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A Comparative Analysis of Fertility Plateau in Egypt, Syria and Jordan: Policy Implications

Hoda Rashad
The American University in Cairo AUC, HRASHAD@AUCEGYPT.EDU

Hassan Zaky
The American University in Cairo (AUC), HZAKY@AUCEGYPT.EDU

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by

Hoda Rashad and Hassan Zaky

Social Research Center

The American University in Cairo

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Introduction

Egypt, Jordan and Syria are three Arab countries whose fertility levels and recent trends are comparable. The fertility rates for the three countries (TFR between 3 and 4) fall in the mid-range[1] and they are all experiencing a plateau in their declining trends. They are also sharing the same medium human development level (UNDP, 2013). On the other hand, these countries are very different in terms of their population sizes[2] as well as the approach to population policies.

The purpose of this paper is to identify population policy options in relation to fertility. Such fertility policies have usually emphasized the growth challenge and specified fertility targets consistent with economic and social resources as well as development plans.

Notwithstanding the fact that national goals that build on the integration of population, economic and social policies are considered necessary for sound development planning and for the achievement of societal aspirations, this paper emphasizes the necessity of situating these goals within a reproductive health paradigm. This paradigm appreciates that the articulation of national goals derives from a concern for individual health and wellbeing. The paradigm prioritarizes that every person should have an equitable opportunity to live a healthy, productive, and fulfilling life in all matters relating to the reproductive system and its functions and processes, according to 1994 ICPD.

In particular, this paper sees that the translation of this paradigm in relation to fertility implies the following core principles:

- National fertility goals are not fixed but may vary in response to the economic and social contexts and development plans.
- Regardless of such goals, they must adhere to the following:

[1] As indicated in (Worldfocus, 2010), the Arab countries can be divided into 4 groupings in terms of average fertility. The Maghreb is the lowest in terms of average fertility. (TFR of 2.2), The Gulf Cooperation Countries with TFR of 2.7 followed by Mashreq countries with TFR of 3.0, then the least developed with the highest fertility levels of 4.4.

[2] Egypt is the largest, with an estimated population of 83 million, Jordan 6 million, and Syria 21 million in 2012 (UN, 2011)

- Protection of the human right for informed choice and non use of any form of coercion.
- Supporting healthy satisfaction of reproductive intentions as well as recognizing the importance of informed and responsible choices.
- In case of inconsistencies between national fertility goals and family choices, such inconsistencies can only be addressed through public policies that align both national and family goals. These policies serve to make "healthy choices easy choices" through empowerment and expansion of opportunities.

- Fertility concerns are indeed central ones but should be seen as one of many concerns within the reproductive health challenges. All such concerns have a clear impetus in gender dynamics that cut across all social groups and social positions.

The Reproductive Health Paradigm is reflected in the analytical questions investigated in this paper, mainly:

- The degree to which the current levels, trend and regional patterns of fertility is a reflection of fertility desires and their satisfaction.
- The unhealthy features of the reproductive pattern that call for policy interventions.
- The potential change in fertility levels that are to be expected with the healthy satisfaction of reproductive intentions.
- The structural forces that are underlying both the current desires and the failure to meet reproductive intentions in a healthy way. In particular, these include the political and institutional aspects of family planning programs, the socio-economic determinants and the gender dynamics.
- The policy implications and the opportunities that are available to address the current fertility plateau.

The paper is divided into six sections.

I. Fertility profiles and their proximate determinants

II. Fertility desires and their satisfaction
III. Unhealthy features of the reproductive pattern
IV. Why fertility is plateauing in Egypt, Syria and Jordan
V. Structural forces underlying fertility plateau
VI. Policy implications and opportunities

I. Fertility profiles and their proximate determinants

a- Fertility levels and trends

Within the Arab region, the three countries considered fall within the Mashreq countries occupying a third position in terms of TFR (Total Fertility Rate) and e_o (Expectation of Life) as presented in table (1)

Table (1): TFR and e_o for various groupings of Arab countries

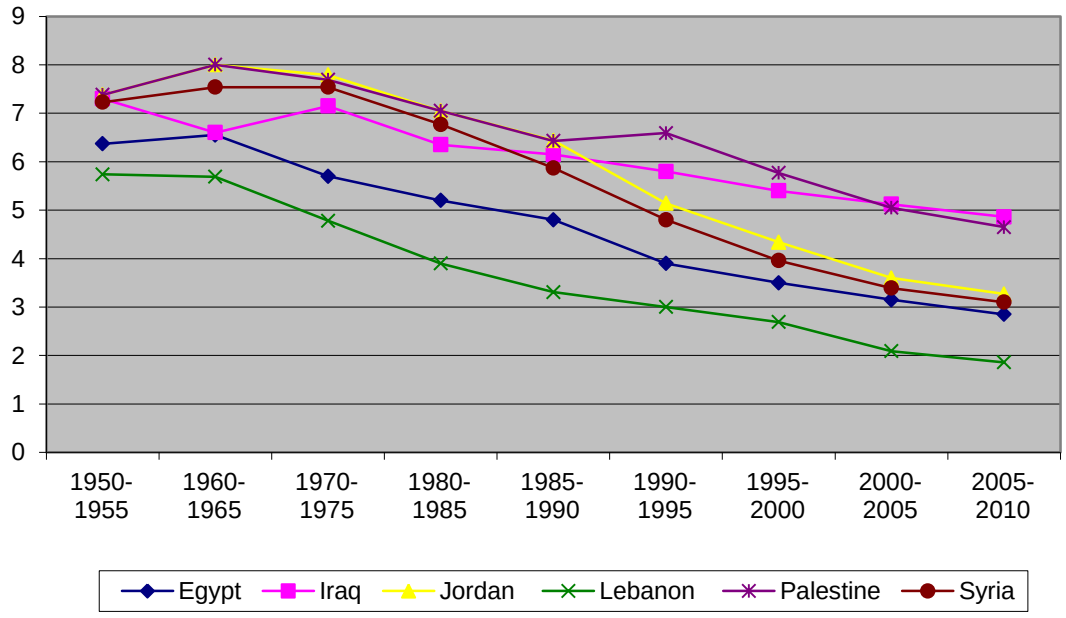
	TFR	e_o
Maghreb	Lowest (2.2)	Second best (69)
GCC	Second (2.7)	Highest (71)
Mashreq	Third (3)	Third (66)
Least[3] Developed	Highest (4.4)	Least (55)

Source: Worldfocus, 2010

The Mashreq fertility average hides diversity in TFR levels (figure 1, figure 2) but the three countries considered are quite similar in two features: The magnitude of fertility (TFR of 3 in Egypt, 3.5 in Syria and 3.8 in Jordan) as well as the experience of the plateau.

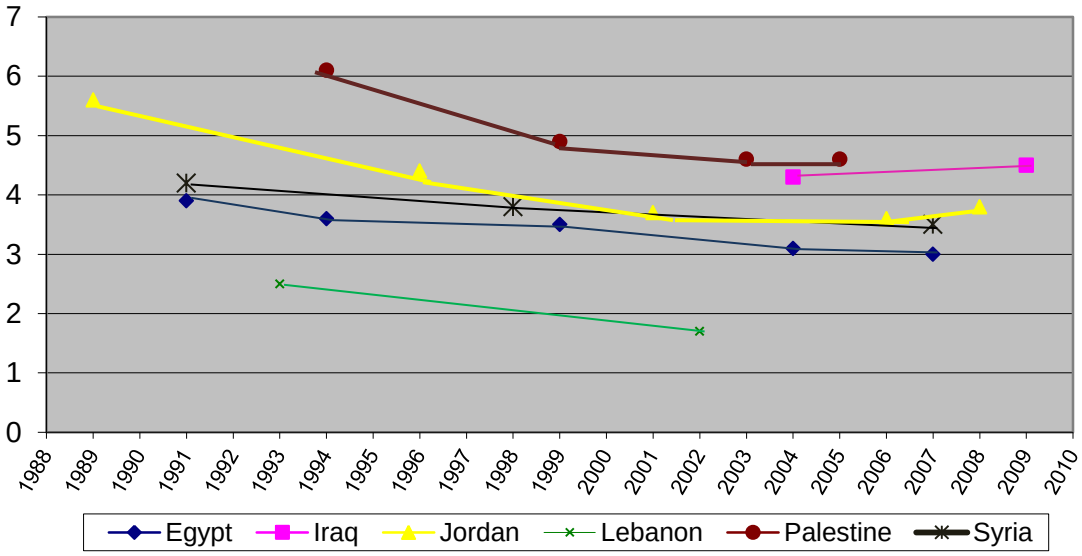
[3] Least developed Arab countries include Comoros, Somalia, Sudan, Yemen, Djibouti, and Mauritania.

Figure (1) :Trends of TFR in Mashreq countries based on United Nations estimation



Source:United Nations (2011) World Population Prospects: The 2010 Revision

Figure (2): Trends of TFR in Mashreq countries based on point estimates from cross sectional surveys



Source:DHS, MCHS, FHS , PFHS and MICS reports

In terms of fertility plateau, estimates of total fertility rate (TFR) in Egypt from various surveys conducted during the period 1988-2008 show a slow decline since 1995 especially during the period 2005-2008. The data indicates that fertility has declined from 4.4 live births in 1988 to 3.0 live births in 2008, a decline of about 1.4 live births in 20 years. The decline that occurred during the period 1988-2000 (0.9 live births) is more than double what occurred during the period 2000-2008 (0.4 live births). The annual rate of decline for the two periods is 0.075 and 0.05 live births respectively, as seen in Table (2).

Table (2): Total fertility rates for different reference years in Egypt, Jordan and Syria

Country	Survey	Mid-Point	TFR
Egypt	EFS1980	1979	5.3
	DHS1992	1991	3.9
	DHS 1995	1994	3.6
	DHS 2000	1999	3.5
	DHS 2005	2004	3.1
	DHS 2008	2007	3.0
Jordan	FFHS 1983	1982	6.6
	PFHS 1990	1989	5.6
	PFHS 1997	1996	4.4
	PFHS 2002	2001	3.7
	PFHS 2007	2006	3.6
	PFHS 2009	2008	3.8
Syria	MCHS 1993	1991	4.2
	FHS 2001	1998	3.8
	FHS 2009	2007	3.5

Source: EFS, DHS, FHS, FFHS ,MCHS, and PFHS survey reports

In Syria, TFR declined from 4.2 in 1993 to 3.8 in 2001 to 3.5 in 2007. The decline during these two periods is constant at a rate of 0.05 live births per year. In Jordan, estimates of TFR show a fast decline during the period 1983-2001 from 6.6 in 1983 to 3.7 in 2001 with an annual rate of 0.16 live births. However since 2001, Jordan has been experiencing a stalled fertility with some signs of a reverse trend since 2006 as seen in Table (2).

In terms of geographic variations, the patterns are different. In Jordan, the range of variations in TFR in 2009 at the governorate level is smallest and is between 3.6 - 4.5. Egypt's governorate level fertility in 2008 follows-at a lower level- but a slightly bigger range between 2.6-4.2 (Girgis and Farag, 2010). The relatively high fertility in Egypt clusters in Rural Upper region. When this region, which alone stands at 3.6, is not considered in the analysis of geographic variations at the regional level, the range of TFRs among regions in Egypt becomes much narrower and is between 2.6-3.0. In Syria, the range is much wider from 2.08 - 6.8. Indeed, Governorates in Syria can be easily divided into three groups (2-3, 3-4, and more than 4, as shown in table (3).

Table (3): Syrian governorates by total fertility rate

Group 1: Low fertility level governorates TFR (2-3)
AlSowaida (2.2), Alazekeya (2.2), Tartoos (2.3), and Damascus (2.6).
Group 2: Medium fertility level governorates TFR (3-4)
Rural Damascus (3.3), Hems (3.1), Hama (3.3), Aleppo (3.2), AlHaska (3.5), and Alqoneitra (3.8).
Group 3: High fertility level governorates TFR (more than 4)
Der-Ez-zor (6.8), Al-Rakka (4.9), Idleb (4.7), and Dar'a (5.1).

Source: Central Office of Statistics (Syria) and the Arab League (2011)

b- Proximate determinants of fertility

The direct determinants of fertility include marriage patterns, contraceptive use, postpartum amenorrhea and abortion. Among these, contraceptive use is a direct translation of a fertility choice. Bongaarts' model provides indices to measure the strength of the inhibiting role of these forces on fertility. In interpreting the findings of the proximate determinants of fertility by Bongaarts, it is well known that the lower the value of the index, the higher the percentage reduction in fertility due to that index. In Egypt, the index for contraception declined from 0.606, to 0.504 to 0.378 during 1988, 1995 and 2005 respectively (El-Zanaty, 2007). On the other hand, the index of marriage hardly changed from 1988 (Cm=0.629) to 2005 (Cm=0.583). This indicates a major inhibiting role of contraceptives and a minimal role of marriage in shaping fertility trends in Egypt during the period 1988 – 2005. Jordan is like Egypt where contraception plays a stronger role than marriage in determining the current level as shown in Table (4) but at a slightly less inhibiting effect than Egypt (Massarweh, 2011). Cc in 2009 was 0.41 compared to Cm of 0.56. In Syria, the situation is totally different where marriage is the stronger inhibiting determinant as Cm is 0.51 in 2009 compared to Cc of 0.59 (Syrian Agency for Family Affairs and UNFPA, 2012). Investigation of the median age at marriage clearly confirms the inhibiting effect of marriage in Syria. Syrian women marry later than women in both Egypt and Jordan. They marry on average at the age of 25 years while women in Egypt marry at 21 years of age and in Jordan at 22 years of age. Clearly, the contraceptive performance in both Egypt and Jordan managed to mitigate for the non-supportive role of marriage patterns in inhibiting fertility. It is probably interesting to note that Bongaarts' contraceptive index in both

Jordan and Syria is slightly an overestimate given the relatively high share of traditional methods in these countries.

Table (4): Proximate determinants of fertility in Egypt, Jordan and Syria

	Egypt 2008	Jordan 2009	Syria 2009
TFR	3.0	3.8	3.5
TMFR	4.6	6.8	6
Cc	0.38**	0.41	0.59
CPR (modern)	60.3% (57.6%)	59% (42%)	53.9%(37.5%)
% currently married (<30)	47.3	34.1	37.3
Median age at first marriage	20.6	22.4	25.3*
Cm	0.58**	0.56	0.51

* Singulate age at marriage
** For year 2005

Trends and pattern of current use of family planning in the three countries are quite different. In Egypt, trends of current use of family planning methods during the period 1984-2008 clearly show that the major jump occurred during the period 1984-1992 where the rate increased more than 50 percent from 30.3 percent in 1984 to 47.1 percent in 1992. During the period 1992-2000, the contraceptive prevalence rate (CPR) increased by almost 19 percent from 47.1 percent in 1992 to 56.1 percent in 2000. However, the national rate has been levelling off during the period 2003-2008 around 59-60 percent. These changes are not uniform across all regions. Rural areas are still moving forward while urban areas are facing a plateau since late 1990s towards the new millennium. The share of traditional methods in Egypt has been very minimal. The share does not exceed 3 percent. The picture in Syria and Jordan is different. The share of traditional methods is about 30 percent of all use. In Jordan, the CPR in 2009 was almost 60 percent, similar to Egypt, but the traditional method rate was 17 percent.

In Syria, CPR in 2009 was lower at 54 percent with 16.4 percent as traditional methods. Regarding the trend of CPR, data from Jordan clearly show a plateau in current use since early 2000s while in Syria, the trend is still increasing, as shown in table (5).

Table (5): Use of family planning for different years in Egypt, Jordan and Syria

Country	Survey	Any method	Any modern methods	Any traditional methods
Egypt	EFS 1980	24.2	22.8	1.4
	DHS 1992	47.1	44.8	2.3
	DHS 2000	56.1	53.9	2.2
	DHS 2005	59.2	56.5	2.7
	DHS 2008	60.3	57.6	2.7
Jordan	PFHS 1990	40	27	13
	PFHS 2002	56	41	15
	PFHS 2007	57	42	15
	PFHS 2009	59	42	17
Syria	MCHS 1993	39.6	28.3	11.3
	FHS 2001	46.6	35.1	11.5
	FHS 2009	53.9	37.5	16.4

Source : EFS, DHS, FHS ,MCHS and PFHS survey reports

In terms of the decision to use family planning methods, women in Egypt and Syria were asked about who was mainly responsible for such a decision. In both countries, a large percentage of users made the decision to use jointly with their husbands (86 percent in Egypt in 2008 and 62.6 percent in Syria in 2009). An issue worth noting here

is that the percentage in Syria in 2001 was 76.5 percent which shows a decline in joint decision making and calls for further investigation.

II. Fertility desires and their satisfaction

Desired, unplanned and unwanted births are key indicators for measuring fertility demands and their satisfaction. In the recent surveys of the three countries, women are asked about their desired number of children if they could go back in time when they had no children and could choose exactly the number of children to have in their whole life. The desired number of children for ever-married women 15-49 years of age on average is almost 3 children in Egypt, compared to 4.2 in both Jordan and Syria. The anomaly between similar desires for Syria and Jordan but a lower proximate index of contraceptives (stronger inhibiting role) for Jordan is noted and will be touched upon later.

In terms of desires to postpone or limit childbearing, a higher percentage in Egypt (just below two-thirds of ever-married women) wants to limit childbearing, compared to 47 percent in Jordan and 45 percent in Syria. This is consistent with lower fertility desires for Egypt.

With regards to unmet need, Syria stands out with the highest unmet need among the three countries. Unmet need in Syria reaches 16 percent in 2009. It declined from 30.6 percent in 2001. The total unmet need in Egypt is 9.2 percent and about 11.2 percent in Jordan. The difference between Syria and Jordan in terms of the inhibiting role of contraceptives is clearly influenced by the difference in the level of unmet need.

Women in Jordan are relatively more successful in translating their expressed desires for no more children into contraceptive uptake.

Regarding unwanted births, there is significant number of births who are wanted later or unwanted at all especially in Jordan and Syria. Almost 14 percent of births that occurred in the five-year period before 2008 Egypt Demographic and Health Survey (EDHS) in Egypt were not wanted, compared to 26.4 percent in Jordan according to the 2009 Jordan Population and Family Health Survey (JPFHS). In Syria, the data does not allow a comparison with Egypt and Jordan. The question covered only pregnant women during the 2009 Syria Family Health Survey (SFHS) survey. The results show that 24.4 percent of pregnant women did not want their pregnancy. This percentage of unwanted births clearly increases dramatically by the birth order in the three countries, especially in the high birth orders.

Regarding discontinuation rates, the data confirm a high level of discontinuation and that such discontinuation is for reasons not connected with desires. In Egypt, women stop using a method within 12 months of starting in almost one-quarter of all episodes of contraceptive use during the five-year period before EDHS 2008. Similar to Egypt, 28.6 percent of the episodes of use among Jordanian women discontinue within one year of use. On the other hand, the methodology used in Syria is different and does not allow direct comparison. It does not use calendar data and episode use within one year. The methodology used here relies on a simple percentage of stopping use among ever-users with time specification. The 2009 SFHS survey indicates that 15.3 percent of ever users in Syria stopped using family planning mainly because they desire more children, health reasons and method failure.

The findings of unmet need, unwanted births, and discontinuation all point to missed opportunities in responding to desires and in further reducing fertility levels. Clearly, Syria potentials for such reduction is much higher than Egypt and Jordan.

III. Unhealthy features of the reproductive pattern

A significant proportion of births in the three countries can be considered to be characterized to occur within an unhealthy pattern of reproduction, as shown in Table (6). In Egypt, according to the latest 2008 EDHS, almost 18 percent of the births are born within a birth interval which is less than 24 months, almost 14 percent of the births are born to mothers of age less than 20 years or of 40 and over, and almost 21 percent of the births are of order 4 and over. In Syria, 2009 FHS indicates that 35 percent of the births are born within a birth interval less than 24 months. Around 14 percent of the births are born to mothers less than 20 years of age or 40 and over. About 30 percent of the ever-married women had more than 4 births. In Jordan, the 2009 PFHS indicates that one-third of the births are born within a birth interval less than two years. Almost 9 percent of the births are born to mothers of age less than 20 years or of 40 and over and more than one-third of the births are of order 4 and above. As indicated in the WHO, this pattern of reproduction poses great health risks to both the mother and the child.

An important concern is the timing of the first use of contraception among women which would avoid births at very young ages. It is evident that this practice is minimal in the three countries but with varying degree. In Egypt, the idea of using contraception before having any children is clearly not accepted since only 0.2 percent of ever-married women use family planning before having their 1st child. The same is true in Jordan and

Syria since only about 2 percent and 1.2 percent of ever-married women in Jordan and Syria use family planning before having the 1st child. The relatively high percentage of use in Jordan and Syria compared to Egypt may be due to the fact that traditional methods –not expected to be linked to health side effects- are more commonly used in Jordan and Syria.

Table (6): Unhealthy features of reproductive pattern

	Egypt 2008	Jordan 2009	Syria 2009
% births to mothers < 20 yrs or 40 yrs and more	14	9	14
% births within BI < 24 mos	18	33	35
% births of order 4 or more	21	37	29*
% using FP before 1st child	0.2	2	1.2

*% of ever married women having five births or more

Source: El-Zanaty and Way (2009), Department of Statistics (Jordan) and ICF Macro (2010), Central Office of Statistics (Syria) and the Arab League (2011)

IV. Why fertility is plateauing in Egypt, Syria and Jordan

In this section, the paper attempts to explain the forces that underlie the fertility plateau in the three countries which are the same forces that could be addressed to precipitate further declines in fertility.

a- Heterogeneous fertility levels

Fertility patterns within the three countries are not homogenous. Each country has a number of geographic classifications with fertility levels that are different from the rest of the country and above the general average. These regions deserve special attention

and more context specific and responsive policies as well as disaggregated planning. The achievement of further reduction of fertility in these geographic areas will certainly influence the plateau.

In urban Egypt, fertility in two main administrative areas, namely towns and slum areas, are higher than the average. Towns are the urban administrative units with population size less than 50 thousand people. Most of the towns are located among rural areas which makes their characteristics closer to the characteristics of rural areas. Females in towns have the lowest education and socio-economic levels, age at first marriage, the lowest contraceptive use, the highest unmet need, ideal number of children, TFR and number of children ever born among all types of urban administrative units. In urban areas, towns constitute about 11percent of the total composition of urban areas. Their fertility levels (TFR=3.1) are relatively higher than other urban areas (TFR for Capitals/large cities = 2.6, TFR for small cities=2.8) and very close to the general average in rural areas (TFR=3.2).

The structure and characteristics of the population of slum areas[4] differ also from those of the non-slum urban population. The available studies on slum areas show that women in slum areas are less educated and poorer than women in non-slum urban areas. Fertility levels are also higher in slum areas than in non-slum areas.

Clearly, the stalling in urban setting is reflecting the stalling in development indicators whether due to the large intra-urban variations in socio-economic characteristics or due to the administrative definitions adopted.

[4] Slum areas, despite having many definitions, have a main characteristic which is being built far from legislations and disciplinary codes.

A similar rationale explains the clustering of higher fertility in rural Upper Egypt compared to other regions. It is true that currently rural Upper Egypt, which constitute at least one-fifth of total Egypt population is still experiencing a declining trend in fertility, however this decline is slowing down, and the recent fertility level remains above the average level.

In Syria, one group of governorates has TFR much greater than 3.5, which is the average TFR. This group consists of Der-Ez-zor (6.8), Al-Rakka (4.9), Idleb (4.7), and Dar'a (5.1). These governorates are mainly rural and agricultural areas. They are mostly located in the northern and southern parts of Syria. They constitute about one-fifth of the total population in Syria according to 2004 Population Census. As shown in Table (8), these four governorates are different from the average situation in Syria especially in FP use, marriage patterns. Their females generally marry younger than women in other governorates, they are less likely to be unmarried and more likely to be unemployed, and least likely to be using contraceptives. Der-Ez-zor also stands out among these governorates especially in TFR, FP use and female unemployment.

Table (8): Some basic indicators in the most fertile governorates in Syria

Governorate (TFR)	% using FP 2009	% unmarried 2010	Age at marriage 2009	% unemployed 2010
Der-Ez-zor (6.8)	17	33	24	13
Al-Rakka (4.9)	46	35	25	7
Idleb (4.7)	47	29	24	7
Dar'a (5.1)	40	29	21	7
Syria (3.5)	54	37	25	6

Source: Syrian Agency for Family Affairs and UNFPA (2012)

Although heterogeneity in fertility levels in Jordan is the least within the three countries, nevertheless, the most recent survey in Jordan indicates that there are several governorates that exceed 4 as their TFR, namely Mafraq (4.2), Jarash (4.5), Tafiela (4.3), Ma'an (4.3), and Aqaba (4.2). They are mainly located in the northern western and southern western parts in Jordan. These governorates constitute about 13 percent of the total population according to the latest population estimates in 2012 (Jordanian Department of Statistics, 2013). According to the preliminary findings of a study currently being conducted, fertility in the refugee camps in Jordan is relatively higher than the average.

b- Use of traditional methods in Syria and Jordan

Use of family planning in Syria and Jordan is characterized by a relatively high use of traditional methods. As it is well known, traditional methods are far less effective than modern methods. The results have indicated that almost one-half of currently married women in Syria are using a contraceptive method of which 30 percent of the total use is for traditional methods, mainly safe period. Traditional use vary by various background characteristics of women. Although Lazekeya has the highest CPR (77 percent) in Syria, half this use is traditional (37 percent). Surprisingly, the likelihood to use traditional method as opposed to a modern method increases with more education in Syria, as shown in Table (9). Use of traditional methods among those with at least a university degree is almost 42 percent of total use, while the use of illiterate women of traditional method represents about one-quarter the total use. There is less variation by

wealth quintiles, however the likelihood of traditional use clearly increases among the richest group of women. These surprising results deserve further indepth investigation.

Table (9): Use of traditional and modern methods by education and wealth in Syria

Background Characteristics	% using traditional methods	% using modern methods	% current use	% traditional out of all use	TFR
Education					
Illiterate	9.4	27.5	36.9	25.5	4.7
Read/write	12.2	38.3	50.5	24.1	3.8
Primary	15.4	40.0	55.4	27.8	3.7
Preparatory	18.5	41.4	59.9	30.9	3.0
Secondary	21.8	39.3	61.1	35.7	2.4
Medium	24.7	39.1	63.8	38.7	2.8
At least university	27.4	37.3	64.7	42.3	2.2
Wealth					
Poorest quintile	10.6	24.3	34.9	30.3	4.8
Second quintile	14.1	34.7	48.8	28.9	4.1
Third quintile	16.3	39.3	55.6	29.3	3.3
Fourth quintile	17	42.6	59.6	28.5	3.1
Richest quintile	22.9	44.8	67.7	33.8	2.6
Syria	16.4	37.5	53.9	30.4	3.5

Source: Central Office of Statistics (Syria) and the Arab League (2011)

In Jordan, use of traditional methods is prevalent. The 2009 PFHS has shown that almost 29 percent of total use is traditional methods. Withdrawal and periodic abstinence are the most common traditional methods. Similar to Syria, but to a less

extent, the likelihood of using traditional method increases with the increase in the educational status. Use of traditional methods is more prevalent among those women with higher education (31 percent of total use) compared to those with no education (24 percent of total use), as shown in Table (10).

Table (10): Use of traditional and modern methods by education and wealth in Jordan

Background Characteristics	% using traditional methods	% using modern methods	% current use	% traditional out of all use	TFR
Education					
No education	7.5	24.2	31.7	23.7	4.1
Elementary	16.6	33.7	50.3	33.0	4.1
Preparatory	15.1	46.4	61.5	24.6	4.7
Secondary	17.5	43.5	61.0	28.7	4.1
Higher	18.8	41.2	60.0	31.3	3.5
Wealth					
Poorest quintile	16.9	36.6	53.5	31.6	4.9
Second quintile	15.3	42.7	58.0	26.3	4.4
Third quintile	17.6	41.1	58.7	30.0	3.9
Fourth quintile	20.1	41.1	61.2	32.8	3.6
Richest quintile	16.0	49.3	65.3	24.5	2.7
Jordan	17.2	42.1	59.3	29.0	3.8

Source: Department of Statistics (Jordan) and ICF Macro (2010).

This tendency for using traditional methods does not distort the expected social patterning of the percentages using modern methods but impacts the gradient of such a distribution and the social gradient of TFR. For example, the use of contraceptives increases with higher level of education and wealth, but the differences across social groups are much smaller than the differences in current use (both traditional and modern). Hence, the differences in TFR by social groups are smaller than what to be expected based on the level of CPR.

c- Missed potentials for further reducing fertility

Family planning programs in the three countries clearly are missing existing opportunities to further reduce fertility and have an unsatisfied potential role. As mentioned earlier, the three countries are experiencing relatively high percentages of unmet need and discontinuation of family planning methods as well as unhealthy patterns in their reproductive pattern. These aspects of use are not totally governed by family planning programs as they are influenced by socio-economic differentials. Nevertheless, an effective family planning program can better capitalize on existing demand, respond more efficiently to service related reasons for discontinuation as well as influence the high health risk reproductive pattern. In this section we profile the characteristics of women who have unsatisfied need for FP as well as those who discontinue using the method. The social patterns point to the differentiated levels of missed opportunities.

The total unmet need in Egypt is 9.2 percent, 11.2 percent in Jordan , and 16 percent in Syria. In Egypt, the likelihood of having unmet need is highest among women who have

no education (11 percent), live in rural areas especially rural Upper Egypt (15.4 percent), belong to the lowest wealth quintile (13 percent). The total use of contraception as mentioned earlier is 60 percent. The majority of users are limiters, since four in every five users report that they want no more children leaving only one woman in every five users as a spacer. The total demand for family planning is almost 70 percent according to EDHS 2008, thus 87 percent of demand is satisfied.

In Jordan, the uneducated women stand out with an unmet need percentage of 28.9 percent. The total demand for family planning in Jordan is 72.9 percent with almost 84.6 percent satisfied. Again in Syria, unmet need is highest among uneducated women (22 percent), those with more than 4 children (23.6 percent) and in Der-Ez-zor (27.7 percent) and Tartoos (25.4 percent).

As indicated earlier, a significant proportion of women stop using contraception after a short period of use although they still do not want to have more children. The data available from the three countries confirm a high level of discontinuation for reasons not connected with desires especially in Egypt and Jordan, which represent a significant missed opportunity for further decline in fertility.

In Egypt, women stop using a method within 12 months of starting in almost one-quarter of all episodes of contraceptive use during the five-year period before EDHS 2008. The main reasons contributing to about 50 percent of this discontinuation rate are the presence of side effects (29 percent), for health and inconvenience reasons (10 percent) and method failure (9 percent). These two reasons point to a role that could be

played by contraceptive providers to address these shortcomings of contraceptive practice. Similar to Egypt, 28.6 percent of the episodes of use among Jordanian women discontinue within one year of use, mainly because of method failure (29 percent) and other reasons (38 percent) such as health and inconvenience reasons. On the other hand, the methodology used in Syria is different and does not allow direct comparison. It does not use calendar data and episode use within one year. The methodology used here relies on a simple percentage of stopping use among ever-users with time specification. The 2009 SFHS survey indicates that 15.3 percent of ever users in Syria stopped using family planning. The desire for more children constitutes about one-quarter of discontinuation. 15 percent for health reasons and 4.2 percent for method failure.

The failure to meet this demand for contraceptive use is translated into unwanted births as reported by women in both Egypt and Jordan. During the three years preceding the survey, women were asked about their births whether they wanted them or not. The TFR was recalculated for both Egypt and Jordan using only the wanted births. The results shown in Table (11) clearly indicate a pattern. Uneducated, rural, poor women are more likely to have unwanted births more than other women. For example, in Egypt unwanted births is almost 0.5 (TFR - Wanted TFR) in urban areas compared to 0.7 in rural areas. Uneducated women report about 0.8 unwanted births compared to 0.5 among those at least secondary education. The poorest women report around 0.9 unwanted births as opposed to 0.4 among the richest women. In general, if the family planning program in both Egypt and Jordan met these needs and worked on unwanted birth, fertility levels will decrease by at least 20 percent.

Table (11): Wanted, unwanted and achieved fertility in Egypt and Jordan by selected background characteristics

	Egypt			Jordan		
	Wanted	Unwanted	Actual	Wanted	Unwanted	Actual
Residence						
Urban	2.2	0.5	2.7	2.9	0.9	3.8
Rural	2.5	0.7	3.2	3.1	0.9	4.0
Education						
No education	2.6	0.8	3.4	2.7	1.4	4.1
Secondary and higher	2.5	0.5	3.0	3.0	0.8	3.8
Wealth						
Poorest	2.5	0.9	3.4	3.6	1.3	4.9
2	2.3	0.8	3.1	3.3	1.1	4.4
3	2.4	0.6	3.0	3.1	0.8	3.9
4	2.4	0.5	2.9	2.8	0.8	3.6
Richest	2.3	0.4	2.7	2.3	0.4	2.7
Total	2.4	0.6	3.0	3.0	0.8	3.8

Source: El-Zanaty and Way (2009), and Department of Statistics (Jordan) and ICF Macro (2010).

d- Relatively high fertility ideals

Desired number of children among families in the three countries is still high but with varying extent. As mentioned earlier, the average desired number of children in Egypt is the lowest around 2.9. In Jordan and Syria, the average is around 4.2.

Looking at fertility ideals clearly show that desired number of children increases, in relative terms, mainly among rural areas, those with no education, and among the poorest women. The least variation in desires by background characteristics is available in Egypt, while the most variation is available in Syria. Jordan is in between.

In Egypt for example, mean desired number of children slightly increases among those living in rural areas (3.0), those with no education (3.3), and those who are in the lowest wealth quintile (3.3), as shown in Table (12). In Syria, there exist significant variations

by background characteristics. For example Syrian women who completed at least secondary education desire two children less than the uneducated women, as shown in Table (12). Also, there is big variation among governorates where it is about 6.3 in Der-Ez-zour and reaches the lowest levels in AlSowaida and Alazekeya (3.1).

Table (12): Mean desired number of children by background characteristics in Egypt, Jordan and Syria

Background characteristics	Egypt 2008	Jordan 2009	Syria 2009
Residence			
Urban	2.8	4.1	3.9
Rural	3.0	4.4	4.6
Education			
No education	3.3	4.9	5.5
Secondary complete/higher	2.7	4.1	3.3
Wealth quintile			
Lowest	3.3	4.3	NA
Middle	2.9	4.1	NA
Highest	2.7	4.0	NA
Total	2.9	4.2	4.2

Source: El-Zanaty and Way (2009), Department of Statistics (Jordan) and ICF Macro (2010), Central Office of Statistics (Syria) and the Arab League (2011)

The study of the fertility ideals of youth is very relevant. Youth clearly shape the future fertility levels in these countries and determine whether they can achieve their demographic goals. Youth in these three countries are no different from the older population with respect to their fertility ideals. They also have relatively high fertility ideals. Data from the 2009 Survey of Young People in Egypt (SYPE) show that young

people's ideal number of children is higher than the replacement level (Barsoum, 2011). Among the unmarried (15-29), the mean desired numbers 2.7 among male young people and 2.6 among females. Among those married, the number is 2.8 among males and 2.9 among females.

In Syria, the desired number of the daughter when she gets married as reported by her mother is almost 4 which is almost equal to the number desired by the mother herself, as reported in the 2009 SFHS. The desired number of daughter clearly decreases with the mother's education and among those in urban areas as compared to the rural areas. Regarding age at marriage, it ranges between 20-23, according to selected background characteristics of the mother, as shown in Table (13).

Table (13): Fertility ideals among youth as reported by the mothers according to selected background characteristics of the mother in Syria

Selected Background Characteristics	Expected Mean Age at marriage	Desired number of children
Education		
No education	19.7	5.3
Secondary and over	22.9	3.0
Residence		
Urban	20.5	3.7
Rural	20.4	4.3
Total	20.5	4

Source: Central Office of Statistics (Syria) and the Arab League (2011)

e- An incomplete process of female empowerment

Women empowerment is defined as a process of expanding opportunities for choice and for their realization. The literature differentiates between critical and strategic choices measuring the status of empowerment. Strategic choices are life changing choices such as the choice of when and who to marry, career choices as well as reproductive ones. The improved socio-economic conditions, particularly education and command over economic resources, contribute to the expansion of strategic choices. However, the achievement of empowerment is not automatic through improvement in education or through work alone. It appears that there is minimum threshold effect for such conditions to impact strategic choices and also they cannot operate in absence of supporting institutional and cultural forces.

In Egypt, the question of whether and when socio-economic characteristics lead to further reduction in fertility was investigated. Zaky (2004) studied the relationship between fertility transition and female rational choices in Egypt using the data of EDHS 1995. The study concluded that the idea of wife's opportunity cost and rational choices related to fertility desires is not substantial in Egypt during the 1990s. The dynamics behind female employment and future fertility desires is not yet that of opportunity cost and value of the wife's time, and how much she may lose by having children. One should not expect dramatic decline in fertility desires, close to the levels of post-transitional societies in the absence of the dynamics of rational choice explanations.

In a more recent study (El-Sheneity, 2011), the relationship between women's potential sources of empowerment with special focus on education and employment and their fertility choices in terms of the total number of children ever born were explored using

both EDHS 2008 and ELMPS 2006 data. The study indicated that the effect of education on fertility preference does not show up unless the level of education reaches secondary level or higher; percent of respondents having four or more children drops considerably when this level of education is reached while those having two or three children increase. The drop in the average number of children ever born is evident when education reaches secondary level in all regions. When it comes to female employment, no evident difference shows for working or non-working women. Furthermore, respondents who have ever worked and have low level of education have larger average of children ever born than those who have never worked. When job characteristics are explored, it is found that a higher percent of respondents with low job quality (security) have four or more children compared to those who have never worked before. Job quality is measured in terms of whether the job is permanent, inside an establishment, sector of employment, having a contract and social security. Almost equal preferences for having two and three children exist. The average number of children ever born for those with low job quality is higher than the average for those who have never worked for almost all levels of education.

In a recent report in Syria, the relationship between female employment and fertility was found to be negative in urban areas compared to positive relationship in rural areas. Similar to Egypt, the authors (Syrian Agency for Family Affairs and UNFPA, 2012) stated that the expected negative relation between female employment and fertility is prevalent under certain types of employment where women are paid, work within specific working hours, and/or in the public sector or in the formal private sector. In addition, there are some indications that education and employment do have some

effect on reducing fertility from high levels (at least 5) to lower levels (3-4) but not less. The following table (14) indicates that the likelihood of having relatively high number of children in Syria clearly decreases among the highly educated women (at least university degree) compared with the least educated. The data show that more than one-half of the illiterate women in Syria have at least 5 children while only 6 percent of those women with at least a university degree have 5 and more children. However it should be noted that, at the same time, almost 40 percent of those highly educated women have 3-4 children. This is a relatively high percentage which indicates high fertility ideals.

Table (14): Female education and employment and fertility in Syria

	Number of children ever born				
	0	1-2	3-4	5 and above	Total
Education					
Illiterate	6.5	15.5	23.3	54.7	100
Read and write	11.9	24.1	31.3	32.7	100
Primary	7.4	26.2	36.7	29.7	100
Preparatory	9.4	32.1	39.5	19.5	100
Secondary	12.5	39.4	34.3	13.8	100
Medium	7.4	39.2	43.0	10.4	100
University and more	10.9	42.9	39.8	6.4	100
Employment					
Yes	8.5	32.2	36.8	21.5	100
No	8.2	26.8	34.3	30.7	100
Syria	8.2	27.8	34.7	29.3	100

Source: Central Office of Statistics (Syria) and the Arab League (2011)

Again for employment, the impact of female employment is only evident among those with at least 5 children. Among employed women, almost one-fifth of the women have 5 children and more compared to 31 percent among unemployed women. At the same time, almost one-third of the women regardless of their employment status have 3-4 children.

Clearly, improvements in women socio-economic characteristics do have some impact on fertility, however, the full impact operates only at a level that materializes in much higher command over resources (whether material in terms of income from paid and secure work or social in terms of knowledge from high levels of education). It is hypothesized that there are certain levels of empowerment that are needed to allow the cost and opportunity of having children and fulfilling ones' objectives to operate and to gain precedence over cultural dynamics supporting large families.

V. Structural forces underlying fertility plateau

Three central and more upstream drivers for the underlying determinants of fertility discussed earlier are: population policies and structures, socio-economic development as well as women and gender policies and efforts.

a- Population policies and structures

The institutional and organizational frameworks responsible for population and fertility are different in the three countries. While Egypt and Jordan have a population strategy and a population council, Syria has neither a policy nor a population council responsible for population in general and fertility in specific. The following attempts to explain the characteristics of this framework in the three countries in order to position this framework as one of the structural forces causing the fertility plateau.

Egypt

Efforts to have a governmental body responsible for handling the population situation can be traced back to the fifties when the Committee for Population Matters was established to assess the population situation and provide recommendation for the government. However such efforts were not progressed as the government pulled out from the population issues. As detailed in Sayed (2011), the first government organizational framework was established in 1965 as “the Supreme Council for Family Planning”. The Council was chaired by the Prime Minister and included as members all Ministers concerned with population. The technical Secretariat “Executive Board for Family Planning” was entrusted with managing the national family planning program with clear mandate aiming to reduce natural increase rate from 25.4 per thousand in 1966 to about 21 per thousand by 1970. Owing to 1967 war, the program stopped. In 1969, a Ministerial Committee was established to assess major activities and recommend future directions. The Supreme Council and its Secretariat were reactivated. The goal for the national program was to reduce the CBR by one per thousand annually to reach the level of 30 per thousand in 1978.

During the period 1965- 2013 the organizational framework for the population challenge changed several times to reflect either changes in mandate, chairmanship and membership or administrative level within the hierarchy of the country. The High-level population council was reformulated 11 times. Its chairmanship switched from the Prime Minister to his deputy, the Vice President, the President, back to the Prime Minister and finally the Minister for Health and Population. The main responsibilities for such high-level council are to approve proposed policies, develop comprehensive

integrated population plans, in collaboration with all stakeholders, coordination as well as monitoring and evaluation. At certain time the functions were expanded to have executing power for pilot experimental projects such as the population and development project, while at other points its role was narrowed to mainly research and data collection.

This long list of organizational structures clearly indicates the lack of stability, the absence of continuous political support and a clear vision about both the population challenge and the institutional framework required for the successful handling and establishing effective working relationship with various stakeholders (Sayed, 2011). It also reflects the periodic seasonality that characterized the official political government position toward the population challenge. Strategic planning, defining roles and responsibilities of all stakeholders, coordination between various programs to ensure their integration, the ability to assess the contribution of various programs in reaching national goals as well as periodic monitoring and evaluation should be spelled out within the mandate of such organs to ensure its effectiveness.

The current family planning program in Egypt has articulated its mandate, guided by a reproductive health paradigm, states its goals as provision of family planning methods and services, adoption of the reproductive right approach, and advocacy concerned with women's health. This is a very positive feature that needs to be drawn upon to allow the program to achieve its goals. It should be noted, however, that the indicators of performance remain centred around the achievements with reference to the level of TFR and does not include detailed indicators covering the many aspects related to the healthy achievement of reproductive desires. Furthermore, the actions adopted are

supply and vertical in nature. They do not adopt an inter-sectoral gender dynamics and social determinants. In addition, the constraints limiting the efficiency of the National Population Council, which is currently under the auspices of the Ministry of Health and Population, do not provide the needed supportive environment for improved performance of family planning services. Such an environment requires the effective translation of the broad population strategy -which includes both socio-economic and gender dimension- as well as an evidence-based planning.

The most recent population strategy was launched in 2007. The main goal was to reduce fertility to reach 2.4 children by 2012 in order to reach replacement level by 2017. Plan was built around four axes:

- Upgrading quality and coverage of RH/FP services within the framework of primary health care.
- Changing attitudes and behavior of Egyptian families to voluntary adopt the concept of small family size.
- Strengthen linkages between population goals and comprehensive sustainable development.
- Effective monitoring and evaluation system that allow periodic assessment of various indicators.

After the 25th of January revolution in Egypt, there is a great deal of ambiguity about how the State views the population challenges and fertility policies. Such an issue is not given the priority it deserves and the right framing. No one talks about the topic, its linkages with the economy and development and how population dynamics is part and

parcel of our vision for Egypt. The current discourse appears to suggest that Egypt population challenges will solve themselves through focusing on socio-economic development. This is clearly not substantiated by the current analysis. The data indicate service challenges in satisfying the current fertility choices of families, in ensuring healthy mothers and children and in meeting the growing aspiration of an increasing population. Socio-economic policies need to target the inequitable distribution of opportunities, need to address gender concerns and need to recognize the interactive relations between population and development. An efficient family planning program and an influential and capable population council are a corner stone of human development in Egypt.

Jordan

The government of Jordan established the National Population Commission (NPC) in 1973 to formulate and implement a national population policy and to address all population-related activities. However, the design of a satisfactory population policy was controversial. Because of the perceived sensitive nature of the government taking a position on fertility matters, the NPC took no distinct actions or steps (Massarweh, 2011).

From the beginning of the 1990s, the government adopted an increasingly explicit anti-natalist approach. The first initiative for proposed population policy was adopted in 1993, when the NPC adopted the Birth Spacing National Program, in an effort to promote better maternal and child health and to reduce fertility through advocating increased birth intervals. This program was discussed nationwide and, in 1993, the

government approved the program as an official population policy, taking into consideration the religious, social, national, and free-choice dimensions of Jordanian society.

The NPC created the National Population Strategy for Jordan, which was approved by the cabinet in 1996 and was updated in 2000 in light of regional and international recommendations and national surveys. The strategy document comprised four main dimensions—namely, reproductive health; population and sustainable development; gender equality and equity and empowerment of women; and population and enhancing advocacy and media.

In 2002 the Higher Population Council (HPC) was established to address population and development challenges and to implement the National Population Strategy work plan. The council is headed by the Prime Minister and is comprised of concerned ministers and members of both the public and private sectors. The HPC continues the work of the NPC, as it is the higher authority, commissioned with proposing and formulating national population policies, and with following up, presenting, updating, and providing a supportive environment for achieving its objectives. During the same period of this fertility plateau, Jordan completed the Reproductive Health Action Plan 1 (RHAP1) during the period 2003-2007 and started in RHAP2 (2008-2012).

Syria

Syria has neither a population policy nor an independent entity responsible for population planning. However, there are some sporadic efforts that could be

considered tools and procedures that could have indirect effects on population as will be shown (Syrian Agency for Family Affairs and UNFPA, 2012).

Although the planning process for economic and social development in Syria have begun from the early sixties in the first five-year plan for the period (1961-1965) and then followed by the second and third five-year plans, but these three plans encouraged population growth to secure the requirements of economic and social development. The Syrian Family Medal was even awarded to families with more than 10 children. This medal came with some incentives. Another law dates back to 1949 banned importing and selling family planning methods.

The fifth five-year plan for the years (1981-1985) was the first plan to directly take the demographic factor into consideration to assess the services needed to raise the standard of living of the population and to the welfare of the Syrian citizen. After the World Population Conference in Mexico in 1984, a special population and labor force department was created within the Directorate of State Planning in 1985 to integrate demographic variables in the development plans of economic and social. One year later in 1986, a permanent committee was formed by a decree of the Prime Minister. This committee was headed by the Minister of State for Planning. This committee called for wider dissemination of reproductive health services to reduce the rate of maternal and child mortality, and spread awareness about the best practices for pregnancy and consider family planning a major factor in the primary health care.

The Sixth Five-Year Plan for the period (1986-1990) focused on encouraging women to avoid early marriage, and considered family planning as a major factor in the primary health care.

An attempt in 1992 was made to prepare a population policy. However, this attempt was neither completed nor implemented. After the World Population Conference in 1994, the concept of reproductive health and family planning were committed to be among the basic components of primary health care. In 2001, a national population conference was held and the 2001-2020 national strategy of reproductive health was set. In 2003, the agency for family affairs was established and the permanent committee was restructured under the heading of the Prime Minister. Several laws were approved limiting incentives to three children only and raising minimum age at marriage for females to 17 years. For the first time, the five year plan 2011-2015 stated the need for limiting population growth rate, increasing the use of family planning and female labor force participation. Currently, the agency for family affairs is preparing a draft for the population policy with the objectives of limiting population growth, achieving a balanced population distribution, improving population characteristics, and preparing for the population window of opportunity.

To sum up, it is evident that recently during the last decade, the population problem is gaining much official attention. However, this attention has not yet materialized into a clear population strategy. Given the current political situation, it is very ambiguous to project an outlook for population policies and interventions in Syria.

b- Socio-economic forces

Slow socio-economic progress underlies a society's stalled fertility. There is a strong link between slow socio-economic progress and fertility plateau as there is between rapid socio-economic development and fertility decline. Socio-economic development is considered conducive to fertility decline and is often cited as the main cause of a decline over time. Changes stemming from socio-economic development create what John Bongaarts has depicted as a chain reaction of circumstances that lead to fertility control. As socio-economic development prevails, a society sees changes in its cost to benefits ratio, causing for the desired number of children per family to substantially decrease. In addition human development will ensure that mortality rates decline and child survival rates increase, causing fewer births per family to attain the desired number of living children.

The cumulative effect of the aforementioned model inevitably leads to fertility preferences. Once fertility preferences are intact, a demand for birth control is apparent, where birth control is affordable for all in light of the recent socio-economic development experienced by a society. Eventually this chain reaction will lead to a continuing and increasing use of contraception, leading to controlled fertility in a society. Thus socio-economic factors as suggested by Bongaarts and several other authors are the single most primary determinants of fertility. Effectively, socio-economic development acts as a propeller for fertility decline, where slow socio-economic progress halts fertility rates.

Egypt, Jordan and Syria are considered by the UNDP as having medium human development level. Jordan has the highest HDI (0.7) among the three countries. Egypt

is second (0.662) and Syria is third (0.648), as shown in Table (15). With respect to income, Jordan is considered among the upper middle income group of countries while Egypt and Syria are among the lower middle income countries. With respect to education, Jordan and Syria have much higher literacy rate compared to Egypt. It is evident that poverty is less prevalent in Jordan compared to Egypt and Syria.

Table 15: Selected human development indicators in Egypt, Jordan and Syria

Country	Egypt	Jordan	Syria
Human Development Index (2012)	0.662	0.7	0.648
Human Development Index Rank (2012)	112	100	116
Gross domestic product per capita PPP$ (2011)	5547	5269	4741
Adult literacy rate (% ages 15 and older) (2005-2010)	72.0	92.6	83.4
PPP less than $1.25 (%) (2011)	1.7	0.1	1.7
National Poverty line (%) (2011)	22.0	13.3	NA

Source: UNDP (2013)

The inequitable socio-economic development is a serious challenge for both Egypt and Syria. Also the current political contexts are bound to interfere with socio-economic development plans.

c- Women and gender policies and efforts

Egypt has been at the forefront of efforts to support women empowerment and to address conservative values underlying a patriarchal model of relations. Egypt was one of the first signatory of the “Convention of the Elimination of all Forms of Discrimination against Women”, it has established the Women Committee within the National Council for Childhood and Motherhood, endorsed Beijing declaration and established in 2000

the National Council for Women as the high level national machinery responsible for women development and empowerment.

Of particular relevance is the fact that Egypt hosted the International Conference of Population and Development (ICPD 1994) which emphasized progressive gender values and fair gender dynamics as central forces for the achievement of reproductive health. Gender values and dynamics were recognized as having an independent pathways of influence that cuts across all social groups but also plays a more significant and synergistic role the lower the social status.

Egypt efforts have clearly influenced the prevailing discourse on women empowerment, resulted in significant legislative changes in favor of women and responded to some initial needs. However, women's empowerment efforts in Egypt have clearly a long way to go before they are embraced by society and before they manage to break the prevailing gender values and dynamics.

The transitional phase following Egypt 25 January uprising has shown both the importance of the leadership embracing of women empowerment as well as the risks of societal non-endorsement of such goals.

In Jordan, the Jordanian National Commission for Women (JNCW), initiated and headed by HRH Princess Basma, is a semi-governmental organization which advocates and promotes for women's diverse issues. According to JNCW (2013), it was established by a cabinet decision in 1992 and has since gained recognition as the authority on women's affairs in Jordan's public sector while it also represents the Kingdom at regional and international levels in matters pertaining to women. JNCW′s

mission is to support the mainstreaming of a gender-equality perspective in all policy areas and to narrow the gap between formal acknowledgement of women′s rights as detailed by legislation and the actual societal attitudes towards women. Among its achievements, the JNCW formulated the National Strategy for Women in 1993. This strategy was adopted by the Jordanian Government, and later launched the process of up-dating the National Strategy for Women in December 1999. The revised strategy was developed by the government in 2006. It highlights women's participation in public life, legal amendments, human security and social protection, economic empowerment, as well as information and communication. JNCW (2013) has also been responsible for mainstreaming gender issues into Jordan's Socio-Economic Development Plan for 1999-2003.

JNCW succeeded in incorporating a gender perspective within the Five Year Plans and allowed for women's issues to be recognized as equally important to those of men in sustainable development and human rights, and also distinguished the particularity of women's issues by stressing the need to eliminate all forms of discrimination. Lately, JNCW has been working on closing the gender pay gap. According to JNCW (2013), some of the main achievements were amendments to personal status and passports laws, social security and civil retirement laws as well as the Municipality Law.

Over the years, the Syrian government has invested some efforts to improve the rights of women. According to Freedom House (2010), the 1973 constitution, for example, calls for equality among all citizens and includes an article that obliges the state to remove all obstacles to women's advancement. Government policies have also encouraged women's education and participation in the workforce. According to

Freedom House (2010), Syria ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2003. However, Syria has no high level entity focussing on women similar to the ones in Egypt and Jordan.

VI. Policy implications and opportunities

The three countries considered have different population sizes and socio-economic challenges; however macro considerations point to the imbalances between existing resources and the countries' ability to meet the growing aspirations for improved well-being. Furthermore, the three countries in question, particularly Egypt and Syria, are facing serious turmoil and /or a challenging transitional phase which are bound to interfere in their socio-economic development path. Of particular concern, the observation that the other two structural drivers related to the prioritarization of population policies as well as the policies and efforts directed to women empowerment, are facing a stall if not a reversal in directions. Clearly, the near future, given the current contextual situation as well as the prevailing high fertility ideals for youth (which are not very different from adults), is unlikely to support further declines in fertility.

Egypt has been projected to reach 111.1 million in 2050 under the now unrealistic scenario of reaching replacement level by 2017 and then levelling off. Syria current context does not allow sound planning for the future and the impact of the current turmoil would need to be considered prior to the articulation of national population policies and goals. Indeed, the reproductive patterns in both Syria and Egypt are expected to change towards increased fertility in the aftermath of the current situations. The spill-over effects on Jordan is likely to dominate development policies and planning for the near future and push aside fertility related policies.

The on-going and emerging contexts in the three countries considered warn against a setback in terms of: Political will to address high fertility; the attention to population policy formulation; the role of structural drivers (socio-economic development, gender); as well as the organizational structures and allocation of resources. The concern with fertility plateau may soon turn into a concern with increase in fertility and large population numbers that are incompatible with resources to meet the people's aspirations.

Regardless of macro considerations, the individual level perspectives adopted in this paper points to unsatisfied fertility choices, discontinuation rates for reasons not related to desires for children, a relatively high levels of unwanted births, as well as many unhealthy features of reproduction.

These features are operating at varying degrees in the three countries. They are much more forceful in Syria, followed by Jordan and are at a much lower level– though still not low enough – in Egypt.

For example, in terms of unmet need, Syria stands out with the highest level among three countries considered (16 percent versus 11 percent, 9.2 percent in Jordan and Egypt). Also both Syria and Jordan experience a very high level of unwanted births (24.4 of current pregnancies in Syria, 26.4 of births during last 5 years in Jordan) while Egypt has much lower level (14 percent of births during last 5 years were unwanted).

The forces that underlie the levels of unwanted births are the unmet need, the discontinuation rates as well as the failures of contraceptives.

The discontinuation rates, for reasons not connected with wanting another child, are close in both Egypt and Jordan (25 percent, 28.6 percent respectively). Clearly, a key force that is supporting the high level of unwanted births in both Syria and Jordan is the large percentages of use of traditional contraceptive methods (around 30percent of contraceptive use in both countries compared to a minimum (3 percent) in Egypt).

Furthermore, the pattern of fertility in the three countries considered reflects unhealthy features. Short spacing (18 percent, 33 percent, 35 percent) of birth are born within an interval of less than 24 months in Egypt, Jordan and Syria respectively); high risk of mother ages at births (14 percent, 9 percent, 14 percent) are born to mothers of ages less than 20 years or of 40 and over in Egypt, Jordan and Syria respectively); as well as higher parity (births of order 4 or more).

The differences in the above findings point to a more successful performance of family planning programs in Egypt. Indeed, this performance draws on a history of commitments and evolution of population policies in Egypt. The early and explicit commitment to population policies in Egypt allowed family planning programs to respond more efficiently to latent demand and to significantly contribute to the current fertility level.

The proximate determinant analysis did demonstrate the influential role played by contraceptives in Egypt. It clearly documented that the similarities in current fertility levels (TFR of 3.0, 3.8, 3.5 in Egypt Jordan and Syria respectively) between three countries hide different dynamics and different influences of the main proximate determinants of fertility.

In Egypt, contraceptives played a major inhibiting role while marriage played a minimum role. Jordan is like Egypt where contraception plays a stronger role than marriage in determining the current level but at a slightly less inhibiting effect than Egypt. In Syria, the situation is totally different where marriage is the stronger inhibiting determinant compared to contraception. Investigation of the median age at marriage clearly confirms the inhibiting effect of marriage in Syria. Syrian women marry later than women in both Egypt and Jordan. They marry on average at the age of 25 years while women in Egypt marry at 21 years of age and in Jordan at 22 years of age.

Despite the many differences between the three countries considered, **all of them can benefit from an improved performance of the family planning program.** This improved performance can avoid the high levels of discontinuation rates and fill some of the gaps in unmet need which in turn will reduce unwanted births. All of these are programmatic issues very much related to the efficiency and quality of services as well as client's satisfaction.

Syria and Jordan, in particular, stand out for quick wins when traditional contraceptive methods are replaced by more effective ones. This service aspect calls for addressing women's concerns about the side effects, the revision of the availability of method mix responding to client needs and ensuring effectiveness.

Another service potentials of a well-functioning family planning program is its addressing of the many unhealthy features of the reproductive patterns that are observed in the three countries. For example, in Egypt, it was calculated that TFR will decline to 2.67 if births of women aged below 20 years and above 40 years were

avoided. If these births are coupled with the unwanted births and avoided through an improved performance of the family program, fertility levels are expected to reach as low as 2.4 which is very close to replacement level.

It is important to emphasize that the focus on healthy reproduction should not be adopted to sugar coat a family planning program. Such a focus should be an integral part of such a program. **The integration of health in family planning programs implies that the family planning program is part of comprehensive reproductive health package, a package that starts from adolescence to post-menauposal.**

Clearly the three countries considered would benefit from strengthening their family planning service delivery and from situating their family planning programs within a reproductive health paradigm. Such a paradigm is quite attentive to the healthy satisfaction of informed choices. It understands the centrality of family planning programs but also seeks to support other dimensions of reproductive health. It responds to individual choices and needs but situate these within a human right's approach that entails the right to universal access to RH quality services.

Another aspect of the reproductive health paradigm is the centrality of gender and social determinants dimensions in influencing reproductive health. The importance of these dimensions in sustaining the fertility plateau will be discussed in the following section.

For the time being, **it should be noted that the adoption of such a paradigm implies that the actions within the family planning programs cannot be confined to a**

supply and a vertical model. Family planning programs should clearly engage in intersectoral actions targeting gender and social determinants.

Fertility plateau in the three countries considered is sustained by high desired number of children that, surprisingly, is not very different between youth and adult population. The disaggregated analysis within countries, also shows a number of geographical classifications with very different fertility levels and trends from the rest of the country and above the general average.

The literature on the forces sustaining high fertility desires and geographical variations in fertility levels emphasize the influential roles of gender dynamics and socio-economic development. Women empowerment introduces competing opportunities not confined to reproduction and shapes the level of desires as well as the realization of such desires (lower levels of unmet needs). Similarly, Socio-economic development favours lower number of children through its influence on the cost and benefits calculations with quality considerations superseding quantity ones.

It should be noted though that while gender and socio-economic forces are the key players in shaping fertility desires, yet family planning programs do play a supportive role. The literature points to a role played by the explicit adoption of population policies and the articulation of national goals. The mass media campaigns, the awareness efforts and the change of discourse on the use of contraceptives are seen as legitimizing the use of family planning and bringing fertility choices to the conscious decision- making strategy. Hence, another contribution of a well performing family

planning program is expected to extend beyond the previously discussed role in responding to articulated desires and addressing unhealthy reproduction.

The detailed analysis of fertility desires showed that desired number of children in the three countries is still high but with varying extent. The average desired number of children in Egypt is the lowest 2.9 and is close to the level of TFR. In Jordan and Syria, the average is around 4.2, a level of desires much higher than the TFR (which is mainly suppressed by marriage and not by contraceptives use).

Furthermore, youth in these three countries are no different from the older population in their fertility ideals.

The social patterning of fertility desires and levels follows the expected profile. Mother education, for example, influences the mean desired number of children. In Egypt, such a number ranges from 3.3 and 2.7 for women with no education and those with secondary plus. The corresponding estimates are 5.5 and 3.3 for Syria and 4.9 and 4.1 for Jordan.

Similarly, the disaggregated analysis demonstrated clearly how disadvantaged communities adopt larger fertility values and unhealthy fertility patterns. The variations across geographic areas in Syria are quite pronounced (reaching as high as TFR of 6.8) while those in Jordan reflect the least heterogeneity.

It should be noted that, Egypt social variations that operate within a much lower levels than both Syria and Jordan. It appears that the early and explicit adoption of population policies contributed to lowering both desires and the levels of fertility for all social groupings.

Egypt however, shows levels of desired number of children for urban areas and women who are educated higher than what would be expected from these higher social groups.

The larger intra urban variations in socio-economic characteristics as well as the administrative definitions adopted for urban areas in Egypt were shown to underline this higher than expected fertility levels and the stalling of fertility in these areas.

The relatively higher than expected fertility desires of educated women (remaining at 2.7 in Egypt) was further investigated. It was shown that the lower level of 2.0 is confined to a subset of women within much higher level of achieved empowerment.

Similar analysis on Syria showed that there is a minimum threshold effect for allowing the improvement of women status to reach its full potential impact on fertility.

Clearly, improvements in women socio-economic characteristics do have some impact on fertility, however, the full impact operates only at a level that materializes in much higher command over resources (whether material in terms of income from paid and secure work or social in terms of knowledge from high levels of education). It is hypothesized that there are certain levels of empowerment that are needed to allow the cost and opportunity of having children versus fulfilling other objectives to operate and to gain precedence over cultural dynamics supporting large families.

The policy recommendations of the previous analysis point to the importance of the equitable socio-economic development among and within geographic areas with particular relevance of improving women status among disadvantaged groups.

Targeting gender dynamics and women empowerment, however, is seen as an important policy recommendation that stands on its own. Empowerment of women requires a minimum threshold effect of socio-economic conditions but also supporting institutional and cultural forces. Such a recommendation should be adopted for its intrinsic value for the achievement of reproductive health as well as for its significant impact on fertility desires.

Another important policy recommendation is adopting youth-focussed policy. The ideational changes among youth need to be targeted. These are very much affected by cultural determinants particularly in terms of gender values as well as socio-economic conditions.

To sum up, the three tracks of self-reinforcing policy directions are:

I) **Improved performance of the family planning program**

This track targets the missed opportunities emphasizing the right of women and families to achieve their informed reproductive desires in a healthy matter. This requires:

- A focus on improved quality of services responding to specific needs of disadvantaged social and geographic groups.
- The integration of family planning services with other reproductive health services. One level of such integration could be within the primary health care level

- The engagement in intersectoral actions targeting ideational changes and socio-economic development for disadvantaged communities, women and youth groups.
- The specification of program goals and targets around reduction of discontinuation rates, unwanted fertility, unmet needs, unhealthy reproductive pattern and the disaggregated monitoring of such indicators of goals and targeting.

II) An effective high level population policy Council

The importance of a high level organizational structure spearheading a population strategy - which includes both socio-economic and gender dimension – as well as an evidence based planning cannot be over stressed. Such planning would highlight the quick wins that are different for each of the countries considered as well as respond to the specificities of each country.

Such a structure would need to:

- Develop and present evidence-based population strategies built around potential goals/objectives for each country population.
- Emphasize decentralization of population plans and adopt a disaggregated approach to customize programs to local conditions, enhance abilities to deal with different population challenges in different geographical areas, and prioritarize under-served populations and regions.

- Sustain and improve national and sub-national data on population issues and analyze the underlying social determinants of reproductive patterns at local levels.
- Review family planning messages, especially in rural areas, to ensure that:
    - One message/vision is enforced and ensures efficient implementation by all relevant stakeholders
    - Messages are designed to convince couples of the importance and benefits of the small family and the health consequences on mother and children of early, late or short spaced childbearing.
- Assign clear roles and responsibilities for all stakeholders to instrumentally contribute to changing the current stalling situation.
- Monitor and evaluate using quality performance indicators to evaluate process and impact in the field and at local levels.
- Update the population objectives and approaches according to the reproductive health paradigm and the progress achieved.

III) Prioritarizing population challenges and full Integration within overall development plans

The Political prioritarization and commitments to address population challenges are necessary for the establishment and effectiveness of the high level population council as well as for the improved family planning performance.

Such a prioritarization needs to be supported by the appropriate framing of the population challenge using the reproductive health paradigm. A framing

that emphasizes the very much needed gender and children human rights' values as well as the youth focus.

In particular there is a need to:

- Create broader community consensus about the population situation in each of the countries considered and accordingly the goals that are to be adopted. This includes the articulation of a clear and unified vision and a consensus around the nature of the population challenge facing each country and the approaches to deal with these challenges.
- Renew the political will and commitment to ensure the full integration of the population dimension into development plans and the availability of resources (human and financial) as well as creating an enabling/supportive environment.
- Develop relevant agreed upon strategies and programs to cope with the defined population challenges and allocate required resources.
- Adopt an overall development approach recognizing reproductive health, gender values, and the importance of children rights especially to education. Such developmental framework includes improved education access, equality and quality, and raising labour market efficiency. This would foster the nation's human capital, boost productivity in all key sectors, allow more equitable resource distribution and enable higher levels of innovation and creativity, and ultimately will help fulfil demographic goals.

- Ensure women provision with potential sources of sustainable empowerment; namely higher education and more secured employment opportunities will certainly help them achieve their informed reproductive desires and support lower desires.
- Support a renewed focus on ideational changes, particularly among youth, is highly needed and the continuing engagement with religious leaders.

The three tracks specified are all important for the three countries and are self-reinforcing. However, the specificities of these countries suggest the following:

1. Syria can achieve quick wins by focussing on improving performance of its family planning programs as well as articulating an integrated population and development policies. Development plans for Syria need to particularly target equitable socio-economic development for the identified disadvantaged governorates and include the establishing of a high level population council.
2. Egypt builds on a solid and well-functioning family planning program guided by a reproductive health paradigm. It needs to consolidate this approach and to reformulate its fertility goals and indicators, beyond TFR, to include the many aspects of the healthy achievement of reproductive intentions. It also requires disaggregated plans, targeting rural Upper Egypt. In addition Egypt must guard against the signals of setbacks in terms of the prioritarization of population challenges as well as gender dynamics.

3. Jordan can also quickly benefit from improved performance of family planning program, particularly reference high utilization of traditional methods. It also needs to continue its socio-economic development path with increased emphasis on gender.
4. The three countries need to emphasize youth focused policies and note that the turmoils they are facing will, more than likely, translate into not just a continuation of the fertility plateau but also a reversal fertility trends.

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