also.

The values of the indicators were estimated assuming that the close geographic areas are homogeneous in their demographic characteristics. For each of the 1000 poorest villages, 2008 DHS data of the close[1] segments (in a distance of 30 km)[2] were used to estimate the indicators of the village[3]. All of the urban segments were excluded and only the rural segments were included in the estimates. A weight was assigned to each segment included in the estimates in order to give the close segments higher relative importance[4]. The weight equals (1/ the distance between the center of the segment and the center of the village).

CAPMAS digital maps were used to determine the distance between the villages and the DHS segments (the estimates were not calculated for 10 villages as their digital maps were not available).

Arch view was used to calculate the distances and to develop the GIS maps.

1 A segment, in the Demographic and Health Survey (DHS), represents a geographic region that was randomly selected from a village or shiakha (see sample design of DHS).

2 30 km was used because it is the minimum distance that allows each one of the poor villages to have at least two DHS clusters associated with it.

3 DHS data are available to download from the following website:
http://www.measuredhs.com/accesssurveys/search/start.cfm

4 This is in addition to the DHS sampling weights.

* The project is grateful to Dr. Mohamed Abouelela, for his help in designing and implementing the methodology of this part, and Mr. Peter Nagy for his help in providing villages' coordinates and creating GIS maps.

Each indicator values were classified into 3 levels (Low, Medium, High), such that each level has the same number of villages, using cut off points. The levels are presented in the GIS maps.

To make the comparison easier, the same definitions of the DHS were used to calculate the indicators in this study. For example, median age at first marriage was calculated for ever married women (25-49 years), and the average number of children ever born was calculated for ever married women (40-49 years).

This methodology is still an experimental one and needs a lot of studies, check and discovering the standard errors using the relations between these estimates and the DHS variables.

Based on the methodology presented hereinabove, the following indicators were estimated for each of the poorest 1000 villages:

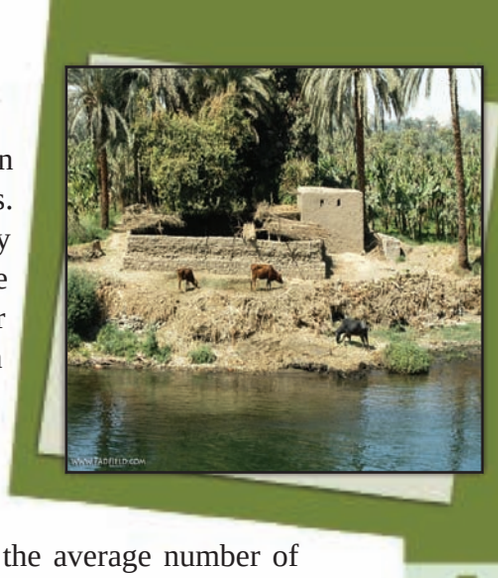
1- Average live births per woman,
2- Median age at first marriage,
3- Contraceptives prevalence rate (any method),
4- Contraceptives prevalence rate (any modern method),
5- Percentage of unmet need for spacing,
6- Percentage of unmet need for limiting,
7- Total percentage of unmet need,
8- Percentage of access to antenatal care,
9- Percentage of access to regular antenatal care,
10- Percentage of deliveries assisted by a doctor,
11- Percentage of access to postnatal care,
12- Percentage of access to postnatal care within two days of the delivery.

The weighted average (using the populations sizes as weights) of these indicators were calculated at governorate level and for the total poorest 1000 villages.

The following section provides an analysis of these indicators, which are structured in three sub-sections. The first sub-section includes the fertility-related indicators (Indicators 1 and 2). The second sub-section includes indicators related to the use of family planning methods and unmet needs (Indicators 3 to 7), and the third sub-section encompasses indicators related to maternal health (Indicators 8 to 12).

4-3-3 Fertility Rates in the Poorest Villages

Table (4-7) provides information about the average number of live births per woman, which reached 5.6 births in the poorest villages. This level is slightly higher than the level in rural Upper Egypt, and much higher than rural Lower Egypt with about child. Data captured in Table (4-7) indicates that the average number of live births per woman reaches 6.4 in Beni-Suef, 5.5 in Menia, and decreases to is 4.5, and 4.8 births in Behera, and Sharkia, respectively.



The median age at first marriage is a key determinant for fertility rates. The indicators reveal that the median age at first marriage in the poorest villages is 18.7 years, ranging from 17.8 years in Menia to 20.5 years in Behera.

Table (4-7) Average number of live births per woman and median age at first marriage in the poorest 1000 villages by governorate

Governorate	Average number of live births	Median age at first marriage
Sharkia	4.8	19.4
Behera	4.5	20.5
Giza	4.9	17.9
Beni -Suef	6.4	18.2
Menia	5.5	17.8
Assyout	6.0	19.2
Souhag	5.6	19.3
Quena	5.5	18.7
Aswan	5.8	19.0
Total	5.6	18.8

- Current Use of Contraceptives and Unmet Needs

Table (4-8) presents estimates about the current use of contraceptives in the poorest villages. These results reveal the decline in the current use of any method, at an average of 44%, decreases to 40% in the case of using modern methods. The current use of contraceptives is even lower in the poor villages of Souhag, at 35% (use of any method), and 31% (use of modern methods). These levels are relatively higher in Behera and Sharkia.

In addition, about 19% of the women living in the poorest villages have unmet need for contraceptives. Thus, satisfying the unmet need in poor villages could increase their CPR to reach the national level. The percentage of unmet need is 25% in the poor villages of Souhag, compared to 18% in Assyout and Quena. The percentage of unmet needs for family planning methods for birth limiting accounts for a larger proportion of unmet needs (12%), while birth spacing acconnts for a lower percentage of unmet needs (7% only). This data underscores the need to focus on increasing and improving access to family planning services, as a part of the poverty reduction program.

Table (4-8) CPR and percentage of unmet needs in the poorest 1000 villages by governorate

Governorate	CPR (any method)	MCPR (modern methods)	Unmet needs for spacing	Unmet needs for limiting	Total unmet needs
Sharkia	63.3	60.1	2.4	5.2	7.6
Behera	66.0	64.4	3.1	3.8	6.9
Giza	51.0	44.6	2.6	7.7	10.3
Beni -Suef	56.9	50.0	6.4	7.9	14.3
Menia	50.6	47.3	4.7	10.6	15.3
Assyout	40.9	37.6	7.1	10.8	18.0
Souhag	34.8	30.8	10.0	15.5	25.5
Quena	43.2	39.5	6.5	11.2	17.7
Aswan	48.0	46.6	5.4	3.2	8.6
Total	44.0	40.4	6.8	11.6	18.3

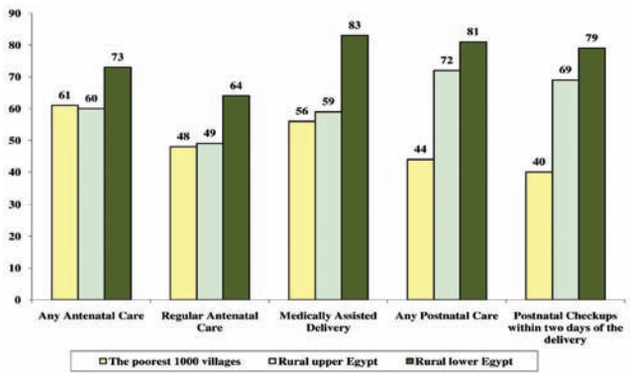
4-3-4 Maternal Health

Table (4-9) sheds light on key factors associated with the status of maternal health in the poorest villages. According to the estimates, about 61% of the women receive any antenatal care, 48% of women receive regular antenatal care. These rates are quite comparable to those identified in rural upper Egypt. However, with the exception of the poor villages in Behera and Sharkia, access to any antenatal care reaches 57%, regular antenatal care, reaches to 45%, which are at a lower level than those identified in rural upper Egypt. Access to regular antenatal care is lower than 50% in the poor villages of Giza, Menia, Beni-Suef, and Souhag.

Table (4-9) Percentage of births whose mothers got antenatal care, medically assisted deliveries, and postnatal care in the poorest 1000 villages by governorate

Governorate	Any antenatal care (%)	Regular antenatal care (%)	Medically assisted delivery (%)	Any postnatal care (%)	Postnatal checkups within two days of the delivery (%)
Sharkia	60.0	54.5	76.0	58.8	58.3
Behera	66.4	60.5	79.6	58.2	50.4
Giza	48.2	42.7	64.0	46.0	45.7
Beni -Suef	55.7	37.0	55.5	40.7	33.8
Menia	57.8	44.0	56.0	40.7	36.8
Assyout	68.7	54.4	48.0	42.1	38.4
Souhag	58.9	45.9	51.3	40.9	36.6
Quena	59.3	50.7	71.9	53.3	50.9
Aswan	69.5	58.0	86.2	73.7	71.2
Total	60.9	48.4	56.3	44.0	40.4

Figure (4-3) Percentage of births whose mothers got antenatal care, medically assisted delivery, and postnatal care in the poorest 1000 villages, in rural upper Egypt, and in rural lower Egypt



As pertains to safe delivery, data reveals that 56% of the total deliveries occur with assistance from a doctor, a nurse, or a trained midwife. This percentage rangs between 48% and 86% in Assyout and Aswan, respectively. This percentage decreases when we take into consideration the poor villages of upper Egypt only, at 51%. In Addition, table (4-8) demonstrates that only 44% of the women receive postnatal care, and 40% of the women receive postnatal checkups within two days of the delivery. In general, the indicators of maternal health, including access to safe motherhood, in the poorest villages are the lowest compared to rural lower Egypt and rural upper Egypt.

Modern contraceptive prevalence rate reaches 40% only in the poorest 1000 villages.

4-4 Population Status in Slum Areas

The issue of slums represents a critical subject in Egypt, and the entire world. This is because of the fact that it involves certain social and security implications. Egypt's slums (called ashwaia't in Arabic) are everywhere in both urban and rural areas.

Despit that "Slum areas" have different definitions, they are similar in a main characteristic, that they all were developed far from legislations. These areas suffer from high population density.

The housing forms in slum areas include random housing, shanties, kiosks, metaphoric housing, graveyards, boats, refuse collectors housing.

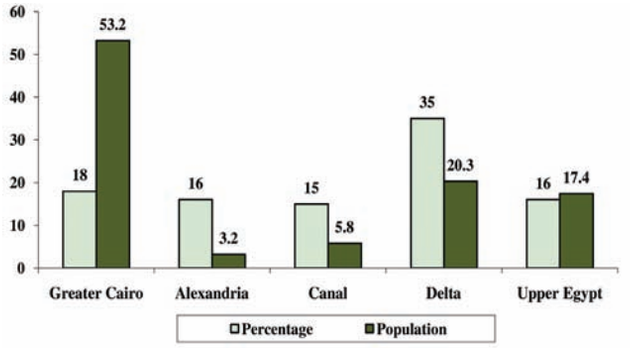
The growth of slum areas is due to many reasons include:

- The population growth rate is higher than housing units growth rate,
- The increase in the percentage of population in the age group (15-45) and the lack of proper work opportunities. This force young people to move to the governorates that have better work opportunities and to live in the slum areas in those governorates,
- The high coasts of housing, especially for youths, which makes them seek cheaper housing in slum areas,
- The high population density in the industrial areas, resulting in the growth of random housing in these areas,
- The high land prices and the low rates of rents caused the abstention of owners from building new units. The state also did not take its role regarding this issue,
- The low rate of income and the high rate of unemployment,
- The absence of the localities role.

4-4-1 Distribution of Slum Areas Nationwide

According to the Ministry of Local Development (2007), as many as 870 squatter and informal settlements existed in Egypt. Figure (4-4) presents the distribution of such informal settlements by region. About 18% of such areas are located in Greater Cairo, 35% in the Delta governorates (308 areas), 16% are located in Alexandria; 15% in Canal Governorates; and, 16% in upper Egypt Governorates. Although the majority of those informal settlements are located in the Delta Governorates (i.e. Damietta, Dakahlia, Kafr El-Sheikh, Gharbia, and Manoufia), the distribution of the population who live in those regions, mounting up to 12.2 million people at the national level, follows a different trend. More than half the population of slum areas (i.e. 6.5 million people) live in Greater Cairo, as opposed to one fifth only (2.5 million people) live in Delta and 2.1 million live in upper Egypt. The remaining proportion of population is distributed between the two regions of Canal Cities and Alexandria. Worth noting is that the inhabitants of informal settlements/ squatter areas account for about 17% of Egypt's population, and 40% of the urban population.

Figure (4-4) Percent distribution of the slum areas and their population by region



Source: Distribution of slum areas 2007, ministry of local development.

A handful of research studies were carried out to identify and determine the fertility patterns and key factors detrimental to fertility rates in slum areas. The following section will focus on the results of three key research activities. The first was carried out by Zanaty et al, in 2003, as a part of the EDHS 2003. The second research intervention was carried out by the Statistics Department at the Faculty of Economics and Political Science, Cairo University, 2004, on a sample of 1,500 respondent households living in slum areas. The third research was carried out by the Social Research Center, the American University of Cairo, 2008, targeting a sample of 4,500 households living in Cairo, the majority of which dwell in slum areas in Cairo.

4-4-2 Socio-Economic Characteristics of Women in the Fertility Age

Research records a decline in the indicators associated with the level of education and employment among women at the fertility age, who live in slum areas. Table (4-10) indicate that almost one third of the women who live slum areas in urban governorates, more than one fifth of the women who live in lower Egypt, and slightly less than half the women who live in slum areas in upper Egypt did not have any schooling. Moreover, about 80% of those women are not employed. It is evident that education and employment are among the most significant factors that influence the reproductive behavior of women.

Table (4-10) Percent distribution of eligible women in slum areas by educational level, employment status, and place of residence

Main characteristics	Urban Governorates	Lower Egypt	Upper Egypt	Total
Educational Status				
No education	32.2	22.8	44.1	30.2
Some primary	15.8	10.2	12.3	12.9
Primary/Preparatory	17.3	11.6	15.5	14.7
Secodary/ upper intermediate	28.4	35.1	24.1	30.5
University or higher	6.3	20.3	4.0	11.7
Employment Status				
Currently Employed	10.6	26.2	14.5	17.7
Used to Work	1.5	2.5	1.4	1.9
Does not Work	87.9	71.3	84.1	80.4
Total Numbers	588	567	220	1375

Source: Statistics Department, Faculty of Economics and Political Sciences, Cairo University: Research Study on the Needs of slum areas for Reproductive Health Information and Services (2004).

4-4-3 Fertility Rate and Determinants

Several research studies indicate that there are variations in the fertility trend in the slum areas versus the formal settlements. Table (4-11) indicate that the total fertility rate of women in the age group from 15 to 49 years in slum areas of Greater Cairo is about 3.1 children per woman, compared to 2.3 children per woman in other urban areas in Cairo. In addition, age-specific fertility rates are higher across all age groups.

The median age at first marriage reached 20.6 years; i.e. one year less than comparable rates in Greater Cairo. This has a reflection on the median age at the first birth, which reached 22.3 years in slums, compared to 23.5 years in urban greater Cairo.

Studies shed light on the trends of birth intervals. The median birth interval in the slum areas is two months lower than that recorded in urban areas of Greater Cairo (38 months versus 40 months). The average ideal number of children reaches 2.8 children in slum areas compared to 2.6 in urban greater cairo.

Table (4-11) Total and age-specific fertility rates and fertility determinants in slum areas of greater cairo and urban greater cairo, 2003

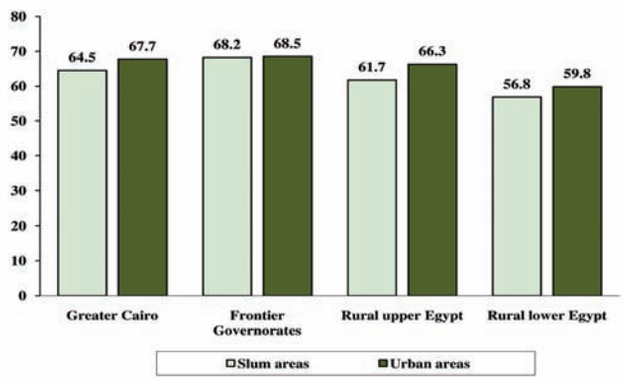
Indicator	Slum areas	Urban areas in greater cairo
Age-Specific Fertility Rates		
15-19	39	27
20-24	155	118
25-29	194	155
30-34	144	122
35-39	76	37
40-44	17	9
45-49	2	0
Total Fertility Rate (15-49)	3.1	2.3
Median Age at First Marriage	20.6	21.5
Median Age at First Birth	22.3	23.5
Median Birth Interval	38.2	40
Ideal Number of Children	2.8	2.6

Source: Zanaty F Way, Slum Areas in Greater Cairo, 2004

4-4-4 Current Use of Contraceptives

Although slum areas suffers from bad living conditions, data reveals that the percentage of women currently use family planning methods in slum areas does not vary largely from the percentage in urban areas of greater cairo. This percetage in urban areas reached 65.5%, compared to 63.8% in slum areas. The high level of CPR in slum areas may be explained by the service availability in the surrounding urban areas. However, this high level of CPR is accompanied with a higher level of TFR than that of urban areas in greater Cairo may be due to the pattern of use and contraceptive discontinuation. In addition, there are no major variations in terms of the most commonly used family planning methods. Two thirds of the users use the IUD, and 17%, use pills. Figure (4-5) demonstrates the CPR and table (4-12) provides information about the mix of family planning methods used by women, who live in slum areas in different regions.

Figure (4-5) Contraceptive prevalence rate by region

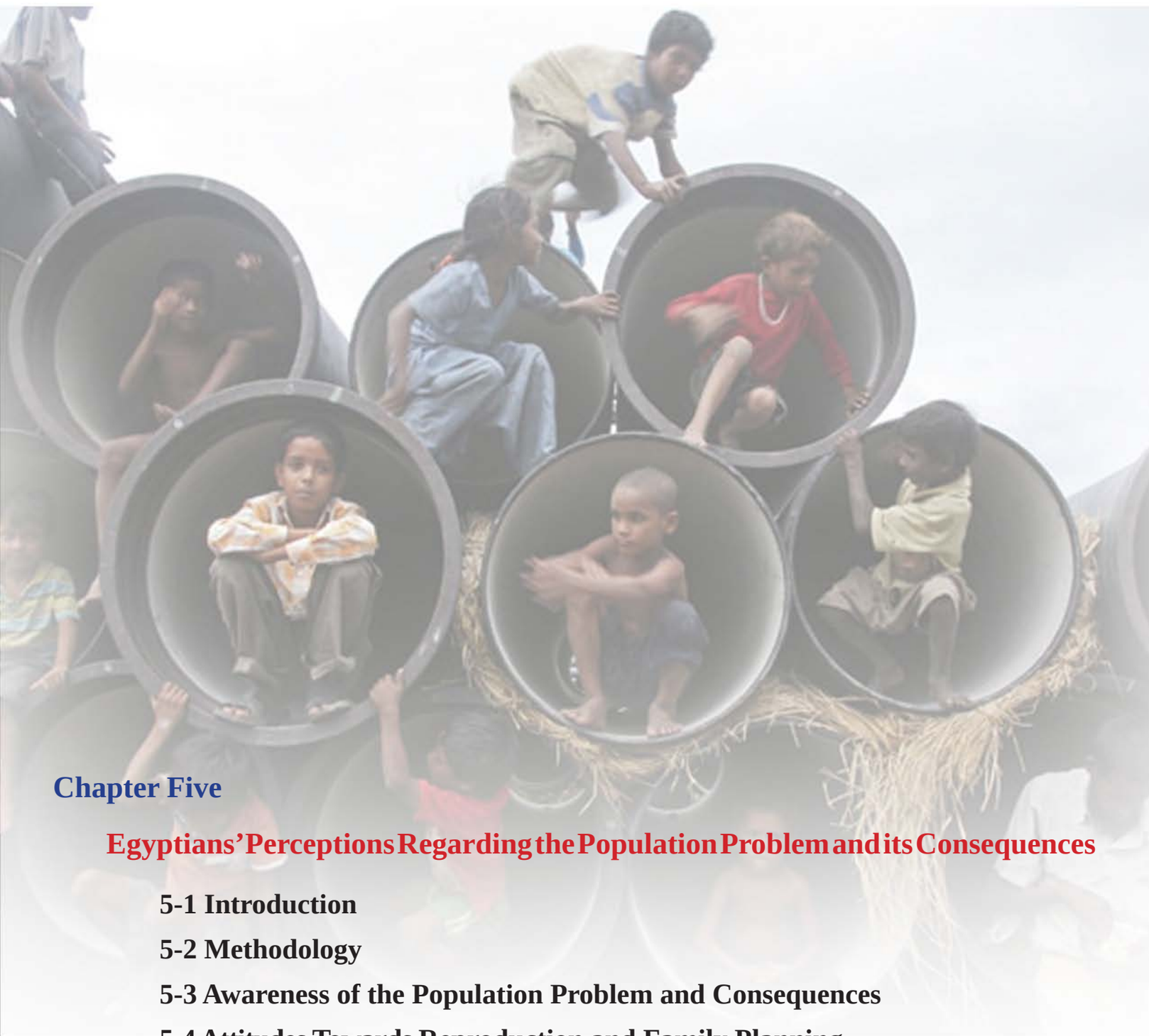


Source: Research Study on the Needs of slum areas for Reproductive Health Information and Services, 2004, Statistics Department, Faculty of Economics and Political Sciences, Cairo University.

Table (4-12) Distribution of contraceptives users in slum areas by method

Region	Pills	IUD	Injectables	Others	Total
Urban Governorates	12.2	71.6	8.2	8.0	100.0
Lower Egypt	21.7	64.9	5.7	7.7	100.0
Upper Egypt	17.6	65.6	12.0	4.8	100.0
Total	16.8	68.0	7.8	7.4	100.0

Source: Research Study on the Needs of slum areas for Reproductive Health Information and Services, 2004, Statistics Department, Faculty of Economics and Political Sciences, Cairo University.



Chapter Five

Egyptians' Perceptions Regarding the Population Problem and its Consequences

5-1 Introduction

Findings of Demographic and health surveys and studies show stalled fertility in Egypt in recent years at 3 children per woman, which necessitates the adoption of new policies to overcome this situation and further decrease fertility rates. Society culture, perceptions and awareness constitutes a fundamental step towards achieving that goal. In this context, this chapter reviews a study of Egyptians' perceptions regarding the population problem and its impacts on development and meeting citizens' basic needs. It aims at exploring the knowledge levels and attitudes as well as locating gaps in order to help decision makers in developing policies and designing educational and guiding plans that affect society culture.

Previous studies -though rare- show increase in the general knowledge of population issues and decreased thorough knowledge of specific issues. A study conducted by the National Council for Human Rights (NCHR) in 2009, for instance, on assessing people's awareness of reproductive rights (NCHR, 2009 "Arabic"), indicated a clear lack of awareness of reproductive rights at all age brackets in both sexes. A positive correlation was also clear between the knowledge of reproductive rights givens and issues on one hand, and the educational variable specifically on the other; the higher individuals' education, the higher awareness of reproductive rights.

Despite limited knowledge of reproductive rights among study individuals, the study showed that the most recognized reproductive right is "the right to reproduce and to plan the number of children desired", with a knowledge percentage of 16.8% among the study population, followed by "the right to access affordable proper contraceptives" with a percentage of 13.6%. The "mother's right to receive adequate pregnancy, delivery, postpartum, and neonatal healthcare" ranked third with a knowledge percentage of 8.6%. Fourth, came the "right to receive premarital care services (premarital check-up)" with a percentage of 5.5%. Fifth, came the "the right to freely determine the spacing between births according to every family's conditions without any obligation" with a percentage of 3.7%. The study, on the other hand, showed that the least or known rights -as viewed by the sample- were "the right to a confidential and private doctor-patient relationship", "the right to access infertility treatment health services", "the right not to be subjected to harmful practices to women and girls, such as female genital mutilation (FGM)", in addition to "the right to access protection and treatment services for sexually transmitted diseases (STDs)". The study recommended the necessity of intensifying awareness campaigns in order to raise citizens' awareness of their reproductive rights as an integral part of their knowledge of their health rights provided for by both constitution and national legislations.

Another study was conducted to observe reproduction-related cultural components (Morcos and Others, 2006 "Arabic") of a group of newlyweds and pre-weds, attempting to explore the system of values and perceptions contributing to molding youths' ideologies and awareness of reproduction issues, as well as the determinants and active factors of such ideologies. The study was conducted on a sample of 1500 individuals drawn from youths aging 18 to 35 and distributed over Cairo, Giza, and Qaliubeya governorates. The study findings confirmed the manifestation of positive signs related to reproductive health, including, but not limited to, support for premarital check-ups, rejection of early marriage because of its psycho-social health impacts on women and on the whole family, considering the optimum marriage age to be 20 for women and 25 for men. Furthermore, the study did not indicate any gender preference for males over females, which positively indicates a concept of gender equality and non-discrimination. As for fertility preferences, the sample showed a clear tendency towards satisfaction with two or three children at most, given the economic pressures encountered by Egyptian families. On the other hand, the findings indicated that more than half of the sample has a prevailing misconception of the family planning; most individuals also refused using male contraceptives, considering it a social stigma.

The findings also indicated severe cognitive deficiency concerning the advantages and disadvantages of contraceptives, and recommended more awareness and guidance plans in this respect in order to correct prevailing misconceptions. The study also indicated strong public awareness of the Egyptian population problem. The sample believed birth rate increase, weak social awareness, poverty, and illiteracy were the main factors behind the population problem.

Another recent study (Halim et al., 2008) on the cultural determinants for overpopulation was conducted on youths aging from 18 to 35 in Ismailia, Sharkia, Beni-Suef, and Sohag. It aimed at observing the youths' general knowledge about small families and family planning, detecting active factors in taking the decision to have children and the system of values and perceptions related to reproduction, identifying different sources of youth's knowledge of family planning, and introduction to their future visions regarding overpopulation.

The study findings have positively indicated assuring youth tendencies including, most importantly, rejection of early marriage, supporting and adopting the concept of a small family, gender equality, and a relative support to premarital check-ups. The study also showed a small percentage of those who were not aware of contraceptives, rejecting having children, or continuing to have children till the birth of a male child. The findings showed individuals' awareness of the existence of a population problem in Egypt.

5-2 Methodology

This chapter is based on two phone opinion polls conducted by the Public Opinion Poll Center of the Egyptian Cabinet Information and Decision Support Center (IDSC). The first poll covered a sample consisting of married household (HH) heads or their wives/ husbands, while the second covered a sample of unmarried youth aging from 18 to 35. It was carefully considered while designing the sample that it should cover all rural and urban areas, urban governorates, Lower Egypt, Upper Egypt, and frontier governorates (Table 5-1).

Table (5-1) Sample design

Region	Married HH heads		Unmarried youths (18- 35)	
	Male	Female	Male	Female
Urban Governorates	250	250	100	100
Urban Lower Egypt	125	125	75	75
Rural Lower Egypt	125	125	75	75
Urban Upper Egypt	125	125	75	75
Rural Upper Egypt	125	125	75	75
Frontier Governorates	125	125	75	75
Egypt	875	875	475	475

The samples consisted of 1750 married HH heads, and 950 unmarried youths. Since the samples were evenly distributed over various areas, weights were used during analysis in order to reflect the size proportion of every area. It was also taken into consideration that weights must reflect education proportions of the sample, because the phone polls are mostly biased to the more educated groups. Data were collected throughout June and July 2010.

In order to collect required samples, 2144 phone numbers were randomly drawn, out of which 1830 married men and women were reached. As for the sample of youths, 857 phone numbers were randomly drawn, out of which 706 young men and women were reached. Table (5-2) shows the achieved sample distribution.

Table (5-2) The actual distribution of the sample (unweighted)

Region	Married HH heads		Unmarried youths (18- 35)	
	Male	Female	Male	Female
Urban Governorates	246	404	123	124
Urban Lower Egypt	78	134	64	47
Rural Lower Egypt	131	139	67	66
Urban Upper Egypt	79	117	21	30
Rural Upper Egypt	80	116	33	35
Frontier Governorates	130	176	39	57
Egypt	744	1086	347	359

Married HH heads' opinion questionnaire included the following issues:

First: knowledge that Egypt has a population problem, and sources of this knowledge.

Second: Feeling the existence or absence of economic development, and reasons for that feeling.

Third: Recognition of Egypt's water problem, and agricultural production insufficiency.

Fourth: Attitude towards local and foreign migration as a potential solution for the population problem.

Fifth: Fertility prefrences and attitude twards reproduction issues (ideal number of children and age for marriage and reproduction…etc.).

Sixth: Attitude towards family planning.

Seventh: Use of family planning.

Eighth: Attitudes towards positive and negative incentives for decreasing reproduction; in addition to some respondent's background characteristics such as age, education, work, and HH possessions.

The youths' poll included the same issues except non-applicable ones, such as practice of family planning. Following are the most significant findings of the polls.

5-3 Awareness of the Population Problem and Consequences

This section addresses the level of awareness of the population problem, its impact on economic development and water security, and sources of this awareness.

Table (5-3) shows that the vast majority of both samples (married and unmarried youths) were aware that Egypt has an overpopulation problem, as indicated by more than 80% of the samples. This rate was higher among females (married and unmarried) than males. The study also showed that the percentage was higher among married persons in urban areas than those in rural areas. Other geographical differences were noted among youths; as the knowledge level among youths reaches its peak in urban governorates and rural lower Egypt (90%), and its bottom in urban lower Egypt (78%).

Table (5-3) Percentage of married HH heads and unmarried youths who indicated that Egypt has overpopulation problem, 2010

Main characteristics	Married HH heads		Unmarried youths (18- 35)	
	Yes (%)	Total number	Yes (%)	Total number
Sex				
Male	82.7	767	84.3	432
Female	89.8	1064	85.1	275
Urban / Rural Residence				
Urban	89.5	736	83.5	334
Rural	85.0	1095	85.8	372
Place of Residence				
Urban Governorates	89.6	404	90.4	166
Lower Egypt*	86.9	762	84.5	233
Urban Lower Egypt	89.0	154	77.5	102
Rural Lower Egypt	86.2	609	90.0	130
Upper Egypt*	88.9	396	82.0	217
Urban Upper Egypt	88.0	92	80.0	35
Rural Upper Egypt	89.1	304	82.9	181
Frontier Governorates	79.6	269	81.1	90
Egypt	86.8	1832	84.8	707

* The sum of urban and rural lower Egypt may differ from the number in lower Egypt raw due to approximation This may occur in the case of upper Egypt also.

Table (5-4) shows respondents' distribution according to the source of knowledge of Egypt's population problem. It showed that the first source of knowledge was the reality of life itself. More than 75% of married HH heads and their wives/ husbands, and 81% of unmarried young men and 63% of unmarried young women mentioned that the source of their knowledge of this problem is the reality of their lives. The expression "reality of life" reflects the overpopulation-related problems witnessed by the respondents during the normal course of their days such as crowed, services queues and high denisty in schools classes. It was also noted that the percentage of HH heads and youths mentioning "reality of life" is higher in urban areas than rural areas. The second source

Table (5-4) Percentage of married HH heads and unmarried youths by the source of knowledge of Egypt's overpopulation problem, 2010

Main characteristics	Married HH heads				Unmarried youths (18- 35)			
	TV (%)	News-papers (%)	Reality of life (%)	Total number	TV (%)	News-papers (%)	Reality of life (%)	Total number
Sex								
Male	30.1	16.4	76.1	635	28.3	9.3	81.0	363
Female	32.6	8.7	76.5	956	41.5	4.7	63.2	234
Urban / Rural Residence								
Urban	29.4	12.7	84.8	659	27.2	6.5	84.9	279
Rural	33.2	11.0	70.4	931	38.6	8.8	64.3	319
Place of Residence								
Urban Governorates	25.1	11.3	89.5	362	21.2	4.6	93.3	150
Lower Egypt	27.5	11.8	74.4	661	31.1	12.7	76.6	197
Urban Lower Egypt	30.1	13.1	80.3	137	27.8	6.3	77.2	79
Rural Lower Egypt	26.9	11.4	72.8	525	33.3	17.1	76.9	117
Upper Egypt	37.8	9.4	68.8	352	43.6	3.4	54.5	178
Urban Upper Egypt	35.4	11.0	77.8	82	32.1	7.1	82.1	28
Rural Upper Egypt	38.4	8.9	66.4	271	46.0	2.7	49.3	150
Frontier Governorates	45.3	15.9	72.4	214	39.7	11.0	74.0	73
Egypt	31.6	11.7	76.4	1591	33.4	7.7	74.0	598

of knowledge was TV, with a percentage of up to one third of the respondents, with higher rates among females than males. It is worth mentioning that newspapers represented small percentage as a source of knowledge (approximately 12% of married HH heads and 8% of unmarried youths), is higher among males than females.

Regarding sensing efforts made in economic development, respondents were asked whether or not they could sense economic development in Egypt. The findings indicated a decline in sensing economic development, especially in urban areas. As shown in table (5-5), half of the married HH heads and unmarried youths mentioned that Egypt did have economic development. This percentage was higher among married males than married females, and vice versa among unmarried youths. It was also noted that 59% of HH heads in upper Egypt sensed economic development, and the percentage declined to 39% in urban governorates. As for youths, it was almost the same percentage in lower Egypt as in upper Egypt: 58% could sense economic development, and the percentage declined to 34% in urban governorates.

Table (5-5) Percentage of married HH heads and unmarried youths who sensed economic development in Egypt, 2010

Main characteristics	Married HH heads		Unmarried youths (18- 35)	
	Yes (%)	Total number	Yes (%)	Total number
Sex				
Male	59.5	767	48.1	432
Female	42.5	1064	55.4	276
Urban / Rural Residence				
Urban	46.5	736	40.3	335
Rural	51.6	1095	60.6	371
Place of Residence				
Urban Governorates	38.6	404	34.1	167
Lower Egypt	48.0	762	58.4	233
Urban Lower Egypt	45.1	153	56.3	103
Rural Lower Egypt	48.8	609	60.0	130
Upper Egypt	59.1	396	58.1	217
Urban Upper Egypt	64.1	92	38.9	36
Rural Upper Egypt	57.6	304	62.4	181
Frontier Governorates	56.5	269	45.6	90
Egypt	49.6	1831	51.1	707

It was also clearly indicated that youths in rural areas could sense economic development in higher percentages than in urban areas (61% against 40%). The difference between rural and urban areas diminished notably in case of married HH heads.

Respondents who believed that Egypt did not have economic development were asked about their reasons (table 5-6), and the most important reason mentioned by married HH heads was price increase. The percentage that mentioned this reason is higher among females than males. The second reason came as overpopulation, which is less important in Upper Egypt than in other areas, followed by unemployment; low wages, pensions, and salaries ranked third and fourth with marginal differences.

As for unmarried youths, it was noted that unemployment ranked as the first reason, with a percentage higher among females than among males, and in Upper Egypt and frontier governorates than urban governorates and lower Egypt. Price increase ranked second, with a female percentage as double as that of males, and urban percentage more than double of the rural one.

Table (5-6) Reasons behind believing that Egypt did not have economic development from the point of view of respondents' who belive that Egypt did not have economic development, 2010

Main characteristics	Married HH heads					Unmarried youths (18- 35)				
	Price increase (%)	Overpopulation (%)	Unemployment (%)	Low wages, pensions & salaries (%)	Total number	Price increase (%)	Overpopulation (%)	Unemployment (%)	Low wages, pensions & salaries (%)	Total number
Sex										
Male	39.6	24.5	10.4	22.7	278	22.0	20.0	33.3	19.5	210
Female	48.7	28.5	21.5	13.6	507	45.7	27.4	45.3	19.7	117
Urban / Rural Residence										
Urban	45.2	24.5	22.2	20.2	356	41.0	14.8	37.7	25.1	183
Rural	45.7	29.1	13.5	14.0	429	17.5	32.2	37.8	12.6	143
Place of Residence										
Urban Governorates	44.6	23.8	17.0	20.5	224	38.0	13.0	37.0	23.0	100
Lower Egypt	45.3	32.2	18.1	18.7	342	34.4	15.6	25.6	22.2	90
Urban Lower Egypt	50.0	29.3	34.7	20.0	75	46.2	12.8	28.2	33.3	39
Rural Lower Egypt	44.0	33.0	13.5	18.7	268	25.5	17.3	23.5	15.4	52
Upper Egypt	50.0	19.1	14.7	7.3	137	20.0	35.6	46.7	16.9	90
Urban Upper Egypt	40.0	29.0	20.0	10.0	30	45.5	18.2	27.3	22.7	22
Rural Upper Egypt	52.3	16.8	13.2	5.7	106	13.2	41.2	51.5	16.2	68
Frontier Governorates	41.0	27.7	21.7	14.6	82	28.3	30.4	45.7	12.8	46
Egypt	45.4	27.1	17.6	16.8	785	31.0	22.4	37.4	20.1	327

Respondents who believed Egypt did have economic development were asked about reasons for which the Egyptians cannot sense economic development. Table (5-7) shows that the first reason – according to respondents who sensed the existence of economic development in Egypt, both HH heads and youths – was price increase, with a percentage approaching half of the married HH heads and third of unmarried youths. The percentage was higher among female HH heads than male HH heads, and increases in urban governorates, urban Lower Egypt, and rural Upper Egypt. As for the youths, the percentage among males was higher than among females, and increased in urban governorates, urban lower Egypt, and urban upper Egypt. Overpopulation ranked second for married HH heads and third for youths (fifth of HH heads and youths). Unemployment ranked third for married HH heads and second for youths (Figure 5-1).

Figure (5-1) Reasons for not sensing the economic development in Egypt, 2010

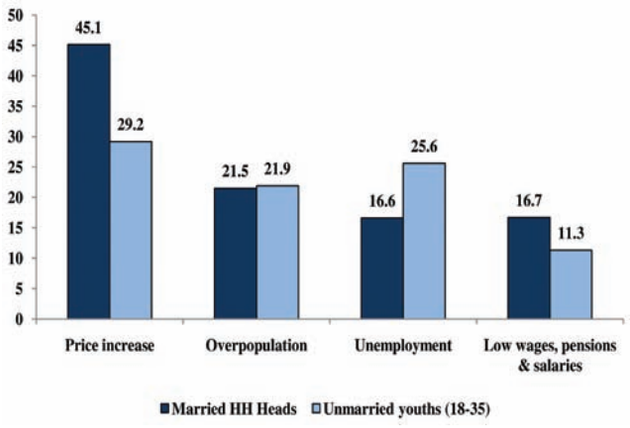


Table (5-7) Reasons that makes Egyptians not sensing the economic development in Egypt from the point of view of the respondents who belive that Egypt have economic development, 2010

Main characteristics	Married HH heads					Unmarried youths (18- 35)				
	Price increase (%)	Overpopulation (%)	Unemployment (%)	Low wages, pensions & salaries (%)	Total number	Price increase (%)	Overpopulation (%)	Unemployment (%)	Low wages, pensions & salaries (%)	Total number
Sex										
Male	39.3	21.8	12.5	16.5	455	35.3	8.2	25.5	14.5	207
Female	51.1	21.1	20.6	16.8	452	21.1	40.5	26.3	5.9	152
Urban / Rural Residence										
Urban	52.2	26.0	17.3	16.7	342	40.0	10.4	19.3	15.7	134
Rural	40.9	18.6	16.1	16.6	565	23.0	28.8	29.8	8.0	225
Place of Residence										
Urban Governorates	51.6	25.2	12.8	14.1	156	50.9	8.8	36.8	12.1	58
Lower Egypt	40.0	17.3	15.0	16.7	366	38.2	6.6	19.1	16.2	136
Urban Lower Egypt	58.0	13.0	18.8	26.1	69	49.1	5.2	6.9	12.1	58
Rural Lower Egypt	35.7	18.5	14.1	14.5	297	29.5	7.7	26.9	19.2	78
Upper Egypt	50.4	23.9	17.5	19.7	234	14.3	47.2	26.8	4.7	127
Urban Upper Egypt	40.7	39.0	20.0	8.5	60	50.0	23.1	30.8	14.3	14
Rural Upper Egypt	53.7	18.9	16.7	23.4	174	9.7	50.0	25.9	3.5	113
Frontier Governorates	42.8	23.7	23.0	15.0	152	17.5	12.2	31.7	14.6	41
Egypt	45.1	21.5	16.6	16.7	908	29.2	21.9	25.6	11.3	362

A comparison between findings in tables (5-6) and (5-7) shows the differences in perspectives on reasons behind lack of sense of economic development among respondents who could not sense economic development and those who could.

In order to find out how accurate the respondents' knowledge of the population issue was, the poll included a question on the size of Egypt's population. All answers ranging from 78 million to 85 million were considered correct. Table (5-8) shows the findings which indicated that only two fifths of Egyptians were aware of the correct number. It was noted that the percentage among married HH heads was less than the percentage among youths and the percentage among male HH heads was as double as among female HH heads. The percentage also increase in urban governorates, urban lower Egypt, and urban upper Egypt in both of the samples.

Table (5-8) Percentage of married HH heads and unmarried youths who mentioned the population size correctly, 2010

Main characteristics	Married HH Heads		Unmarried youths (18- 35)	
	Percentage of respondents who mentioned the number correctly	Total number	Percentage of respondents who mentioned the number correctly	Total number
Sex				
Male	59.6	767	51.6	432
Female	27.3	1064	32.2	276
Urban / Rural Residence				
Urban	52.4	736	57.3	335
Rural	33.1	1095	32.3	372
Place of Residence				
Urban Governorates	51.9	403	49.7	167
Lower Egypt	40.7	762	54.9	233
Urban Lower Egypt	50.3	153	65.0	103
Rural Lower Egypt	38.3	609	46.9	130
Upper Egypt	29.7	397	25.5	216
Urban Upper Egypt	45.2	93	44.4	36
Rural Upper Egypt	25.0	304	21.5	181
Frontier Governorates	40.9	269	50.0	90
Egypt	40.8	1831	44.0	707

The poll also included a question on water sufficiency for the population in Egypt. Table (5-9) shows that almost half the HH heads believed the currently available water was sufficient for the populations' needs. It also shows great gender-based differences, as married males felt more secure about water sufficiency than females (67% versus 46%). The findings also showed that almost half youths believed that water was sufficient, and almost one third thought it was insufficient. Persons who had no idea about water sufficiency represented 16% of married HH heads and 10% of youths.

Asking about factors leading to boosting the production and improve the economic status in Egypt, more than third of the two samples (37% of each) believed that "alleviating unemployment and providing job opportunities" was the most important step. A less percentage believed that land reclamation and new projects must have come first. A very few percentage (11% of HH heads and 6% of youths) believed that family planning may have led to economic improvement (Figure 5-2).

Figure (5-2) Factors that lead to improve economic status in Egypt, 2010

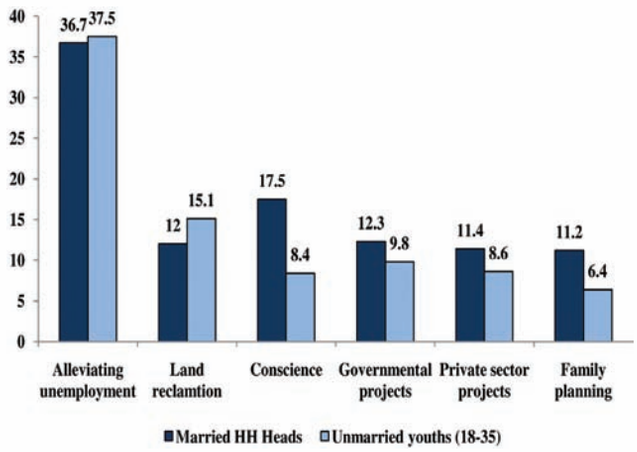


Table (5-9) Percent distribution of the married HH heads and unmarried youths by their opinion in the sufficiency of water for population and main characteristics, 2010

Main characteristics	Married HH heads					Unmarried youths (18- 35)				
	Yes (%)	Yes, conditionally (%)	No (%)	Did not specify (%)	Total number	Yes (%)	Yes, conditionally (%)	No (%)	Did not specify (%)	Total number
Sex										
Male	66.6	3.8	19.5	10.2	766	59.3	1.4	35.6	3.7	432
Female	46.0	2.2	32.2	19.6	1065	47.1	1.1	31.2	20.7	276
Urban / Rural Residence										
Urban	56.7	4.4	24.2	14.7	735	55.1	1.5	38.0	5.4	334
Rural	53.2	1.8	28.7	16.3	1095	54.2	0.8	30.2	14.8	371
Place of Residence										
Urban Governorates	52.2	4.2	26.0	17.6	404	67.3	1.8	24.4	6.5	168
Lower Egypt	57.9	1.6	27.3	13.3	762	54.5	1.3	42.5	1.7	233
Urban Lower Egypt	63.8	2.6	21.1	12.5	152	52	2.0	45.1	1.0	102
Rural Lower Egypt	56.3	1.3	28.9	13.5	609	57.7	0.8	40.0	1.5	130
Upper Egypt	52.1	2.0	26.7	19.1	397	47.4	0.9	29.8	21.9	215
Urban Upper Egypt	60.2	4.3	17.2	18.3	93	57.1	0.0	37.1	5.7	35
Rural Upper Egypt	49.7	1.3	29.6	19.4	304	45.3	1.1	28.2	25.4	181
Frontier Governorates	52.4	5.6	27.5	14.5	269	48.3	0.0	39.3	12.4	89
Egypt	54.6	2.8	26.9	15.7	1832	54.8	1.1	33.8	10.4	705

5-4 Attitudes Towards Reproduction and Family Planning

This section tackles married HH heads' and youths' attitudes towards reproduction and family planning in respect of the ideal number of children, gender preferences, spacing between children, and the ideal age of marriage for both men and women.

Table (5-10) shows the attitudes of married HH heads and youths in respect of the ideal number of children (median and mean). The table shows that mean and median ideal number of children were less among unmarried youths than married HH heads (median 2 and 3 respectively). No differences were found between youths in urban and rural areas. Geographically, rural upper Egypt and frontier governorates were the highest concerning the mean ideal number of children for married HH heads while urban upper Egypt and frontier governorates were the highest in the case of the unmarried youth.

Table (5-10) Mean and median ideal number of children among married HH heads and unmarried youths, 2010

Main characteristics	Married HH Heads			Unmarried youths (18- 35)		
	Mean	Median	Total number	Mean	Median	Total number
Sex						
Male	2.7	3.0	721	2.4	2.0	421
Female	2.6	2.0	1015	2.3	2.0	237
Urban / Rural Residence						
Urban	2.6	2.0	697	2.4	2.0	323
Rural	2.7	3.0	1038	2.4	2.0	370
Place of Residence						
Urban Governorates	2.5	2.0	379	2.4	2.0	163
Lower Egypt	2.6	2.0	739	2.4	2.0	231
Urban Lower Egypt	2.7	3.0	150	2.3	2.0	163
Rural Lower Egypt	2.6	2.0	589	2.5	2.0	101
Upper Egypt	2.8	3.0	380	2.3	2.0	216
Urban Upper Egypt	2.5	2.0	91	2.5	2.0	35
Rural Upper Egypt	2.8	3.0	290	2.2	2.0	180
Frontier Governorates	2.9	3.0	237	2.7	3.0	84
Egypt	2.6	3.0	1735	2.4	2.0	693

Table (5-11) shows the percentage of married HH heads and youths interested in having more children in case they already had the ideal number but all children were of the same sex. Generally, the attitude towards having more children further grew if the children were all girls than in case of boys. The percentage among youths was higher than married HH heads, and among female HH heads was higher than male HH heads. The percentage was higher among female youths than male youths if all children were boys, and higher among male youths than female youths if all children were girls. The percentage was geographically the highest in rural areas and Upper Egypt. Totally, the percentage of married HH heads interested in having more children was 13% if they had only girls and 7% if they had only boys. As for unmarried youths, they seemed to be more interested in diversifying their children than in preferring a sex over another. About 26% of unmarried youths were interested in having more children if they already had their ideal number all of girls, against 23% if the children were all boys.

Table (5-11) Percentage of married HH heads and unmarried youth who are interested in having more children if their children were of the same sex, 2010

Main characteristics	Married HH Heads			Unmarried youths (18- 35)		
	All children are girls	All children are boys	Total number	All children are girls	All children are boys	Total number
Sex						
Male	9.8	4.7	767	28.5	19.7	432
Female	16.1	8.9	1064	21.1	27.6	275
Urban / Rural Residence						
Urban	9.6	6.9	736	20.6	16.7	335
Rural	16.1	7.3	1095	30.1	28.2	372
Place of Residence						
Urban Governorates	7.2	4.5	403	10.7	6.6	168
Lower Egypt	13.0	6.6	762	24.5	21.5	233
Urban Lower Egypt	11.1	9.8	153	37.9	37.9	103
Rural Lower Egypt	13.5	5.7	609	14.5	9.2	131
Upper Egypt	20.2	11.1	397	39.8	39.2	216
Urban Upper Egypt	14.0	8.6	93	8.3	0.0	36
Rural Upper Egypt	22.0	11.8	304	45.9	46.7	181
Frontier Governorates	14.2	7.1	268	22.2	15.6	90
Egypt	13.4	7.2	1830	25.7	22.7	707

Table (5-12) sorts youths and married HH heads according to their preferences of child spacing. It shows that more than half of married HH heads believed the ideal spacing to be three to five years, with a percentage of females higher than males. As for youths, 43% believed the ideal spacing to be less than three years.

Table (5-12) Percent distribution of married HH heads and unmarried youths by the ideal spacing period and main characteristics, 2010

Main characteristics	Married HH heads				Unmarried youths (18-35)			
	Less than 3 years (%)	3 to 5 years (%)	More than 5 years (%)	Total number	Less than 3 years (%)	3 to 5 years (%)	More than 5 years (%)	Total number
Sex								
Male	31.3	48.1	20.6	757	42.3	40.9	16.7	430
Female	30.4	56.4	13.2	1050	42.7	37.6	19.7	274
Urban / Rural Residence								
Urban	28.0	54.4	17.6	722	42.2	42.8	15.0	334
Rural	32.7	51.9	15.4	1084	42.6	36.7	20.8	371
Place of Residence								
Urban Governorates	28.6	52.0	19.3	398	31.9	57.8	10.2	166
Lower Egypt	30.6	54.0	15.3	757	45.5	36.1	18.5	233
Urban Lower Egypt	27.5	61.1	11.4	149	59.8	27.5	12.7	102
Rural Lower Egypt	31.5	52.2	16.3	609	34.6	42.3	23.1	130
Upper Egypt	34.9	51.3	13.8	390	50.2	29.8	20.0	215
Urban Upper Egypt	22.8	58.7	18.5	92	28.6	54.3	17.1	35
Rural Upper Egypt	38.7	48.7	12.7	300	54.7	25.1	20.1	179
Frontier Governorates	28.1	53.8	18.1	260	34.4	38.9	26.7	90
Egypt	30.8	52.9	16.3	1808	42.5	39.6	17.9	705

Table (5-13) shows percentages of married HH heads and youths according to the preferred age of marriage for boys. Half of married HH heads and youths agreed on 25 to 29 years to be the ideal age of marriage for men. The percentage in urban areas was higher than rural areas, and among females was higher than among males. It was noted that more than fourth of married HH heads believed that the ideal age of marriage for men should be over 29 years, whil more than fourth of youths believed that the ideal age should be below 22. Almost fifth of the youths believed the ideal age should be between 22 and 24.

Table (5-14) shows married HH heads and youths' attitudes in respect of the ideal age for girls' marriage. Almost two thirds of the two samples agreed that the ideal age for a girl's marriage was between 18 and 21. The percentage was higher in rural areas than in urban areas. A very few percentage (no more than 3% of both married HH heads and youths) believed the ideal age should be under 18. It was also noted that less than 1% of married HH heads considered 30 years and above as the ideal age of marriage for girls, while all youths mentioned that the ideal age should be under 30. More than third of married HH heads and more than fourth of youths believed the ideal age of marriage for girls should be between 22 and 24. This percentage is higher in urban than in rural.

Table (5-13) Percent distribution of married HH heads and unmarried youths by the ideal age of marriage for males and main characteristics, 2010

Main characteristics	Married HH heads					Unmarried youths (18-35)				
	Less than 22	22 to 24 years	25 to 29 years	30+	Total number	Less than 22	22 to 24 years	25 to 29 years	30+	Total number
Sex										
Male	16.7	9.7	49.9	23.6	753	24.8	28.2	43.3	3.7	432
Female	10.7	8.8	52.5	28.0	1047	27.4	9.5	49.6	13.5	274
Urban / Rural Residence										
Urban	7.4	7.9	55.3	29.4	721	12.6	21.3	54.1	12.0	333
Rural	17.1	10.0	48.9	24.0	1080	37.5	20.5	38.3	3.8	371
Place of Residence										
Urban Governorates	6.6	7.6	59.7	26.1	395	11.4	25.3	47.6	15.7	166
Lower Egypt	19.0	7.0	49.5	24.5	756	21.9	23.6	50.2	4.3	233
Urban Lower Egypt	8.7	6.0	53.3	32.0	150	17.6	29.4	49.0	3.9	102
Rural Lower Egypt	21.6	7.2	48.6	22.6	607	24.8	19.4	51.9	3.9	129
Upper Egypt	11.8	9.7	47.7	30.8	390	48.8	11.1	34.1	6.0	217
Urban Upper Egypt	8.7	5.4	48.9	37.0	92	8.3	16.7	58.3	16.7	36
Rural Upper Egypt	12.8	11.1	47.1	29.0	297	56.6	9.9	29.7	3.8	182
Frontier Governorates	8.5	17.0	50.6	23.9	259	6.7	29.2	58.4	5.6	89
Egypt	13.2	9.2	51.5	26.1	1800	25.7	20.9	45.9	7.5	706

Table (5-14) Percent distribution of married HH heads and unmarried youths by the ideal age of marriage for females and main characteristics, 2010

Main characteristics	Married HH heads						Unmarried youths (18-35)					
	Less than 18	18 to 21 years	22 to 24 years	25 to 29 years	30 +	Total number	Less than 18	18 to 21 years	22 to 24 years	25 to 29 years	30 +	Total number
Sex												
Male	3.7	62.8	31.2	1.7	0.5	747	4.7	68.7	25.9	0.7	0.0	425
Female	2.2	58.9	37.6	0.9	0.5	1043	0.0	69.6	30.0	0.4	0.0	273
Urban / Rural Residence												
Urban	1.9	48.9	45.9	2.3	1.0	728	0.6	54.4	43.8	1.2	0.0	333
Rural	3.6	68.3	27.4	0.5	0.2	1064	4.9	82.5	12.6	0.0	0.0	365
Place of Residence												
Urban Governorates	3.0	47.1	47.1	2.0	0.7	401	1.2	50.9	46.7	1.2	0.0	167
Lower Egypt	3.4	63.9	31.2	1.2	0.3	736	0.4	76.2	23.3	0.0	0.0	227
Urban Lower Egypt	0.7	53.3	42.8	2.6	0.7	152	0.0	64.7	35.3	0.0	0.0	102
Rural Lower Egypt	4.1	66.6	28.3	0.9	0.2	584	0.8	85.6	13.6	0.0	0.0	125
Upper Egypt	2.3	68.2	28.2	0.5	0.8	390	7.9	77.1	14.0	0.9	0.0	214
Urban Upper Egypt	1.1	50.0	44.6	2.2	2.2	92	0.0	57.1	37.1	5.7	0.0	35
Rural Upper Egypt	2.4	74.1	23.2	0.0	0.3	297	9.5	81.0	9.5	0.0	0.0	179
Frontier Governorates	2.3	59.4	36.5	1.1	0.8	266	1.1	64.4	34.4	0.0	0.0	90
Egypt	2.9	60.4	34.9	1.2	0.6	1792	3.0	68.9	27.5	0.6	0.0	698

The poll also surveyed respondents' opinion on the religious view of contraceptives, whether to delay pregnancy, to space childbirths, or to use for limiting births. In this respect, two questions were posed: the contradiction between religion and using contraceptives for pregnancy delay or for childbirth spacing, and the contradiction between religion and using contraceptives to control birth. Table (5-15) shows that almost fifth of married HH heads and youths believe that using contraceptives for pregnancy delay or birth spacing is against religion. In the case of HH heads, a higher percentage of females believe in this contradiction than males HH heads, and a higher percentage in upper Egypt than other regions. The percentage also was higher among unmarried male yoths than among unmarried female youths.

Table (5-16) shows that the percentage of respondents who belive in contradiction between religion and using contraceptives for limiting was higher than that of those believing in contradiction with using contraceptives for pregnancy delay. Slightly more than fourth of married HH heads, and slightly less than fourth of youths believe that using contraceptives for limiting is against religion.

Studing the relation between the respondents' opinion in the contradection between using contraceptives and religion and their current contraceptive use status, data show that there is no segnificant difference in CPR among those who beleive and those who do not beleive in that contradection.

Table (5-15) Percentage of married HH heads and unmarried youths who asserted that using contraceptive for delaying pregnancy or spacing births contradicts with religion, 2010

Main characteristics	Married HH heads		Unmarried youths (18-35)	
	Yes (%)	Total number	Yes (%)	Total number
Sex				
Male	18.4	767	22.5	432
Female	21.4	1064	15.2	275
Urban / Rural Residence				
Urban	15.4	736	19.4	334
Rural	23.4	1095	19.9	372
Place of Residence				
Urban Governorates	15.4	404	10.8	166
Lower Egypt	17.8	762	29.9	233
Urban Lower Egypt	19.6	154	41.2	102
Rural Lower Egypt	17.6	609	21.4	130
Upper Egypt	31.2	396	19.4	217
Urban Upper Egypt	13.0	92	8.6	35
Rural Upper Egypt	36.8	304	21.4	181
Frontier Governorates	17.5	269	9.0	90
Egypt	20.2	1832	19.7	704

Table (5-16) Percentage of married HH heads and unmarried youths who asserted that using contraceptives for limiting births contradicts with religion, 2010

Main characteristics	Married HH heads		Unmarried youths (18-35)	
	Yes (%)	Total number	Yes (%)	Total number
Sex				
Male	28.6	767	26.9	432
Female	25.9	1064	17.1	275
Urban / Rural Residence				
Urban	26.0	736	23.6	334
Rural	27.8	1095	22.8	372
Place of Residence				
Urban Governorates	23.8	404	19.2	166
Lower Egypt	26.0	762	32.1	233
Urban Lower Egypt	30.3	154	26.5	102
Rural Lower Egypt	25.0	609	36.6	130
Upper Egypt	27.0	396	14.3	217
Urban Upper Egypt	22.7	92	16.7	35
Rural Upper Egypt	28.9	304	13.8	181
Frontier Governorates	34.9	269	29.7	90
Egypt	27.0	1832	23.1	704

5-5 Attitudes Towards Migration

This section tackles attitudes towards migration, both internal and external. In this chapter we mean by Internal migration moving to new cities when available. This section also tackles the most important conditions necessary for moving to new cities, as well as travelling abroad for work, and permanent migration as a solution for the population problem.

Table (5-17) shows that about 43% of married HH heads were willing to move to new cities if they had a chance, while a third refused to move. It is worth mentioning that 3% already lived in new cities. It was noted that males were more willing to move to new cities than females. It was found also that the percentage of willingness among married HH heads was higher in urban governorates compared to other areas.

Table (5-18) shows that 61% of youths were willing to move to new cities if they had the chance, while only 17% showed unwillingness. It was noted that youths were more willing to move to new cities than HH heads. It is also worth mentioning that only 0.7% of youths already lived in new cities and that Upper Egypt was geographically the highest in respect of willingness to move to new cities.

Fifth of the unmarried youth believe that using contraceptive to delay pregnancy is against religion and forth of them believe that using for birth limiting is against religion.

Among the most important conditions necessary for those willing to move were availability of basic services and facilities and availability of job opportunities, as about half of both married HH heads and youths indicated services and basic facilities, and fourth of them indicated appropriate job opportunities.

Table (5-17) Percent distribution of HH heads by willingness to move to new cities and main characteristics, 2010

Main characteristics	Yes (%)	Yes, conditionally (%)	No (%)	Don't know (%)	Already live in a new city (%)	Total number
Sex						
Male	45.2	22.7	26.8	0.9	4.3	765
Female	40.8	22.5	33.0	1.5	2.2	1065
Urban / Rural Residence						
Urban	45.2	27.9	19.6	1.6	5.7	736
Rural	41.0	19.1	37.6	1.0	1.3	1095
Place of Residence						
Urban Governorates	51.4	28.0	18.9	0.7	1.0	403
Lower Egypt	39.1	20.8	36.2	1.2	2.8	763
Urban Lower Egypt	43.8	29.4	19.0	0.7	7.2	153
Rural Lower Egypt	37.9	18.7	40.4	1.3	1.6	609
Upper Egypt	44.4	25.0	27.8	1.3	1.5	396
Urban Upper Egypt	40.9	35.5	15.1	3.2	5.4	93
Rural Upper Egypt	45.4	22.0	31.6	0.7	0.3	304
Frontier Governorates	37.4	15.9	35.2	1.9	9.6	270
Egypt	42.7	22.6	30.4	1.2	3.1	1832

Table (5-18) Percent distribution of unmarried youths by willingness to move to new cities and main characteristics, 2010

Main characteristics	Yes (%)	Yes, conditionally (%)	No (%)	Don't know (%)	Already live in a new city (%)	Total number
Sex						
Male	60.6	23.00	15.1	0.5	0.9	431
Female	62.2	14.90	20.7	1.8	0.4	275
Urban / Rural Residence						
Urban	60.1	22.30	15.2	1.2	1.2	336
Rural	62.0	17.80	19.1	0.8	0.3	371
Place of Residence						
Urban Governorates	55.4	32.1	11.9	0.0	0.6	168
Lower Egypt	64.4	21.9	12.4	0.4	0.9	233
Urban Lower Egypt	72.3	17.8	7.9	1.0	1.0	101
Rural Lower Egypt	58.5	24.6	16.2	0.0	0.8	130
Upper Egypt	70.0	9.7	18.4	1.4	0.5	217
Urban Upper Egypt	63.9	27.8	8.3	0.0	0.0	36
Rural Upper Egypt	71.4	6.6	19.8	1.6	0.5	182
Frontier Governorates	42.7	16.9	37.1	2.2	1.1	89
Egypt	61.3	20.0	17.1	0.8	0.7	706

Table (5-19) The most important conditions necessary for willingness to move to new cities, 2010

Main characteristics	Married HH heads			Unmarried youths (18-35)		
	Services and basic facilities (%)	Appropriate job opportunities (%)	Total number	Services and basic facilities (%)	Appropriate job opportunities (%)	Total number
Sex						
Male	51.7	39.7	174	34.3	25.3	100
Female	51.5	18.4	239	64.3	12.2	41
Urban / Rural Residence						
Urban	67.6	16.1	205	54.7	25.3	75
Rural	35.9	38.6	210	28.8	16.7	66
Place of Residence						
Urban Governorates	76.1	10.6	113	43.4	9.3	54
Lower Egypt	44.7	38.4	159	49.0	20.0	51
Urban Lower Egypt	62.2	17.8	45	61.1	31.6	19
Rural Lower Egypt	37.7	46.5	114	42.4	15.6	32
Upper Egypt	41.0	25.3	99	40.9	38.1	22
Urban Upper Egypt	54.5	21.2	33	55.6	44.4	10
Rural Upper Egypt	33.3	27.3	66	27.3	33.3	12
Frontier Governorates	37.2	37.2	43	26.7	43.8	15
Egypt	51.6	27.5	414	43.2	21.8	142

Table (5-20) shows that more than half of the youths were willing to travel to work abroad, while less than fourth of married HH heads were willing to do the same, and third of the youths refused to travel for work abroad, against two thirds of married HH heads. It is worth mentioning that youths in Lower Egypt were more willing to travel when compared to other areas.

Table (5-21) shows that less than fifth of both married HH heads and youths believed that permanent emigration could possibly be a solution for Egypt's population problem. The percentage was slightly higher among youths. It is worth mentioning that HH heads and youth in upper Egypt, especially rural areas, accepted permanent migration as a solution more than other areas.

Table (5-20) Percent distribution of married HH heads and unmarried youths by willingness to travel to work abroad, 2010

Main characteristics	Married HH heads					Unmarried youths (18-35)				
	Yes (%)	Yes conditionally (%)	No (%)	Don't know (%)	Total number	Yes (%)	Yes conditionally (%)	No (%)	Don't know (%)	Total number
Sex										
Male	22.2	15.4	62.2	0.3	767	62.6	11.4	25.5	0.5	431
Female	21.4	12.5	64.3	1.8	1065	36.6	14.1	47.8	1.4	276
Urban / Rural Residence										
Urban	21.5	14.3	63.3	1.0	736	53.4	11.6	34.3	0.6	335
Rural	21.9	13.3	63.5	1.3	1096	51.6	13.2	34.1	1.1	372
Place of Residence										
Urban Governorates	22.8	13.6	63.0	0.5	403	50.0	8.3	40.5	1.2	168
Lower Egypt	18.4	14.3	65.9	1.4	762	64.8	14.6	20.2	0.4	233
Urban Lower Egypt	21.6	18.3	57.5	2.6	153	68.6	16.7	14.7	0.0	102
Rural Lower Egypt	17.6	13.5	68.0	1.0	609	61.5	13.1	24.6	0.8	130
Upper Egypt	28.0	15.9	54.2	2.0	397	45.2	12.9	40.6	1.4	217
Urban Upper Egypt	18.5	18.5	63.0	0.0	92	36.1	8.3	55.6	0.0	36
Rural Upper Egypt	30.9	15.1	51.6	2.3	304	47.0	13.8	37.6	1.7	181
Frontier Governorates	20.4	8.9	70.6	0.0	269	43.3	13.3	43.3	0.0	90
Egypt	21.7	13.7	63.4	1.1	1831	52.5	12.4	34.2	0.8	707

Table (5-21) Percentage of married HH heads and unmarried youths who belive that emigration could be a solution for Egypt's population problem, 2010

Main characteristics	Married HH heads		Unmarried youths (18-35)	
	Yes (%)	Total number	Yes (%)	Total number
Sex				
Male	17.0	766	19.0	431
Female	14.4	1065	20.7	275
Urban / Rural Residence				
Urban	13.5	736	14.1	334
Rural	16.8	1096	24.8	371
Place of Residence				
Urban Governorates	14.4	403	10.1	168
Lower Egypt	13.8	762	18.5	233
Urban Lower Egypt	13.7	153	23.5	102
Rural Lower Egypt	13.8	609	13.8	130
Upper Egypt	22.9	397	32.4	216
Urban Upper Egypt	14.1	92	11.4	35
Rural Upper Egypt	25.3	304	36.5	181
Frontier Governorates	10.7	270	11.1	90
Egypt	15.4	1832	19.7	706

Chapter Six

Population Information Gap in Egypt

6-1 Introduction

6-2 Sources of Demographic Data

6-3 Population Information Gap in Egypt

6-4 Challenges Against Bridging the Statistical System Gap in Egypt

6-5 Recommendations

6-1 Introduction

With major increases in population in many countries around the world and the recent global crises, setting evidence-based policies has become a necessity, where policy makers and executers no longer have the opportunity to experiment with uncertain policies.

Making evidence-based policies is defined as the methodology helping informed decision making by including the strongest and most accurate available evidence in the core of the policy making and implementation process.

This process requires the availability of information, based on which evidence and alternatives are determined to be included in the decision making process. Such evidence must cover a large scale to allow making a set of alternative policies to choose from, be sufficiently accurate and detailed to ensure criticism and experimentation survival (UNICEF, 2008). The purpose of policy making is to make changes (Hill, 2010). As much as information is available and of good quality, the process of defining evidence and alternatives will be more accurate, credible and reliable to make and implement appropriate policies more efficiently, which leads to a change in the right direction.

Information is also necessary to enable different service providers to set different plans and programs to provide services to the neediest groups. Although the information required for providing services is different in nature form that required for making general policies, the quality of both depends on the quality of the basic data from which information was derived.

Egypt has sought to establish databases providing information across all population and development-related sectors and areas, and has invested in conducting studies required by decision and general policy making processes.

6-2 Sources of Demographic Data

6-2-1 Census

The first census conducted in Egypt's modern history was in 1882; 2006 census was the thirteenth in the Egyptian series of censuses.

Central Authority for Public Mobilization and Statistic (CAPMAS), the agency responsible for conducting censuses in Egypt, conducts census through de facto counting, i.e. counting individuals according to their location on the night appointed for the census, which is determined when citizens' mobility away from their usual whereabouts is minimal.

Census in Egypt is the main source of data about population size and population characteristics, as it provides data about the number of population at the smallest administrative levels, as well as the characteristics of this population including gender, age, marital status, education, labor force participation, profession, economic activity, disabilities and internal migration.

The methodologies and procedures followed in conducting census affect its coverage of all the Egyptian population and accuracy of the data collected about population characteristics.

6-2-2 Vital Statistics

Vital incidents registration systems in Egypt comprise systems of registration of births, deaths, marriages and divorces annually. Each of these categories is registered based on an application dealing with a number of relevant variables, allowing the analysis of the phenomenon size, determinants and related variations.

6-2-2-1 Births' Data

Egypt has a long history of registering vital incidents, with birth registration starting in 1891. These statistics used to be published by the Authority of Public Statistics in an annual bulletin since 1917 (CDC, 2003). Despite Egypt's variety in the sources of population data such as censuses, vital incidents registration and field surveys, the births' database is the most significant information source for birth data. Birth statistics depend on reporting newborns, which includes the newborn's name, sex, birth date, birth order, place of residence and parents' names, ages and education.

This data could be subject to simple statistical analysis to obtain the following information:

1) Total number of births in the reference period,
2) Distribution of births according to their order,
3) Distribution of births according to the mother's age,

4) Distribution of births according to the mothers' level of education,
5) Geographical distribution of births.

This information allows considering many significant indicators.

The importance of births' statistics lies not in providing data about total births, but because this database can be used in designing population policies at the local level and in evaluating programs and projects related to these policies. Moreover, this database should not be considered as a source of birth numbers at administrative unit levels only (governorates, Qism/Markaz, Shiakha/villages); rather, birth demographic characteristics provide the knowledge needed for knowing detailed fertility trends.

By demographic characteristics of births we mean the mother's age, birth's order, parents' education and occupation, and the family's economic level. When such data are collected causeably accurately and comprehensively, then analyzed at the smallest administrative units levels, they will provide decision makers at the national and local level a great opportunity to identify successes and failures in the population program. It also allows effective intervention to break the stall of the fertility, not to mention the provision of a base to follow up and evaluate population programs aiming at decreasing fertility levels locally with objectivity based on indicators reflecting the final result of this program and not only intermediate indicators of activities implemented without necessarily achieving the purpose they were designed for.

6-2-2-2 Deaths' Data

Egypt has another long history of registering mortality data, where the 1891 obligation for people to register their births was connected to registering deaths as well. Publishing deaths statistics started regularly in bulletins since 1917 also.

Deaths' statistics depend on registering mortality incidents which, if collected highly comprehensively, accurately and promptly, the state will have an information system useful in the planning and evaluation of many health and development issues. The form used in registering mortality incident in Egypt includes, not only the deceaseds' personal data, but also their demographic characteristics and cause of death. This data allows the acquisition of the following information in high quality:
(1) Total number of deaths in the time reference period,
(2) Deaths' distribution according to age and gender,
(3) Deaths' geographic distributions,
(4) Deaths' distribution according to cause of death,
(5) Various classifications to distribute deaths according to age, gender, place of residence and cause of death.

This information allows the estimation of the basic indicators reflecting mortality levels and patterns not just at the national level but also the local; e.g. mortality rates by age, infant mortality rates, child mortality rates, maternal mortality rate and mortality rates according to causes. These data are also used in producing life tables and estimating life expectancy at birth, and in identifying mortality seasons when studying changes of mortality trends and patterns.

6-2-3 Population surveys

Population surveys are one of the most important data sources, especially periodical surveys, as they focus on certain issues detailed data are collected about. The most illustrious survey used in Egypt is the Demographic and health survey (DHS) which started in 1988 to provide a huge amount of population information, allowing periodical observation to population indicators reflecting fertility levels and patterns, family planning patterns and contraceptive usage, as well as reproduction determinants at national and geographic regional levels (urban governorates, urban lower Egypt, rural lower Egypt, urban upper Egypt, rural upper Egypt, frontier governorates) and providing indicators of contraceptive use at governorate levels.

IDSC implements the Egyptian Household Affairs Observatory survey four times per year to issue indicators reflecting short-term changes in fertility and contraceptive use indicators at governorate levels so as to monitor and evaluate the population program. However, the DHS and the Egyptian Family Affairs Observatory survey do not provide indicators at small geographic regional levels (Qism/Markaz), and do not provide

governorate-level indicators except for a small number of indicators, which prevents utilizing these surveys in following up the population program implementation and effect assessment at the local level.

6-2-4 Databases and Systems:

The National ID database is one of the most important IT mega projects, resulting in a particular number for each Egyptian citizen born since 1900. This database comprises registering births, deaths, marriage and divorce incidents. The database has also unleashed many e-government applications which have facilitated procedures citizens go through, partially put an end to bureaucracy, and reduced many security abuses related to showing identity.

Additionally, this database stores huge data for developing statistics and indicators used in observing population growth indicators and family raising and breakdown. Developing these indicators at the smallest administrative levels will be an essential addition to the monitoring and evaluation system of the population status in Egypt.

In addition to the National ID database, contraceptive practices databases play a significant role in identifying couples years of protection achieved by the family planning program and the percent distribution of every contraceptive at the national and governorate levels. Moreover, contraceptive inventory databases are important in identifying inventory bottlenecks at the national level to encounter them so that shortage does not decrease contraceptive usage.

6-3 Population Information Gap in Egypt

6-3-1 Population Censuses

Given the key importance of census data to planning, policy drafting, and decision making, IDSC was commissioned to conduct the 2006 population Post Enumeration Survey (PES), pursuant to separation between authorities of execution and evaluation. PES was conducted utterly independent from census activities where IDSC collected a random sample of about 49,000 household, evenly distributed over governorates, re-collected most of their census form data, and examined census coverage and data accuracy by comparing individuals' and households' data mentioned in the census with the corresponding data mentioned in the PES (IDSC, PES 2006, 2008).

PES results indicated 2006 census under coverage which necessitates correction of the census results using the PES results.

PES findings showed that counting net under coverage percentage was 8.73% all over Egypt. It also ranged between 6.75% in lower Egypt and 16.95% in urban governorates. This percentage of under coverage necessitates correction of the census results, as the total population number according to 2006 census was approximately 72.798 million, while the corrected total population number according to PES results was approximately 79.543 million.

In addition to counting under coverage, there is a clear deficiency in 2006 census data accuracy. Table (6-1) summarizes the most important findings of comparing individuals' characteristics, showing that age, education, and work status were the most inaccurate data collected in the census (IDSC, PES 2006, 2008).

Repeatedly, such findings emphasize the necessity of correcting published census results in accordance with PES findings, and then publishing the corrected data in order to be employed in policy drafting and decision making.

Table (6-1) Rate of agreement in population characteristics between census and PES

Characteristics	Rate of agreement (%)
Sex	95.6
Age (5-year groups)	73.1
Relation to HH head	94.9
Marital Status	95.8
Education level	76.2
Work Status	75.9
Governorate of Birth	94.0
Type of place of Birth (Urban/ Rural)	94.0

Source: PES 2006 Report, 2008, IDSC

6-3-2 Vital Statistics

6-3-2-1 Births' data

Despite the fact that the birth registration system in Egypt theoretically has the necessary tools to collect the required data at the lowest administrative level, the facts show that birth characteristics data were inaccurate and incomprehensive; therefore, cannot be efficiently used in building a local monitoring and evaluation system.

This can be proved through the following notes on birth data:

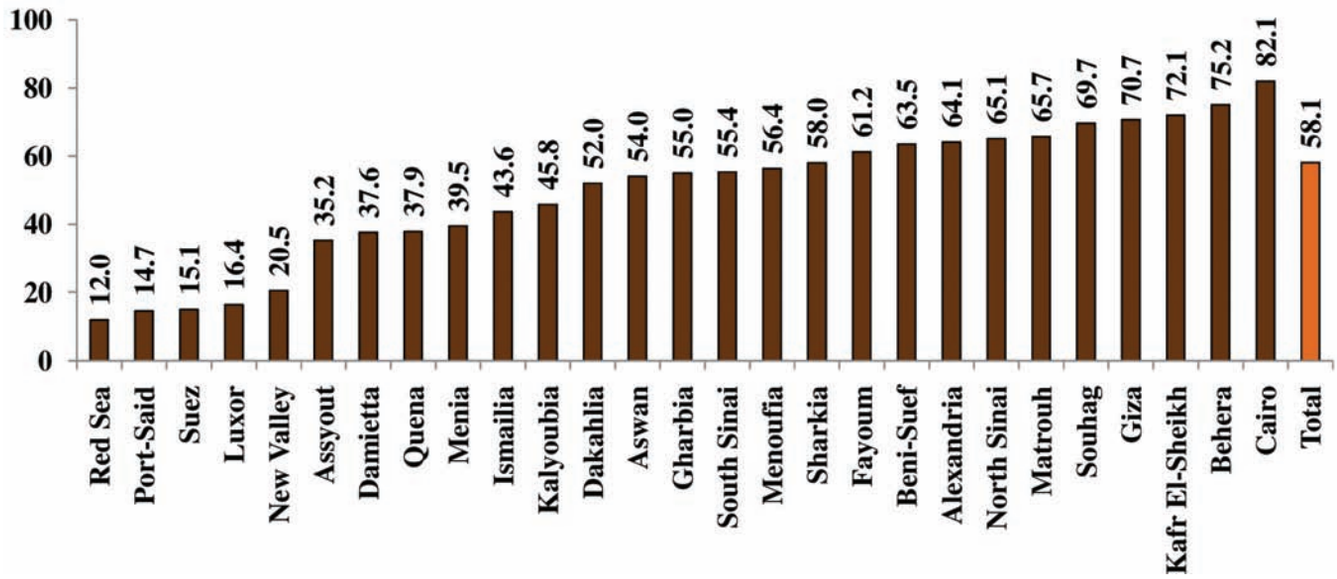
- The percentage of "incomplete data" in mothers' age was 58.1% in 2008. Astonishingly, this percentage was higher in urban areas (66.6%) than in rural areas (52.6%), which indicates that non-disclosure of mothers' age cannot be attributed to cultural causes, but mostly to more general causes such as carelessness of either the data collector or the respondent for filling the data on birth characteristics, which could be attributed to lack of awareness of both the reporter and the employee about the importance of these data.

- It was also noted that this percentage was steadily increasing over the last years, as it spiked from 17% in 2000 to 27% in 2007, then more than doubled to be 58% in 2008. Such a notice indicates a serious problem regarding the completion of registration. Analyzing CAPMAS data at governorate level shows that Cairo comes first with 82% of incomplete mothers' age, a result which contradicts the expectation that urban areas will be having less percentage of incomplete data.

- Birth order was another item of data that should have been completed in the birth registration. Data published on birth order did not match fertility levels in Egypt, as the first child percentage was up to 76% in 2008, while TFR in Egypt was three children per woman. Moreover, when comparing birth order findings of 2008 DHS over the five previous years with the CAPMAS birth statistic of the period corresponding to DHS reference period, a large difference will be noted in birth distribution (table 6-2). CAPMAS birth statistics indicated that 59% of births were for "first child" against 33% in the DHS. Findings of the latter seemed to be more consistent with other indicators of fertility levels in Egypt.

- Birth data are being published a year after the reference year, e.g. December 2009 was the publication date for the annual bulletin of birth and deaths statistics of 2008. Also, there were no monthly or quarterly bulletins on birth statistics.

Figure (6-1) Percentages of 2008 births whose mothers' ages at birth are not registered by governorate



Source: Calculated from birth statistics, birth and deaths bulletin for successive years, CAPMAS.

Table (6-2) Percent distribution of births by birth order from CAPMAS birth statistics and DHS

Birth order	CAPMAS birth statistics (2003- 2007)[1]	DHS 2008 (5 years preceding the survey)[2]
1	58.8	32.7
2	19.0	27.2
3	11.6	19.2
4	5.7	10.3
7-5	4.5	9.0
8+	0.5	1.5
Total	100.0	100.0
Mean birth order	1.85	2.50

Sources: 1- Calculated from birth statistics, birth and deaths bulletin for successive years, CAPMAS.
2- Calculated from DHS 2008 raw data.

6-3-2-2 Deaths' Data

Deaths' data evaluation studies showed decline in deaths' registration deficiency. The Law stipulates that "Reporting shall take place within 24 hours of mortality or the verification thereof on the specified form. It shall be reported to the health office located in the same neighborhood, if available, or to any health authority determined by the Health Ministerial Decree issued for neighborhoods lacking health offices. The deceased's identification card shall be necessary for the reporting; otherwise, the reporter shall acknowledge the unavailability thereof".

However, the significant gap in Deaths' registration is the data on causes. Despite law stipulates mortality registration upon occurrence, the stipulated procedures cannot be practically applied due to a cultural background that refuses the examination of the deceased. On the other hand, no adequate search procedures are being taken in order to diagnose mortality causes.

The compilation of a life table is an important analytic step usually taken after every census, aiming at estimating life expectancy. Egypt has no recent life table; neither does it have regions or governorates life tables.

Moreover, the compilation of a life table is another important analytic step usually taken after every census, aiming at estimating life expectancy. Egypt has no recent life table; neither does it have regions or governorates life tables. It is worth noting that the compilation of life table must be based on census corrected age-specific and gender-specific data.

Table (6-3) shows a list of indicators elaborating the population information gap in Egypt, with a note on the scale and publication periodicity of each indicator. With the bridging of this gap, the Egyptian Population Program will get a full chance to comprehensively monitor and evaluate its activities.

Table (6-3) The most important population, births and deaths indicators, their administrative levels, priodicality and sources of needed data.

Serial	Indicator	Adminestrative levels	Priodicality	Source
1	Number of Births	Country	Monthly	National ID Database
		Governorate	Monthly	
		Markaz/Qism	Quarterly	
		Village/Shiakha	Quarterly	
2	Distribution of births by birth order	Country	Monthly	National ID Database
		Governorate	Quarterly	
		Markaz/Qism	Quarterly	
		Village/Shiakha	Quarterly	
3	Distribution of births by mother's age at birth	Country	Monthly	National ID Database
		Governorate	Quarterly	
		Markaz/Qism	Quarterly	
		Village/Shiakha	Quarterly	

Serial	Indicator	Adminestrative levels	Priodicality	Source
4	Distribution of births by mother's education level	Country	Monthly	National ID Database
		Governorate	Quarterly	
5	TFR	Country	Annually	Field Surveys
		Governorate	Annually	
6	TFR by mother's education level	Country	Annually	Field Surveys
		Governorate	Annually	
7	TFR by household wealth status	Country	Annually	Field Surveys
		Governorate	Annually	
8	Contraceptives Prevalence Rate (CPR)	Country	Quarterly	Field Surveys
		Governorate	Quarterly	
		Markaz/Qism	Annually	
9	Contraceptives prevalence rate by education level	Country	Quarterly	Field Surveys
		Governorate	Quarterly	
10	Contraceptives prevalence rate by number of living children	Country	Quarterly	Field Surveys
		Governorate	Quarterly	
11	Contraceptives prevalence rate by household wealth status	Country	Quarterly	Field Surveys
		Governorate	Quarterly	
12	Percentage of contraceptive outgoing and inventoried	Country	Monthly	Family Planning Services Database
		Governorate	Monthly	
13	Couples' Years of Protection (CYP)	Country	Monthly	Family Planning Service Database
		Governorate	Monthly	
14	Couples' years of protection by method	Country	Monthly	Family Planning Service Database
		Governorate	Monthly	
15	Family planning service quality indicator	Country	Annually	Field Surveys
		Selected areas	Monthly	
16	Percentage of those who feel that Egypt has a population problem	Country	Quarterly	Opinion Polls
		Governorate	Quarterly	
17	Percentage of those who feel that Egypt has a population problem by age	Country	Quarterly	Opinion Polls
		Governorate	Quarterly	
18	Percentage of those who want 2 children only	Country	Quarterly	Opinion Polls
		Governorate	Quarterly	
19	Percentage of those who want 2 children only by age	Country	Quarterly	Opinion Polls
		Governorate	Quarterly	
20	Percentage of those who want 2 children only by education level	Country	Quarterly	Opinion Polls
		Governorate	Quarterly	
21	Percentage of those who want 2 children only by household wealth status	Country	Quarterly	Opinion Polls
		Governorate	Quarterly	
22	Distribution of deaths by cause of death	Country	Annually	Ministry of health

6-4 Challenges Against Bridging the Statistical System Gap in Egypt

6-4-1 Unavailability of necessary and adequate data across different sectors:

Some of the sectors and groups, vital for the population program development and policy making, lack adequate necessary data for their policy drafting. For example, slum areas and aged people are the most data-lacking groups despite being the neediest of different services. Moreover, there is lack in age-specific marriage distribution at the lowest administrative levels, despite its importance to locate areas considered as pockets for early marriage concentration.

6-4-2 Data inaccuracy and incompletion:

Large amount of the available data are inaccurate, including -as previously mentioned- population census and vital statistics.

6-4-3 Conflicting data and information of different sources:

The inaccuracy of some data and indicators in Egypt can be attributed to the fact that they are issued from different sources. Conflict in the values can be found once the available data are thoroughly studied. Such conflict is usually stemming from the variation of adopted definitions and methodologies. Moreover, most issuing authorities do not disclose their adopted definitions, methodologies, or calculation methods in compiling data and indicators, a behavior that exacerbates the problem and makes it more difficult for the data user to identify the most suitable source.

6-4-4 Conflicting data and information issued by same source through different publishing channels:

Some authorities issue their population data through different channels. It could be published, for example, through paper reports, CDs, or through official websites. The data and information disseminated through different channels sometimes conflict in spite of being issued by the same source, and at the same time.

6-4-5 Lack of skilled human resources:

Egypt, as many other developing countries, lacks the skilled statisticians and demographers necessary for collecting, supervising the collection of, and analyzing data, and for conducting population estimates and projections; the core of planning and monitoring.

Studies must be regularly conducted in order to evaluate the quality of population, birth, and mortality data available. They must be delegated to authorities independent from those of data collection and dissemination.

Some reports indicated that the lack of qualified human resources is made worse by the brain drain from developing countries to developed countries and international organizations, which is attributed to the lack of adequate conditions and budgets to encourage them to stay and meet their needs. (Verma and Perez, 2009). Lack of expertise in Egypt can also be attributed both to the disconnection between education and labor market, and to shortage in the budgets allocated for training and enhancing human resources' skills.

6-5 Recommendations

Following is a review of a set of procedures that may help bridging the information gap in population data:

6-5-1 Informational content

Additional geographical indicators on population, births, and mortalities must be issued periodically as shown in Table (6-3).

6-5-2 Data Quality

Studies must be regularly conducted in order to evaluate the quality of population, birth, and mortality data available. They must be delegated to authorities independent from those of data collection and dissemination.

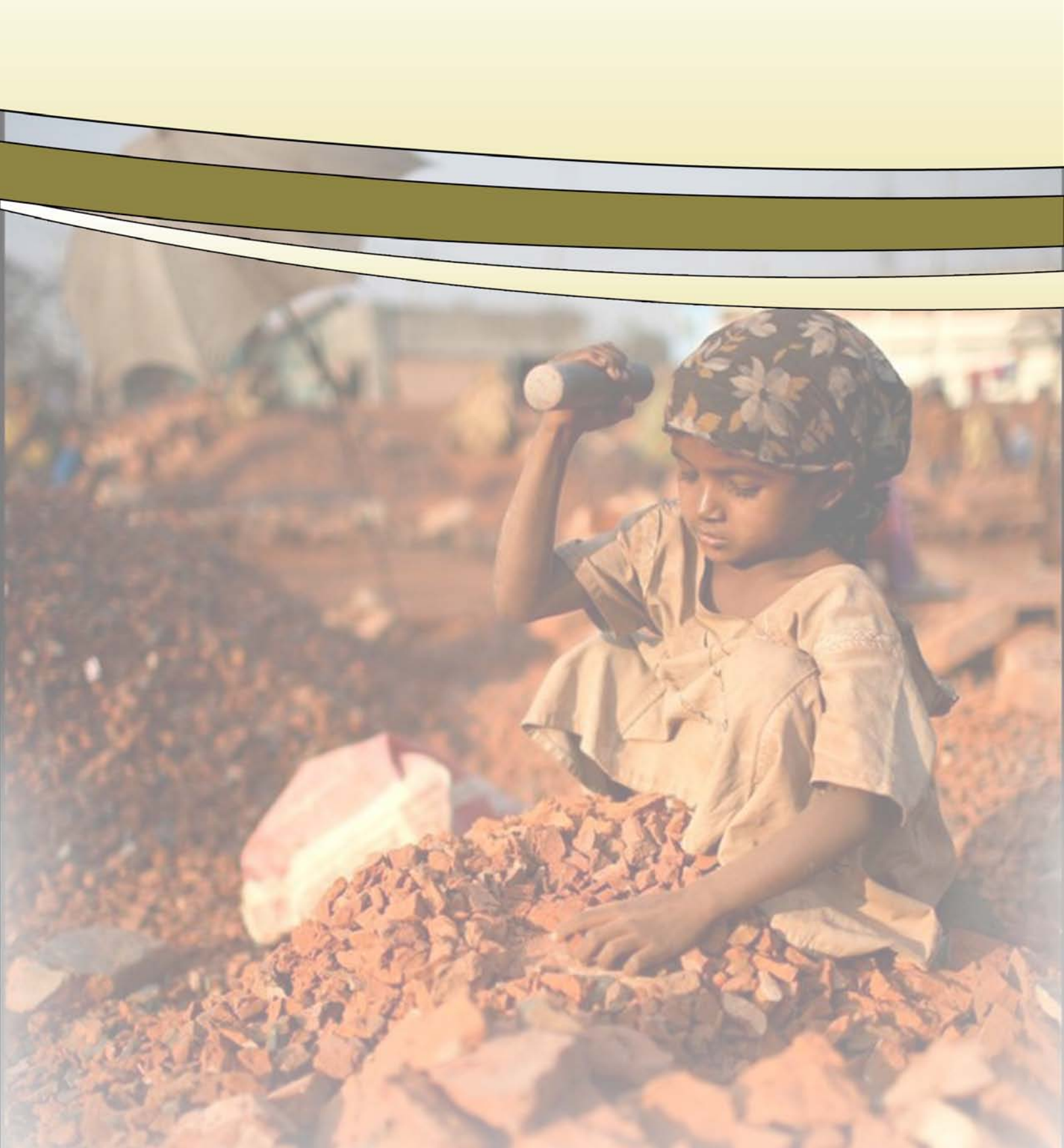
6-5-3 Availability

Data must be issued within the shortest possible course of time in order to enable decision makers and the Population Program monitors and evaluators to take the necessary corrective actions

to increase the program efficiency. Moreover, data must be electronically available in order to reduce the cost and time of publishing data.

6-5-4 Capacity Building

There is a compelling need for human capacity in local vital incidents registration, in order to improve the data quality. In light of the enormous number of health offices that register births and deaths, capacity building is expected to take place in phases. It is proposed to identify Phase I health offices as pilot to all health offices in the country, and in a way that ensures produced data will show reliable indicators in planning and monitoring and evaluation. The same statistical approach will be adopted in the following expansions, which results in producing acceptably reliable sample indicators when handling capacity building, which will help local and national decision support.



Chapter Seven

Concluding Remarks and Challenges

7-1 Concluding Remarks

7-2 Challenges

7-1 Concluding Remarks

Studying the population status in Egypt demonstrated that Egypt is young age-wise, where most citizens are young with a population pyramid of a wide base and narrow peak. Change in age composition leads to creating a demographic window of opportunity. Egypt is expected to enter such window during the upcoming 10 years and remain so for 20-30 years.

Egypt's population faces many challenges in education, which shapes its characteristics in a way that disables adequate competition with other countries. The most significant challenge is illiteracy rate which is still high despite the decline it witnessed in the last 50 years. Illiteracy and education are among the factors contributing to the relatively low ranking Egypt attained in the Human Development Indicator compared to other countries, since one out of every 3 people in Egypt is illiterate which is considered a high ratio compared to international levels. This ratio is even higher among females (10+) where it is 47%.

Labor force participation with its functional structure reflects a person's position in society. In this regard, it is noted that women face many challenges relevantly such as their low participation in labor force, increase of unemployment, and the types of jobs women undertake. Unemployment rate among women is more than 3 times higher than that among men (19% for women and 6% for men) according to 2008 labor force Survey. Employed persons' distribution according to economic activity, especially women, showed that around 85% of women worked in agricultural and services sector while only 50% of men worked in this sector, which reflects that the Egyptian society encourages women's work in limited fields such as agriculture, teaching, and nursing. It is notable also that half of employed women worked in the informal sector.

According to the 2008 Demographic and Health Survey, current total fertility rate (TFR) in Egypt is 3 live births per woman aged 15-49 years. This rate decreases to 2.7 in urban areas, especially urban governorates (2.6) and urban lower Egypt (2.6), and increases to 3.6 in rural upper Egypt.

All women, regardless of their characteristics, wish to have more than 2 children, and such desire goes beyond 3 children among the poorest women, those who did not go to school/ in complete primary education, or live in rural areas, especially rural upper Egypt. In the period between 1988 and 2008, desired number of children increased among specific categories of women such as women in urban lower Egypt, those who completed secondary or higher education, or women working for cash. Comparison of TFR with desired TFR shows that the undesired TFR was about 20% of TFR.

During the last 30 years, from 1980 to 2010, using contraceptives in Egypt greatly progressed. However, CPR in urban areas has been moving in a very limited range since the early 1990s onwards. Studying the status of different country areas shows that upper Egypt, especially rural upper Egypt, was the leading cause behind the increase in the CPR, where it increased six-fold there. We should also note that the CPR in rural upper Egypt was fluctuating within a narrow range during 2000-2008.

Studies indicate that women discontinue use of contraceptives during the 12 months subsequent to the beginning of use in about 25% of all usage periods during the years preceding the survey. Side effects and health considerations are the main factors behind stopping. Studies indicated also that the total percentage of unmet needs in Egypt was approximately 9%. The unmet need for family planning methods increases in rural upper Egypt to around 15%. Such need is also high among women with no education (11%) and those who belonged to the poorest quintile (13%). It is worth mentioning that around 30% of currently married women who do not use contraceptives and wish to delay pregnancy or need contraception stated that they were not using any contraceptive due to method-related reasons such as health considerations and fear of side effects.

Studying the status of deprived areas, especially rural upper Egypt, Egypt's poorest 1000 villages, and slum areas, showed prevalence of early marriages in upper Egypt in general and in rural areas in particular and revealed that rural upper Egypt had the lowest levels of CPR and that

women there received less care during pregnancy and childbirth. Modern contraceptives prevalence rate in the poorest villages was estimated at around 40%, where the unmet need there increased to about 19%. CPR in slum areas was not very different from that prevailing in urban areas as a whole; yet they suffered from very low environmental conditions.

Egypt witnessed remarkable changes in components and elements included in successive demographic programs, which aimed to provide more opportunities for different demographic groups and eliminate inequity of access to family planning/ reproductive health services including access to information on reproductive health. This led to changes in the level of variation, especially regarding the extent to which family planning and reproductive health services are available for different demographic categories. In fact, these objectives shed more light on decreasing inequity among different geographic areas and did not consider decreasing inequity among groups with different economic and education levels. Inequity was studied according to specific factors and variables including type of place of residence (urban/ rural), region, wealth status, age, education level, and governorates. The study showed that women were highly exposed to family planning messages during 1995-2000 to reach 96%; yet it dropped dramatically later to be 61% in 2008. In the same time, inequity of exposure to family planning messages increased during 1995-2008, which might partially refer to the drawback of the role played by the Egyptian TV channels compared to satellite channels.

Furthermore, inequity measured by level of variation (LV) declined in most indicators. LV of modern contraceptives prevalence rate declined during 1995-2008 according to different characteristics and variables. LV among contraceptives users who got contraceptives from the public sector increased between urban and rural and according to wealth status. This might also be due to the greater dependence on the public sector as the source of modern family planning methods in Egypt.

In addition to that, level of variation in unmet need declined, according to all characteristics, except for the regions where it increased. Also, "TFR" level of variation declined according to all other characteristics. This indicates the need to more efforts to reduce inequity especially among the groups and in the indicators that witnessed increase in LV.

Approaches followed by Tunisia and Iran to counteract overpopulation are one of the most successful experiences in the region, where birth rates came down to standard levels equal to or falling below replacement level which Egypt wishes to reach by 2017. Both experiences were successful due to implementation of a powerful family planning program based on political will translated into legislation and effective programs which led to change of individuals' reproductive behavior. It is noteworthy that one of the Iranian experience aspects thought to be very important is about synchronization of family planning program implementation with the creation of widespread health service network in rural areas, leading to the establishment of around 16,000 health units, each covering 1,500 persons in rural areas. A unit includes both male and female service providers. In addition to providing health services, the health unit medical staff also conduct census for the area served by the health unit in order to know their health needs. Improving women's status and their role in socity was a cornerstone in the plans formed by the two countries, espicially Tunisia, to reduce the population growth rates. Such experiences affirm importance of political commitment to the problem, provision of financial support methods, promoting demand, and serious implementation and follow-up. Egyptian program implementers should examine such successful experiences to know how to reach a rate less than that of replacement in the shortest time possible.

Observing Egyptians' perception regarding the population problem in Egypt, we would find that most Egyptians were aware of the population problem Egypt is suffering from. Such awareness resulted from their daily lives rather than from different mass media. High percentage of the Egyptians did not sensed economic development in

Egypt, especially in urban areas which were more overpopulated. Inflation and unemployment were of the most important reasons behind undermining development efforts. The study revealed also that a great percentage of Egyptians did not know the correct population size. Many, married HH heads and youth were not aware of the water crisis in Egypt and that the available water is not adequate for fulfilling population needs.

Most married HH heads believed birth spacing must be 3-5 years, while this trend tended to decrease among the youth. Hence, we should raise youth's awareness on health risks of short birth spacing for both mothers and children. Most Egyptians preferred a marriage age of more than 25 years for males and more than 18 years for females. A considerable percentage of married HH heads and unmarried youth believed that using family planning, whether for pregnancy delay or birth limiting, contradicted with religion. However, this belief does not affect the married HH's contraceptive use. A remarkable percentage of Egyptians wished to move to new cities if appropriate living conditions were available there, especially utilities, services, and job opportunities. Therefore, youth should be encouraged to live in new cities and be provided with appropriate job opportunities there.

In 2008, Egypt's crude death rate was 6 per 1000 people, noting that such rate had been moving so slowly since the early 1990s as it was 6.9 per 1000 people in 1992. It is worth mentioning that infant mortality rate witnessed positive development during the last century's second half, where it was about 25 per 1000 live births according to the 2008 Demographic and Health Survey. Maternal deaths resulting from pregnancy and childbirth are among the most important causes of women's death. In 1992/1993, maternal mortality rate was about 174 per 100,000 live births. Studies revealed a significant decline in this rate where it became 84 per 100,000 live births in 2000.

The study of Egypt's demographic data status showed that Egypt is suffering from a huge information gap as a result for the gap in demographic data obviously seen in the poor quality of information available on population, births, and mortalities, besides the limited access to data. The 2006 census post enumeration survey (PES) revealed that 8.7% of the population were not covered in census at the country level and that data collected on demographic characteristics were of poor quality where the match rate between individual characteristics collected in the census and those collected in the PES was 73% for age data, 76% for employment and education status, and 96% for gender data which recorded the highest rate. The study of birth data showed inaccuracy in age of mother at birth and birth order as well. The current periodicality of publishing data does not allow to monitor and evaluate the impact of the population and health program adequately.

A great percentage of Egyptians did not know the correct population size. Many, married HH heads and youth were not aware of the water crisis in Egypt and that the available water is not adequate for fulfilling population needs.

7-2 Challenges

Egypt is still encountered by many challenges to achieve its development goals. The most critical challenge is the constant increase in Egypt's population which doubled many times during the last years, with 10 million in 1900, over 20 million in 1950 (i.e. doubled in 50 years), over 40 million in 1979, (i.e. doubled in less than 30 years), and finally about 80 million currently.

For the time being, Egypt's births exceed 2 million a year, with the number of births ordered third or higher estimated to be over 800,000 births a year.

Egypt witness a case of stalled fertility. Fertility rates declined slowly in Egypt where TFR reached 3 births per woman and has been constant for years.

Between 2000 and 2008, the CPR in rural upper Egypt was fluctuating within a narrow range, indicating a stall in contraceptives use. Moreover, the same pattern can be seen more clearly in other areas. Yet, CPR increased when children' number increased, where half of the women started using a contraceptive after having the first child and

two thirds of them did that after having the 3rd child, which emphasizes that the main cause of contraceptives use was unwillingness to give birth to more children rather than the desire to space births. One out of every 11 women in Egypt still has unmet need to family planning needs. It is also notable that the relatively increased percentage of women who discontinued using a contraceptive might be due to service-provider-related reasons, such as side effects and contraceptive failure. This is also emphasized by other study results which indicated that inadequate consultation services were offered by service providers on family planning methods, especially within the Health Reform Program system. Such results illustrated the great challenge faced by the family planning program in relation to coverage of unmet family planning demands, identification of women who needed family planning services, and provision of such services, which is one of the prime factors behind the attempt to adjust the slow decrease in Egypt's fertility rate.

Egypt ranked average among the region's countries in terms of maternal death rates estimated at 350 per 100,000 live births in Yemen and 3 per 100,000 live births in UAE. Data indicated a high percentage of overweight and obese women among those who were either married but not pregnant or others who were more than 2 months after their last pregnancy (38.4% and 39.6% respectively). Data showed an improvement of nutrition level among children between 1992 and 2000, followed by a poorer nutrition level between 2000 and 2008 where children suffering from malnutrition were more than those registered in 1992, according to height-for-age and weight-for-age standards. Such results emphasized the need for making a huge change in the nutrition pattern among different categories of Egyptians[1].

Constant overpopulation might also be affecting different service access and quality. Despite the major expansion in Egypt's health service network, health indicators revealed the need for more expansions in order to cover deprived areas.

The population problem was even worse in Egypt's disadvantaged areas concentrated in rural Upper Egypt, Egypt's poorest 1000 villages, and slum areas where poor demographic characteristics and low living conditions prevailed along with low women's participation in the labor force, which resulted in high TFRs in such areas. In spite of the efforts made to improve these areas, especially the poorest villages, the geographic targeting program did not include in its first stage "integrated development" any projects to encounter demographic challenges like family planning or maternal and child health services. However, the Ministry of Family and Population (MOFP), formed in March 2009, started preparing the health and social plan needed to face demographic challenges in the poorest villages.

Slum areas suffered from multiple environmental problems; yet, CPR and reproductive health are no different from that in the neighboring urban areas. However, this is not sufficient; rather, a study is needed on the effectiveness of access to such services (method discontinuation and reasons; when do women use) and their impact on fertility.

Fertility rates in rural upper Egypt were still high with a lower level of maternal care, which made it necessary to provide more health and educational services there since lowering the fertility rate on the national level depended mainly on lowering rates in such areas.

These results indicated how important it was to update and allow access to data and conduct more studies in rural upper Egypt and slum areas. Indicators must be developed on both rural and urban levels to show disparities between them to be used in developing plans to help eliminate them.

The study of the variation in exposure to family planning messages reflected decreased exposure and increased variation among population groups, which may refer to the minor role played by local TV channels compared to satellite channels, which necessitates more effort in the population problem-related IEC activities. This requires the organization and development of such efforts in a way appropriate to conditions

[1] This issue was widely discussed in the 3rd report on population status "Food crisis and population status in Egypt".

and needs of all demographic groups, focusing on disadvantaged groups.

Although all successive demographic programs in Egypt aimed to eliminate disparities among Egypt's different areas, the index of inequity among different population groups indicated that living in specific region was one of the most important characteristics affecting access to information and family planning-related services since regions have higher levels of variation compared to other characteistics. Therefore, more efforts must be made, including evaluation, review, and screening of plans, programs and procedures.

Such procedures include re-planning the distribution of family planning and reproductive health services to increase prevalence in upper Egypt and rural areas, reformulate family planning messages via public media in a way that helps convey it better to women regardless of their education levels, and raise awareness among women of different classes and age groups on the importance of using family planning methods, not only as methods for birth control, but also for ensuring a healthy reproductive life. Additionally, training courses and opportunities should be provided to doctors working in health units offering family planning and reproductive health services to enable them to serve women of different groups regardless of their education levels and socio-economic conditions. Moreover, procedures include enhancement of private sector's role in family planning activities, especially in relation to provision of family planning methods in disadvantaged areas, along with promoting small families, and encouraging families to have 2 children only through procedures such as provision of positive and negative incentives. It is also necessary to review, complete data and upgrade quality of available databases in order to enable all competent authorities to circulate accurate and integrated data in different phases of planning and implementation.

One of the major challenges against the Egyptian government is the need for allocating LE 84 million at least -might even increase to LE 257 million by 2017- in order to compensate the expected reduction in subsidies allocated for financing family planning in Egypt. The Egyptian government would develop plans contributing to the achievement of this goal.

Existing illiteracy causes of non-enrollment in schools and dropping out of education will always be an obstacle to eliminating illiteracy and raising individuals' educational standards.

Studies made on Egyptians' perception of the population problem affirmed the common concept implying that the median optimal number of children is 3, tending to decrease among youth to reach 2 children. Such results can be used as a helpful base through demographic education, raising health awareness, and providing family planning services.

Most youth did not mind travelling abroad for work, and less than fifth agreed on migration as a solution for the population problem in Egypt. In this regard, youth's awareness must be raised on the importance of possessing legal travel documentation so that they do not have trouble or be liable to legal responsibility.

Many of the married HH heads and youth still believe that the use of family planning methods contradicts with religion, which indicated how necessary it is to use guidance of sound religious opinions and promote enlightened religious discourse via different media channels.

All these issues were extremely due to high illiteracy rates in Egypt. Despite all the attempts Egypt made to eliminate illiteracy, existing illiteracy causes of non-enrollment in schools and dropping out of education will always be an obstacle to eliminating illiteracy and raising individuals' educational standards. It is also due to Egypt's educational policies and lack of adequate motives encouraging families to enroll their children in schools and guarantee their continuity there.

Part of the problem lied in the gap between targeted policies and society values, where many families still believed that having many children was a sign of power, and a good source of income. During the past 20 years, average optimal number of children was constant at 2.9 children, which

indicated that the society still wished to have 3 children. This means failure of all promotional campaigns carried out during that period calling for reducing children's number and having 2 children only for each family, especially in light of studies conducted on a representative sample of the population to evaluate the impact of one of population campaigns. Results revealed that less than fifth of the respondents noticed the campaign and less than one third of those respondents realized that it is related to population.

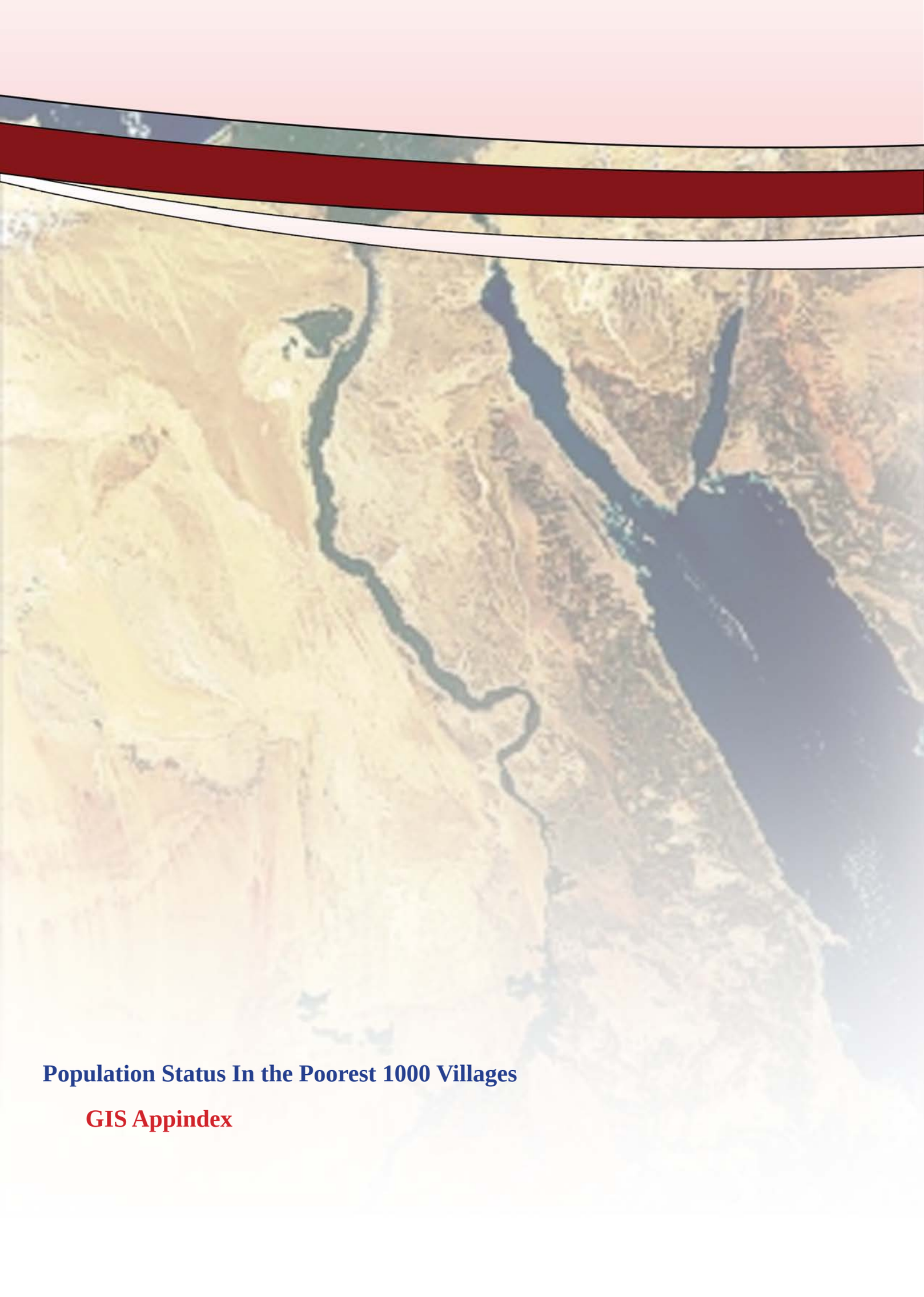
Many individuals, males and females, believed that males were better workers than females, where the 2008 World Values Survey showed that about 86% of respondents (males and females) thought that men are better workers than women, 93% thought that men are better political leaders than women, and 40% believed that university education is more important for males than for females.

This gap makes it difficult to increase integration of women in education and labor market, which is a very important motivation for reducing the number of desired children and of actual births. Studies showed that the higher the level of women's education, the lower the number of children she had. Besides, women working in return for money gave birth to fewer children than those who were unemployed.

Apparently, there is a gap between the reality and public perceptions in Egypt also. As previously mentioned, a high percentage of Egyptians did not know the accurate number of population. Many HH heads and youth were not aware of the water crisis in Egypt and that available water is not adequate for fulfilling population needs.

Such gaps cannot be bridged unless there is a synergy of efforts and commitment of different authorities to implement a unified strategy. Major roles in this regard are to be played by the religious discourse, direct and indirect media, and academic curriculum content, which should stress the small family concept and the necessity of adhering to it, clarify that women play a role far beyond giving birth to children, and that a nation's development occurs due to that of its population characteristics along with their culture and capabilities and not to the growth of population. Furthermore, the population problem must be discussed and promoted extensively among citizens so that they realize that an additional child certainly is a burden not only on the family but also on the country with all its utilities, especially with respect to scarcity and inadequacy of country resources, natural resources in particular, which are not known to many citizens.

Egypt suffers from another significant gap affecting its plans and strategies: the information gap emitting from the lack of demographic data, where many of the data required for following up on the population problem are of poor quality. To improve such quality, many actions should be taken, including continuous studies to evaluate data available on population, births, and mortalities, and capacity building for employees working in vital registration offices on the local level, in addition to ensuring data availability, issuing timely data to enable decision makers and employees concerned with population activity implementation, and the Egyptian population program follow-up and evaluation to take corrective actions necessary to increase the program effectiveness, and publicize these data on the smallest administrative levels.



Population Status In the Poorest 1000 Villages

GIS Appindex

This appendix presents the results of some estimated indicators for the 1000 poorest villages in Egypt. Firstly, a list of the villages is presented, and a set of maps is provided to show the location of each village (using villages' codes from the list). Then, the appendix presents some GIS maps, each corresponding to one indicator with villages' codes and indicator levels (low, medium and high) are shown on the maps.

The set of indicators presented in this appendix are:

1. Average live births per woman,
2. Median age at first marriage,
3. Percentages of current use of family planning,
4. Percentages of current use of modern family planning,
5. Percentage of unmet need for spacing,
6. Percentage of unmet need for limiting,
7. Percentage of total unmet need,
8. Percentages of births whose mothers received any antenatal care,
9. Percentages of births whose mothers received regular antenatal care,
10. Percentages of births whose mothers received medical assistance during delivery,
11. Percentages of births whose mothers received any postnatal care,
12. Percentages of births whose mothers received postnatal care within two days after delivery.

The poorest 1000 villages

N	Village Name	N	Village Name	N	Village Name
Sharkia					
253	Kafr Al-farayha	271	Kafr Abo moslem	289	Kafr Ayuob Awadd
254	Al-monagah Al-kobra	272	Sawada	290	Kafr Bany Al-aym
255	Al-dawahriya	273	Awlad Abdeen	291	Al-absy
256	Monshaat Abo Omar	274	Al-rawda	292	Kafr Al-zakazeek Al-kibly
257	Al-nasrya	275	Kafr Dabbous	293	Al-adliya
258	Al-nahaseen	276	Al-khattara	294	Meet Maala
259	Darwish	277	Al-higagya Al-mostagadda	295	Beer Emara
260	Kafr Al-ashkam	278	Saft Al-henna& its koufour	296	Al-bakarsha
261	Senitat Al-refaaeen	279	Al-eraky	297	Al-nigigy
262	Al-malakien Al-qiblyia	280	Omriet	298	San Al-hagar Al-bahriya
263	Sammakien Al-sharq	281	Kafr Mohamed Al-ghatory	299	Shohadaa Bahr Al-baqar 2
264	Nogoom	282	Kafr Al-arab	300	Shohadaa Bahr Al-baqar 3
265	Hesset Al-manasra	283	Kafr Hesain Al-tobgy	301	Shohadaa Bahr Al-baqar 4
266	Al-taradiya	284	Kahlat Al-gabal	302	Al-salhiya 3 Al-abtal
267	Al-azzazy	285	Sandanhoor	303	Al-salhiya 7 Al-ahrar
268	Akyad Al-bahriya	286	Al-saadien	304	Qassaseen Al-shark
269	Akyad Al-qiblyia	287	Al-sanafeen Al-qiblyia	305	Hood Al-nada
270	Karadees	288	Kafr Akyad	306	Shobra Al-nakhla
Behera					
2	Al-eman 3	989	Al-tal Al-kibeer		
988	Al-ghaba	990	Monshaat Al-wekeel		
Giza					
436	Behbeit	442	Al-helf	678	Arab Al-abayda
437	Monshaat Aboulabbas	443	Bany Saleh	679	Al-saudia
438	Kafr Barakat	444	Nazlet Targam	680	Zawiet Aboswylam
439	Bagat Al-shikh	445	Al-brombol	681	Menyet Al-rekka
440	Kafr Halawa	446	Gizerat Al-koraymat	682	Monshaat Solyman
441	Al-helf Al-araby	456	Tabl Aamoon	683	Kafr Torky & Kafr Torkhan
Beni-Suef					
307	Bany Khallifa	312	Nazlet Khalaf	317	Gizerat Al-wokalya
308	Al-awaona	313	Monshaat Taher	318	Delhans
309	Monshaat Al-omaraa	314	Ezbet Koftan	319	Al-mansoura
310	Al-nouera	315	Gizerat Al-foqaey		
311	Bahnamouh	316	Helya		

Menia					
684	Bany Werkan	720	Al-shikh Masoud	756	Bardonat Al-ashraaf
685	Abo Sedhom	721	Atniya	757	Bany Samet
686	Ibrahem	722	Kafr Al-madawer	758	Hamaddah
687	Al-gazaaer	723	Al-okaliya	759	Ashrouba
688	Al-esmailya	724	Bany Khalaf	760	Abou Elabbas
689	Bany Samrag	725	Monshaat Lamloum	761	OM Al-sas
690	Zahra	726	Al-shikh Zeyad	762	Al-hosaynia
691	Tahnasha	727	Abo Besht	763	Monshaat Bakeer
692	Al-hawasliya	728	Nazlet Bany Khalaf	764	Al-shikh Fadl
693	Demsha & Hashem	729	Sharona	765	Al-nagahh
694	Al-barageel	730	Dahroutt	766	Bany Ali
695	Al-edarah	731	Al-tahreer	767	Monshaat Al-kaisy
696	Atqa	732	Monshaat Neyazy	768	Balla Al-mostagadda
697	Salaqous	733	Ashneen Al-nasara	769	Nazlet Al-daleel
698	Al-maseed	734	Nazlet Sheeha	770	Al-qais
699	Malatiya	735	Dair Al-garnous	771	Kafr Al-shikh Ibrahem
700	Monshaat Al-sawy	736	Al-zoura	772	Al-sennarya
701	Zawiet Al-godamy	737	Bartabat	773	Al-salam
702	Bremsha	738	Nazlet Dahroutt	774	Helwa
703	Monshaat Al-azhary	739	Ebbad Sharona	775	Koum Matay
704	Nazlet Awlad elshik	740	Al-garnous	776	Monshaat Galal
705	Mayanat Al-wakf	741	Aba Al-wakf	777	Monshaat Lotfallah
706	Kafr Mahdy	742	Kofada	778	Al-atlaat
707	Hemaida Al-gendy	743	Al-gendya	779	Al-rawda
708	Nazlet Ramadan	744	Sakoola	780	Bardanwha
709	Kafr Abdelkhalik	745	Al-nasriya	781	Seela Al-sharkia
710	Belhasa	746	Aatw Al-wakf	782	Nazlet Amr
711	Kafr Al-maghraby	747	Saft Abogerg	783	Kofor Al-soleya
712	Al-kom Al-akhdar	748	Shalakam	784	Kom Waly
713	Al-kayat	749	Monshaat Al-yousofy	785	Seela Al-gharbia
714	Bany Amer	750	Al-bahnasa Al-gharbia & Kafr Al-mansoura	786	Adkak Al-mesk
715	Mfouz Tieba	751	Abo Gerg	787	Nazlet Awlad Al-shikh
716	Al-baghour	752	Al-mawadda	788	Marzouk
717	Nazlet Belhasa	753	Sendefa	789	Saqyet Dakouf
718	Bany Khaled	754	Abtouga	790	Abo Shehata
719	Monshaat Abdallah Lamloum	755	Kafr Aboulawdain	791	Abo Aziz

792	Abo Haseeba	829	Al-kamadeer	866	Mensfees
793	Menbal	830	Nazaly Taha	867	Bany Komgor
794	Dakouf	831	Nazlet Shady	868	Al-sahala
795	Abwan	832	Boga	869	Bany Ebaid
796	Monshaat Menbal	833	Saft Al-laban	870	Gizeret Sheeba
797	Al-shikh Hasan	834	Tahna Al-gabal	871	Monshaat Al-dahab Al-qeblya
798	Torfa	835	Taha Al-aameda	872	Bany Mousa
799	Asttal	836	Nazlet Ebaid	873	Kom Al-mahres
800	Kafr Al-kawady	837	Mahdya	874	Al-fokkaiy
801	Gawada	838	Hihya	875	Kom Al-zohair
802	Bany Ammar	839	Nazlet Al-fallaheen	876	Al-matahra Al-kiblia
803	Qlousna	840	Bany Hasan Al-ashraaf	877	Bany Kheyar
804	Al-tawfikia	841	Demsheer	878	Zawiet Hatem
805	Monshaat Monkiteen	842	Al-bergaya	879	Abiyouha
806	Al-rouby	843	Al-hawarta	880	Al-karm
807	Al-helmia	844	Nazlet Faragallah Matta	881	Bany Saaied
808	Al-kotousha	845	Al-daowdia	882	Nazlet Awlad Gouaid
809	Al-gharbawy	846	Admou	883	Senaim
810	Monkiteen	847	Nazlet Hesain Ali	884	Manahry
811	Delkam	848	Toukh Al-khail	885	Al-berba
812	Al-hamaisha	849	Bahdal	886	Al-soltan Hasan
813	Shousha	850	Sawada	887	Al-nahhal
814	Al-tiba	851	Tallah	888	Kafr Al-feila
815	Al-salam	852	Touah	889	Balansoura
816	Dair Gabal Al-tair	853	Saft Al-khomar Al-gharbia	890	Abo Korkas
817	Gabal Al-tair	854	Zawiet Soltan	891	Geres
818	Al-sharayna	855	Bany Mohamed Soltan	892	Al-hasania
819	Monshaat Bedainy	856	Makousa	893	Monshaat Zaafarana
820	Al-sharawya	857	Saft Al-khomar Al-sharkia	894	Mantout
821	Al-shikh Abdellah	858	Bany Ahmed	895	Asmant
822	Ezbet Al-kamadeer	859	Bany Mahdy	896	Safay
823	Bany Ghany	860	Monshaat Al-dahab Al-bahria	897	Aboulsafa
824	Bany Al-hakam	861	Saft Al-khomar Al-aslia	898	Monshaat Deabes
825	Manshiet Al-sheraey	862	Bany Hammad	899	Zaafaranah
826	Al-galaa	863	Reeda	900	Bany Hasan Al-shorouk
827	Etsa	864	Bany Mohamed Shaarawy	901	Nazlet Geres
828	Nazlet Al-amodain	865	Sharara	902	Atleedem

903	Kafr Labs	932	Monshaat Al-maghalka	961	Tanoo
904	Nazlet Al-sarw	933	Al-rayramoon	962	Nazlet Mahmoud
905	Qasr Hoor	934	Kalba	963	Nazlet Tanda
906	Hoor	935	Al-areen Kibly	964	Tal Bany Omran
907	Al-shikh Temy	936	Dair Al-barsha	965	Nazlet Saaied
908	Nazlet Harz	937	Al-barsha	966	Asmo Al-aroos
909	Monshaat Al-nasr-Monshaat Kamel	938	Al-baraka	967	Bany Haraam
910	Abshadat	939	Dairout Om Nakhla	968	Nazlet Awlad Morgaan
911	Nazlet Makien	940	Nazlet Al-areen Kibly	969	Abo Khelka
912	Bany Khaled	941	Om Koms	970	Bany Omraan
913	Nazlet Sharmookh	942	Monshaat Saif Al-nasr Mohamed	971	Nazlet Mohamed Samhan
914	Al-mahras	943	Ezbet Galal	972	Nazlet Al-hasayba
915	Nazlet Hamzawy	944	Sengerg	973	Al-rahmania
916	Shaarawy	945	Al-shikh Shibeka	974	Al-hag Kandeel
917	Bany Rooh	946	Al-maasara Bahary	975	Al-nasrya
918	Kalandool	947	Al-badraman	976	Al-omarya
919	Al-shikh Ebada	948	Tanda	977	Zaabara
920	Naway	949	Toukh	978	Al-emarya Al-sharkia
921	Ezbet Mostafa Hamdy	950	Nagaa Markeb	979	Al-matahra Al-bahria
922	Abo Kolta	951	Galal Al-sharkia	980	Derwa
923	Tona Al-gabal	952	Nazlet Abdelmeseeh	981	Dair Ateiah
924	Al-rawda	953	Delga	982	Al-sawahga
925	Nazlet Tona	954	Nazlet Al-badraman	983	Al-serarya
926	Bany Hafez	955	Ezab Tal Bany Omraan	984	Al-tawfik 7
927	Dair Abohinnes	956	Al-sawalem	985	Al-hemmah
928	Al-bayadya	957	Kafr Khozam	986	Al-kamal
929	Al-areen Bahary	958	Gizerat Tal Bany Omraan	987	Al-amal
930	Al-horriya	959	Monshaat Khozam Al-gharbia		
931	Al-ashmonien	960	Bany Salem		
Assyout					
1	Monshaat Al-maasara	451	Tal Awlad Serag	459	Al-hoota Al-gharbia
434	Abo Kareem	452	Nazlet Abdelelaah	460	Dashlout
435	Abo Al-hadr	453	Al-zeera	461	Daiyrout Al-shereef
447	Al-atiyat Al-keblia	454	Al-rowaigat	462	Garf Sarhaan
448	Basra	455	Monshaat Al-badary	463	Nazlet Sarakna
449	Dair Basra	457	Al-matawaa	464	Sarakna
450	Awlad Ibrahem	458	Zawiet Haroun	465	Amshoul

466	Al-hoota Al-gharbia	502	Nazaly Ganoub	538	Arab Al-ateyat Al-bahria
467	Nazlet Mostafa Abdelhaleem	503	Bany Saleh	539	Sarawa
468	Nazlet Abdellah	504	Al-habalsa	540	Al-sawalem Al-bahria
469	Saw	505	Ank	541	Shakalkeel
470	Nazlet Al-awamer	506	Al-shikh Awnallah	542	Bany Mohammadiat
471	Nazlet Saw	507	Al-sarakna	543	Nazlet Al-kadadeeh
472	Banoub Zahr Al-gamal	508	Al-haradna	544	Al-awamer
473	Al-mahmoudia	509	Bany Yehia Kibly	545	Kom Booha Kibly
474	Shalash	510	Bany Korra	546	Kom Al-mansoura
475	Kom Angasha	511	Bouk	547	Dair Show
476	Baweet	512	Bany Zaid Bouk	548	Al-hammam
477	Bany Yehia Bahary	513	Al-monshaa Al-soghra	549	Al-mandara Kibly
478	Nazlet Badawy	514	Gizeret Al-maabda Al-gharbia	550	Gizeret Bahig
479	Al-mandara Bahari	515	Al-temsahia	551	Arab Mateer
480	Kodiet Mobarak	516	Razket Al-dair Al-meharrak	552	Al-hawatka
481	Beblaw	517	Om Al-kosour	553	Bany Odaiyat
482	Al-riyad	518	Blout	554	Arab Al-atawla
483	Dair Al-kosair	519	Al-medawar	555	Nagaa Abdelrasoul
484	Masara	520	Al-monshaa Al-kobra	556	Nagaa Sabaa
485	Nazlet Zaher	521	Bany Refea	557	Al-hassany
486	Nazlet Farag Mahmoud	522	Kom Al-shaheed	558	Baheeg
487	Qasr Hedar	523	Bany Shokair	559	Al-gawly
488	Kharfa	524	Abo Khalil	560	Sawalem Abnoub
489	Kom Booha Bahary	525	Damanhour	561	Kom Abo Shibl
490	Senbou	526	Al-tatalia	562	Nogoa Bany Hosain
491	Meraina	527	Al-maabda Al-sharkia	563	Al-aadr
492	Awaga	528	Monshaat Khashaba	564	Bany Sanad
493	Al-manashy	529	Al-sahreeg	565	Awlad Rayik
494	Al-nehaia	530	Nazlet Romaih	566	Bany Morr
495	Nagaa Khodair	531	Al-maabda Al-gharbia	567	Al-ezba
496	Aramiat Al-diwan	532	Nazlet Karaar & Gehaina	568	Masraa
497	Aramieat Al-khodairy	533	Bany Shaaran	569	Al-tawabia
498	Fazara	534	Al-atamna	570	Sallam
499	Bany Helaal	535	Bany Ibrahem	571	Al-akraad
500	Al-sabha	536	Dair Al-gabraawy	572	Gahdam
501	Bany Edrees	537	Arab Al-shanabla	573	Al-maasara

574	Bany Zaid	609	Monshaat Hammam	644	Nogoaa Al-maadi
575	Al-boora	610	Al-nawamees	645	Al-etmania
576	Mankabaad	611	Al-masoudy	646	Al-nawawra
577	Al-kallabat	612	Al-kom Al-ahmar	647	Al-mashaiaa Bahary
578	Bany Ghaleb	613	Monshaat Al-okaal	648	Bany Hosain
579	Nazlet Al-assara	614	Abo Khars	649	Al-mashayaa Kibly
580	Elwan	615	Kom Saada	650	Kosair Al-amarna
581	Al-hadaya	616	Al-zaraby	651	Nagaa Al-esawia
582	Al-ghareeb	617	Al-okal Bahary	652	Al-moteaa
583	Al-namaysa	618	Magrees	653	Awlad Ali
584	Al-shaghba	619	Al-ablak	654	Al-afadra
585	Shatab	620	Nagaa Zoraik	655	Nazlet Bakhoum
586	Dronka	621	Al-dwair	656	Al-shamia
587	Korkares	622	Dair Al-ganadla	657	Nazlet Al-shikh Shihata
588	Mosha	623	Dakran	658	Meer
589	Reefa	624	Kom Asfaht	659	Al-ansaar
590	Nazlet Bakour	625	Teama	660	Arab Al-gahma
591	Dair Dronka	626	Al-bayadia	661	Al-shikh Dawoud
592	Al-matmar	627	Bany Feez	662	Tanagha
593	Bakour	628	Al-shikh Etmaan	663	Kiman Saied Al-sharky & Tema
594	Al-ouna	629	Al-okal Kibly	664	Al-barood Shark
595	Al-louka	630	Al-himamya	665	Al-barood Gharb
596	Dewena	631	Al-kordy	666	Awlad Elyas
597	Al-zawia	632	Kom Abo Hagar	667	Kardous
598	Al-khawaled	633	Al-shanayna	668	Bany Magd
599	Al-nazla Al-mostagadda	634	Al-azayza	669	Arab Al-amayim
600	Dyr Tassa	635	Al-waadla	670	Bany Elieg
601	Tassa	636	Kom Saied Al-gharby	671	Al-qasr
602	Bany Semaya	637	Nogoaa Al-sadadra	672	Bany Taleb
603	Al-balayza	638	Nazlet Al-kadim	673	Al-fema
604	Nazlet Al-malek	639	Nagaa Geziret Faw	674	Al-kout
605	Al-akadma	640	Al-amry	675	Awlad Serag
606	Bwait	641	Ezbet Al-akbatt	676	Al-wasta
607	Al-nikhaila	642	Al-berba	677	Awlad Badr
608	Al-tanagha	643	Nazlet Awlad Mohamed		

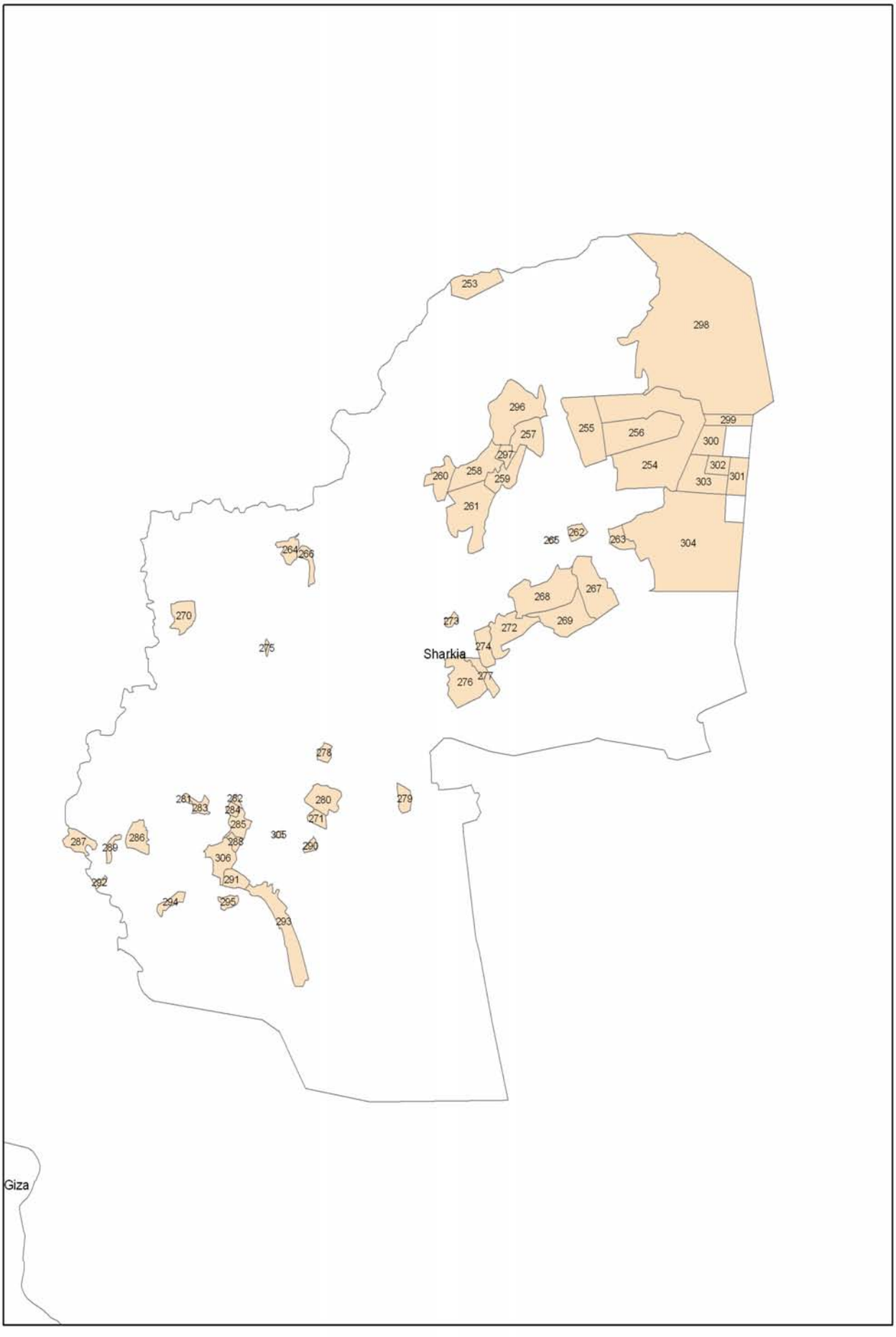
Souhag					
3	Enaibes	39	Nagaa Hamad	75	Al-salamouny
4	Bany Ammar	40	Dawod	76	Al-wakda
5	Al-seksaka	41	Nazlet Al-dwaik	77	Nagaa Tammam
6	Geziret Tama	42	Hager Meshta	78	Saadallah
7	Salamoun	43	Al-goraidat	79	Abo Aziz
8	Faw Gharb	44	Al-safeeha	80	Bany Zaar
9	Al-shouka	45	Al-khazendarya	81	Al-hamadia
10	Al-hasana	46	Al-shikh Rahooma	82	Aabar Al-malek
11	Al-gabab	47	Bany Harb	83	Al-deyabat
12	Al-rayaina Al-maalak	48	Al-shikh Zain Al-deen	84	Orrabet Abo Dahab
13	Nazlet Abdallah	49	Al-shik Masoud	85	Al-hawaweesh
14	Al-shikh Ammar	50	Al-sawaleh	86	Baga
15	Al-mawateen	51	Gziret Al-khazendaria	87	Al-bakhaita
16	Al-hadeeka	52	Kom Badr	88	Al-shikh Makram
17	Kom Al-arab	53	Al-horaydia Al-bahria	89	Nagaa Al-naggar
18	Al-hama	54	Sahel Tahta	90	Al-arraba Al-sharkia
19	Al-tahreer	55	Al-hareeria Al-kiblia	91	Kelfaw
20	Mashta	56	Al-kom Al-asfar	92	Al-nazzah Al-bahria
21	Al-eghana	57	Nogoaa Al-sawamaa Gharb	93	Nazzah
22	Al-hasamda	58	Al-kobaisat	94	Al-shikh Shibl
23	Al-kotna	59	Al-gobairat	95	Gizeret Al-shourania
24	Al-heesha	60	Benho	96	Omar Ibnelkhattab
25	Ezbet Al-kawia	61	Al-tolayhat	97	Al-haradna
26	Al-ezba Al-mostagaddah	62	Al-sawamaa Gharb	98	Al-rayayna Belkitkata
27	Al-atamna	63	Al-gallawia	99	Fazara Belkaria
28	Sleem	64	Bany Helaal	100	Al-horaydia
29	Kom Ghareeb	65	Nazlet Ali	101	Nazzat Al-hager
30	Al-karia Beldoair	66	Al-farasia	102	Nogoaa Al-rayania
31	Al-modamr	67	Nazzat Al-mohazzemeen	103	Fawgly
32	Shattoura	68	Al-gazazra	104	Banaweet
33	Kom Ashkaw	69	Al-rayayna Belhager	105	Nogoaa Bany Wasel
34	Tal Al-zouky	70	Al-harafsha	106	Al-awamia
35	Al-wakaat	71	Al-betakh	107	Ali Ben Aby Taleb
36	Al-halaky	72	Aabar Al-wakf	108	Aqsaass
37	Al-saada	73	Needa	109	Awlad Ismaiel
38	Om Doma	74	Bahta	110	Amer

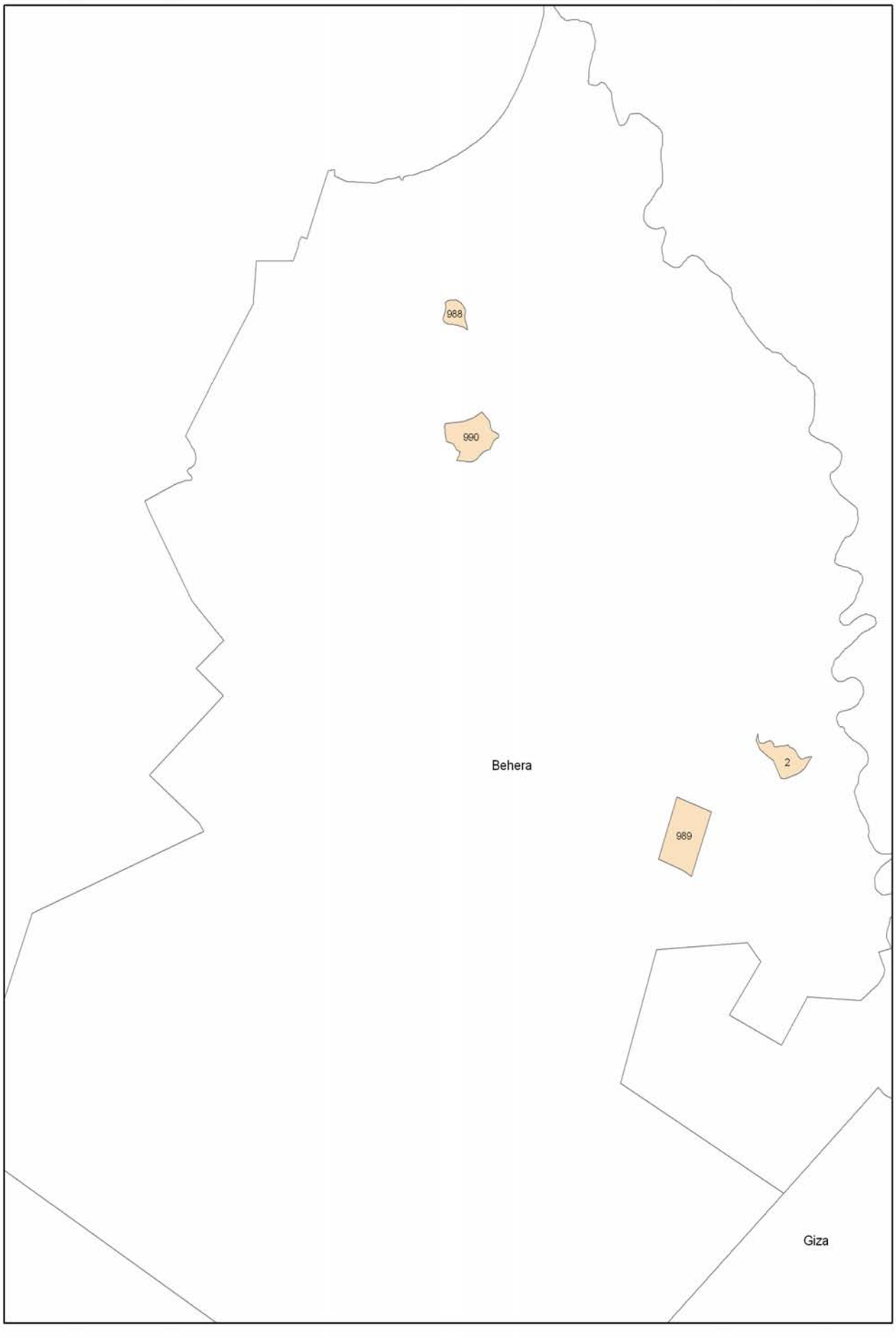
111	Bany Wasel	148	Balasfoura	185	Awlad Yehia Bahary
112	Basouna	149	Al-bayadia Belnazer	186	Al-danakla
113	Gehena Al-sharkia	150	Al-mazalwa	187	Bendar Al-ramlia
114	Nagaa Taiea	151	Demno	188	Al-shohadaa
115	Othman Ben Affaan	152	Rawafea Al-kosair	189	Al-masaeed
116	Shandaweel	153	Al-mahamda	190	Al-baiady & Al-karia
117	Al-sawamaa Shark	154	Al-salaa	191	Bany Aish
118	Nogoaa Al-sawamaa Shark	155	Al-rouayheb	192	Al-rakakna
119	Seflack	156	Al-ahaywa Shark	193	Al-berba
120	Al-tawayl Al-sharkia	157	Al-kawamel Bahary	194	Kharfet Gerga
121	Al-karamta Shark	158	Al-hagarsa	195	Bait Al-kheraiby
122	Bany Weshah	159	Al-bagia Balshikh Youssef	196	Al-hager Bawlad Yihea
123	Al-tawaiel Al-gharbia	160	Al-horayzat Al-gharbia	197	Bait Khallaf
124	Al-omour	161	Kom Baddaar	198	Al-khallafia
125	Al-samarna	162	Awlad Ghareeb	199	Nagaa Ghobashy
126	Abo Bakr Al-seddik	163	Al-ahayoa Gharb	200	Al-gawaheen
127	Al-shikh Youssef	164	Kharekat Al-manshaa	201	Al-aawamer Bahary
128	Al-ghorayzat	165	Al-kawamel Kibly	202	Awlad Yihea Kibly
129	Bahaleel Al-gizera	166	Al-zouk Al-sharkia	203	Bait Dawoud Sahl
130	Tunis	167	Al-hammas	204	Al-aawamer Kibly
131	Al-karamta Gharb	168	Al-zouk Al-gharbia	205	Al-koraan
132	Gizeret Shndaweel	169	Al-sakria	206	Nogoaa Mazen Shark
133	Wenaina Al-gharbia	170	Al-zara	207	Nagaa Bardees
134	Rawafea Al-esawia	171	Al-amaida	208	Al-zawatna Al-baharia
135	Wenyna Al-gharbia	172	Al-dwairat	209	Mazata Shark
136	Al-balabeesh Al-mostagadda	173	Al-khanansa	210	Al-mahasna
137	Al-hegz	174	Awlad Al-shikh	211	Al-nosairaat
138	Al-herga Bahary	175	Awlad Ali	212	Al-mashawda
139	Awlad Nosair	176	Al-khanansa Gharb	213	Al-sahel Bahary
140	Al-esawia Shark	177	Al-shawawla	214	Al-zankour
141	Bendar Al-karmania	178	Awlad Salama	215	Al-tawader
142	Gizeret Al-montaser	179	Awlad Hamza	216	Al-baskia
143	Awlad Mamen	180	Gizeret Awlad Hamza	217	Al-akaria
144	Awlad Shaloul	181	Awlad Gobara	218	Kom Ashkilo
145	Al-koula	182	Al-rashaida	219	Awlad Touk Gharb
146	Al-anbaria	183	Awlad Baheeg	220	Al-sahel Kibly
147	Gizeret Mahrous	184	Bendar Al-tibbenat	221	Bait Allam

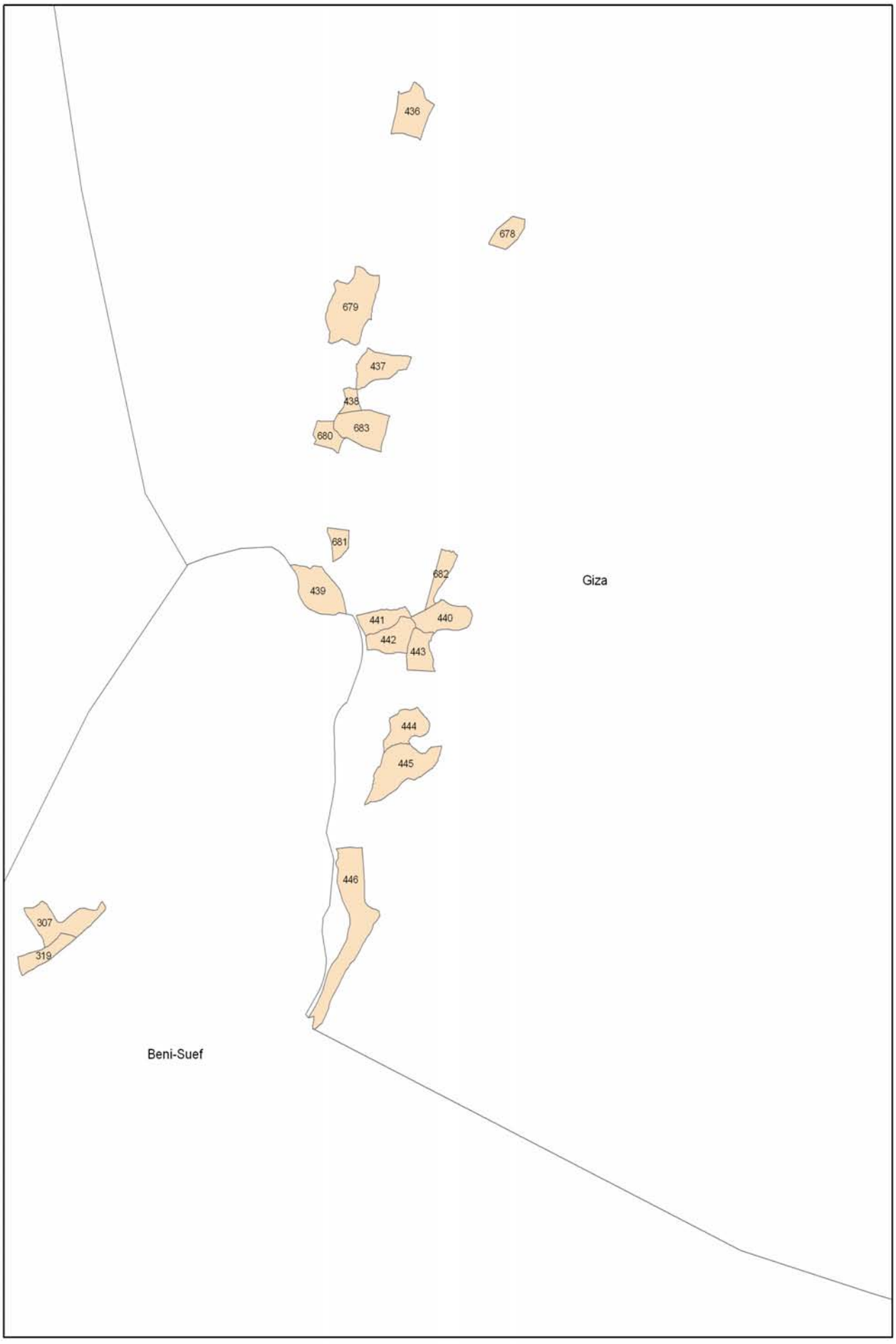
222	Al-shikh Marzouk	233	Al-salmany	244	Al-okalia
223	Yakoub	234	Berkheel	245	Al-ghabat
224	Awlad Salem Bahary	235	Al-samata	246	Al-hallafy
225	Al-balabeesh Bahary	236	Naknak	247	Al-ghonaymia
226	Awlad Eliw	237	Al-khiaam & Gizeret Naknak	248	Benga
227	Al-harga Belkoraan	238	Awlad Khalaf	249	Arab Bakhwag
228	Awlad Salem Kibly	239	Al-balabeesh Kibly	250	Al-sawalem
229	Al-eslaah	240	Al-herga Kibly	251	Nazlet Omara
230	Al-koshh	241	Bany Gameel	252	Nazlet Al-kady
231	Al-naghameesh	242	Arabet Abedous		
232	Al-shikh Baraka	243	Al-hobail & Al-sheloulia		
Quena					
320	Al-marees	346	Al-teraa	374	Al-aamra
321	Al-rayayna	347	Nagaa Azzouz	375	Al-rawateb
322	Al-rozaykat	348	Ezbet Al-bousa	376	Samhoud
323	Al-rozaykat Al-kiblia	349	Al-sayad	377	Al-kibly Samhoud
324	Al-demokratt	350	Al-helfaya Kibly	378	Al-samata Bahary
325	Al-mahameed	351	Karya 3	379	Al-samata Kibly
326	Al-mahameed Al-kiblia	352	Al-atyeat	380	Nagaa Al-shikh Ali
327	Al-shaghab	353	Gizeret Al-doum	381	Nagaa Saaied
328	Al-gherera	354	Al-zaraneb	382	Al-ttouayraat
329	Al-deybia	355	Al-sabriat	383	Faw Kibly
330	Kemaan Al-mataana	356	Hegaza	384	Belaad Al-mal Bahary
331	Al-maala	359	Abo Diab Shark	385	Al-hobailat Al-sharkia
332	Tefnees	360	Al-sharky Samhoud	386	Bakhanes
333	Al-hanady	361	Al-maharza	387	Al-rezka
334	Asfoun	362	Abo Mannaa Shark	388	Al-hobailat Al-gharbia
335	Al-homaidat	363	Al-aawamer & Bany Berza	389	Al-hasanat
336	Al-nogoaa	364	Al-ezab	390	Kom Yakoub
337	Al-dair	365	Abo Diab Gharb	391	Al-marashda
338	Al-nogoaa Kibly	366	Al-bahary Samhoud	392	Faw Gharb
339	Al-halla	367	Al-negma & Al-homran	393	Faw Bahary
340	Al-karaya	368	Dandara	394	Al-solaymat
341	Zarneekh	369	Abo Mannaa Kibly	395	Al-rafsha
342	Al-mesawia	370	Al-awsat Samhoud	396	Al-kalmina
343	Al-addayma	371	Kosair Bakhanes	397	Al-shokaify
344	Gizeret Ragih	372	Abo Mannaa Gharb	398	Al-kolaaya
345	Komair	373	Al-ameria	399	Al-kasr

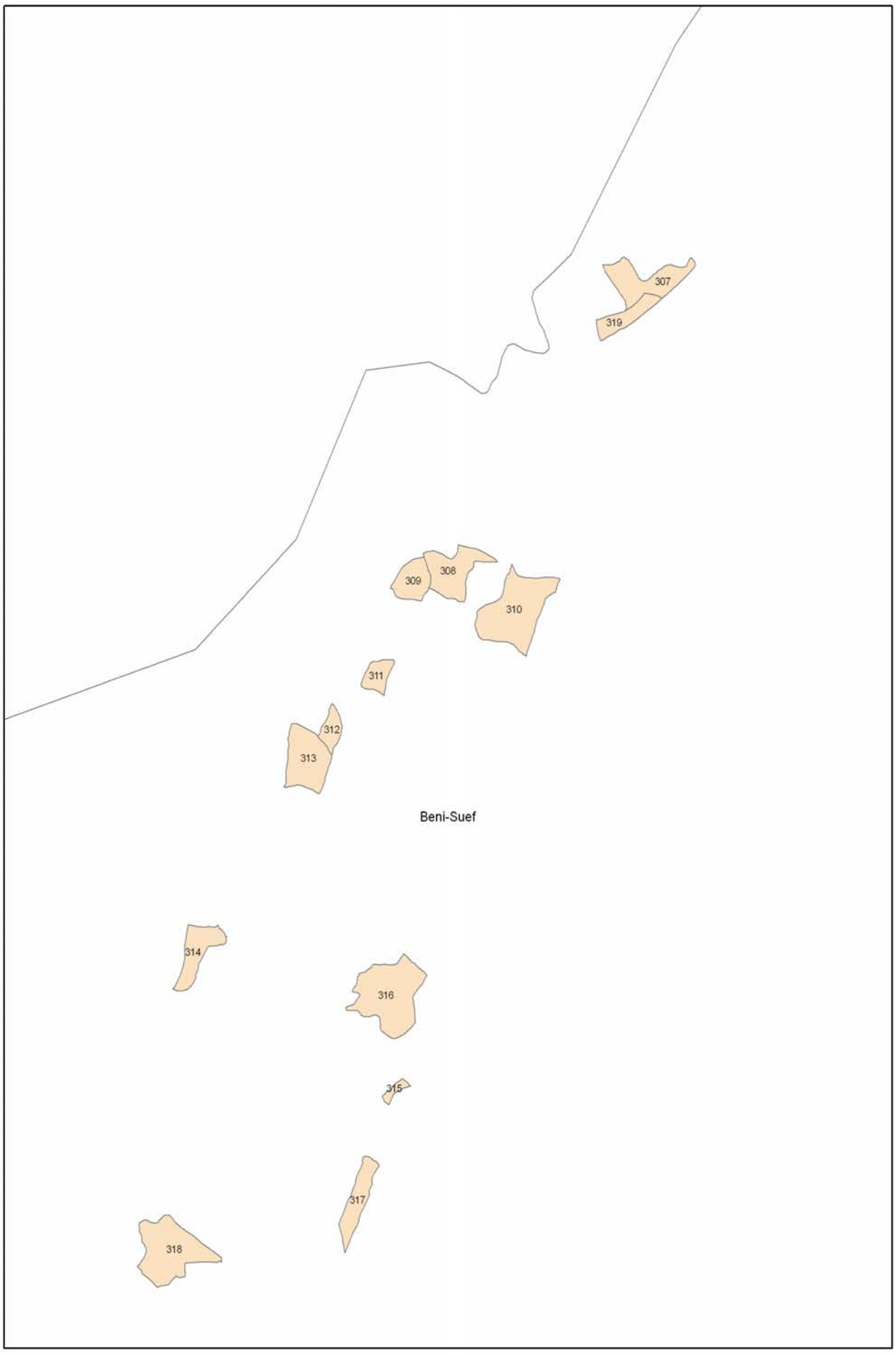
400	Refaah	412	Al-kallaheen	424	Abasa
401	Ezbet Al-bousa	413	Al-helfaia Bahary	425	Hegazet Bahary
402	Al-dair Al-sharky	414	Al-gharby Bahgoura	426	Al-kharanka
403	Al-karnak	415	Al-nogoaa	427	Gizeret Motaira
404	Al-selmia Al-hayet	416	Al-mahrousa	428	Denfeek
405	Al-osayrat	417	Abo Amoury	429	Al-bahary Komoola
406	Karam Omraan	418	Al-erky	430	Al-mafragia
407	Gizeret Al-hamoudy	419	Al-kallaheen	431	Al-ayaysha
408	Al-dair	420	Al-harragia	432	Al-awsat Komoola
409	Al-dahsa	421	Al-olaykat	433	Khozaam
410	Nagaa Al-hag Sallam	422	Al-makhzan		
411	Al-kenawya Al-baharia	423	Al-halla		
Aswan					
357	Wady Al-nakra	358	Al-eman		

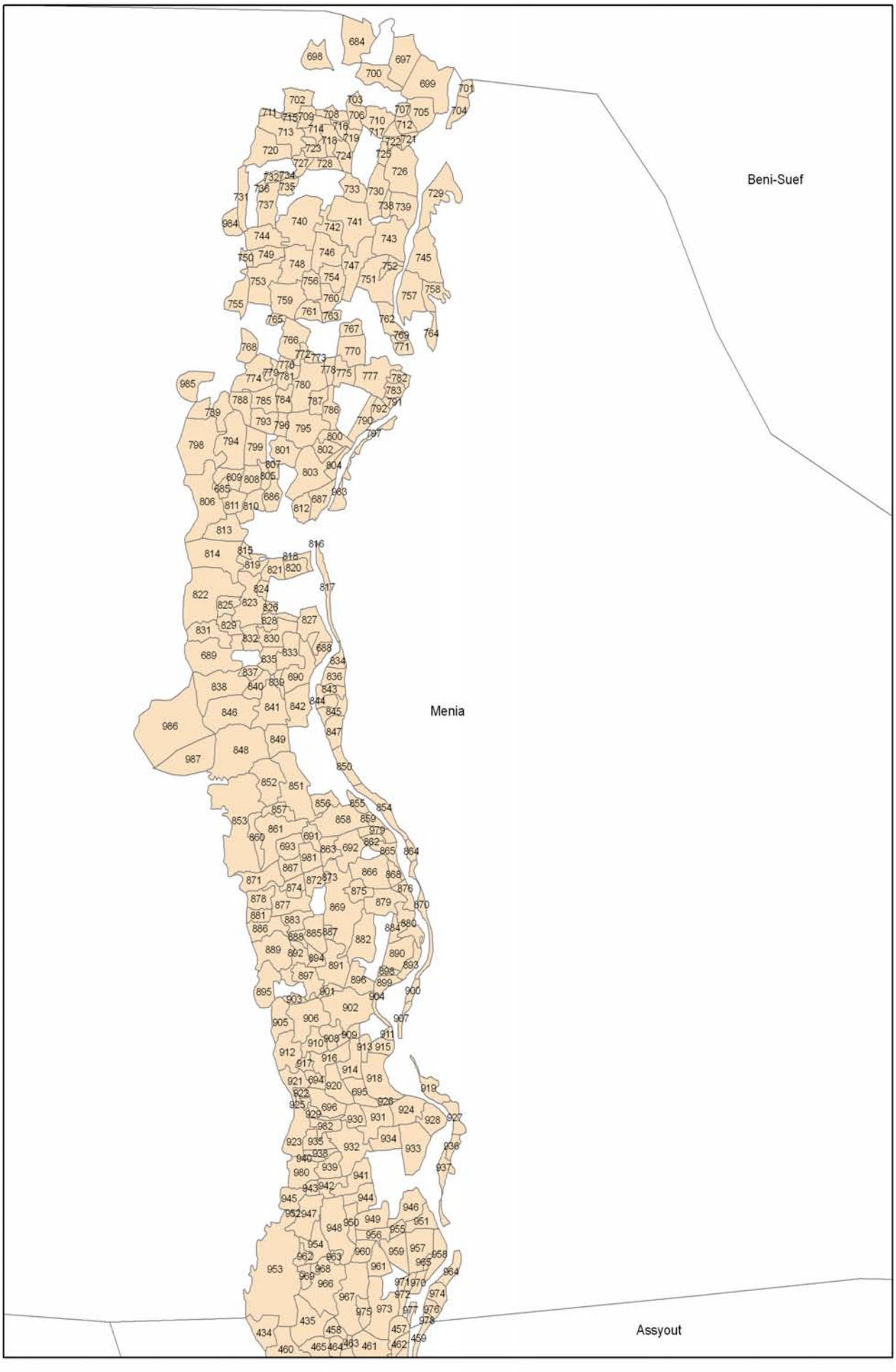
Maps of the poorest 1000 villages

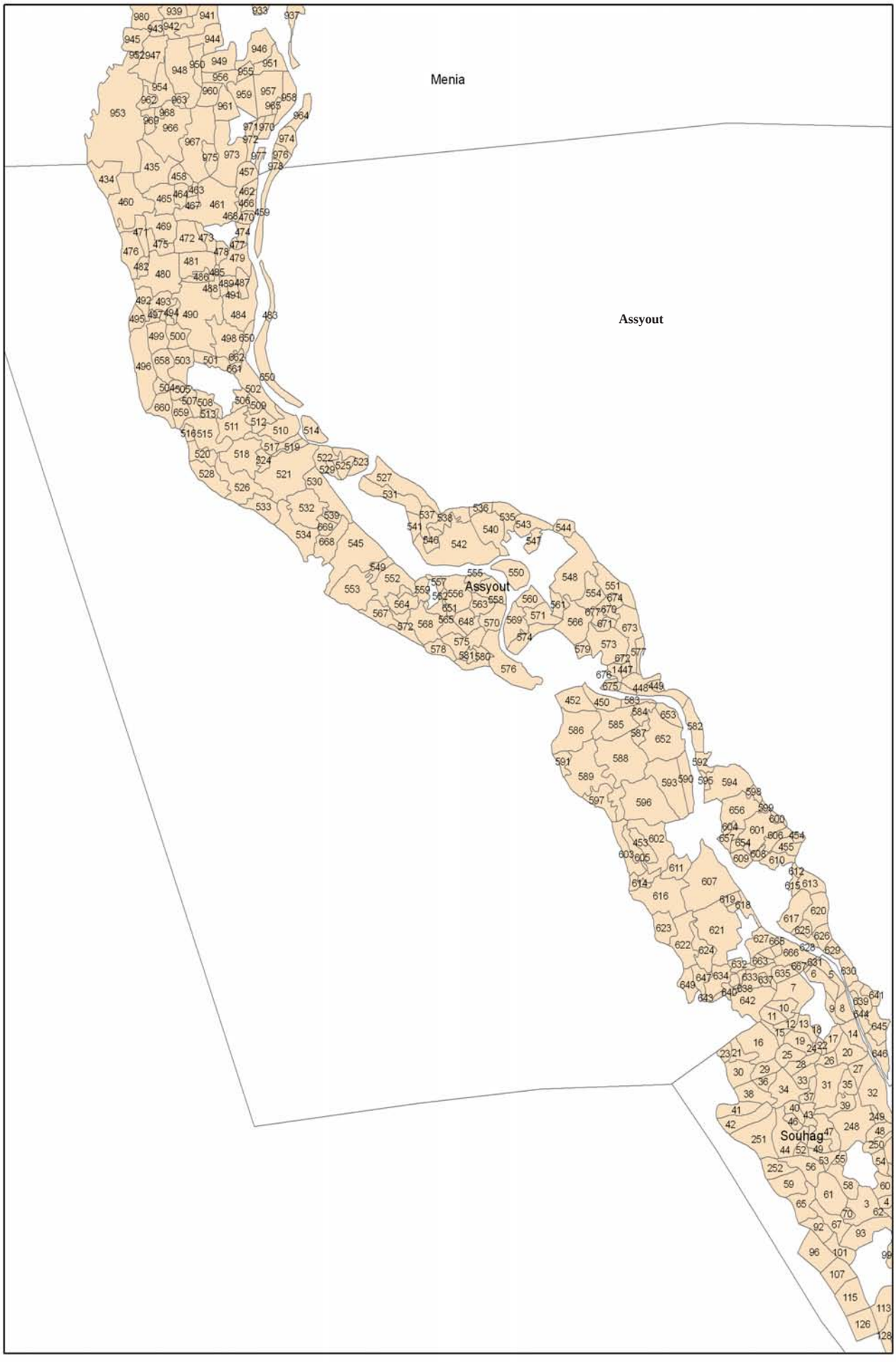


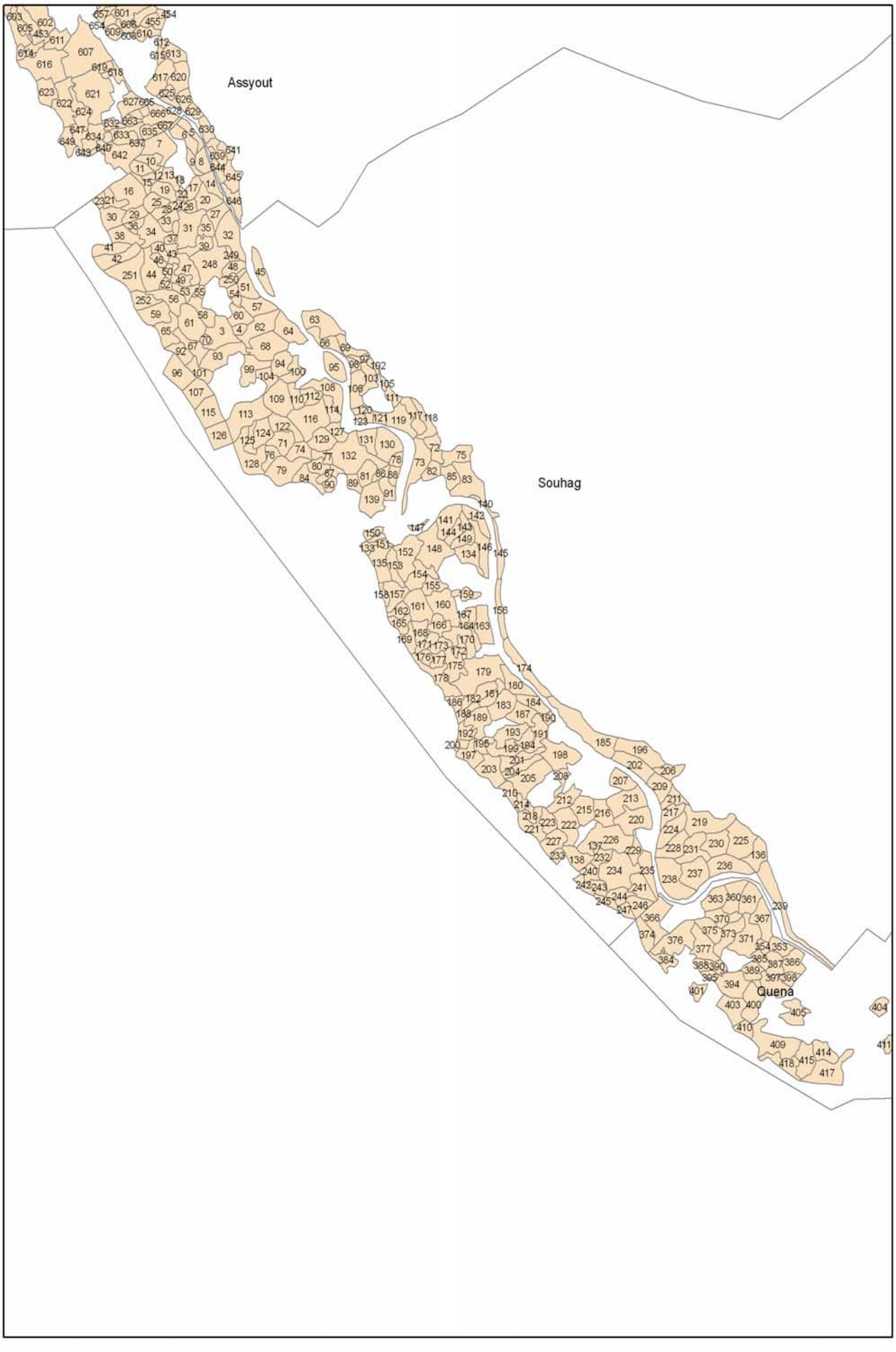

988
990
Behera
2
989
Giza

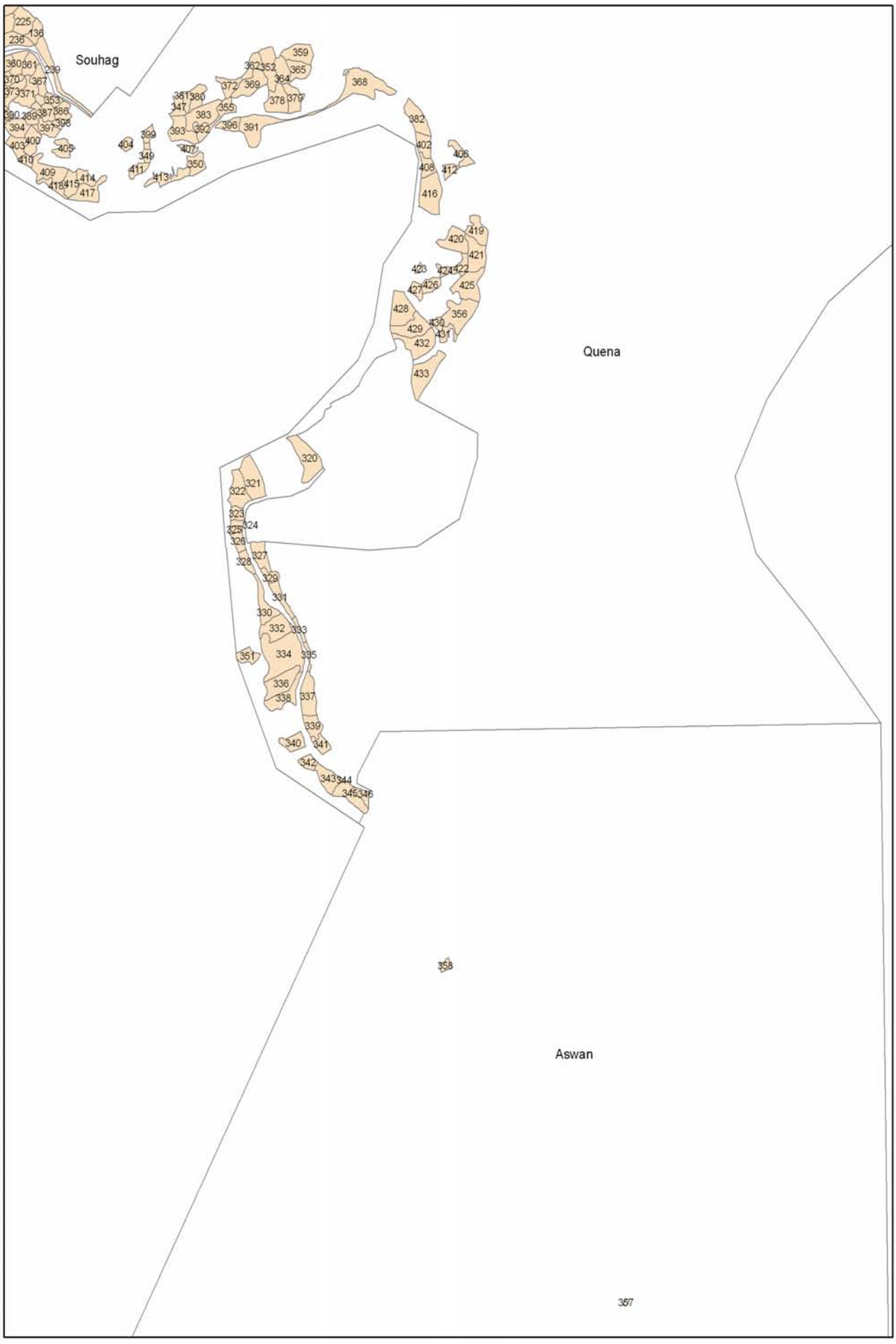

436
678
679
437
438
680
683
681
682
439
441
440
442
443
444
445
446
307
319
Giza
Beni-Suef


307
319
309
308
310
311
312
313
Beni-Suef
314
316
315
317
318


Beni-Suef
Menia
Assyout

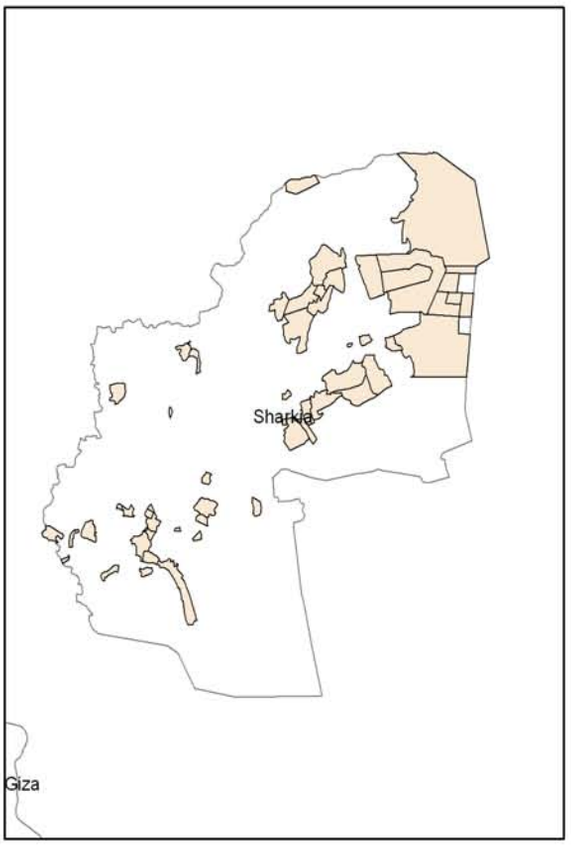

Menia
Assyout
Assyout
Souhag

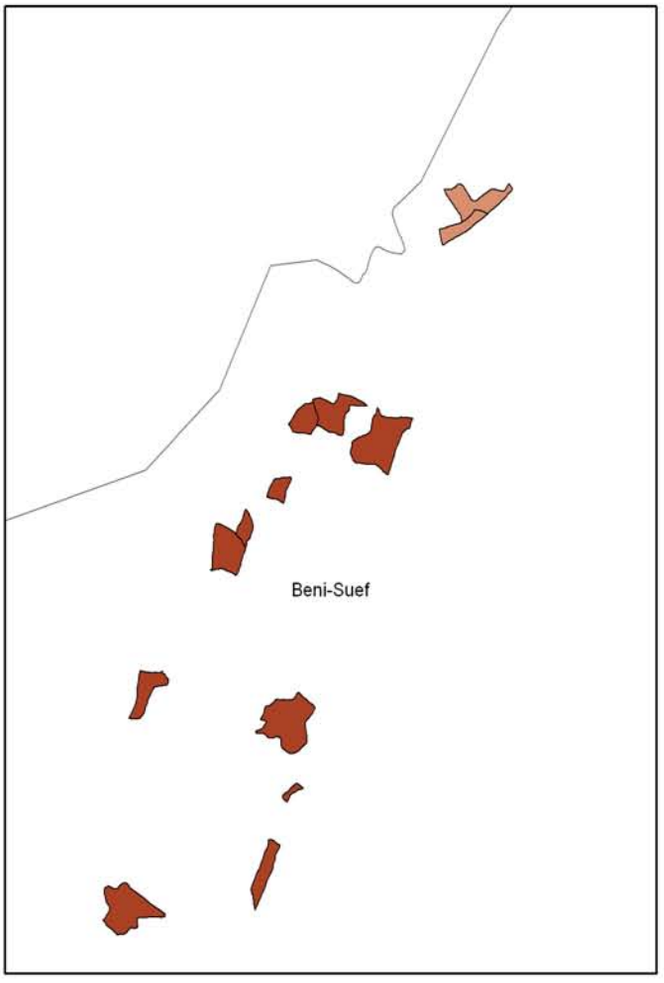

Assyout
Souhag
Quena

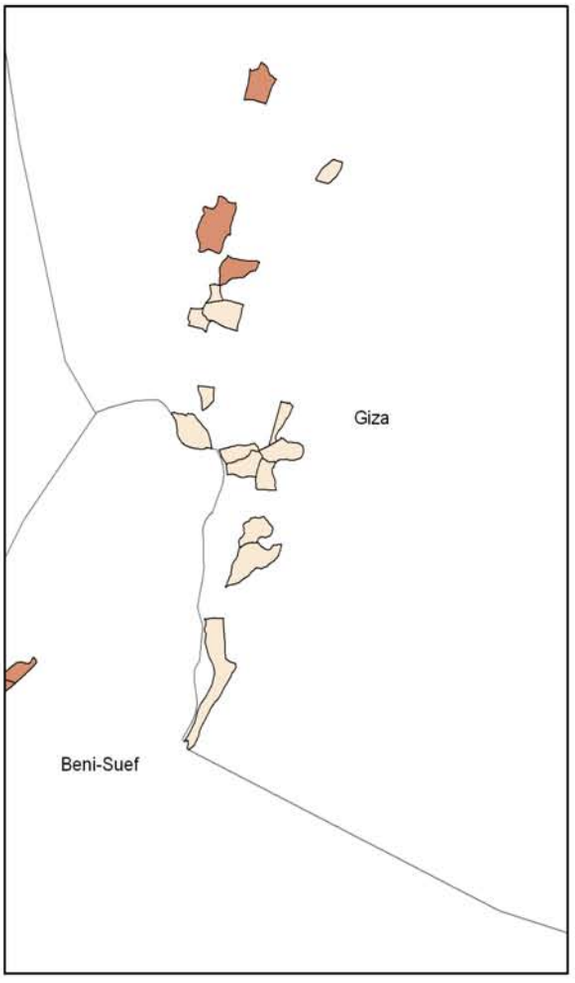

Souhag
Quena
Aswan

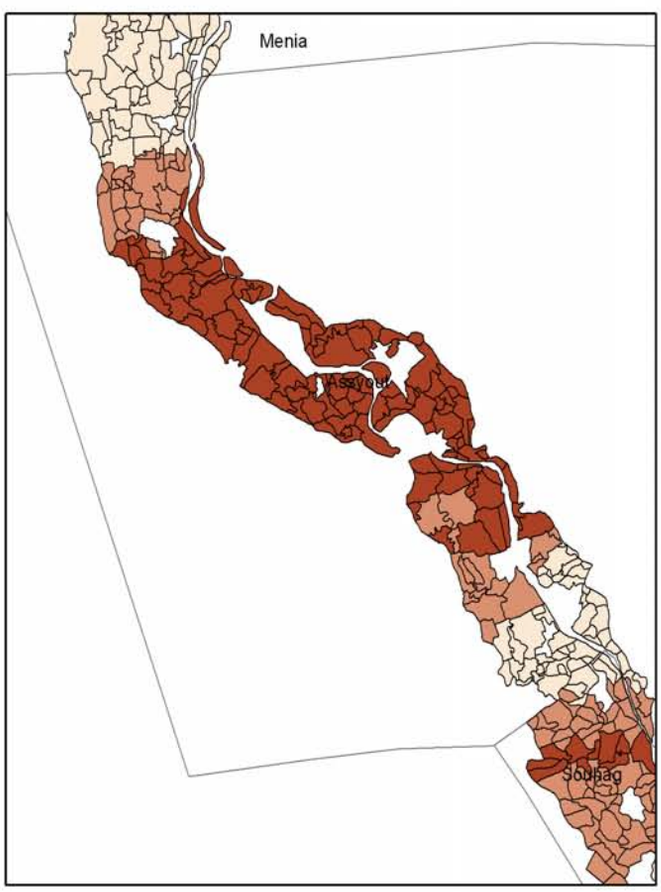
1- Average live births per woman

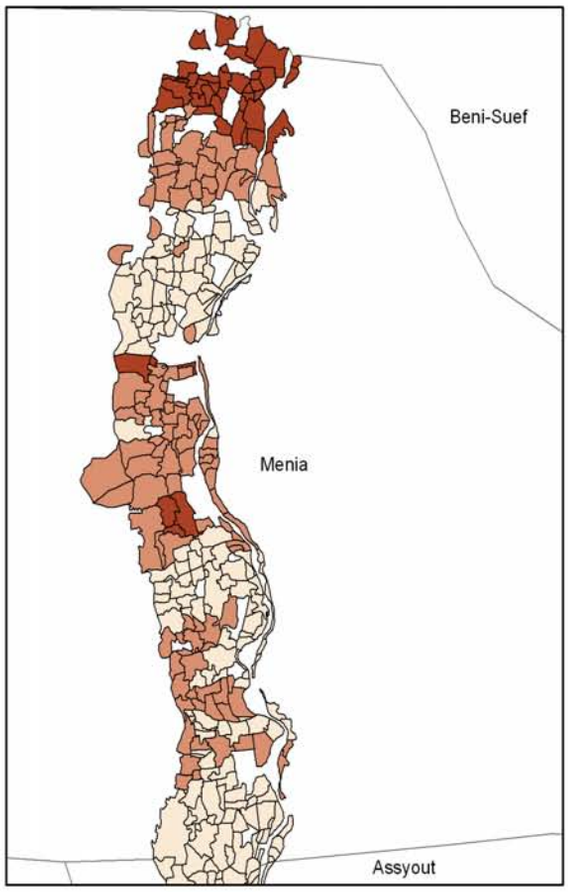
- Low (3.60 -)
- Medium (5.40 -)
- High (6.00 - 7.30)

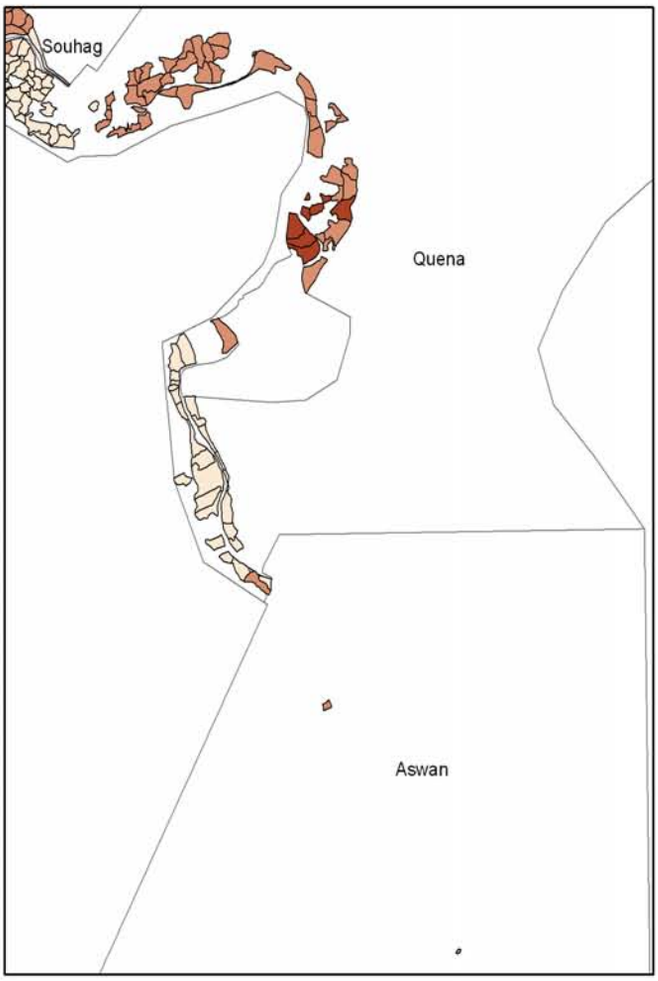


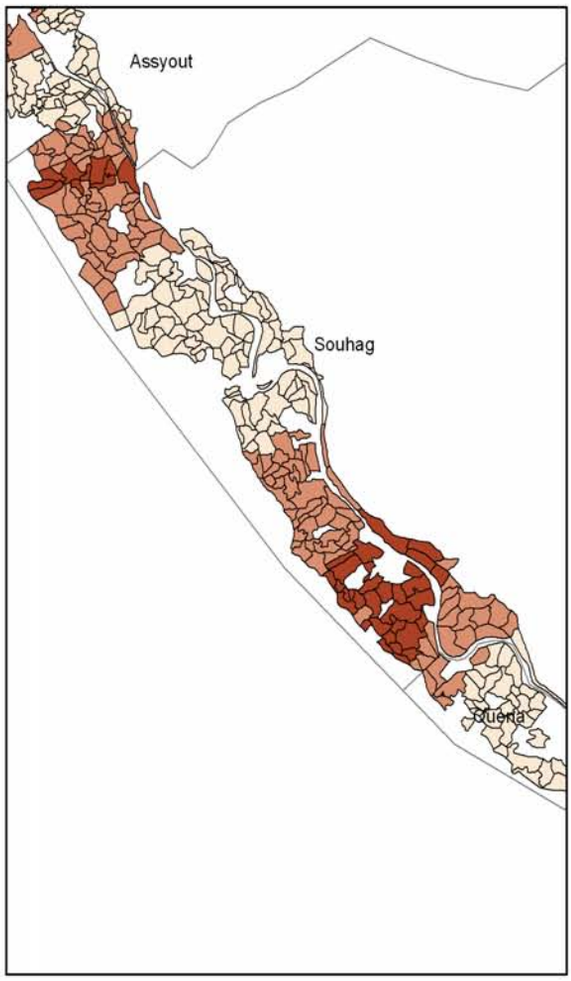





Menia
Assyout
Souhag


Beni-Suef
Menia
Assyout


Souhag
Quena
Aswan

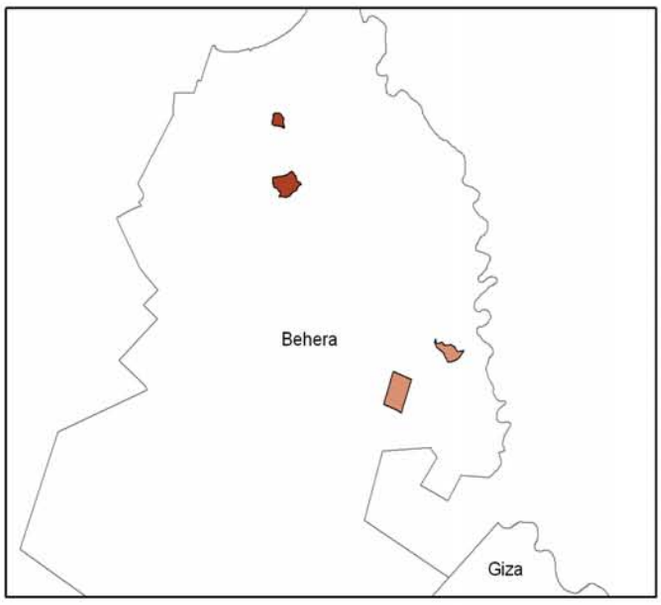

Assyout
Souhag
Quena

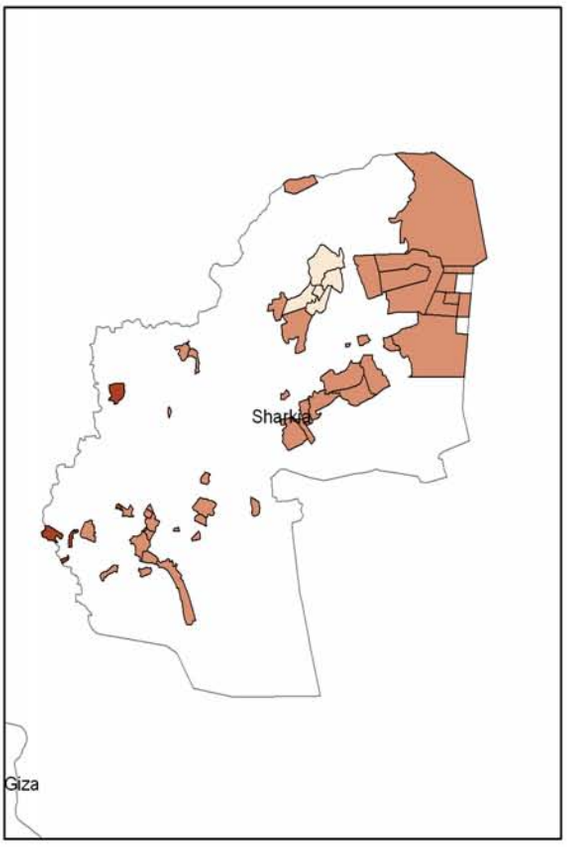
2- Median age at first marriage

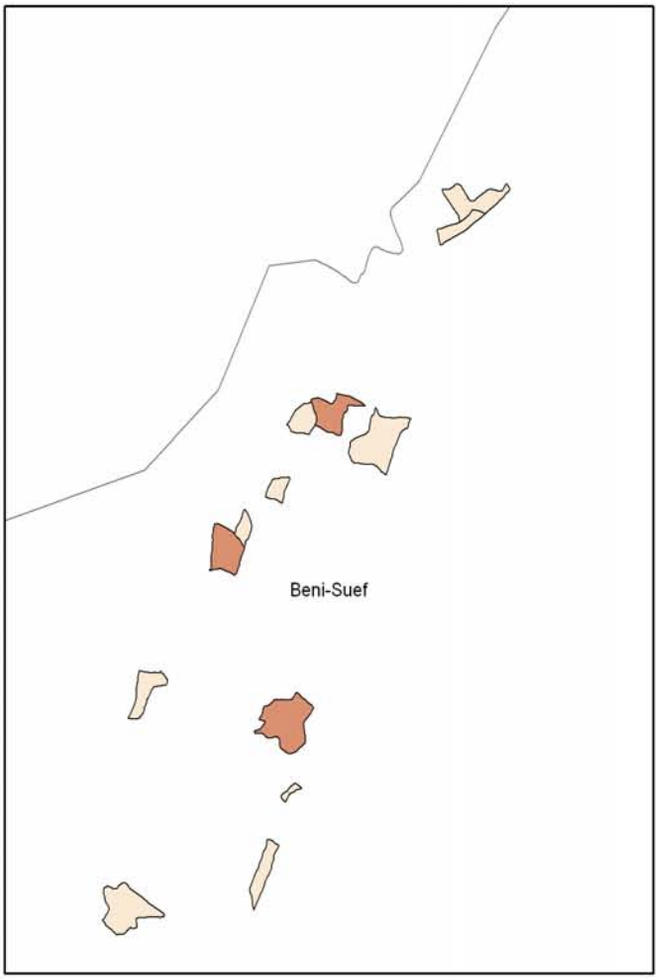
Low (14.00 -)

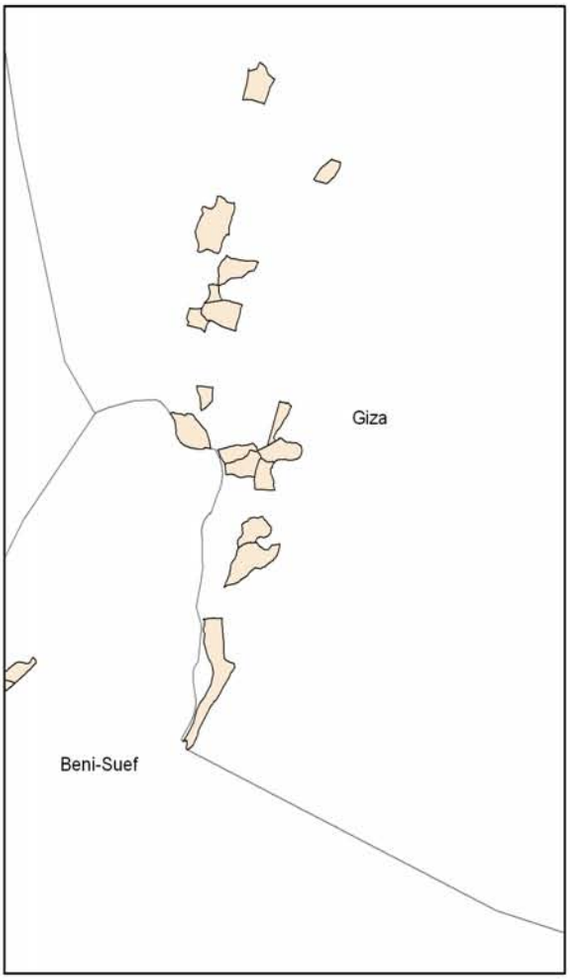
Medium (20.00 -)

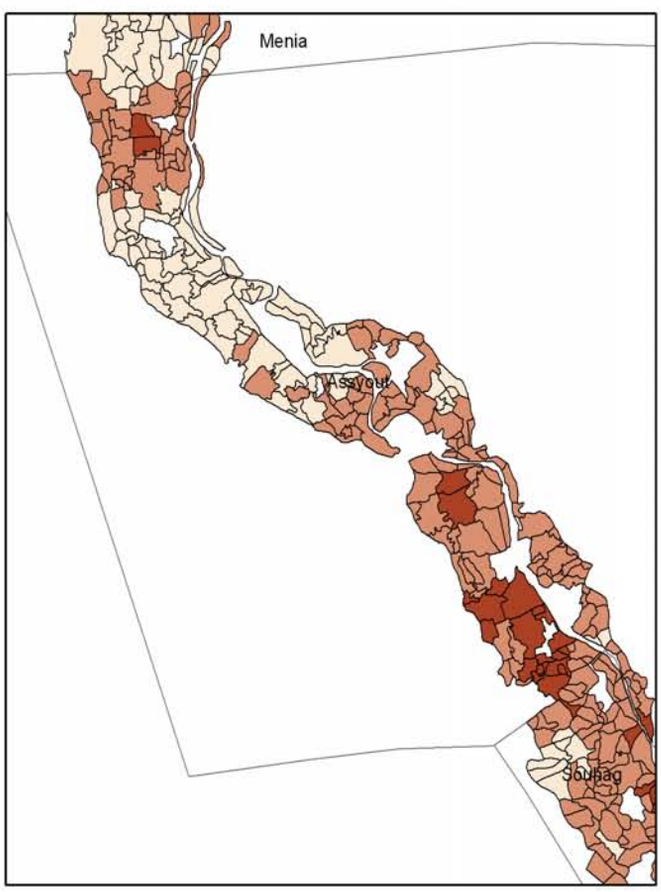
High (20.00 - 22.00)

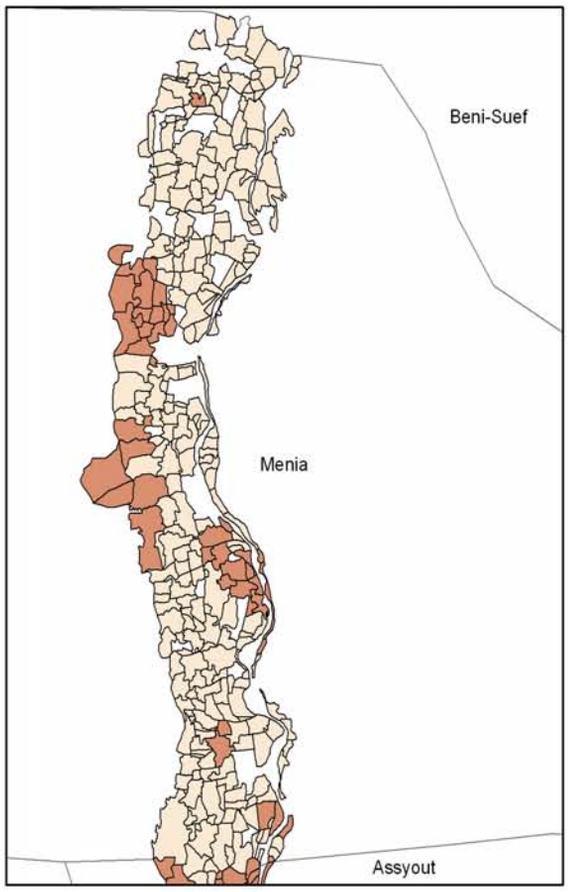


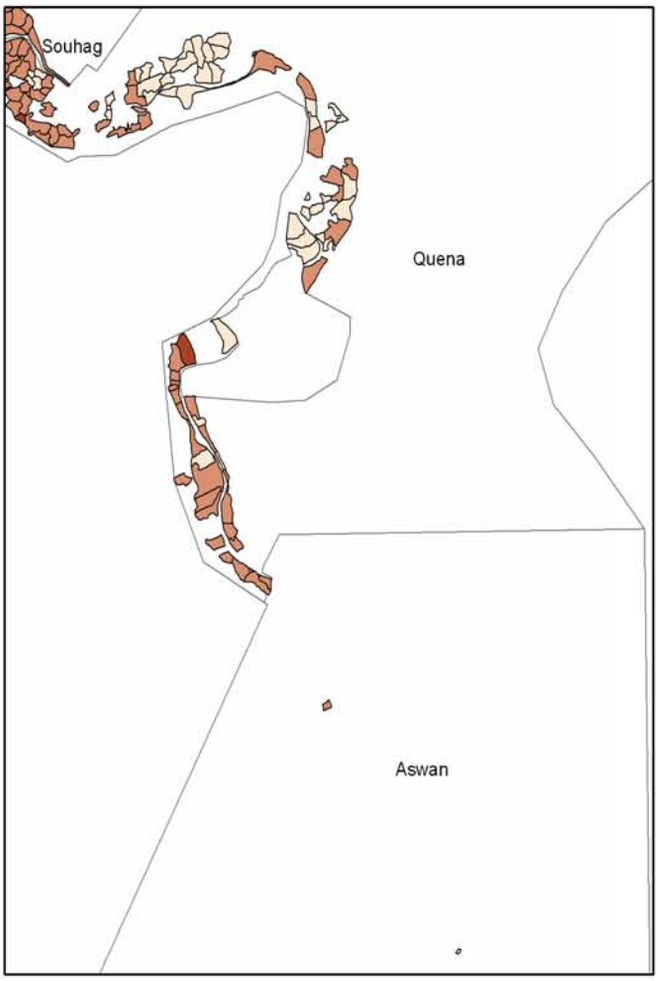


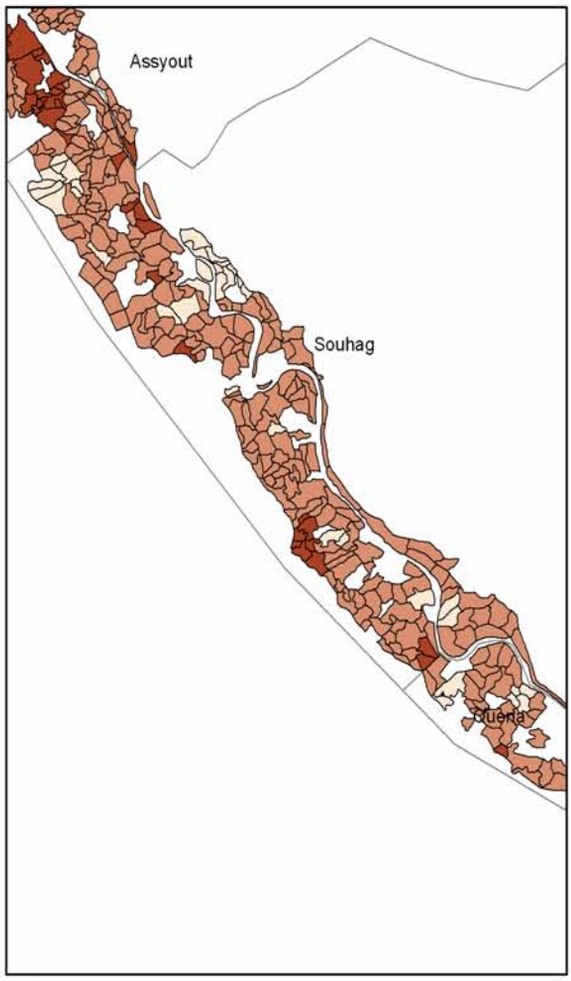





Menia
Assyout
Souhag

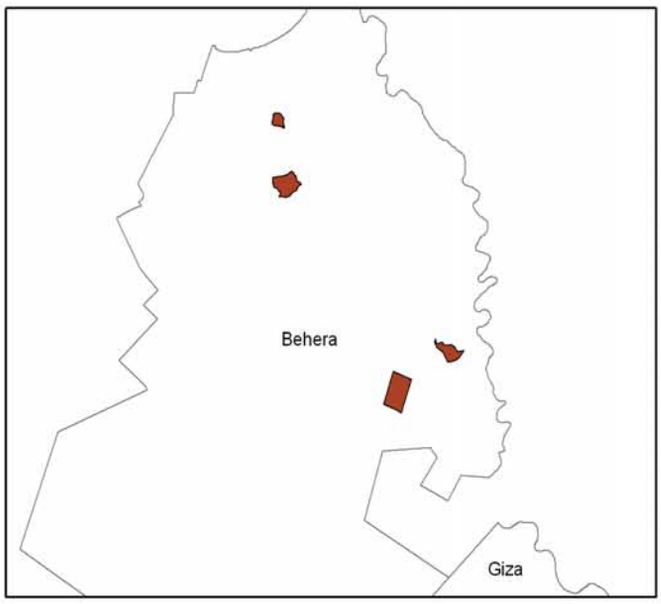

Beni-Suef
Menia
Assyout

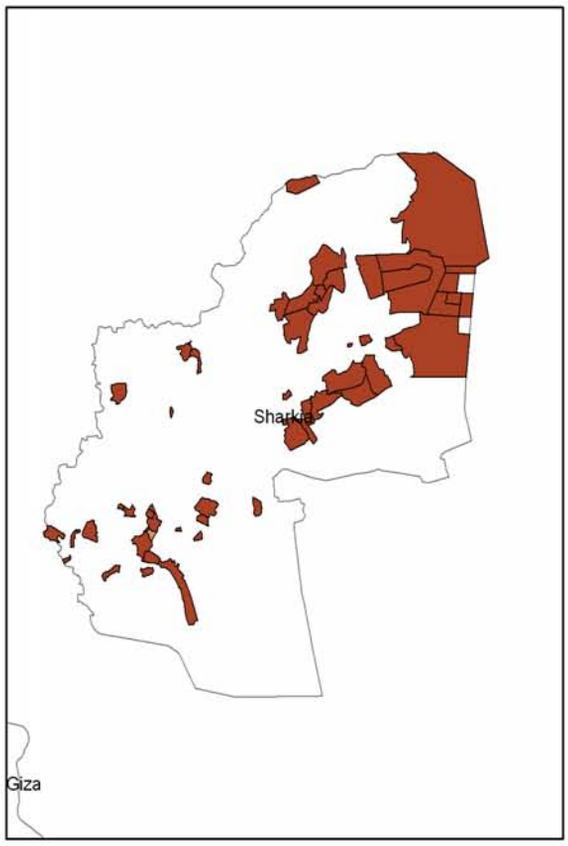

Souhag
Quena
Aswan

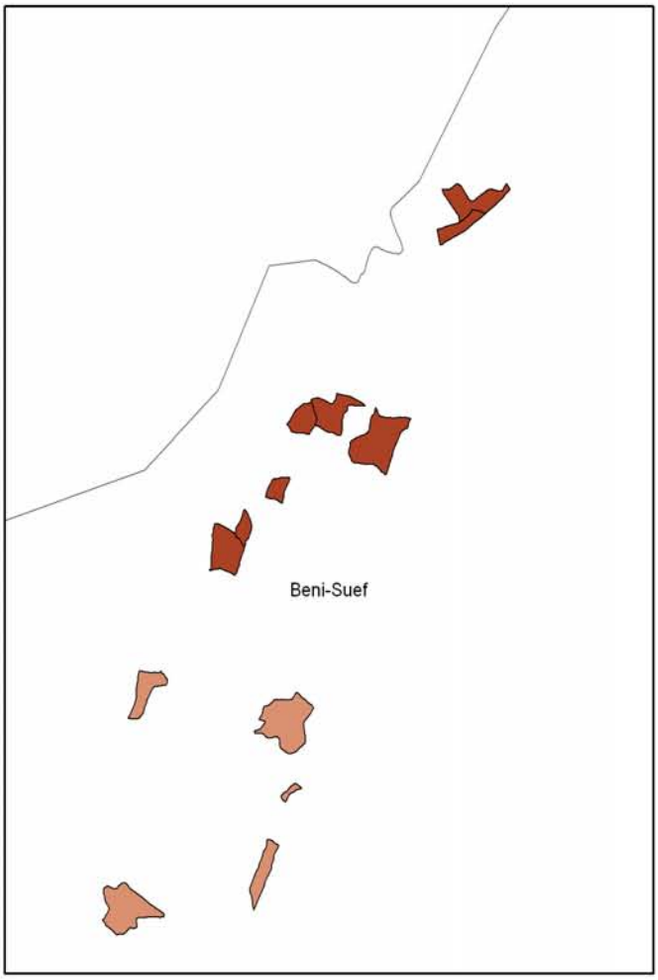

Assyout
Souhag
Quena

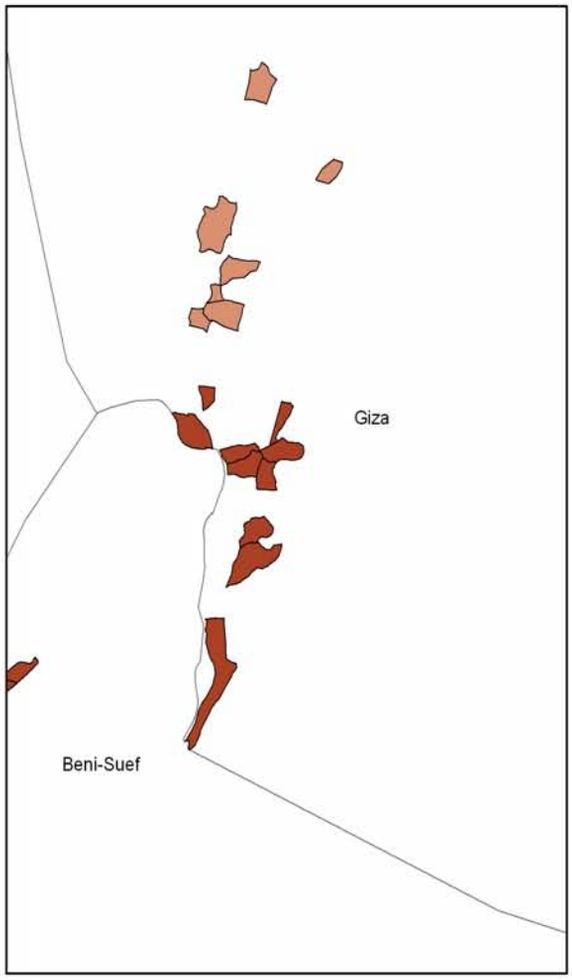
3- Currently Use Any Family Planning Method

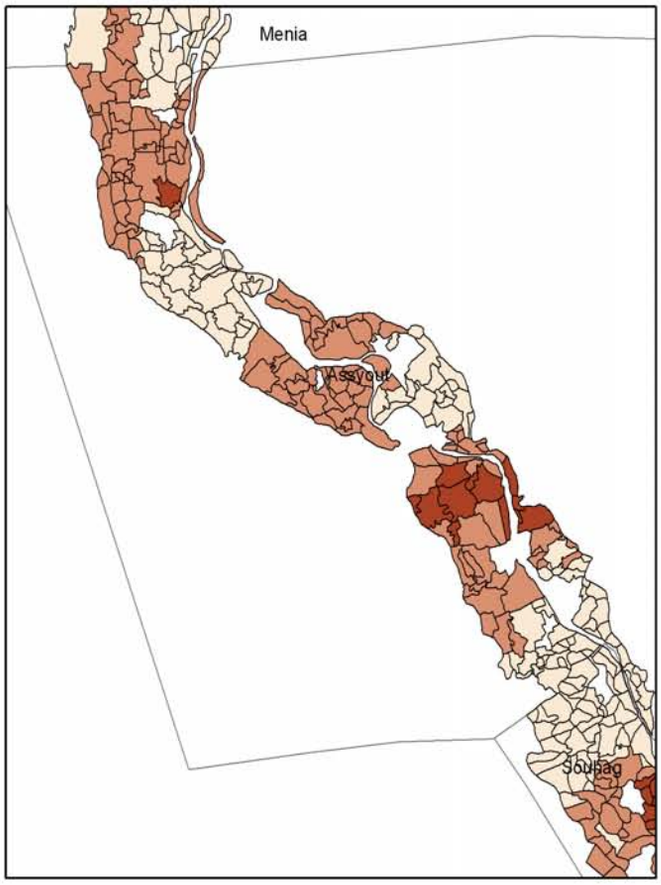
Law (16.80 -)
Medium (40.10 -)
High (50.10 - 72.50)

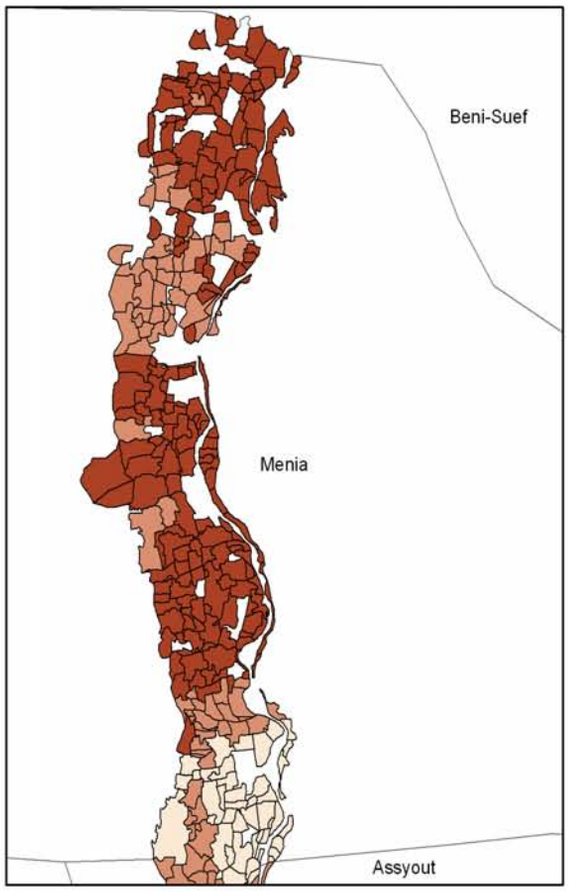


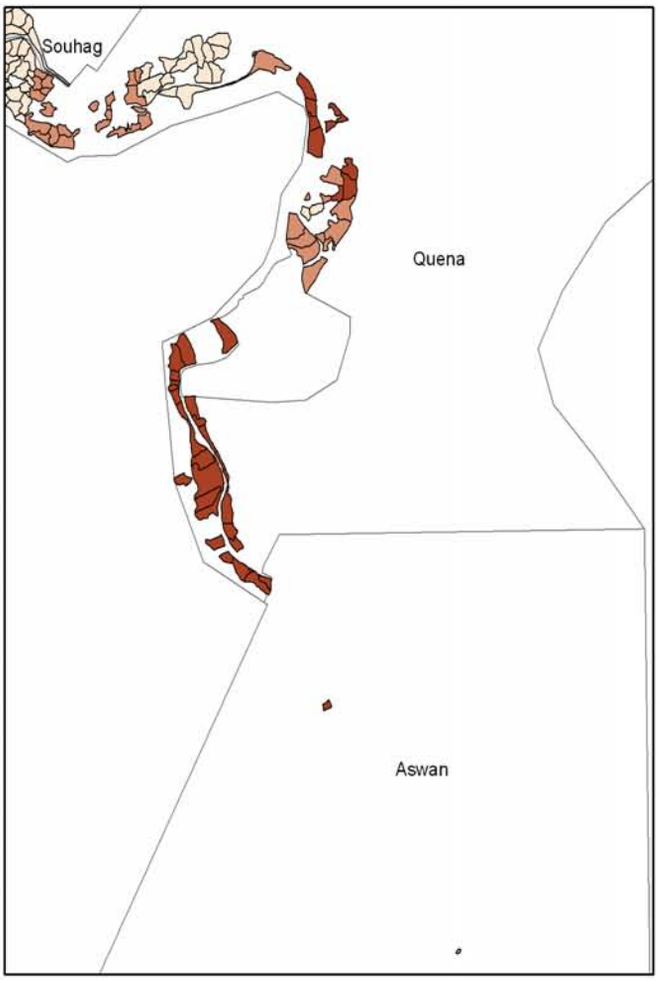


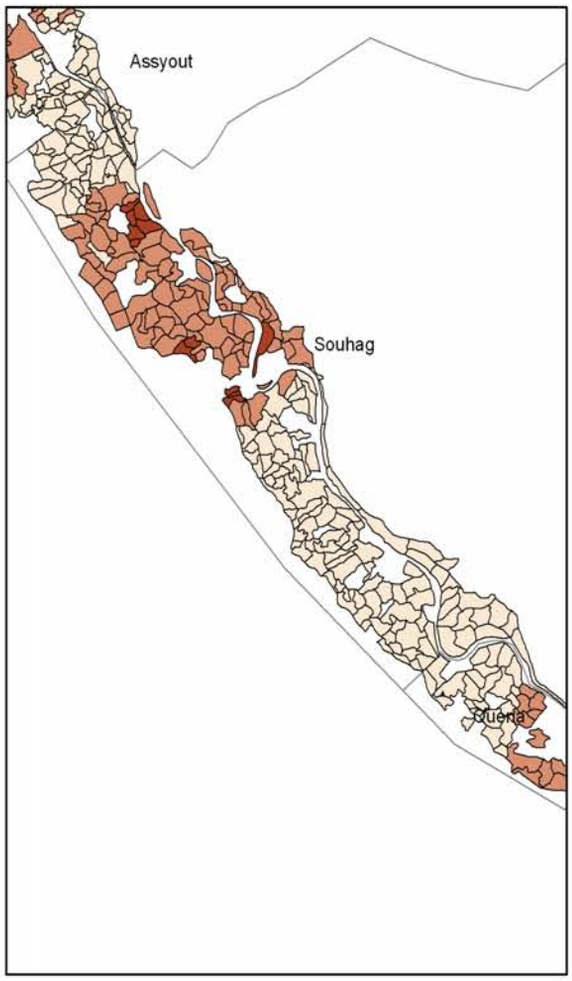





Menia
Assyout
Souhag

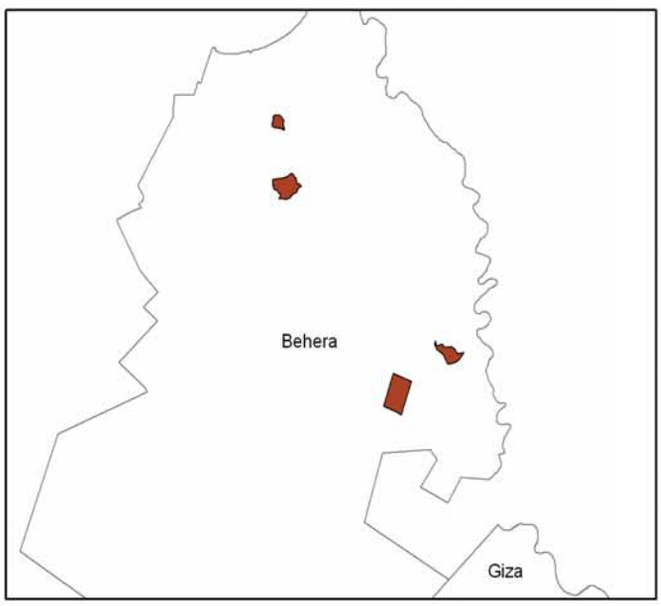

Beni-Suef
Menia
Assyout

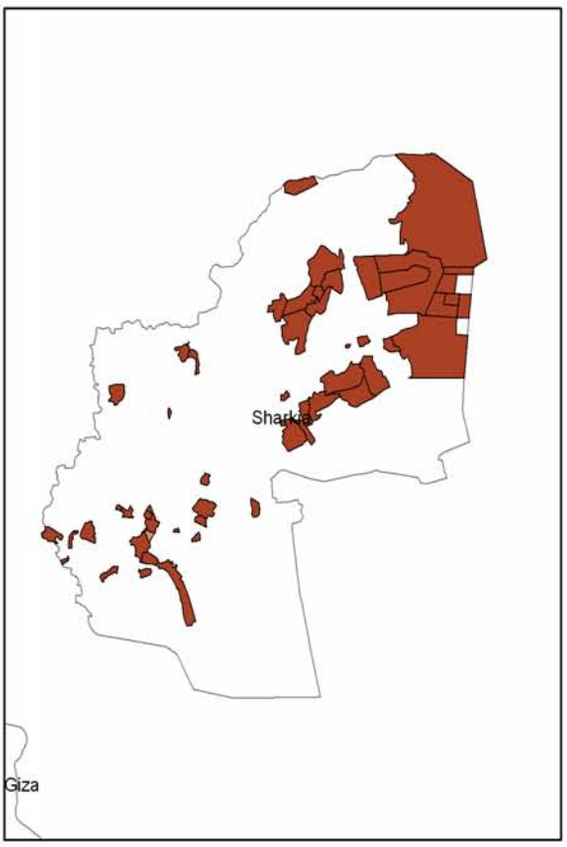

Souhag
Quena
Aswan

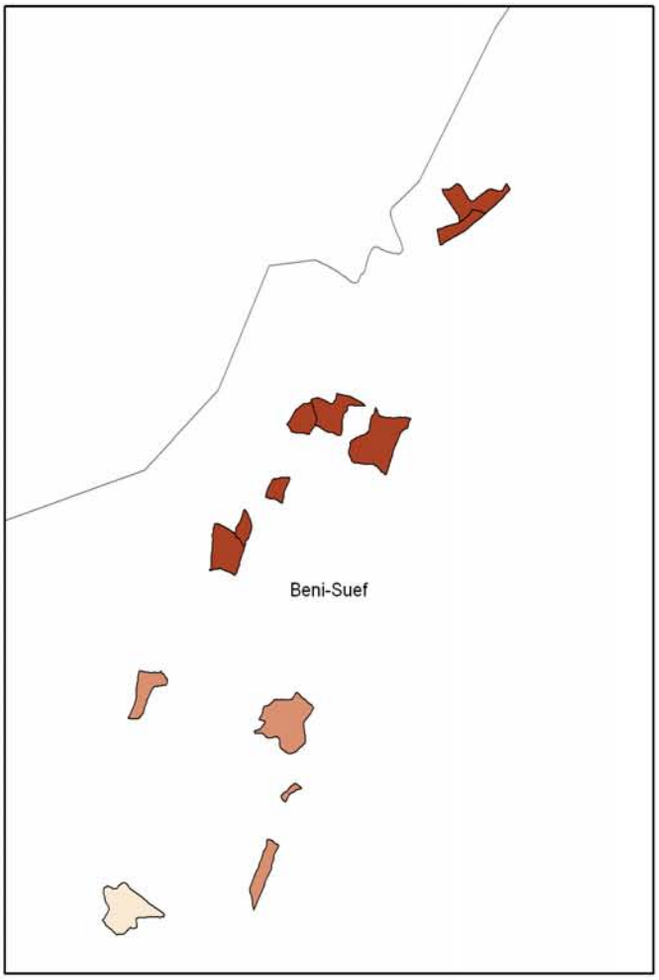

Assyout
Souhag
Quena

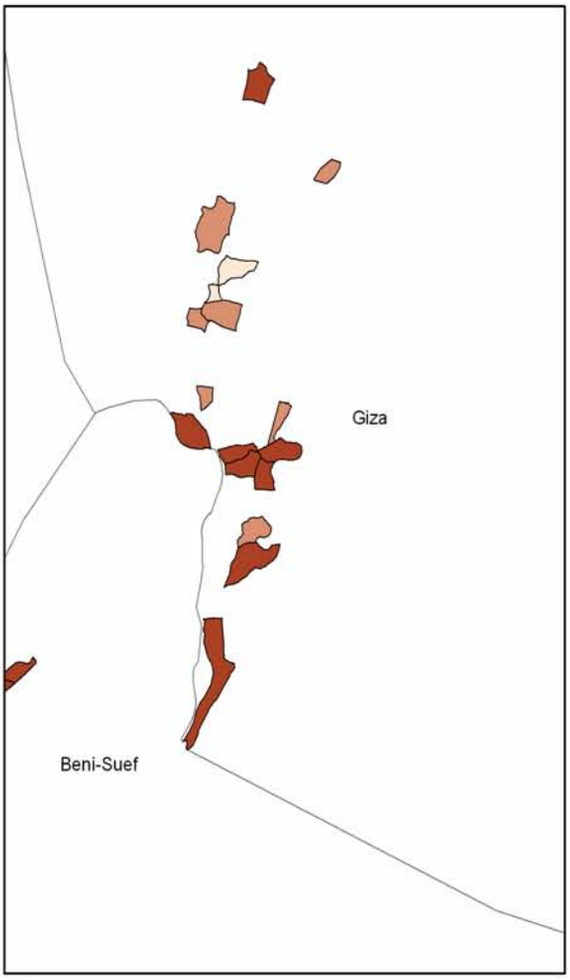
4- Currently Use Modern Family Planning Method

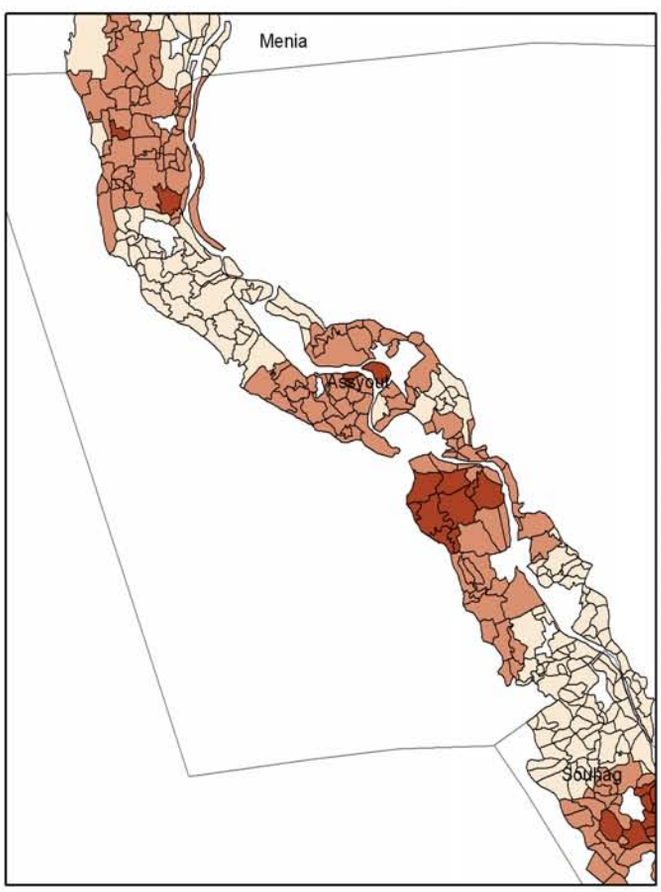
Low (11.50 -)
Medium (36.40 -)
High (46.20 - 72.00)



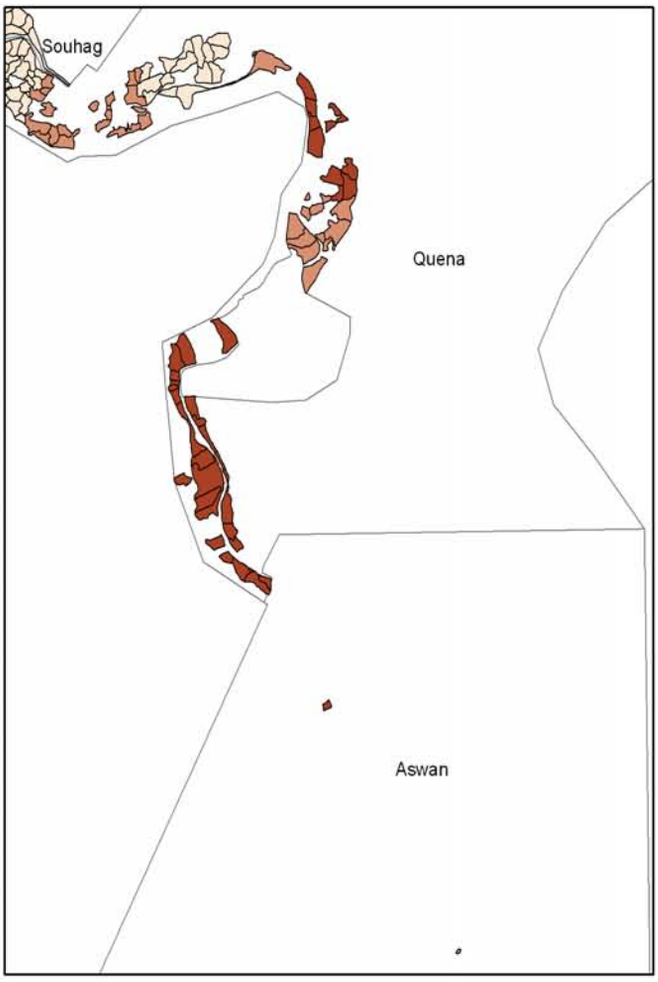


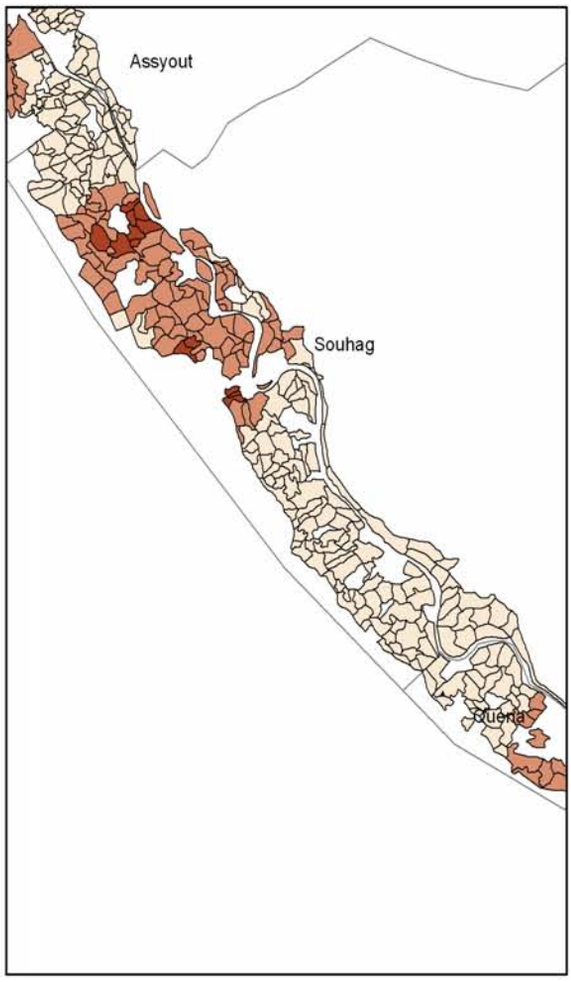





Menia
Assyout
Souhag


Beni-Suef
Menia
Assyout


Souhag
Quena
Aswan

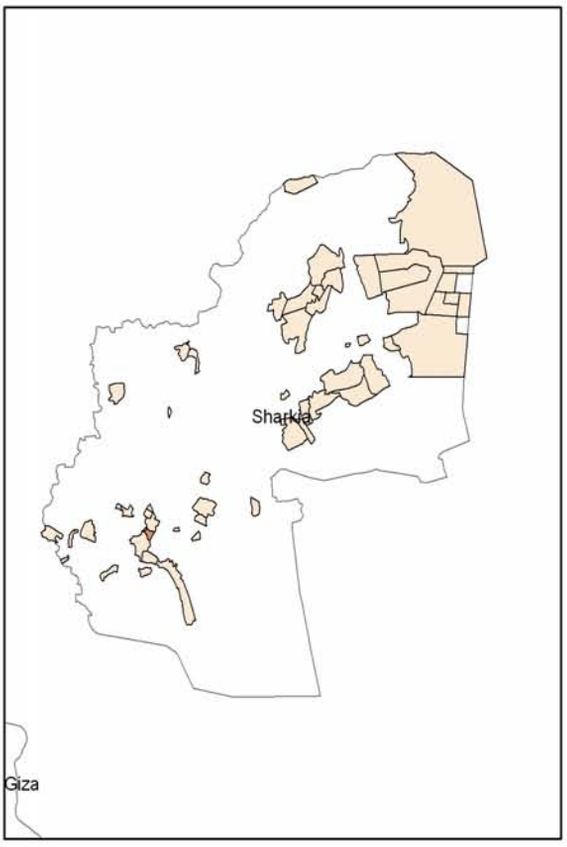

Assyout
Souhag
Quena

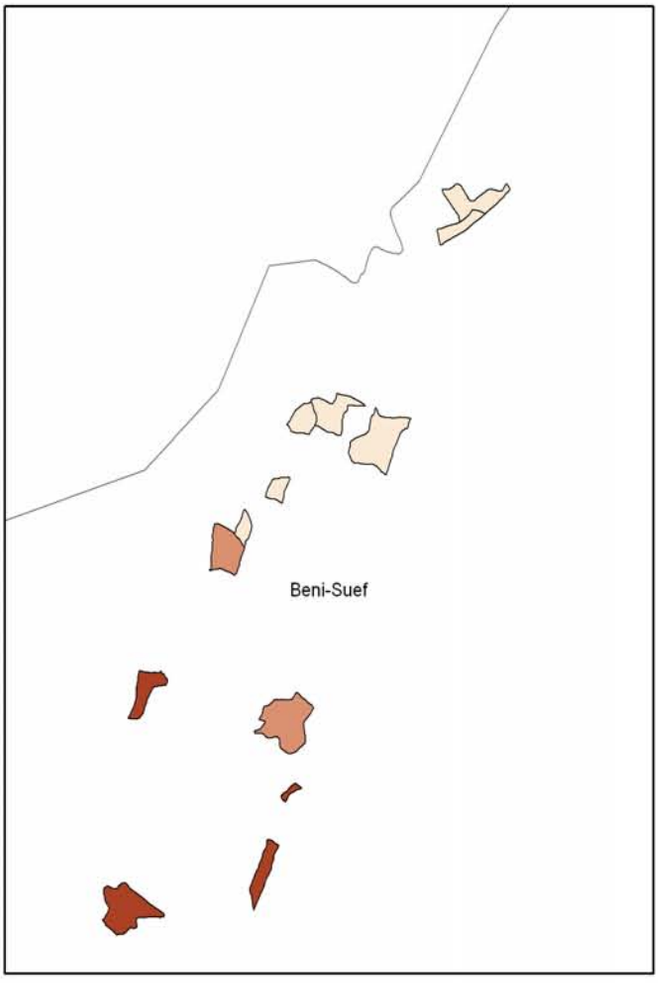
5- Unmet Need for Spacing

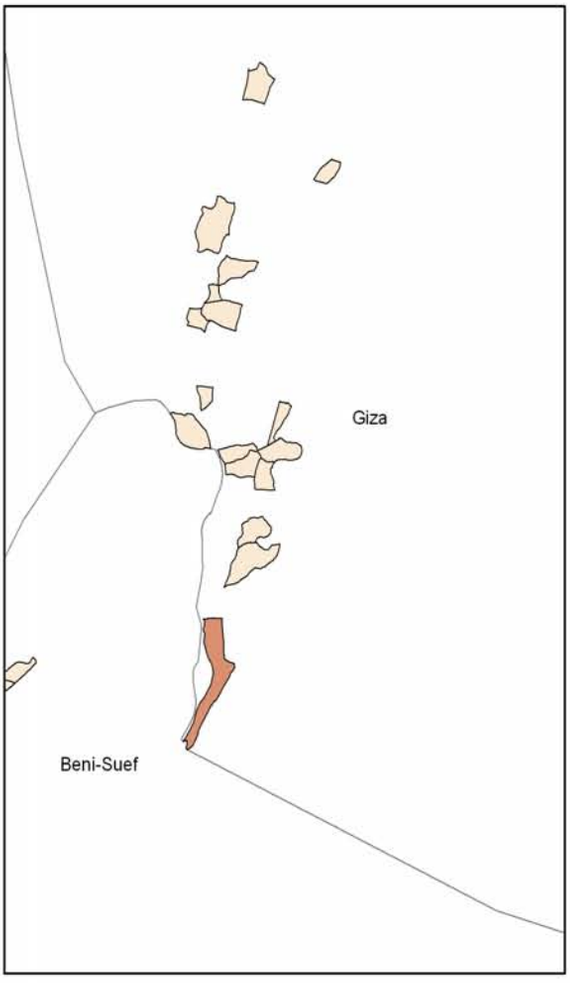
Low (0.40 -)

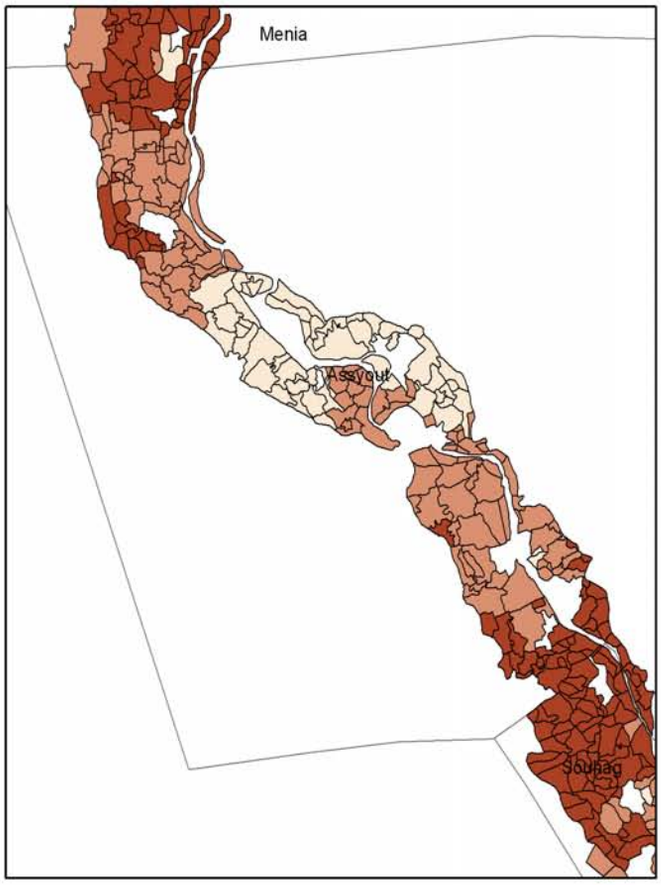
Medium (5.0 -)

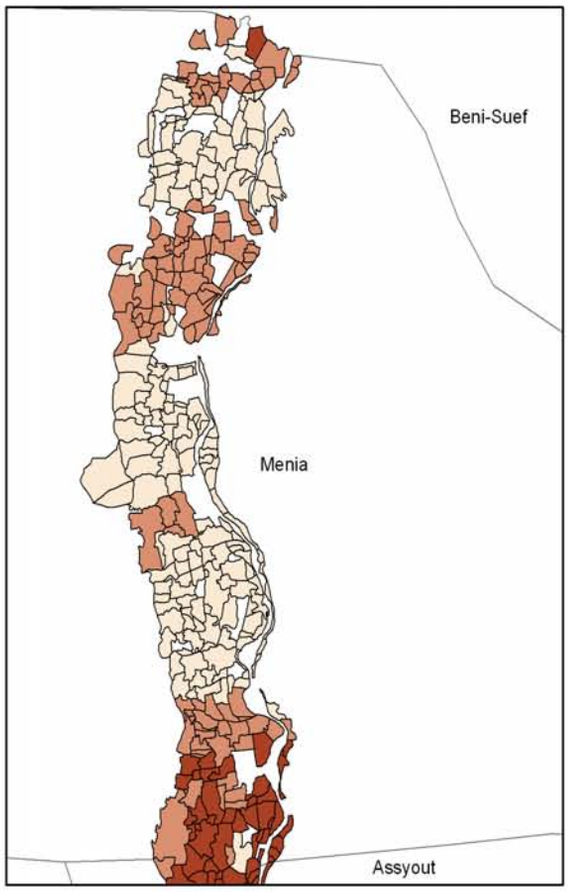
High (8.30 - 19.90)

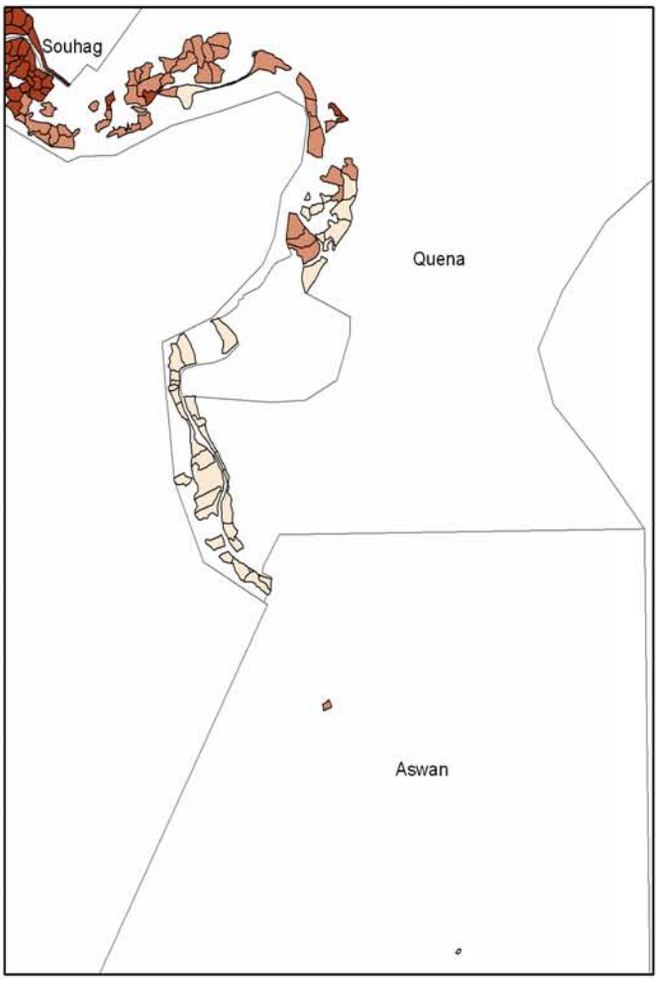


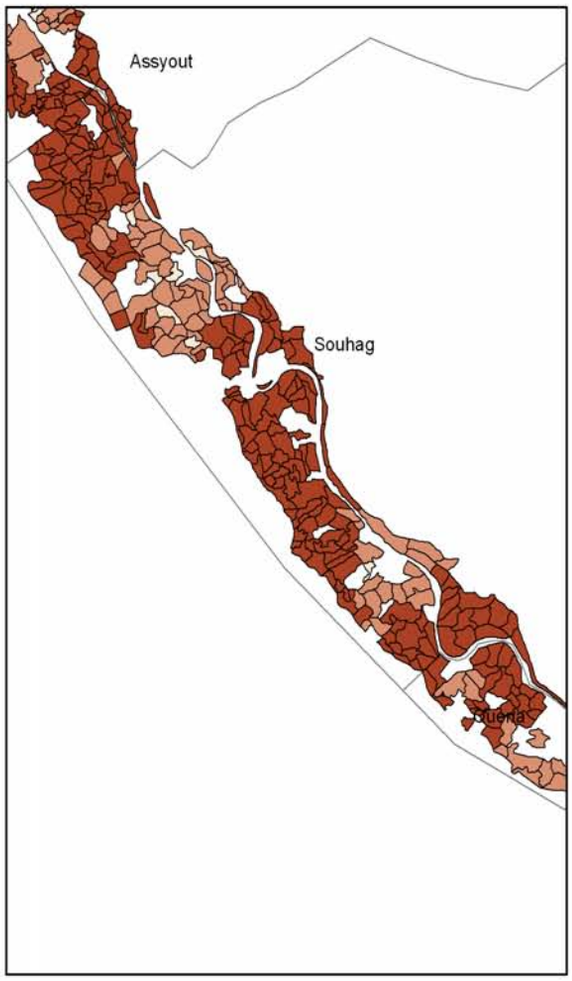





Menia
Assyout
Souhag


Beni-Suef
Menia
Assyout


Souhag
Quena
Aswan

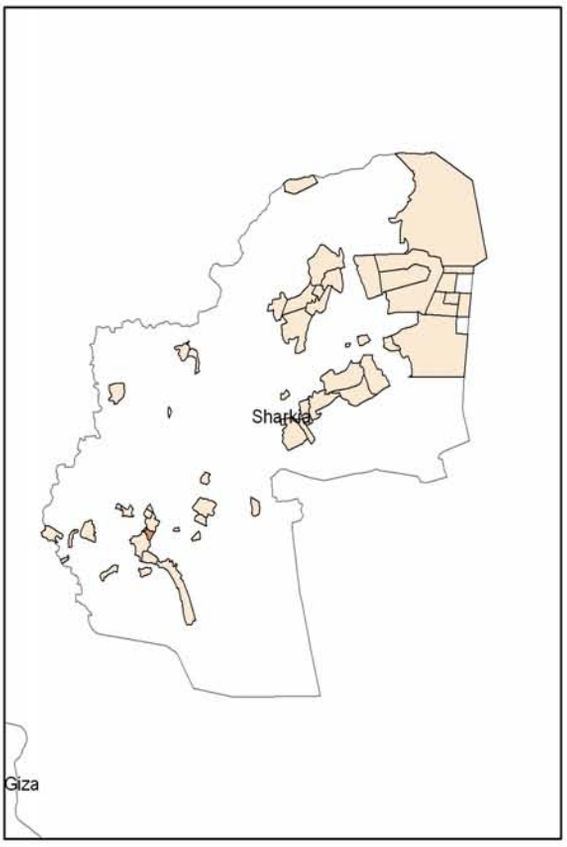

Assyout
Souhag
Quena

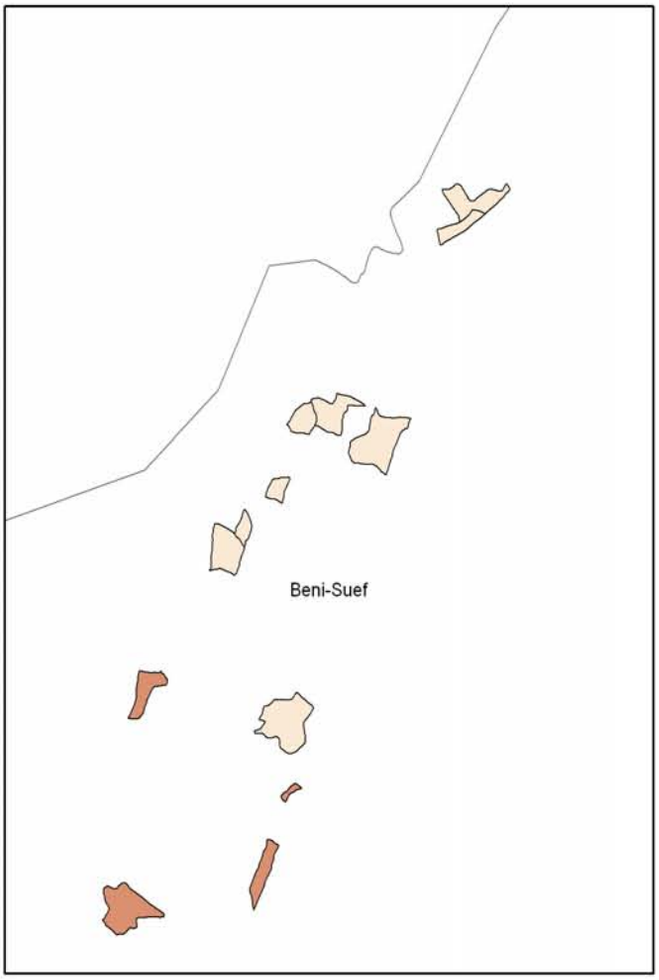
6- Unmet Need for Limiting

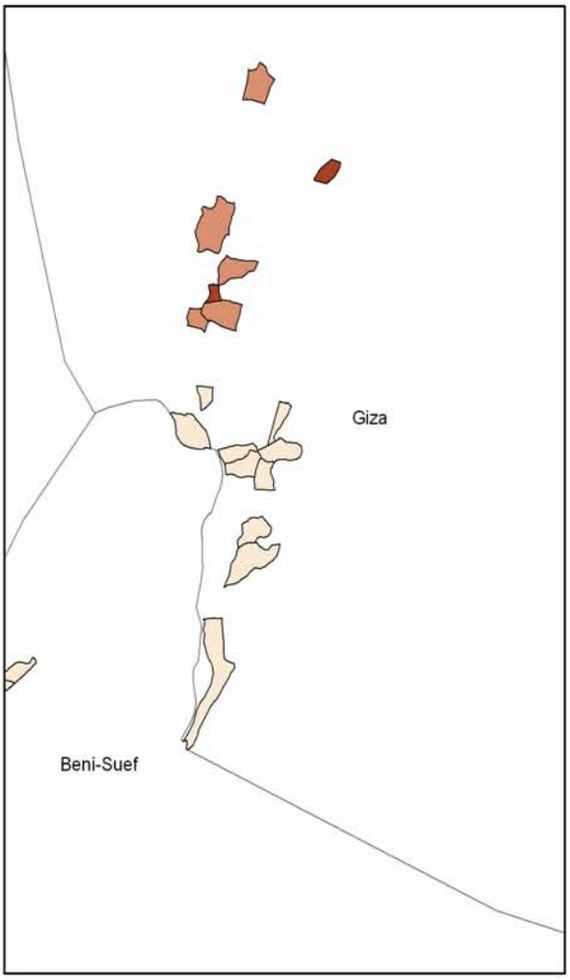
Low (0.00 -)

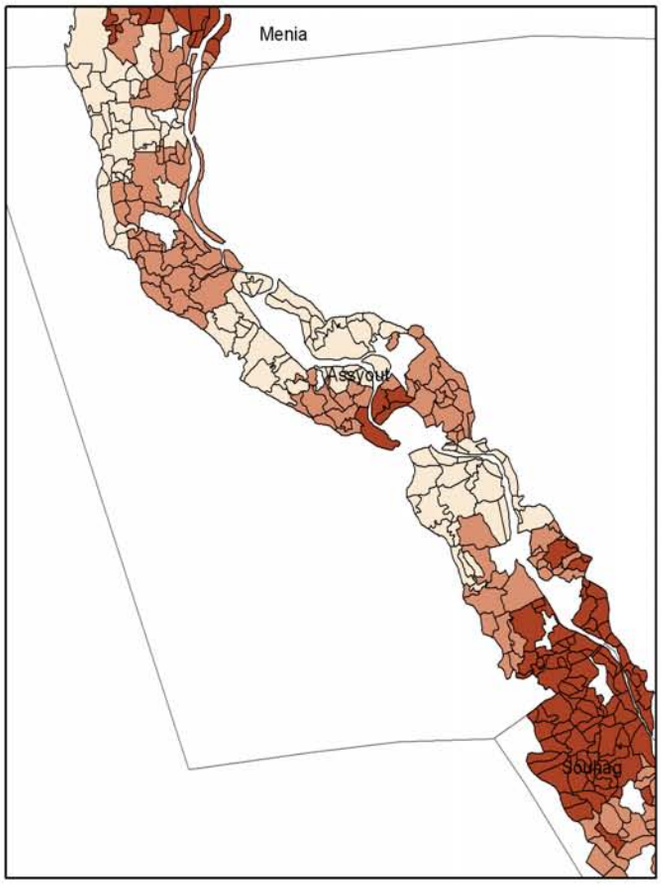
Medium (9.20 -)

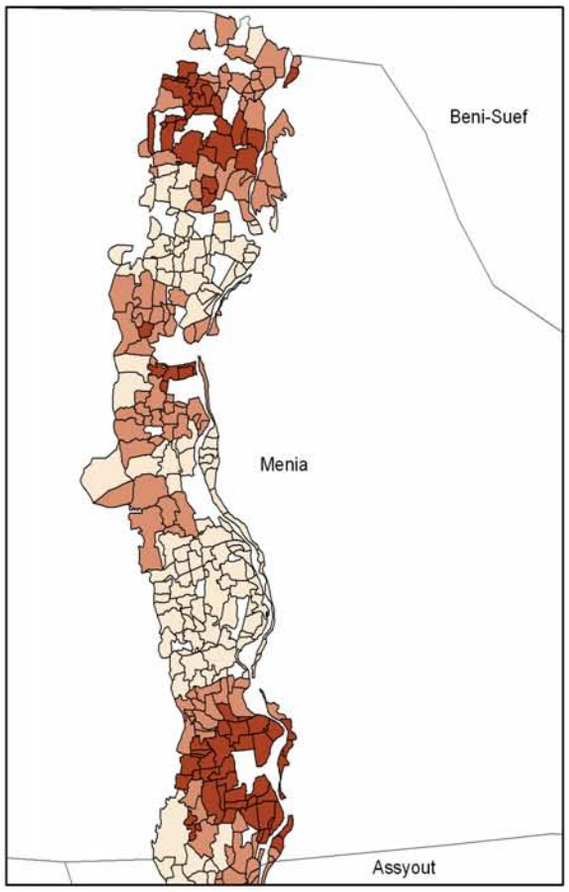
High (13.30 - 29.70)

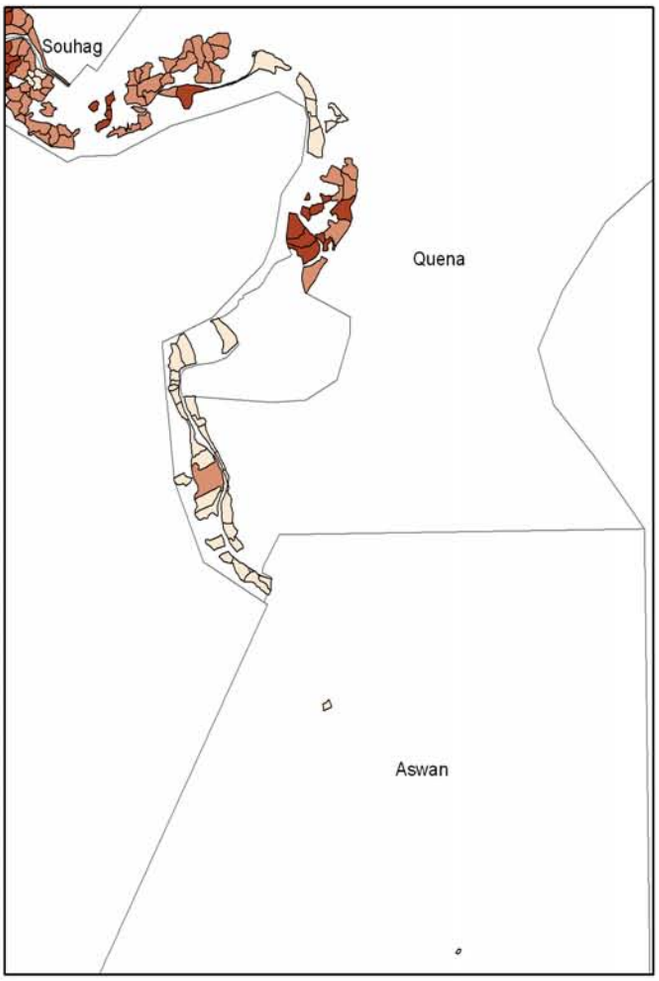


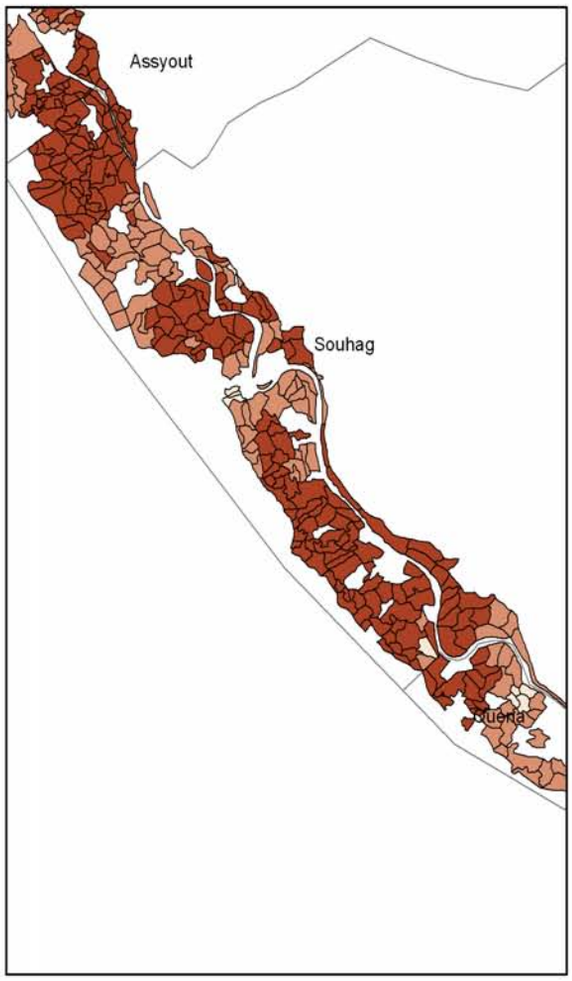





Menia
Assyout
Souhag


Beni-Suef
Menia
Assyout


Souhag
Quena
Aswan

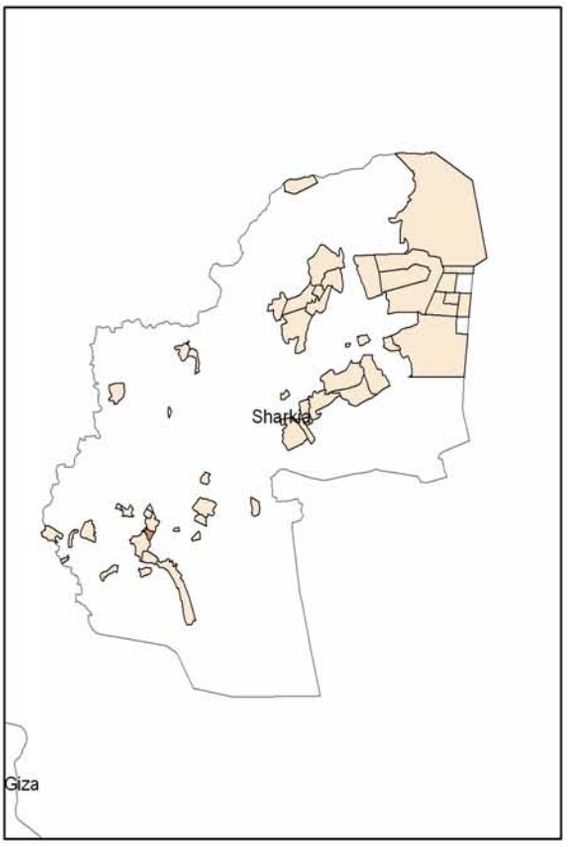

Assyout
Souhag
Quena

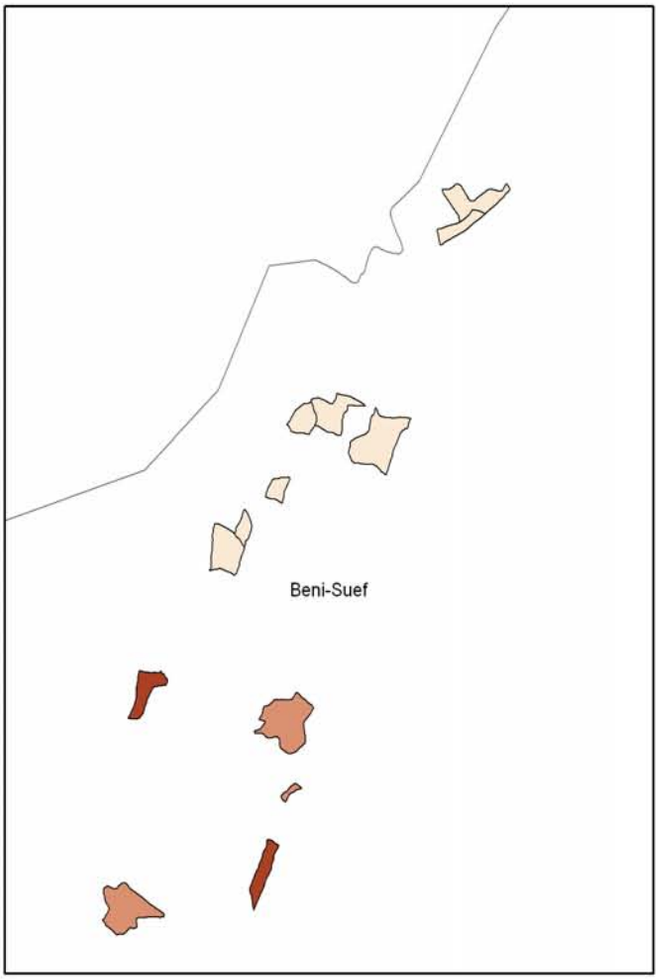
7- Total Unmet Need

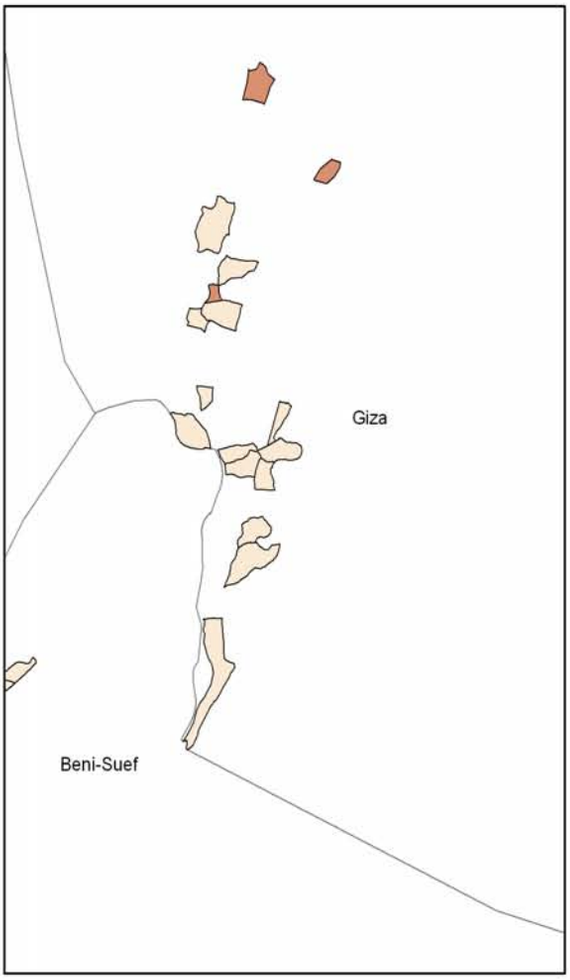
Low (1.40 -)

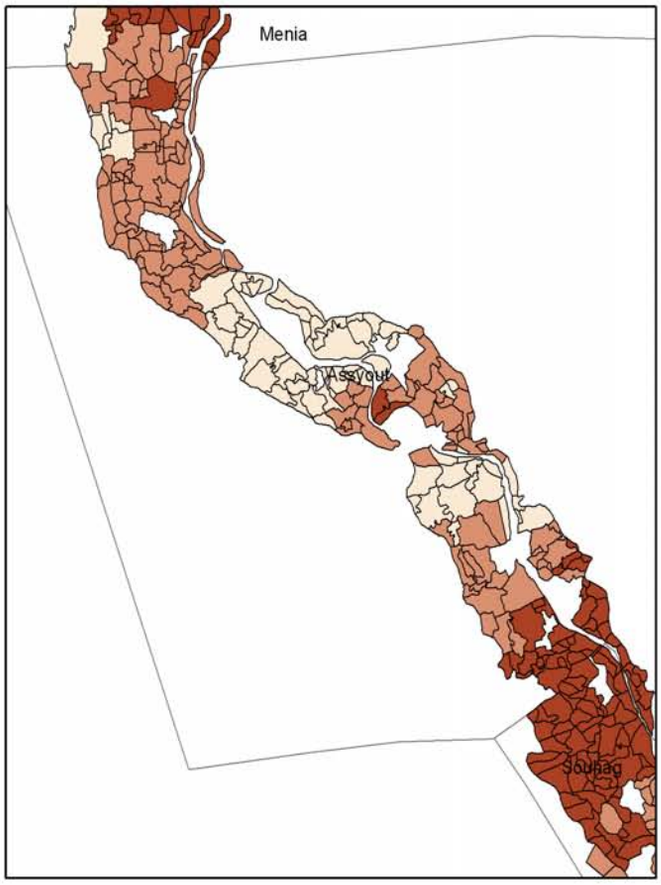
Medium (15.00 -)

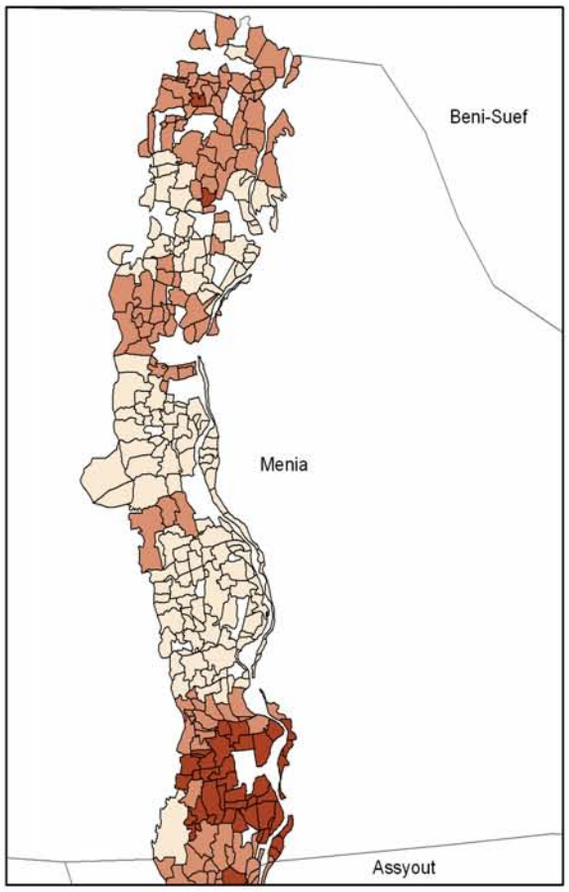
High (21.20 - 38.30)



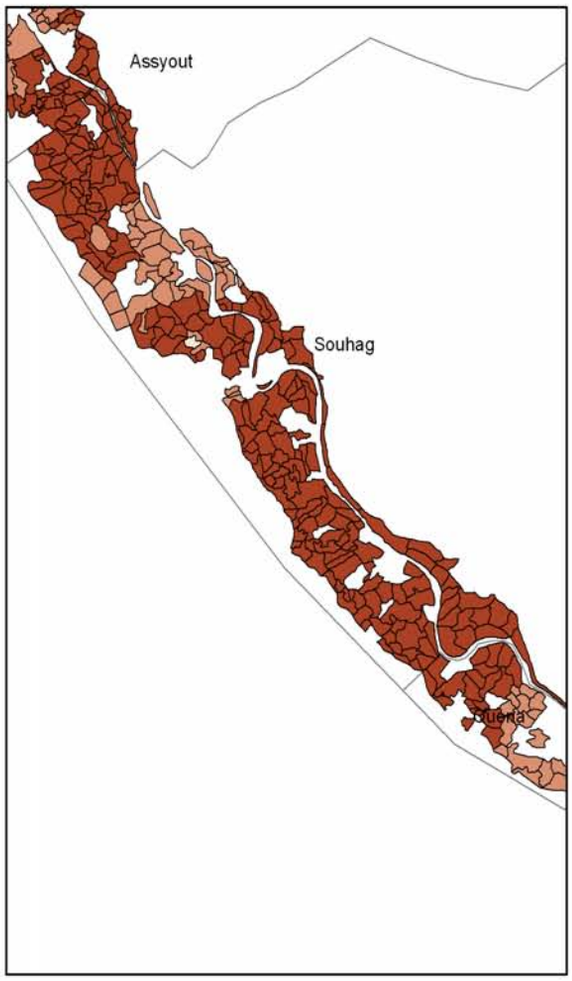


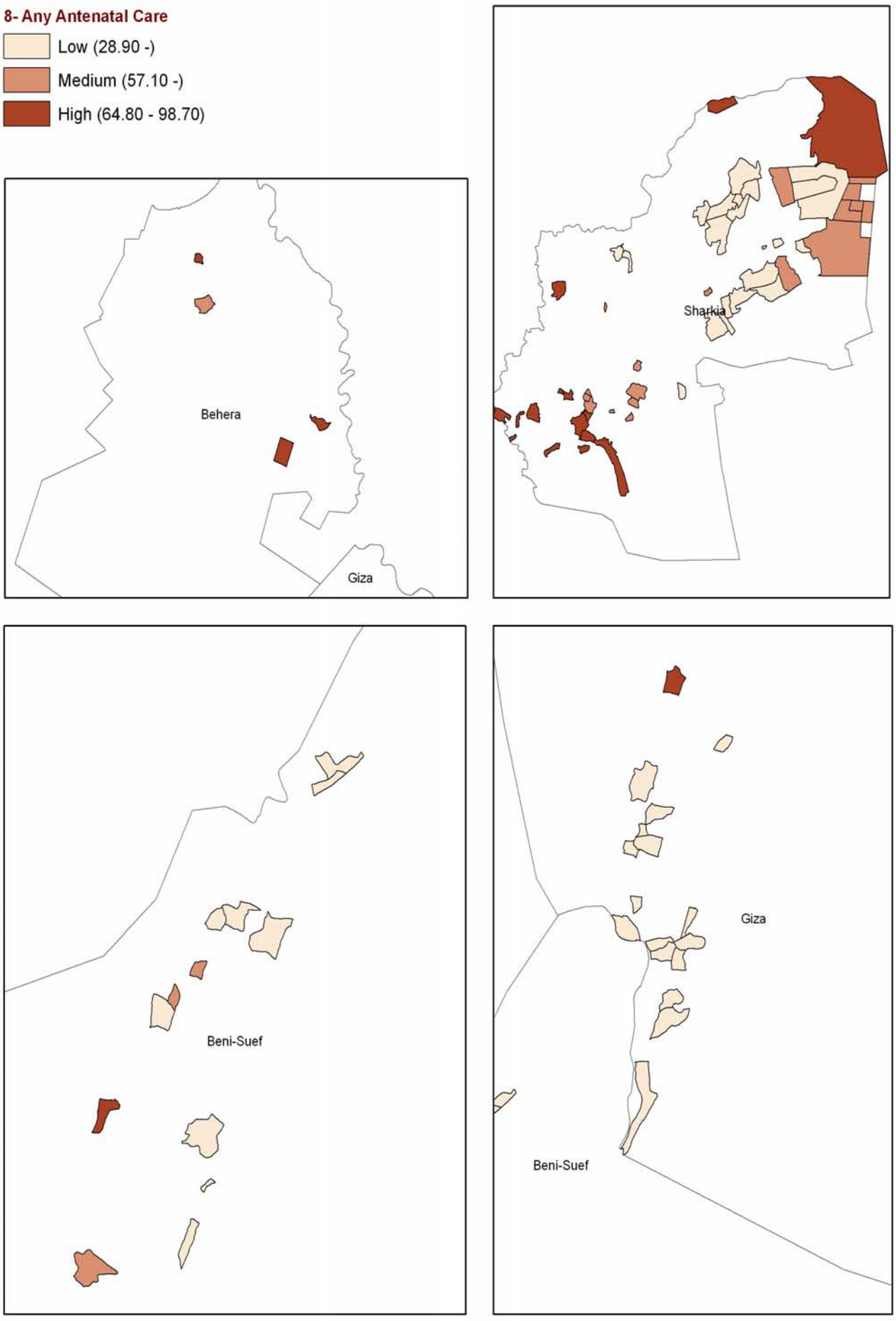


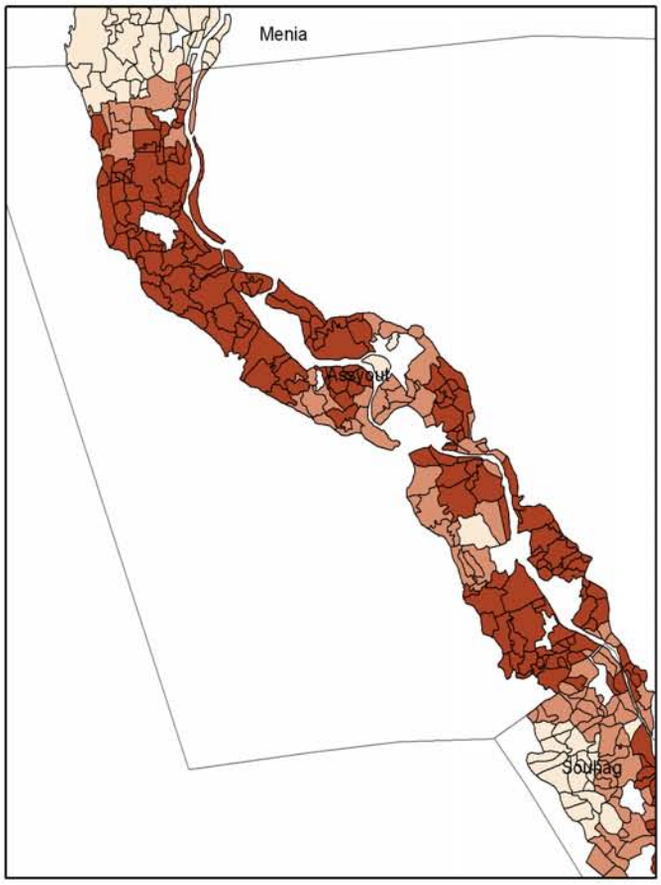

Menia
Assyout
Souhag

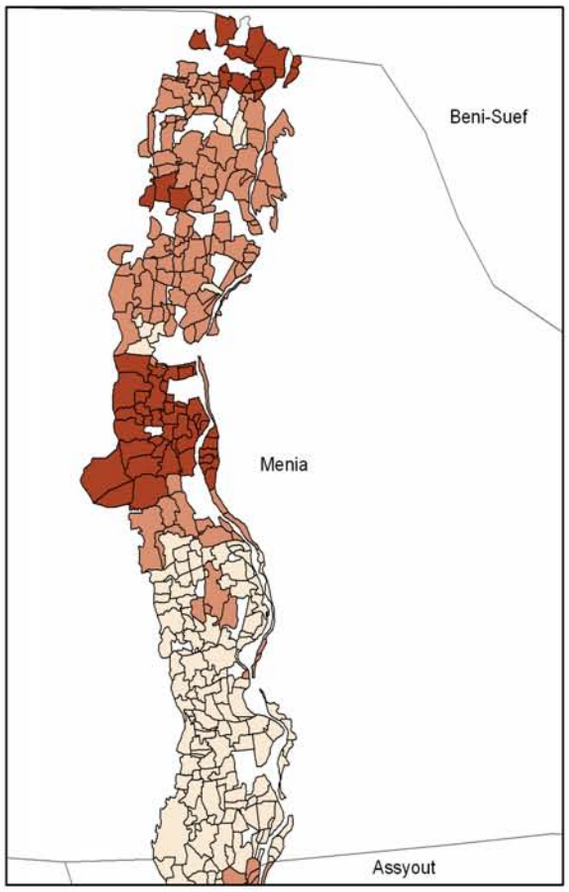

Beni-Suef
Menia
Assyout

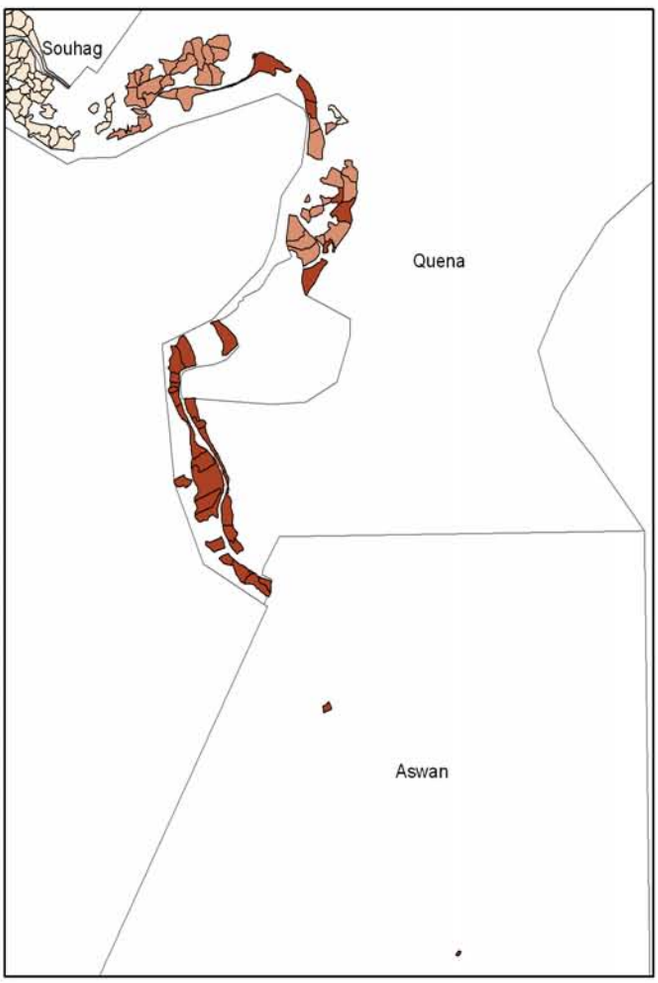

Souhag
Quena
Aswan

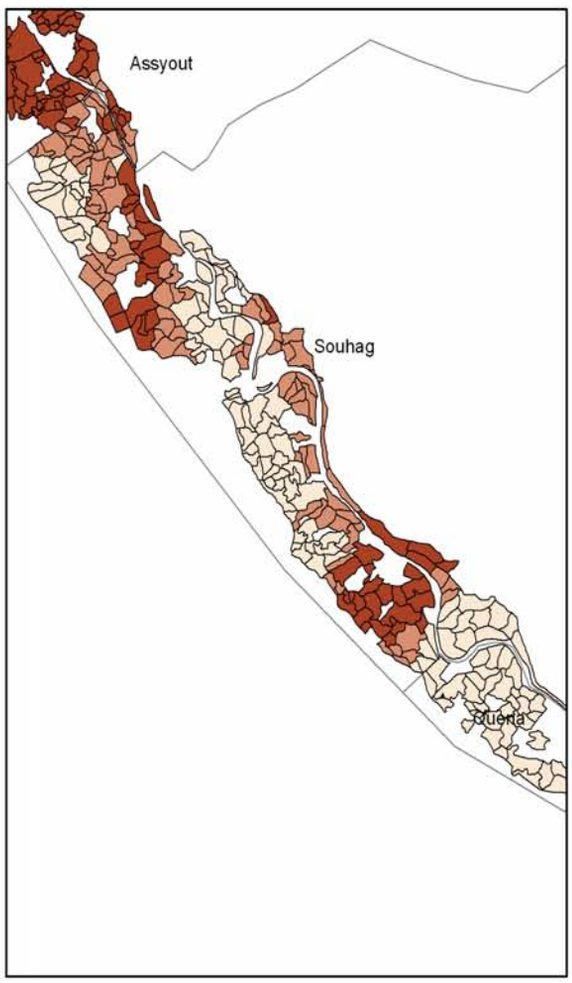

Assyout
Souhag
Quena


8- Any Antenatal Care
Low (28.90 -)
Medium (57.10 -)
High (64.80 - 98.70)
Behera
Giza
Sharkia
Beni-Suef
Giza
Beni-Suef


Menia
Assyout
Souhag


Beni-Suef
Menia
Assyout


Souhag
Quena
Aswan

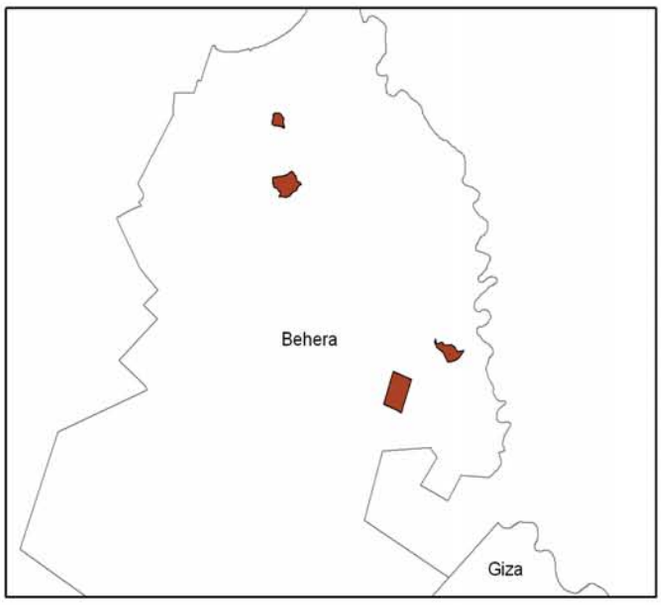

Assyout
Souhag
Quena

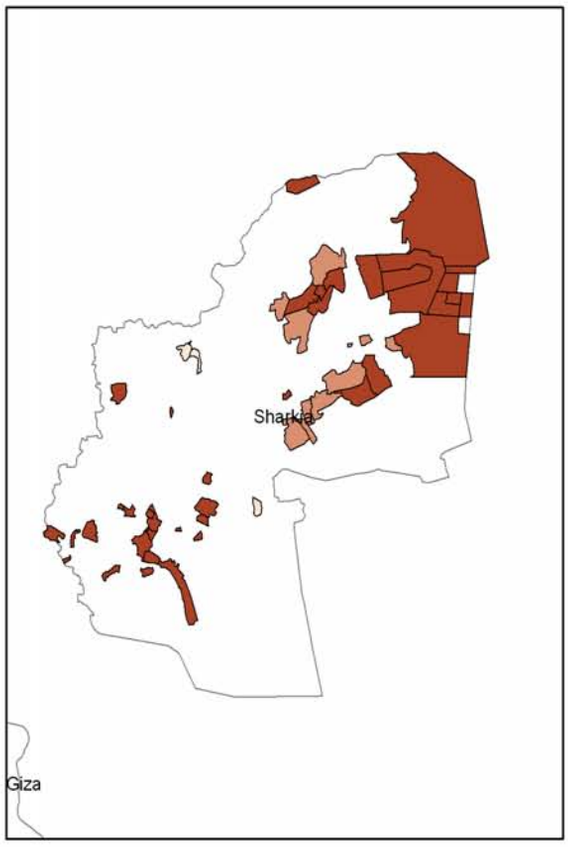
9- Regular Antenatal Care

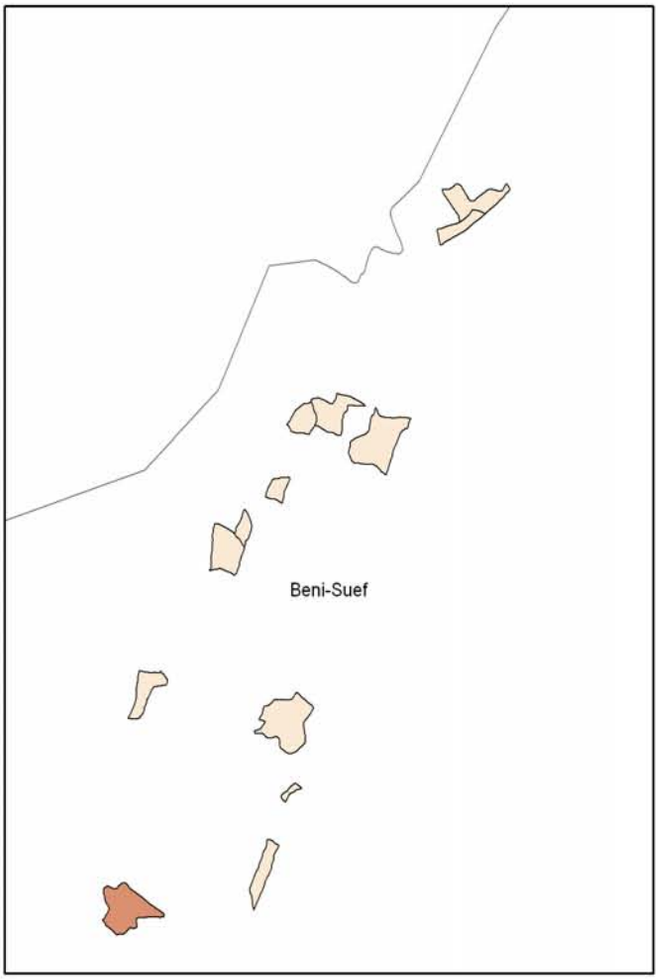
Low (17.70 -)

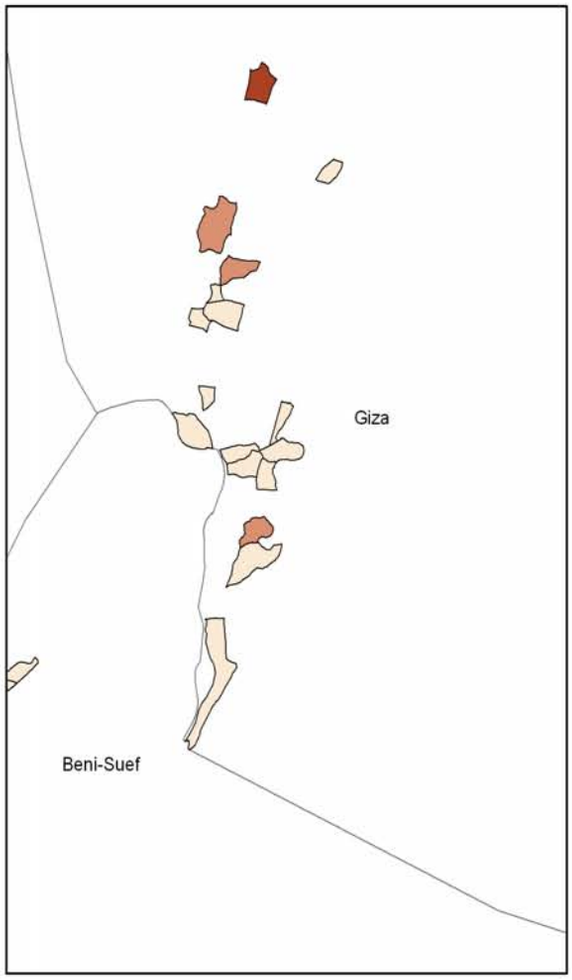
Medium (44.10 -)

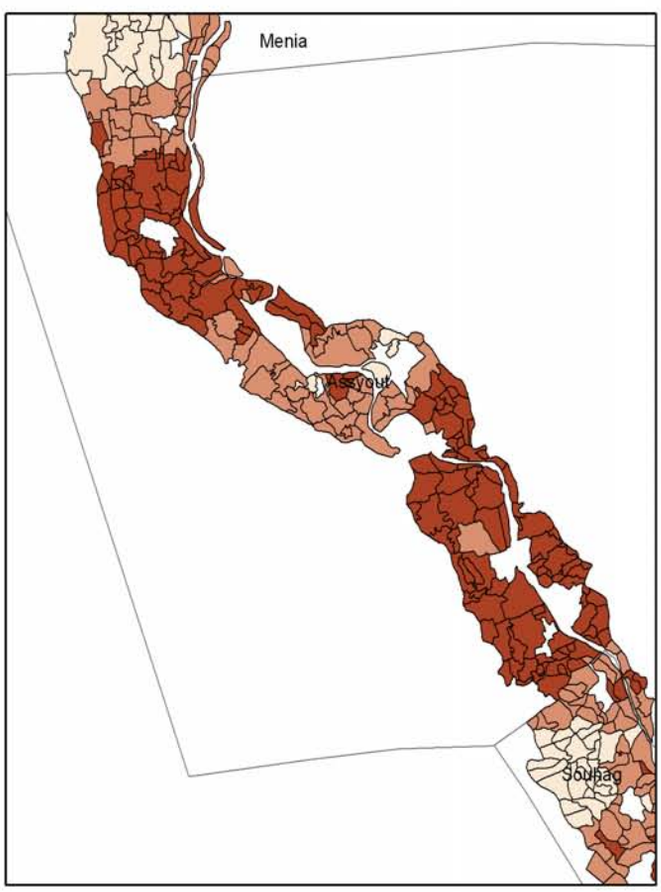
High (52.30 - 91.20)

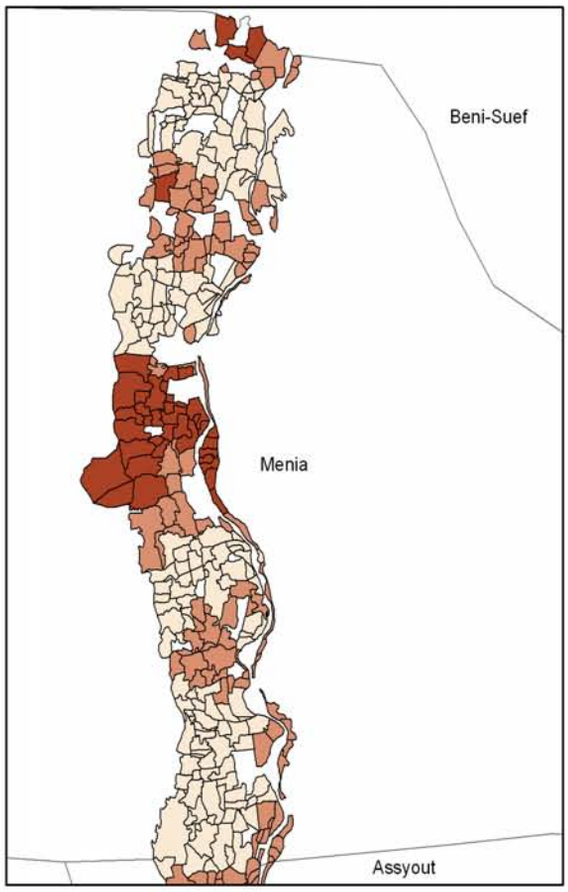


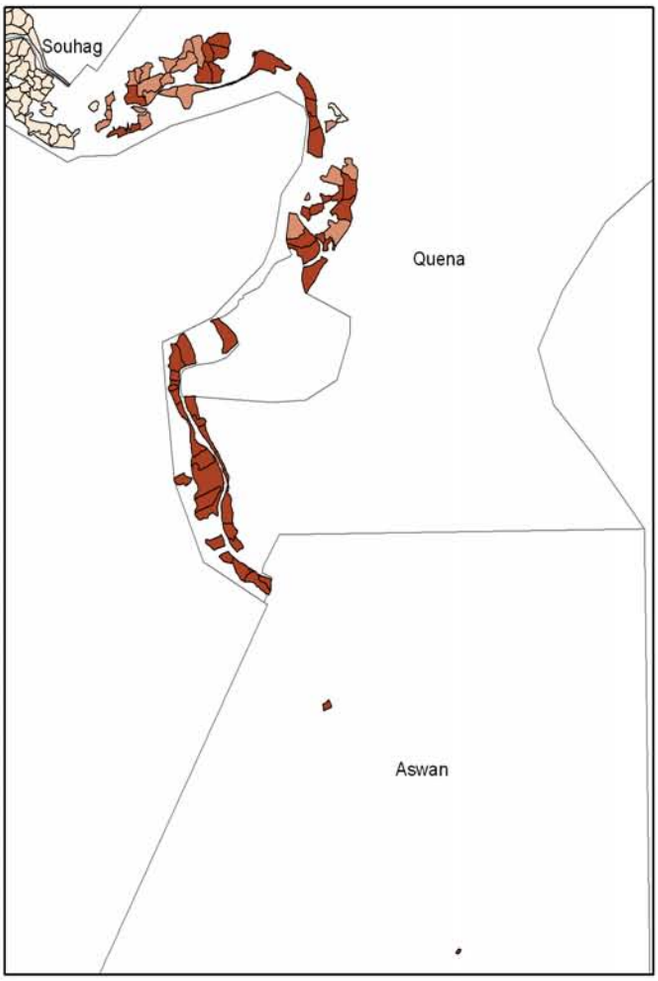


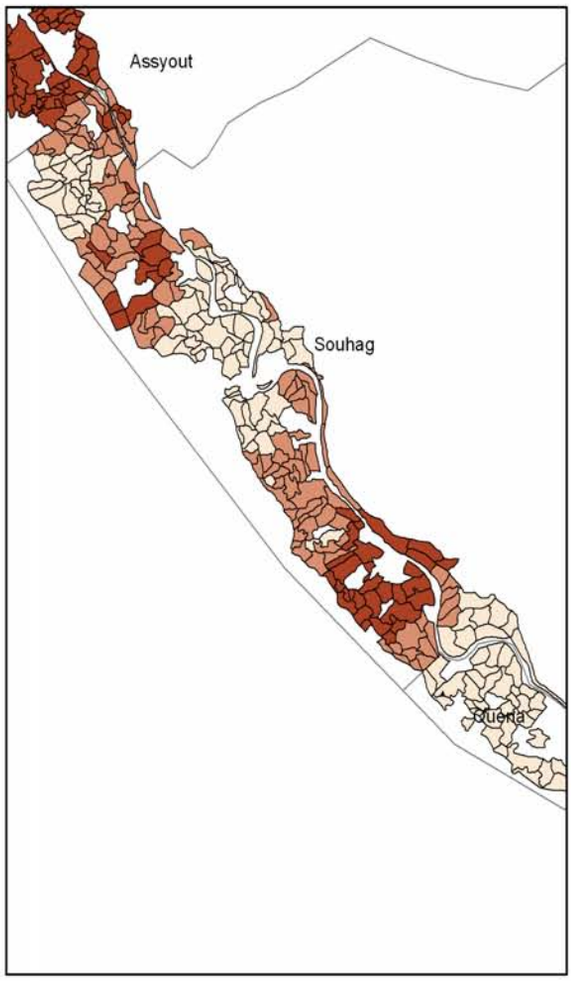





Menia
Assyout
Souhag

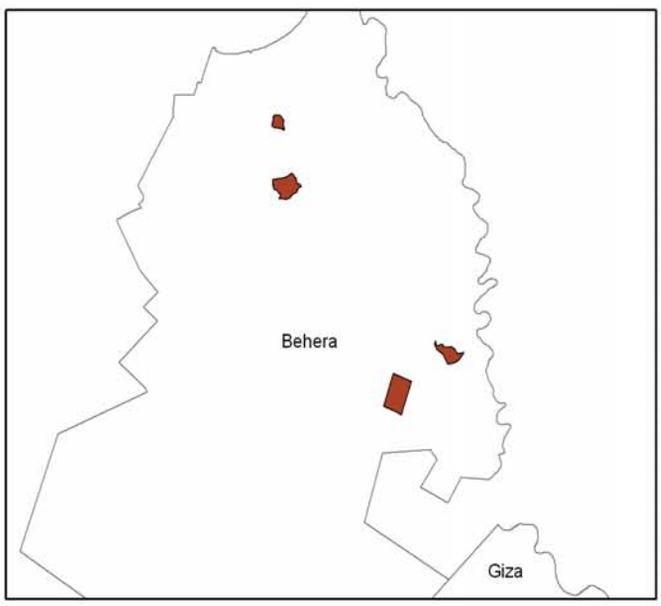

Beni-Suef
Menia
Assyout

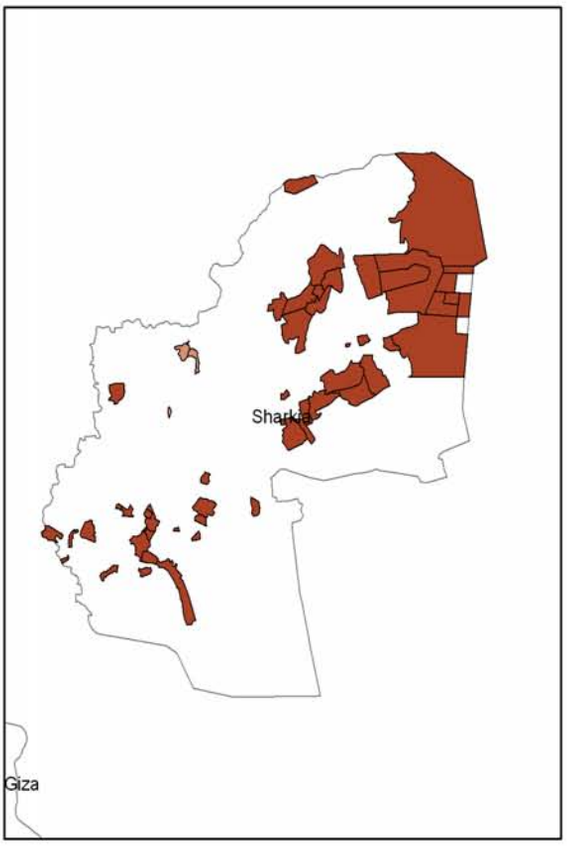

Souhag
Quena
Aswan

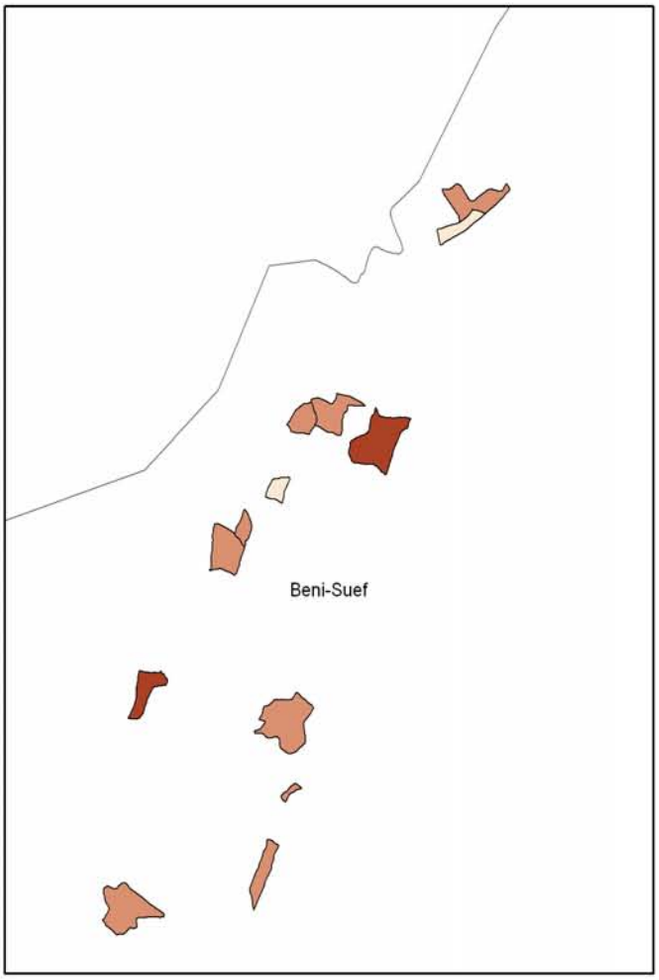

Assyout
Souhag
Quena

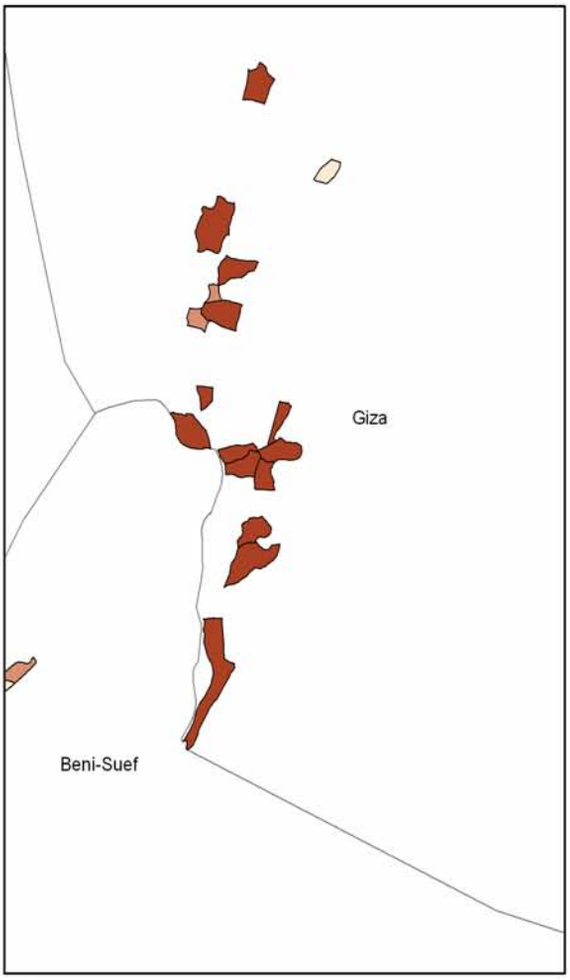
10- Medical Assistance During Delivery

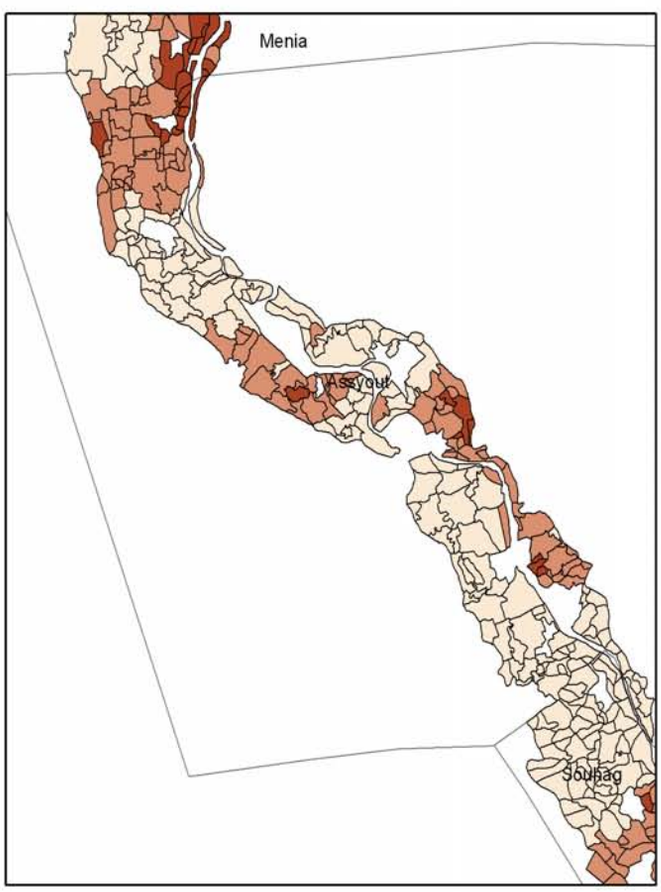
Low (21.10 -)
Medium (49.40 -)
High (59.30 - 99.90)

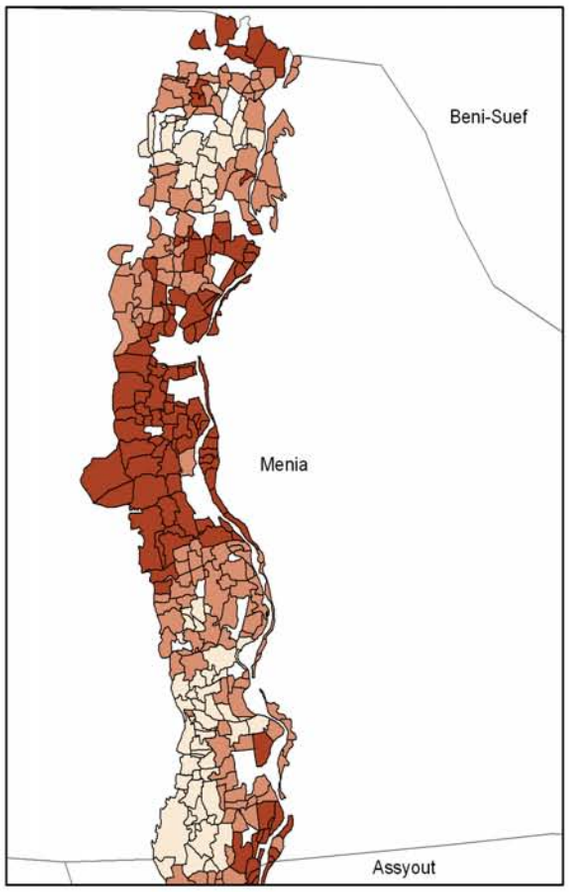


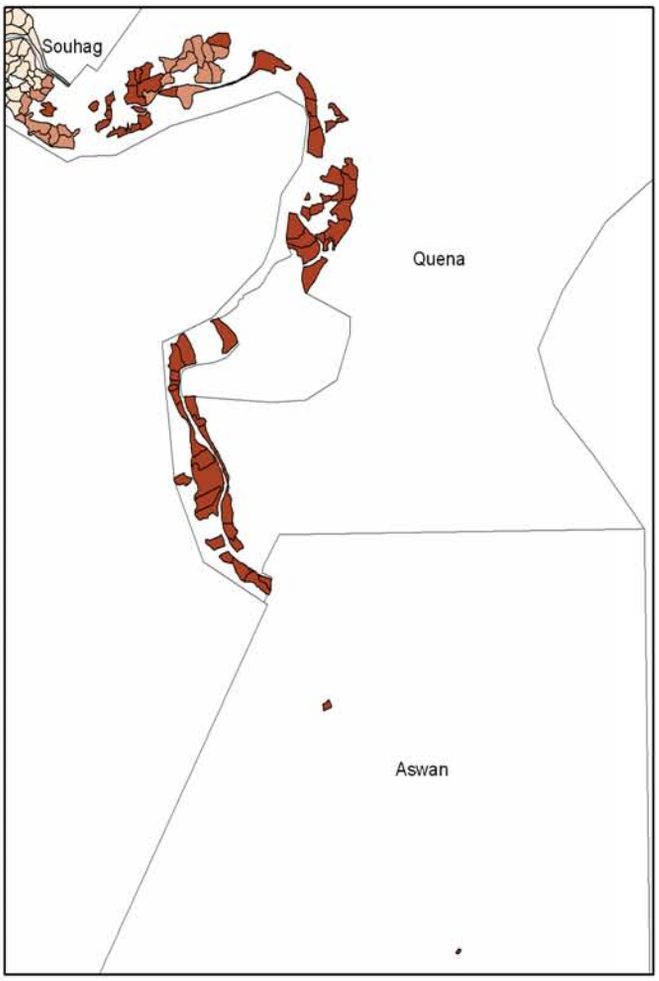


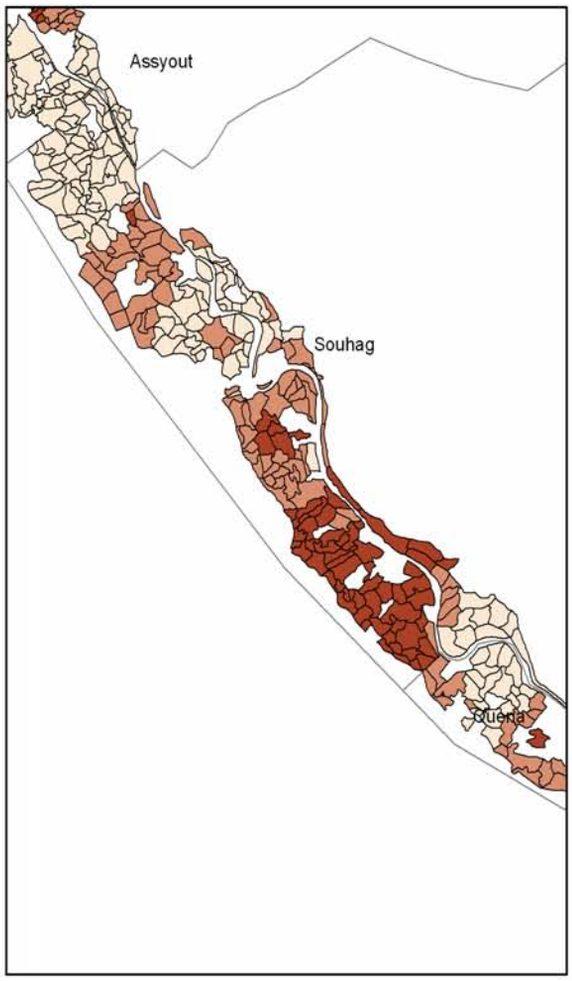





Menia
Assyout
Souhag

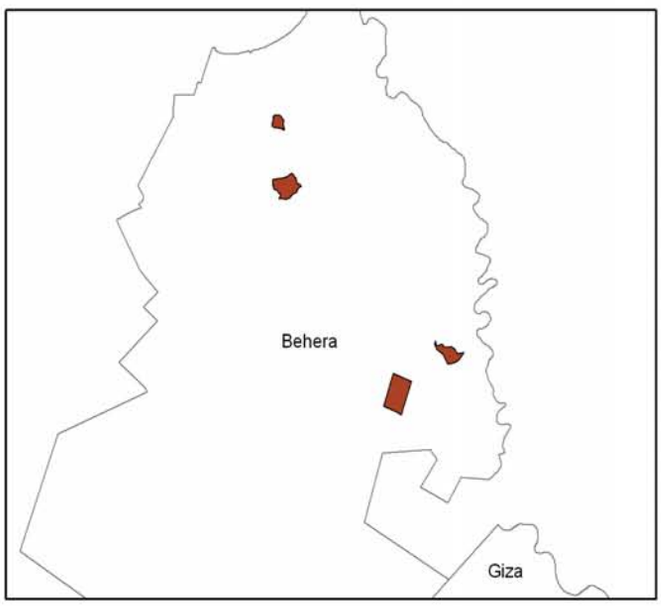

Beni-Suef
Menia
Assyout

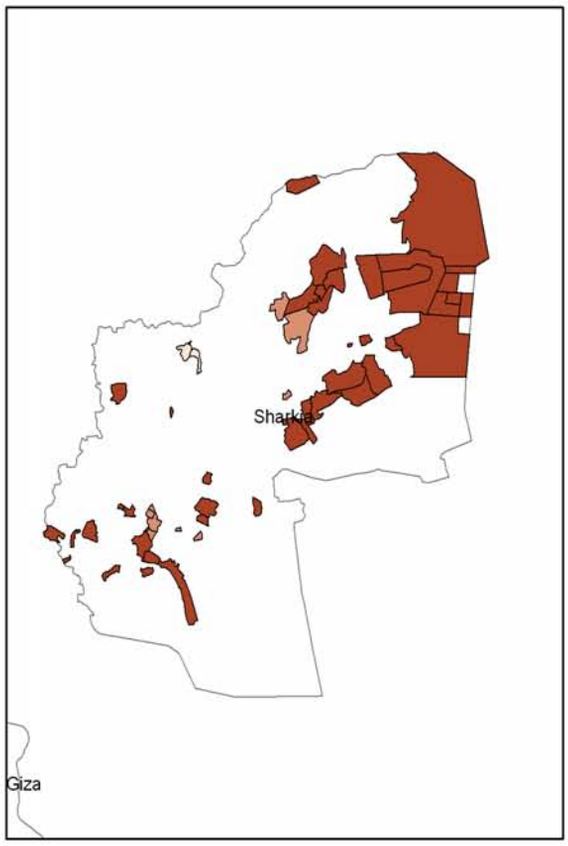

Souhag
Quena
Aswan

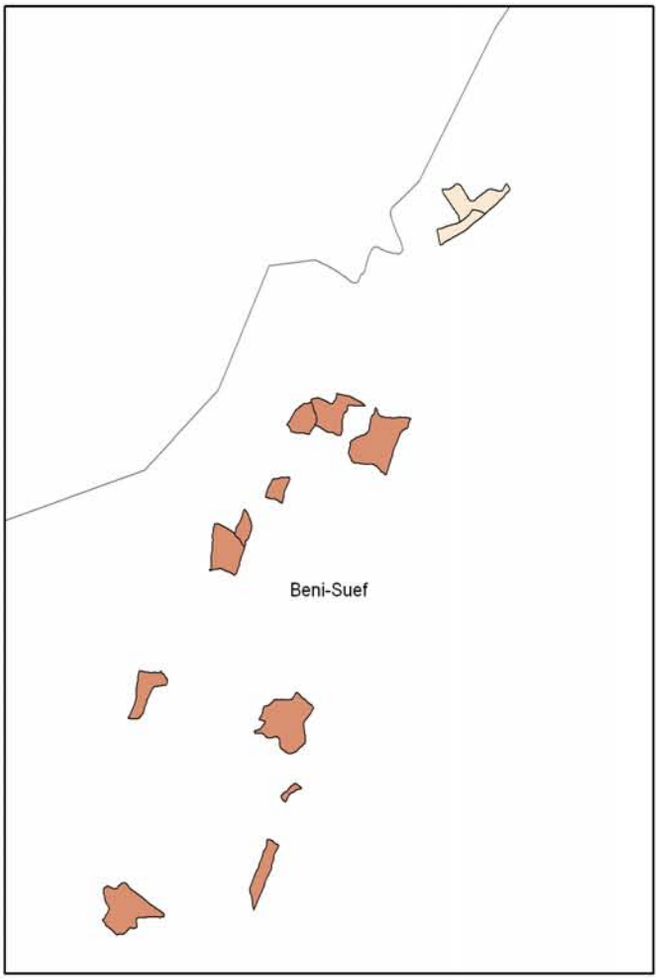

Assyout
Souhag
Quena

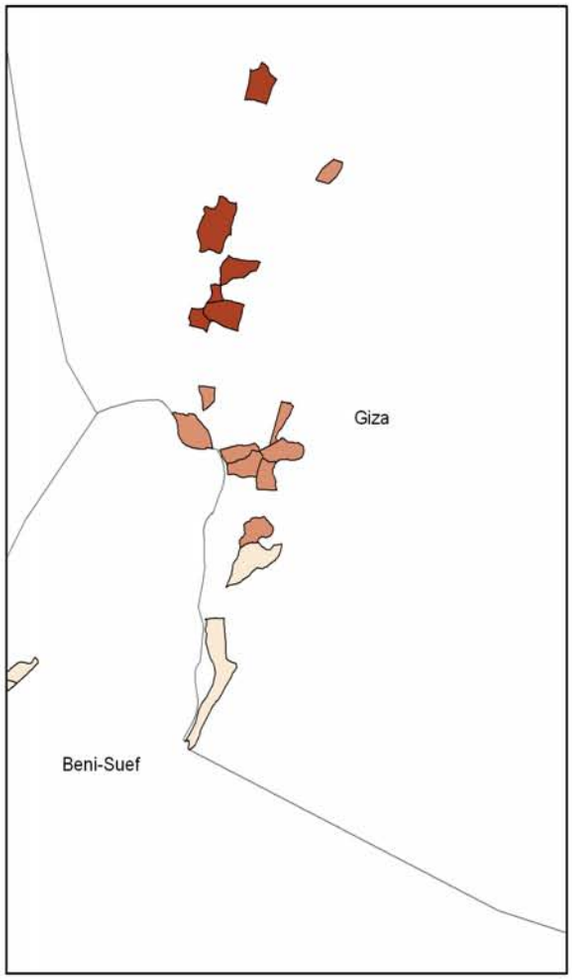
11- Any postnatal care for mother

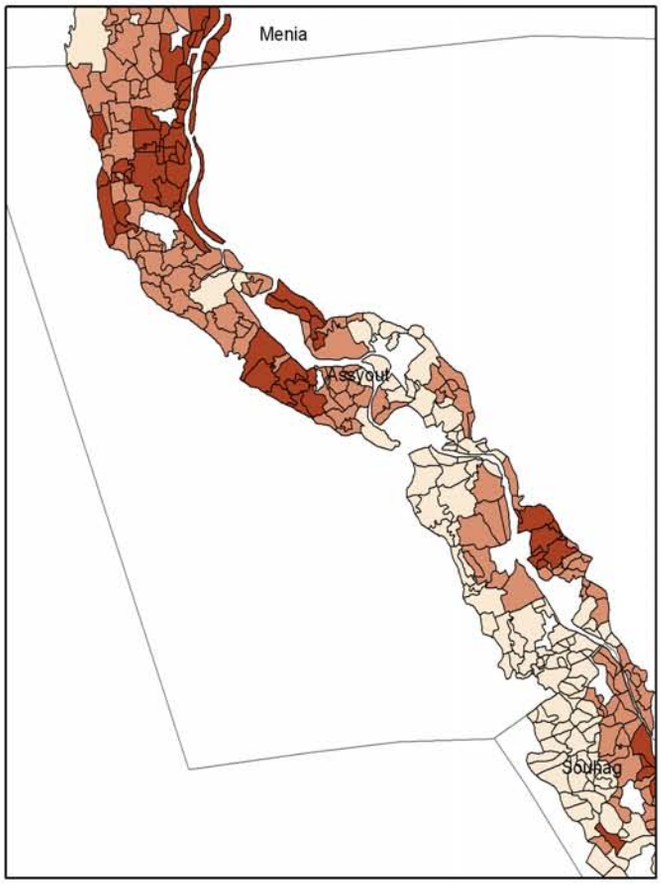
Low (16.40 -)
Medium (37.60 -)
High (47.60 - 98.80)

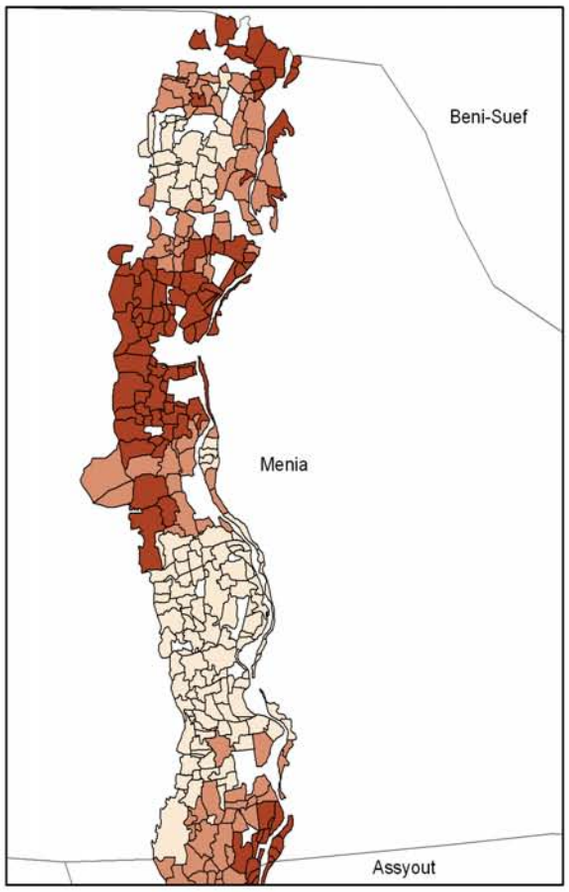


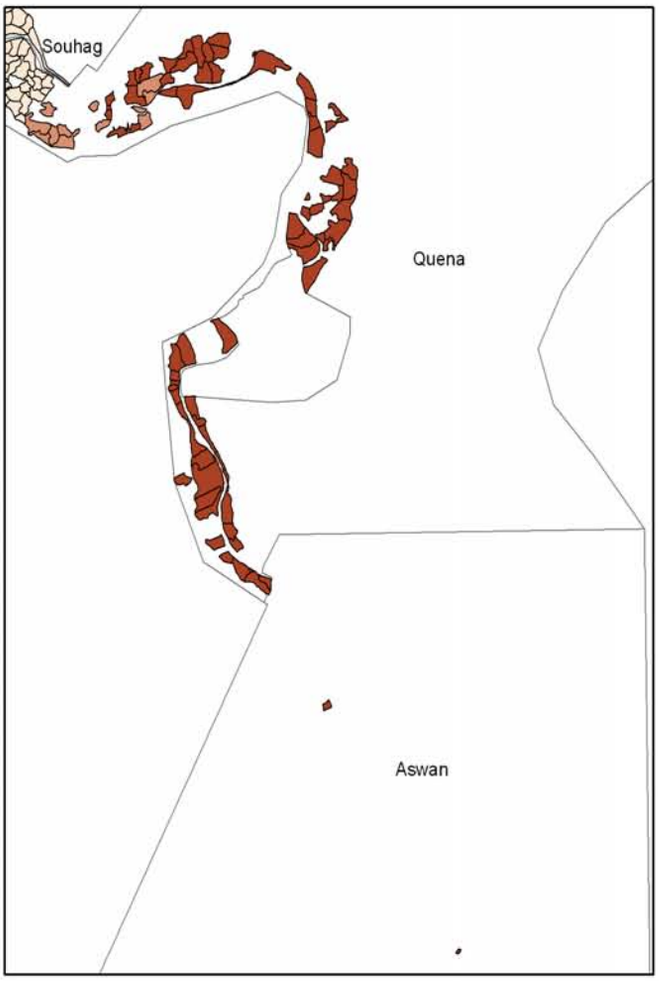


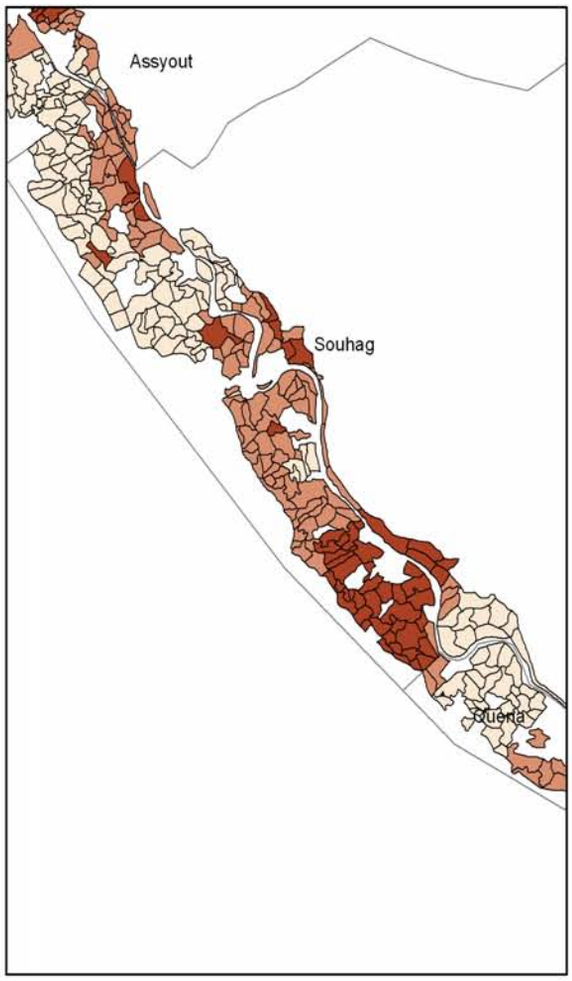





Menia
Assyout
Souhag

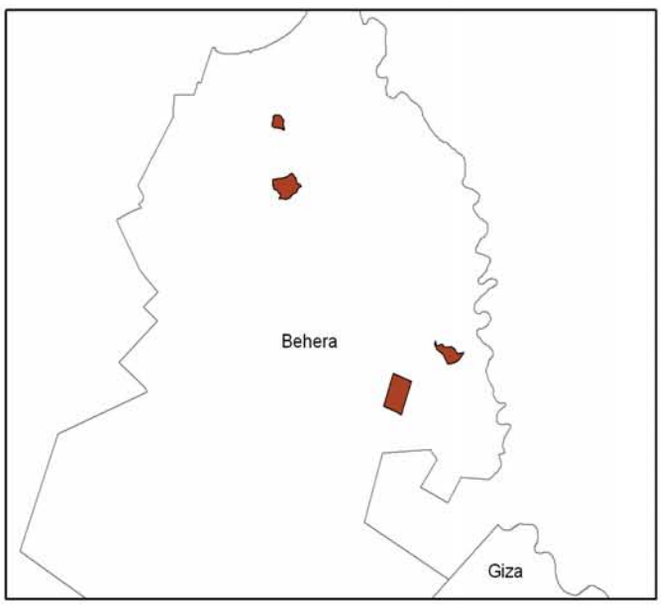

Beni-Suef
Menia
Assyout

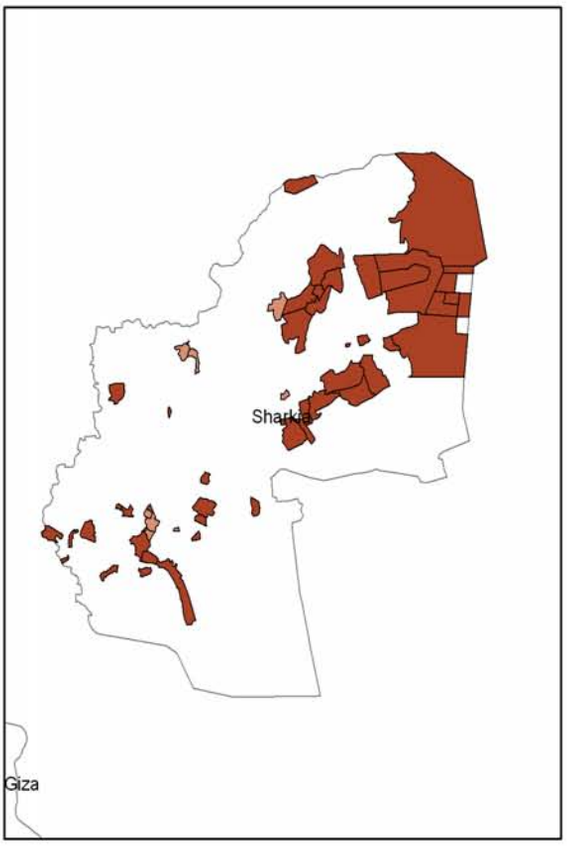

Souhag
Quena
Aswan

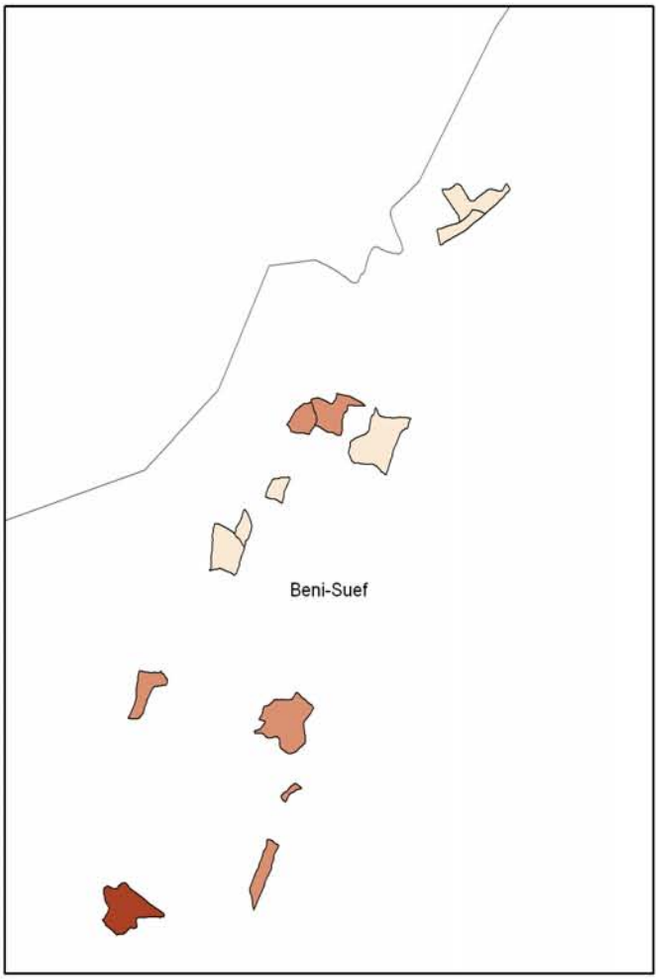

Assyout
Souhag
Quena

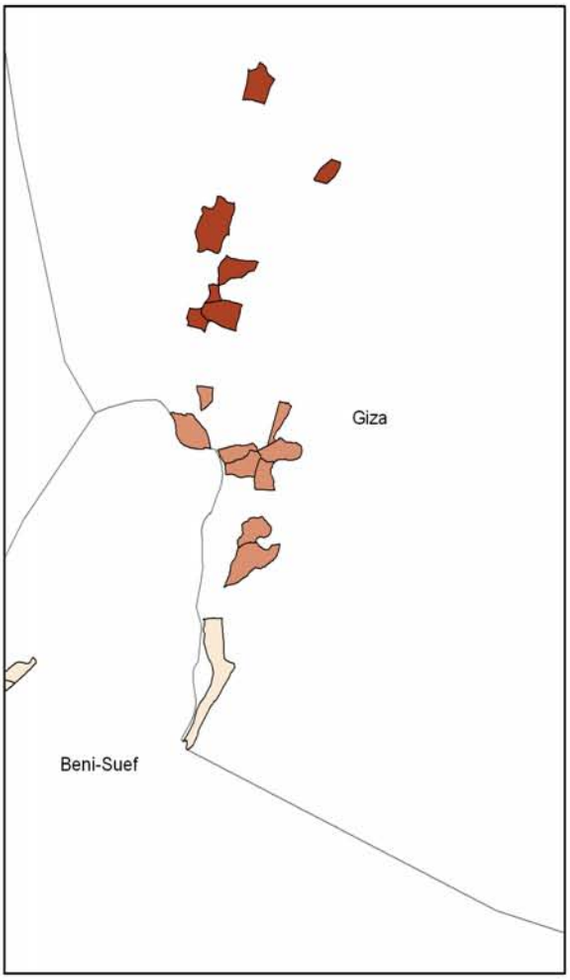
12- Postnatal care for mother within 2 days

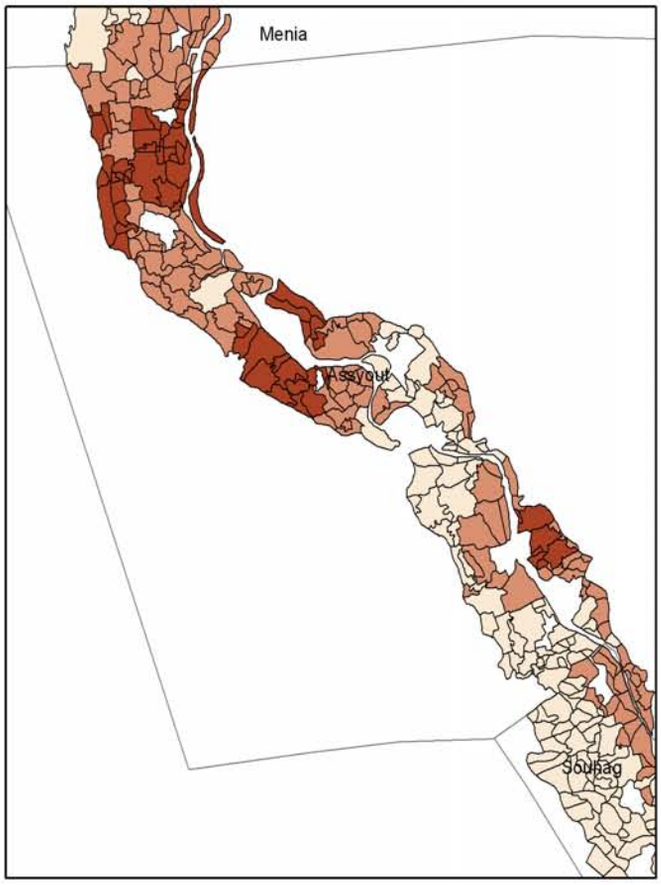
- Low (14.20 -)
- Medium (33.00 -)
- High (43.70 - 98.70)

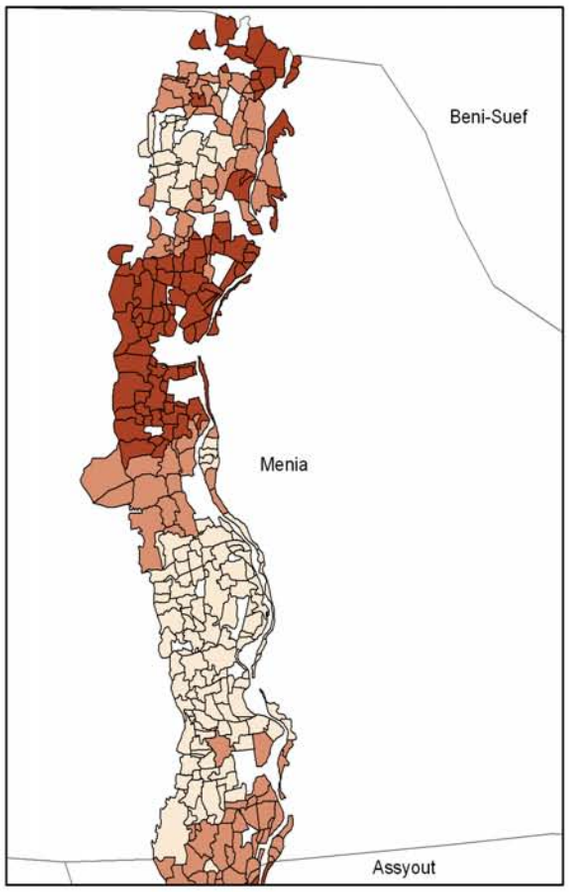


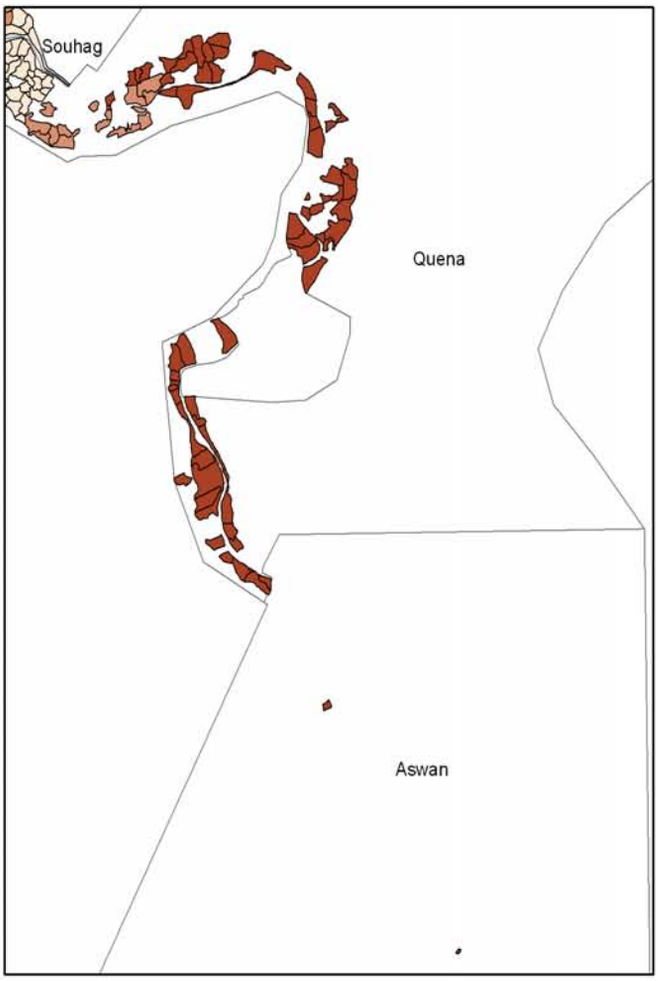


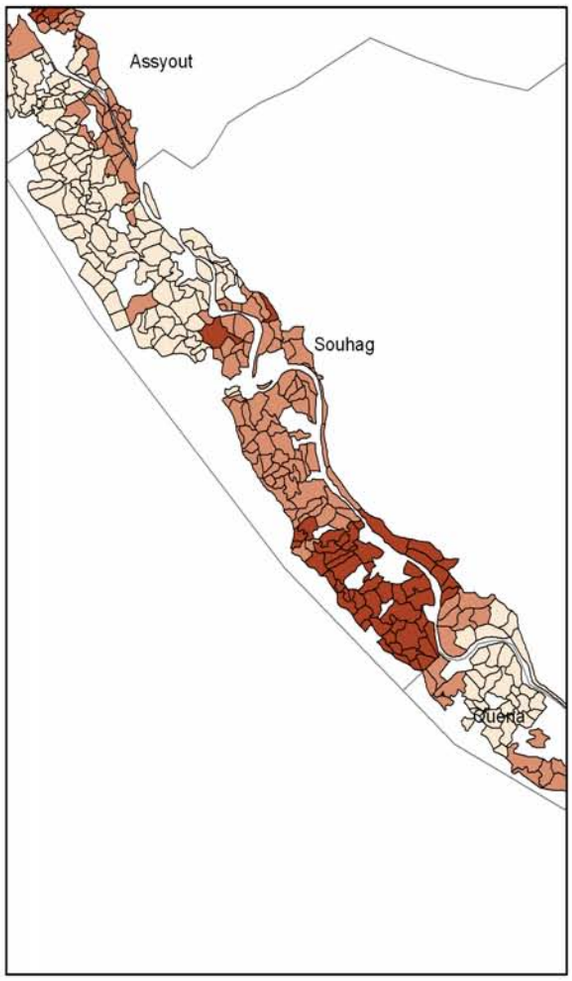





Menia
Assyout
Souhag


Beni-Suef
Menia
Assyout


Souhag
Quena
Aswan


Assyout
Souhag
Quena

References

References:

- Abbasi-Shavazi, M.J. et al., 2009,The Fertility Transition in Iran: Revolution and Reproduction, Springer Science & Business Media B.V.
- Agha, Sohail and Mai Do, 2008, "Does an Expansion in Private Sector Contraceptive Supply Increase Inequality in Modern Contraceptive Ues?", Bethesda, MD: Private Sector Partnerships-One Project, Abt Associates Inc, Maryland, USA.
- Bongaarts, John, 2003, "Completing the fertility transition in the developing world: The role of educational differences and fertility preferences", Population Council, New York, USA.
- Daly, A, 1969, Tunisia: The liberation of women and the improvement of society. In Bernard Berelson (ed.), Family Planning Programs: An International Study. New York: Basic Books, Ic. For UNESCO 2007: It is the report you sent me earlier.
- El-Zanaty, F. & Ann Way, A, 2001, Egypt Demographic & Health Survey 2000, Calverton, Maryl&: MOHP, NPC, & ORC Macro.
- El-Zanaty, F. & Ann Way, A, 2004, Egypt Interim Demographic & Health Survey 2003, Cairo, Egypt: MOHP, NPC, El-Zanaty & Associates, & ORC Macro.
- El-Zanaty, F. & Ann Way, A, 2006, Egypt Demographic & Health Survey 2005, Ministry of Health & Population, National Population Council, El-Zanaty & Associates, & ORC Macro, Cairo, Egypt.
- El-Zanaty, F. & Ann Way, A, 2009, Egypt Demographic & Health Survey 2008, Ministry of Health & Population, National Population Council, El-Zanaty & Associates, & ORC Macro, Cairo, Egypt.
- Institute of National Planning, 2008, Evaluation of the National Strategic Plan for Population till Year 2007, Cairo, Egypt.
- Khadr, Z.A., et al, 2010, Using GIS in Constructing Area-Based Physical Index in Cairo Governorate, Egypt, Habitat International Journal 34(2010) 264-272.
- Ministry of Health & Population. National Maternal Mortality Study: Egypt 2000. (2001). Directorate of Mother & Child Health Care, MOHP Egypt.
- National Office of Family and Population, 2002, Tunisian Family Health Survey 2001. National Office of Family and Population in collaboration with the Pan Arab Project for Family Health.
- Osman, Magued and Hanan Girgis, 2010, Inequity of access to contraceptives in Egypt; Trends, Policies and procedures, presented in London school of Economics, British society for population studies annual conference Exeter, UK.
- Roudi-Fahimi, Farzaneh, 2002, Iran's family planning program: Responding to a nation's needs, MENA Policy Brief, population reference bureau, USA.

- TAHSEEN Project, 2004, Situation Analysis of Family Planning and Reproductive Health Outreach Workers in Egypt, Cairo, Egypt.
- UNESCO Institute for Statistics, 2007, GLOBAL EDUCATION DIGEST 2007: Comparing Education Statistic Across the World. Montereal Canada.
- UNICEF, 2008. Bridging the gap: The role of monitoring and evaluation in evidence - based policy making, www.unicef.org/ceecis/evidence_based_ policy_making. pdf, accessed may 2010.
- Verma, Vijay & Cristina Perez, 2009, Meeting data needs in developing countries: questions of quality, quantity and capacity, Policy and research papers, International union for the scientific study of population (IUSSP), Paris, France.
- Way et al, 2003, Egypt Demographic and Health Data: A Geographic Perspective, Measure DHS, and El-Zanaty and Associates.

المراجع العربية:

- الجهاز المركزي للتعبئة العامة والإحصاء، ١٩٩٨، التعداد العام للسكان والإسكان والمنشآت لعام ١٩٩٦.
- الجهاز المركزي للتعبئة العامة والإحصاء، ٢٠٠٨، «دراسة المناطق العشوائية في مصر».
- الجهاز المركزي للتعبئة العامة والإحصاء، ٢٠٠٨، التعداد العام للسكان والإسكان والمنشآت لعام ٢٠٠٦.
- الجهاز المركزي للتعبئة العامة والإحصاء، ٢٠٠٩، «دراسات وبحوث في السكان».
- الجهاز المركزي للتعبئة العامة والإحصاء، إحصاءات المواليد والوفيات من ٢٠٠٥ إلى ٢٠٠٨.
- الزناتي، ف. و واى، ٢٠٠٤، «المناطق العشوائية بالقاهرة الكبرى».
- المجلس القومي لحقوق الإنسان، ٢٠٠٩، صندوق الأمم المتحدة للسكان: نتائج الدراسة حول المعرفة بالحقوق الإنجابية.
- المجلس القومي للسكان، الخطة الاستراتيجية القومية للسكان في مصر ٢٠٠٧-٢٠١٢، ٢٠٠٧، القاهرة، مصر.
- المجلس القومي للسكان، ٢٠٠٦، التقرير السنوي عن خدمات تنظيم الأسرة ٢٠٠٦، القاهرة، مصر.
- المجلس القومي للسكان، ٢٠٠٩، التقرير السنوي عن خدمات تنظيم الأسرة ٢٠٠٨، القاهرة، مصر.
- المركز الديموجرافي بالقاهرة، ٢٠٠٣، سكان مصر في القرن العشرين، القاهرة، مصر.
- عثمان، ماجد، ومحمد فتوح، وحنان جرجس، ٢٠٠٩، تقدير مستويات الإنجاب ٢٠٠٠ على مستوى المحافظات، مشروع قضايا وسياسات السكان والتنمية، القاهرة، مصر.
- فرج، محمود وحنان جرجس، ٢٠٠٨، تقدير مستويات الإنجاب لعام ٢٠٠٥ في محافظات الجمهورية، مشروع قضايا وسياسات السكان والتنمية، القاهرة، مصر.
- جرجس، حنان ومحمود فرج، ٢٠١٠، تقدير مستويات الإنجاب لعام ٢٠٠٨ في محافظات الجمهورية، مشروع قضايا وسياسات السكان والتنمية، القاهرة، مصر.
- قسم الإحصاء، ٢٠٠٤، كلية الاقتصاد والعلوم السياسية، جامعة القاهرة، «دراسة احتياجات المجتمعات العشوائية من المعلومات وخدمات الصحة الإنجابية».
- مركز المعلومات ودعم اتخاذ القرار، ٢٠٠٨، استطلاع رأى المواطنين حول الحملة الإعلامية «وقفة مصرية»، القاهرة، مصر.
- مركز المعلومات ودعم اتخاذ القرار، ٢٠٠٨، المسح البعدي للتعداد العام للسكان والإسكان (٢٠٠٦): مستويات الشمول ودقة البيانات، القاهرة، مصر.
- مشروع قضايا وسياسات السكان والتنمية، ٢٠٠٩، تقرير حالة السكان في مصر: ١٥ عاماً على المؤتمر الدولي للسكان والتنمية، القاهرة، مصر.
- مشروع قضايا وسياسات السكان والتنمية،٢٠٠٦، تقرير حالة السكان في مصر ٢٠٠٥، القاهرة، مصر.
- نادية حليم وآخرون، ٢٠٠٨، المحددات الثقافية للزيادة السكانية، المركز القومى للبحوث الإجتماعية والجنائية، المجلس القومي للسكان، القاهرة.
- هيل، كارين، ٢٠١٠، محاضرة عن إعداد السياسات: تجربة المملكة المتحدة، ورشة عمل «دعم قدرات الحكومة المصرية على وضع السياسات وتقييم الأثر الاقتصادي والاجتماعي استرشاداً بأفضل الممارسات الأوروبية»، مركز المعلومات ودعم اتخاذ القرار برئاسة مجلس الوزراء المصري بالتعاون مع المبادرة المصرية لإصلاح مناخ الأعمال ومبادرة دعم الارتقاء بالحوكمة والإدارة (سيجما).
- وزارة التنمية الاقتصادية، ٢٠٠٩، «برنامج الاستهداف الجغرافي في القرى الألف الأكثر فقراً».
- وزارة التنمية المحلية، ٢٠٠٧، «توزيع المناطق العشوائية».
- وفاء مرقص وآخرون، ٢٠٠٦، المحددات الثقافية للزيادة السكانية، دراسة على عينة من الشباب، المركز القومي للبحوث الإجتماعية والجنائية، المجلس القومي للسكان، القاهرة.

Population Sataus in Egypt Reports

1- Population Status In Egypt

2- Policy Implications Of The Demographic Dividend (Window Of Opportunity) And Its Consequences On The Labor Market: A Case Study Of Egypt

3- Food Crisis and Population Status in Egypt

4- Population Status In Egypt: ICPD @ 15

5- Population Status In Egypt: Towards Achieving the Objectives Of The National Population Program