

**Remobilizing the Gender and Fertility Connection:  
The Case for Examining the Impact of Fertility Control and  
Fertility Declines On Gender Equality**

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Anju Malhotra\*

ABSTRACT

Increasingly, research and policy attention is turning to the consequences of fertility declines in a large number of countries, with issues on the agenda including aging, age structures, economic growth rates, children’s well-being and their access to investments and resources. However, there has been little research on the impact of demographic change on gender relations. The question—can fertility declines and fertility control transform gender systems and empower women—has not been coherently posed, conceptualized or tested for developing countries. It may well be one of the most important questions of our times, fundamentally affecting the lives, options, challenges, and concerns of women and men over the next several decades. In this paper, I argue that attention to the gender implications of declining fertility levels needs to be on the population agenda as these may signify some of the most profound and transformative shifts shaping developing societies in recent history. Drawing from various disciplines, I describe the pathways through which we might expect fertility decline and control to act as a lever for more equal gender relations. I then propose four conditions that are likely to determine the extent to which gender systems may be changed: childbearing is valued less and therefore motivation to subjugate women has decreased; sexuality is distinguished from procreation; women allocate less time to childbearing and childrearing; and, contraception provides women opportunity to balance reproductive and non-reproductive goals. Finally, I provide a conceptual framework to guide future research on this topic.

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## INTRODUCTION

During much of the last half century, the primary points of research and policy interest for developing countries were family planning adoption, fertility declines, and ensuring women's access to safe, effective and voluntary sexual and reproductive health services (Sinding, 2000; Germain, 2000). It was reasonable for research and policy to focus on the determinants of these outcomes, and these concerns and their determinants continue to be relevant in many developing countries today. At the same time, however, much progress has been made in achieving these goals, and they in turn have resulted in dramatic demographic, political, social, and economic shifts, especially over the last quarter century (Khan et al 2007; Abbasi-Shavazi and McDonald 2006; Amin and Lloyd 2002; Fargues 2005; Demeny 2003; United Nations World Population Prospects 2007). Increasingly, research and policy attention is turning to the consequences of fertility declines in a large number of countries, with issues on the agenda including aging, age structures, economic growth rates, children's well-being and their access to investments and resources (Sinding, 2000).

However, there has been little research or policy attention to consequences for gender relations as a result of demographic shifts in developing countries. The question—can fertility declines and fertility control transform gender systems and empower women—has not been coherently posed, conceptualized or tested for developing countries. It may well be one of the most important questions of our times, fundamentally affecting the lives, options, challenges, and concerns of women and men in developing countries over the next several decades. In this paper, I argue that attention to the gender implications of declining fertility levels needs to be on the population agenda as these may signify some of the most profound and transformative shifts shaping developing societies in recent history.

The paper makes the case for increased research and policy attention to this connection from four perspectives. I begin by laying out a theoretical case for why it might be reasonable to expect that declines in fertility might lead to significant, even fundamental shifts in gender systems. I next examine the empirical literature, focusing on what can be learned about framing this connection from the relatively extensive research on this question for developed countries, but also from the more limited research on developing countries. Third, I propose a conceptual framework that maps out the key components of the connection, delineates some basic parameters underlying the

pathways, and poses some central questions for investigation. Finally, I conclude by emphasizing the strategic and practical value of focusing on this connection, not only for its relevance to the broader development field and the realities of men's and women's lives in the developing world, but also as an opportunity for combining the feminist and population agendas in a meaningful and constructive way forward.

## THE THEORETICAL BASIS

In this section I discuss some of the theoretical underpinnings of a case for fertility declines and fertility control leading to significant and positive shifts in gender relations. In reviewing the literature that intersects population and gender issues, I attempt to tie together various strands of the argument emerging from demographic, feminist, reproductive health, and anthropological perspectives, each of which I believe presents a part of the puzzle, but not the whole. All these scholarly traditions have much to offer to our understanding and anticipation of what demographic shifts of the 20<sup>th</sup> century in the developing world are likely to hold for evolving gender relations in the 21<sup>st</sup> century. Woven together, however, they present an even more persuasive case for expecting a movement toward more egalitarian gender systems.

In scanning the demographic literature, we begin to see one strand of this argument in the early 1980s. In addressing the combined effect of demographic changes on "sex roles" in advanced industrial societies, Davis argues that lower fertility levels combined with longer life expectancies reduce the importance of marriage and motherhood in women's lives (Davis & van den Oever 1982; Davis 1984). In combination with other social changes that accompany demographic transitions—such as later marriage, increasing divorce rates and favorable labor force conditions-- marriage and childbearing begin to constitute a smaller proportion of women's lives, reducing the importance of women's domestic role and contributing to a greater emphasis on jobs, careers, and self fulfillment. Some feminist sociologists, anthropologists, and demographers have echoed, modified, or extended this argument. For example, Huber (1991) argues that by freeing women from childbearing and childrearing, fertility and mortality declines may indirectly facilitate a shift in gender relations by allowing them time and space to participate in political change. In a similar vein, Rosaldo and Lamphere (1974) suggest that freeing up large portions of women's lives and time from the basic reproductive roles is important for achieving gender equality because it allows them greater opportunities for participating in public spaces, becoming active agents in shaping culture, and thus changing it. In reviewing how women's status and gender systems may be influencing fertility

declines, Mason (1997) also proposes that there is the likelihood that demographic change itself may reorder gender systems, and that “modern demographic regimes...may be a precondition for gender change. It seems unlikely, however, that they are sufficient to produce this change on their own.”

This type of argument has some similarity and overlap with the discussion of the relationship between birth control, reproduction and gender equality in the broader feminist literature. Feminists of various strains have argued that women’s childbearing burden is a basis for the gendered division of labor and women’s subordination (Firestone 1970; Gordon 2000; 2002; Lerner 1993; Steinam 1994). For example, Firestone (1970) considered women’s biology—in particular the social, physical, and psychological disadvantages imposed by pregnancy, childbirth, and subsequent childbearing—to be the founding basis for gender inequality and patriarchy. Women’s control over contraception and abortion, or the means of reproduction, were seen by many radical and second wave feminists as the essential path for overcoming a patriarchal gender division of labor. For example, Steinem (1994) asserts that in a patriarchal economic system, male “production” has economic value but female “reproduction” does not, and that there exists a fear of women’s potential for using their reproductive ability to their advantage. With control over fertility, and decision-making power over whether and when to reproduce, women would have ownership of the “means of reproduction,” thus achieving balance of power with men.

Reproductive health advocates and feminists have also seen effective and meaningful control of contraceptive options by women as a precondition for shifts in patriarchal social systems. Gordon (2003) traces how feminists of the early 20<sup>th</sup> century viewed birth control as both a reproductive right and a tool for individual and self-determination by women. For example, early advocates and founders of the birth control movement, such as Margaret Sanger and Annie Besant, saw women’s control of effective contraception as a way to separate sex and procreation, laying the foundation for female emancipation ().

In more recent history, many of the advocates for and framers of the “Cairo Agenda” in the 1980s and 1990s articulated a similar conviction. Although eventually the main argument that drew the most attention from the Agenda at the 1994 ICPD conference was the importance of women’s empowerment for achieving reproductive health, rights, and fertility declines, the underlying theoretical framework emphasized the reverse relationship as well. For example, Dixon-Mueller

(1994) suggests that contraceptives, when delivered through sound reproductive health policies and programs, can allow women to take control over their own lives, which becomes an empowering process, serving to redefine patriarchal institutions, family structures and gender systems. A similar centrality of reproductive control as a pre-condition and catalyst for broader gains in gender systems underlies other works making the case for reproductive health and rights (Correa & Petchesky; Germain 1987): “without the right of reproductive choice, each of the other social and economic rights has only limited power to advance the well-being of women” (Freedman and Isaacs 1993).

While most anthropological literature does not frame discussions of reproduction explicitly in terms of fertility declines and contraceptive access, there is a strong emphasis in this literature on the relationship between reproductive and sexual control of women and inequalitarian gender systems, especially as they are manifest through kinship systems. Early writers such as Rosaldo and Lamphere (1974) focused on the universality of women’s subordination, arguing that in every society, since women bear and raise children, their socially and culturally defined role as mothers provides the basis for their subordination. Rubin (1975) identifies kinship systems as the mechanism that places men and women in an asymmetric power relationship, with the exchange of women and accompanying transactions determining who within the kinship structure controls women’s sexuality and reproductive potential. Later literature in anthropology moves away from universalities and argues that the meaning of reproduction, the value of motherhood, and the rules for controlling sexuality vary across societies, and in that variation lies some of the basic variation in gender systems. For example, Lerner (1993) finds that historically, in patriarchal societies, one of the major assumptions about gender was that men have an inherent right to control the sexuality and reproductive functions of women, while women have no such right over men. Variations in the assumptions about sexual and reproductive control define variations in the status and position of women across societies and across time.

Demographers have not addressed societal shifts or variations in terms of control over women’s reproduction or sexuality, but they have considered how the value of children may vary over time and across societies. In *A Theory of Fertility Decline*, Caldwell (1982) discusses the shift in net generational flows, where modernization results in a shift from the older generation benefitting socially and economically from children, to a reversal where children are a net cost to their parents. He argues that not only does the reversal result in fertility declines, but also in important changes in

the family. Since it relies on the subordination of women and children, patriarchal organization may not be as viable for family or individual success in newer demographic regimes when children are a net burden instead of a net asset. Folbre (1983) takes this point one step further, arguing that there may be an even stronger basis for transformation in gender relations with declining fertility levels. While the older generation does accrue benefits from children in high fertility regimes, men reap a disproportionate share of the social and economic benefits while women bear the majority of costs. With fertility declines, the social and economic benefits to men decline and the costs for supporting and raising children increase. In contrast, for women, the physical, time, and social costs of bearing and rearing children decline. This shift in both generational and gender cost-benefit ratios also serves to shift gendered power relations, placing women in a more equitable position vis-à-vis men.

These theoretical discussions suggest a number of pathways from fertility declines and fertility control to gender equality, with some important intersections that are rarely articulated. First, there is the issue of the historical motivation for subjugating women. Feminist scholars articulate this in terms of women's biological and reproductive burden, considering women as more vulnerable to being subjugated. Anthropologists articulate it in terms of reproductive and sexual control motivated by the structure of kinship systems. However, if we link the demographic and economic discussion of the value of children to these arguments, a more potent articulation for the basis of women's subjugation through sexual and reproductive control emerges. If children have historically held enormous economic and social value, in their capacity as reproducers of this tremendous asset women have presented an especially valuable target for subjugation. Thus reproductive and sexual control of women makes a lot of sense, not because women might have been more vulnerable biologically, or valuable in kinship transactions, but simply because they combined both productive and reproductive potential. In particular, to the extent that labor is a valued commodity, there is a powerful incentive for controlling women's sexuality and reproduction through not only family and kinship systems, but also through political and economic systems, as well as through prevailing ideologies and norms. They are the source of not just their own labor, but also the labor of all the children they might produce. Perhaps Thomas Jefferson captured the concept most accurately in describing the relative value of his female slaves as opposed to male slaves: "I consider a woman who brings a child every two years as more profitable than the best man of the farm. What she produces is an addition to capital, while his labors disappear in mere consumption" (Fehn 2000).



As we connect this point to the discussion about the value of children and gender differentials in net generational flows, it seems that the declining *motivation* for the continued subjugation of women emerges as one potentially strong reason for fertility declines leading to more egalitarian gender systems. If women's reproductive value and potential is seen as an underlying basis for patriarchal systems—including sexual and reproductive control through various social ideologies and institutions—then the declining social and economic value of children which accompanies fertility declines could possibly shake the foundations of such systems.<sup>1</sup> In particular, if children no longer yield substantial benefits to those in power (men, senior women, kinship systems, slave owners), but are a source of costs instead, then the motivation for controlling women's sexuality and reproduction is weak or negligible.

The second important intersection to consider is the separation of sexuality and procreation. In effect, even without fertility declines and fertility control, historically most societies have supplied social routes for the separation of sex and procreation, often with the stigma of social illegitimacy (i.e. homosexuality), but also with legitimacy for men but not women (i.e. prostitution). So the real contribution of fertility declines and contraceptive access may lie in propelling social legitimacy for the same separation of sex and procreation for women. As fertility declines result from (or are accompanied by) the declining social or economic value of children in patriarchal structures, systems and ideologies, enforcing sexual control of women (i.e. sexual double standards, requirements of chastity, taboos on non-marital sex) may no longer seem necessary or viable. In conjunction, however, effective means of contraception and abortion, especially in women's own control, would have to be available for women to achieve this separation in real terms.

A third pathway of importance that emerges from the theoretical intersections is the extent to which effective means of fertility control may also facilitate women's access to emerging opportunities in a changing gender system. Effective contraception may lead to shifting gender relations by allowing women to balance and appropriately time the fulfillment of their sexual, reproductive, and non-reproductive needs and aspirations.

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<sup>1</sup> It is important to note that children may continue to have enormous personal value (such as love, comfort, connection) in low fertility regimes, but the literature in general indicates high social and economic value—with assets, income, old age insurance, social status, prestige, political power—resulting from children to be a predominant feature of only high fertility regimes.

A final, and related point is that the shift in fertility regimes is generally a part of the broader demographic transition that results not only in lower fertility rates, but also lower mortality rates, thus expanding life spans significantly. This combination means that women are likely to have anywhere between one half and three-quarters of their life span no longer devoted to childbearing and childrearing, and some alternative role becomes almost a necessity. When demographic shifts are accompanied by other trajectories of social and economic development—modernization, economic growth, political change, education and employment options—both a longer life span and effective fertility control would be expected to equip and motivate women to engage as participants and actors in these shifts. Thus the pace and stage of the demographic transition, the means and delivery of fertility control and the context in which fertility declines occur may play a key role in defining not only whether there are resultant changes in gender systems, but also how extensive these are, and the exact shape they take.

#### THE EMPIRICAL BASIS

A theoretical discussion is only meaningful if it leads us to consider what it might mean practically, both for the lives of real men and women, as well as for policy implications for addressing the challenges and opportunities resulting for them from demographic shifts. I begin by considering the empirical evidence from developed countries that provides significant support for a broad based relationship between fertility declines, fertility control and more egalitarian gender systems. I then consider the empirical research on developing countries where a direct examination of this relationship is largely lacking, to review the relevance of existing literature in helping to define some parameters, questions, and direction for an emerging research agenda.

##### *Empirical Evidence from Developed Countries*

A substantial literature documents the major shifts in gender relations in the developed world over the last half-century. The shifts in women's childbearing patterns and contraceptive behavior have been an integral part of many of these analyses (e.g., Scrimshaw 1981; Davis 1982; Davis 1984; Birdsall and Chester 1987; Chesnais 1996; Goldin and Katz 2002). In general, there is broad agreement that women's access to the means of fertility control and smaller family sizes have shaped (and been shaped by) broad societal shifts in women's labor force participation, increased sexual freedom, changing definitions of marriage and family life, and normative shifts in how motherhood and women's roles are viewed. Reflecting some of the insights from the theoretical literature, there is also evidence that the nature and degree of shifts have varied across societies, and that three factors have been critical in defining the extent to which gender relations have been

transformed: 1) the socio-economic and political context; 2) the type of fertility control options available to women; and 3) the levels of fertility declines.<sup>2</sup>

In the U.S. for example, the case is frequently made that the Pill was a driving force in both the sexual revolution and the women's movement, which resulted in dramatic shifts in gender relations. As the widely disseminated *Our Bodies, Ourselves* declared, "Unless we ourselves can decide whether and when to have children, it is difficult for us to control our lives or participate fully in society" (quoted in Andersen 1997, p. 210). Scrimshaw (1981) claims profound changes in sexual attitudes and behavior as well as new dynamics in the male-female relationship resulting from the Pill, especially in separating sex from reproduction. She suggests that in the context of multiple other shifts in American society, the Pill was a catalyst that decreased family size, increased women's ability to control the timing of reproduction, and fundamentally separated sex from reproduction. These changes, along with increased participation by women in the labor force and improved career pursuits (Davis 1982), are indicative of dramatic shifts in women's status in US society. Concurrently, the politics of the Pill also gave women the power to question the medical establishment, push consumer activism, and seek out their own health information (Scrimshaw 1981).

Some demographic research has focused more specifically on the economic and life opportunities women gained as a result of the Pill. Birdsall and Chester (1987) argue that the Pill gave American women near-perfect control over the timing and occurrence of childbearing. This reliability in reproductive timing and control permitted them to make career and family plans with a certain amount of confidence. Goldin and Katz (2000; 2002) argue that the confidence meant not only that women could enter the labor force, but also that they could seriously avail themselves of the opportunity to get long term education and pursue careers typically reserved for men. Their study demonstrates empirically that the Pill played a significant role in increasing women's age at marriage and participation in prestigious academic training programs such as law and medicine.

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<sup>2</sup> There is also considerable evidence that the separation of sexuality and procreation is manifest in growing legitimacy and social evolution of channels for women to express their sexuality without necessarily bearing children (i.e. the acceptability of women engaging in premarital and non-marital sex). My analysis of the role of various contraceptive options in facilitating this disengagement of sexuality and procreation, is currently under development.

The uniqueness and importance of the Pill in the U.S. is often contrasted with the fertility transition in Japan, where despite improvements in women's education, employment, age at marriage, and declines in fertility, traditional patriarchal norms persisted for a longer period within the household and labor markets remained strongly segregated by sex (Norgren and Norgren 2001; Birdsall and Chester 1987; Rindfuss et al. 2004; Retherford et al. 1996). Some researchers have argued that Japan's contraceptive history is a likely explanation for the slower shift: the fertility transition in Japan was brought about largely through abortion and condoms, methods that did not provide the same sense of certainty, security, and planning for Japanese women (Birdsall and Chester 1987; Presser 2006; National Institute of Population and Social Security Research 2008).

Others have argued that the cultural context within the U.S. facilitated women's empowerment and shifted their status within the family and society. Reliable birth control and fertility declines in the 1960s and 1970s occurred at a time of social upheaval and change, including a resurgence of feminism, and resultant shifts in the policy environment that paved the way for women to participate in higher education, sports, jobs, and politics. These opportunities changed women's status within the family and society (Goldin and Katz 2002; others). Increases in female labor force participation and education facilitated women's involvement in society outside of their homes (Davis 1984). With the FDA's authorization of the Pill and the legalization of abortion women's reproductive options began to be less under state control (Scrimshaw 1981; Goldin and Katz 2002 and 2000). U.S. legal and political frameworks gave women increased civil rights, and social norms were favorable to family planning (Scrimshaw 1991; Freedman and Isaacs 1993; Goldin and Katz 2000; Goldin and Katz 2002). Thus the efficacy of fertility control options combined with a broader enabling environment to increase women's ability to control their own reproduction, and contributed to a number of resultant shifts in their life options.

Sweden and Italy also serve as two contrasting cases where the socio-economic context has resulted in divergent implications for both fertility levels and women's position in the family and the labor force (Chesnais 1996). In Italy, increased control of reproduction—especially the number of children—has allowed women greater access to time, money, energy, and other resources that have in turn allowed them to make gains in the society and family (Chesnais 1996; Perez and Livi-Bacci 1992). At the same time, researchers suggests that the very low birth rates in Italy (TFR = 1.2 in 1995) may be in large part due to only a limited shift in expectations regarding motherhood:

women in effect are deliberately having very small families because the burden of expectations around childcare and a mother's responsibilities continues to be heavy (Chesnais 1996).

In contrast, in Sweden, the policy and normative environment has resulted in greater adaptation in the role of motherhood as fertility has declined and women have gained sexual and reproductive control. The government has supported family planning and provided subsidies for access to contraception, but fertility declines have also been accompanied by family and woman-friendly policies in the labor force such as generous maternity and paternity leaves, extensive child care support, and job protection. This concurrent support for balancing childbearing and labor force opportunities has allowed Swedish women to maintain low, but not extremely low fertility levels (TFR = 1.7 in 1995) (Chesnais 1996; McDonald 2000)

The evidence from developed countries is important both for the methodological and substantive guidance it can provide us moving forward to garner and assess similar evidence for developing countries. It is worth remarking that the empirical literature on this issue is comprised not only of micro-level, cross-sectional, quantitative analysis examining specific measures of fertility control or fertility levels in their relationship to outcomes such as labor force participation. Rather, it includes a broader range of often reinforcing studies tracking change over time, historical analyses, and macro-level retrospective case studies. It is the cumulative and diverse evidence, and the combination of individual level behavioral patterns reinforcing societal level trends and patterns that give this evidence much of its weight.

Substantively, the evidence demonstrates that women's control over their childbearing tends to result in complex, vast and divergent changes in gender relations. The net balance of the shifts in gender systems is positive, although many arenas of reproductive control continue to be highly contested, many areas of gender inequity remain, and new challenges and problems have emerged for women as family and gender systems have transformed. On the whole, however, it is evident that societal rules and institutions shifted, and in many cases were pushed by women to shift, to accommodate women's changing aspirations, opportunities, and options. Moreover, in most cases, some of the most significant shifts in women's fertility control options and expanded options and opportunities are jealously guarded and defended by women when the changes in the gender system are challenged.

Fuller understanding of these changes has been vital in understanding not only demographic implications for developed countries, but also for understanding the direction of societal progress and challenges. While it is likely that developing countries will chart their own path in manifesting the implications of fertility transitions, the evidence from developed countries helps us to understand the type of contextual conditions that might need to be in place, the forms of fertility control that might be most meaningful to women, and the type of changes that might be most transformative.

### *Empirical Research on Developing Countries*

#### *Effect of gender relations on fertility*

As stated in the beginning of this paper, there has been relatively little direct attention to empirical examination of the gender implications of declining fertility levels and increasing contraceptive use rates in the developing world. Especially at the macro level, both a theoretical and empirical consideration of this connection has been lacking. Most of the empirical literature on gender and fertility emerges from the 1980s and 1990s and has focused on the relationship in the other direction. This literature does offer some guidance on the dimensions of gender inequality and women's condition that present the greatest challenge, as well as the possibility, for change in various parts of the developing world. It also offers some guidance on measurement and methodological approaches that need to be considered in examining the link between fertility and empowerment.

In the 1980s academic interest in gender as a factor shaping fertility transitions emerged in part because more traditional explanations and debates from the 1970s about family versus economic development driving fertility declines started to be seen as too dichotomous and simplistic (Germain 2000; Sinding, 2000). Increasing interest in social and cultural explanations of fertility behavior was fueled also in part by consistent research findings indicating that women's education was the strongest predictor of declining fertility levels (Jejeebhoy 1995; Diamond et al 1999; Lloyd et al 1999; Glewwe 1999). Finally, an increasing presence of women in the demographic profession who were interested in theorizing and empirically testing the gender and fertility link was also a likely contributing factor.

Thus, the 1980s and 1990s marked a relatively prolific period for both theoretical and empirical studies on how gender relations might affect fertility levels. For example, Mason (1987) articulated

a theoretical framework of how women's status can influence fertility through the demand, supply, and costs of childbearing. Dyson and Moore (1983) compared differing gender and demographic regimes in North and South India and demonstrated that relatively more egalitarian gender systems tend to have lower fertility levels. A number of quantitative data analyses (mostly in Asian settings) focused on testing the links between specific measures of women's position and a range of fertility related outcomes (e.g., Morgan and Niraula 1995; Malhotra et al 1995; Jejeebhoy 1991; Balk 1994; Schuler et al 1997). For example, Morgan and Niraula (1995) examined the links between female autonomy, son preference and fertility intentions in Nepal; Malhotra, Vanneman, and Kishor (1995) measured the influence of sex discrimination, economic value and marriage systems on fertility levels across districts in India; and Jejeebhoy (1991) used data from Tamil Nadu, India to argue that improvements in the status of women "exert an increasingly negative effect on fertility over the course of demographic transition" (Jejeebhoy 1991, p. 217). Besides India, Bangladesh was a hotspot for gender and fertility analyses. Among others, Balk (1994) examined the relationship of community and individual level measures of women's status with fertility behaviors while Schuler, Hashemi, and Riley (1997) analyzed the effect of credit programs as a potential source of empowerment enabling women to use contraception.

With a few exceptions (i.e. Dyson and Moore (1983); Malhotra, Vanneman, and Kishor (1995) these studies examined the empowerment-fertility connection at the individual and household levels. Although the results from these household-level empirical studies were at times equivocal in demonstrating a clear linkage between measures of women's empowerment and fertility outcomes, they advanced the field considerably by fostering conceptual thinking about gender as a determinant of fertility and furthering the definition and measurement of basic concepts. For example, the terminology shifted from "women's status" as measured almost entirely in terms of education and employment levels (e.g., Davis 1984) to the term "female autonomy," with emerging household level measures of mobility, communication, and decision-making in various spheres (e.g., Schuler et al 1997). Evolving research questioned the "autonomy" terminology as being a static measure which did not capture the relational aspect of women's ability to act or behave without constraints relative to men (Malhotra and Mather, 1997; Govindasamy and Malhotra, 1998; Kabeer, 1998).

These contributions pave the way for empirical examination of the reverse causation: how the fertility declines that have now occurred in many of these developing countries may be reshaping

gender relations. The measurement experiences from these studies also raise caution about the limited power of the common demographic empirical tools of survey based regression analyses for understanding the connection between broad-based trajectories of social change. The emergent insight from many of the studies cited above was that cross-sectional, micro, household level measures were often inadequate for measuring more systemic aspects of gender inequality—such as marriage and family systems, or the gendered nature of labor markets, or community norms—in the settings under investigation (Mason 1997; Amin; Lloyd 2002; Malhotra and Schuler 2005). Several studies attempted an understanding of broader contextual factors by incorporating qualitative contextual data in their analysis while others attempted multi-level analyses. While these approaches offered some advantages, they only partially addressed the difficulty of capturing dynamic, societal processes and their interrelationships.

#### *Effect of fertility declines on gender relations*

As there is little empirical research directly addressing the gender and fertility relationship in the reverse direction, I examine some studies that have more indirectly examined the trends and patterns affecting women's lives during and after fertility declines. This research gives some indication that gender relations are changing, but on the whole, raises more questions than it answers. A much more robust range of empirical evidence is required to assess whether the overall hypothesis holds, and what variations it may present. The piecemeal and very incomplete evidence from these studies, however, does provide some guidance on the type of specific themes and questions that should be on the research agenda if the connection between fertility declines, fertility control and shifts in gender systems is to be addressed empirically.

There is some confluence of data on early transition countries, especially Asian countries such as Taiwan and Korea, suggesting that there may indeed be a long term trend toward positive shifts in gender systems in the decades following fertility declines and widespread use of birth control. While these shifts can by no means be entirely attributed to demographic changes alone, it is clear that both lower fertility levels and increased reproductive control by women have played a role. For example, in Taiwan, fertility declines resulted from a strong government program, and were very rapid, with the TFR going from around 6 in the early 1960s to less than 2 by the 1990s (Poston, 2000). These declines have been accompanied and, in the subsequent decades, followed by very marked shifts in marriage systems (with delayed, more self-choice marriages and increasing non-marriage among women), increases in women's labor force participation and a more family-friendly work environment for women, especially in professional and semi-professional careers,



allowing women to continue work post-marriage and post-childbearing (Yu, 2005; Lee, 2009). These shifts in women's roles and opportunities have occurred in the context of rapid economic growth which relied heavily on the engagement of Taiwan's female labor force in export oriented growth (Lee, 2009), though there is some research that suggests that gender wage disparities have persisted in these industries, particularly as they have matures (Zveglich et al., 1997; Berik, 2000).

Some studies have remarked similar shifts in fertility, family life, and gender relations in Korea, which experienced a similar pattern of fertility declines and economic growth, but not the same early engagement of women in the labor force. Research is also finding that, although son preference as a strong manifestation of gender inequality continued to persist in Taiwan and Korea in the post transition period (and in fact, sex selection increased), both son preference and sex selection have now declined in these societies, indicating dramatic shifts in normative attitudes regarding the value of daughters versus sons (Chung and Das Gupta, 2007; Guilimoto, 2009).

As an Asian country that also experienced fertility declines very rapidly, but a decade later and in the context of a coercive state mandated population policy, China presents a fascinating case for research on this issue. For example, it is unclear whether such a scenario means that women now have control over fertility, or whether the state motivations and mandate prevent their having this control despite the fact that they have ready access to contraception. Some research suggests that despite the origins of the fertility control mandate from the state, women themselves valued the ability to have smaller families as well as the resulting positive changes in their own lives and in the lives of their families. In their assessment of the gender implications of family planning, Hardee, Xie and Gu, (2004) note that few women disputed that they were better able to achieve their own aspirations and increased prosperity for their households as a result of access to birth control. Many also indicated that they had reduced household burdens and more bargaining power. However, other research documents women being pressured by the government's childbearing requirements on the one side, and by society's (and women's own) preferences for sons on the other (Qu and Hesketh 2006; Zhu et al., 2009). A significant body of research shows continued strong son preference and distorted sex ratios in China, and while some researchers are predicting a similar path to Korea and Taiwan where son preference eventually declines, others are more pessimistic (Song, 2009). Moreover, while women's educational levels and labor force participation in China have increased in the last two decades, it is not clear whether these are the result of

fertility transitions or a continuation of prior government mandated policies requiring greater representation of women in schools and jobs.

More recent transitions in countries like Mexico or Brazil present an even murkier picture, possibly because clear patterns of change in gender relations have yet to materialize, or possibly because they have not been adequately investigated. With TFRs reaching replacement level only very recently in Mexico, it is yet to be seen if the trend toward increased educational levels and labor force presence among women holds, and whether extensive wage disparities begin to diminish. Moreover, over the last two decades Mexico has presented a very different economic context for fertility declines than the dramatic growth patterns in much of East Asia during declining fertility levels in those societies. Under these circumstances, it is not clear whether household level changes in the division of labor, domestic violence, and role expectations will take effect more gradually, or perhaps not at all. Moreover, in most Latin American countries, it remains questionable whether full reproductive control for women is achievable without legal access to safe abortion. This question is important even for a country like Brazil that achieved its fertility decline in part due to high rates of abortion (Singh and Sedgh, 1997; Martine, 1996).

Mixed evidence does not necessarily mean that long term shifts in gender relations are unlikely; it could simply be reflective of the recent nature of the fertility transition where norms, institutions, roles, and behaviors are likely to be in flux: structural change may well take 2-3 decades, or possibly more. However, without some deeper combination of micro and macro analysis as well as some longitudinal data on cross-generational implications and broader societal trends, it is difficult to ascertain whether the mixed patterns are due to the stage of the transition, or due to lack of fundamental change.

One good example of this analytic difficulty is the case of Bangladesh. Bangladesh is a much-studied country with more recent (and currently stalled) fertility declines that continues to present mixed evidence. For example, Amin and Lloyd (2002) argue that to the extent that they have occurred, fertility declines appear to have empowered women by increasing their access to and control of resources. They note increased school enrolment for girls, more access to credit, new ideas about reproductive control, and increased social networks as the key aspects of improved life options for women. Other research has also argued that while only two-three decades ago patriarchal control in Bangladesh was high and the status of women was very low by most measures, both have shown

improvement. Researchers have attributed many of these shifts to the combination of fertility declines and ready access to fertility control, but also to increased employment opportunities among young women, and to the micro-credit movement in Bangladesh (Schuler et al., 1996; 1997; Adnan, 1998; Simmons, 1996).).

In contrast, some studies have argued that these improvements have not signaled fundamental shifts in the patriarchal nature of Bangladeshi society, including meaningful changes in social norms and family systems (Schuler et al. 1995; Kabeer 1998). At least from the existing evidence, it is unclear whether the Bangladeshi gender system is especially entrenched, whether the accompanying contextual conditions have not been as catalytic for significant change as in the more dynamic economies of East Asia, or possibly, that fertility declines are too recent and not low enough to signify a declining social or economic value of children, or a separation between sexuality and reproduction, or the dissolution of the motivation to control women's sexuality and reproduction.

Most sub-Saharan African societies, where fertility rates have been much slower to fall and are not close to replacement levels, present an even greater dilemma for empirical analysis. They also present a potential opportunity for tracking the nature of likely shifts in gender systems from earlier stages in the transition. For example, the case of Ghana poses a classic challenge in interpreting the results from limited existing research. Bawah et al (1999) indicate that while the Navrongo experiment in Northern Ghana produced a substantial increase in contraceptive adoption, it has also activated tensions in gender relations. In this challenging setting for family planning programs, women have welcomed access to contraception, but have also been subject to physical abuse and reprisals from the extended family, and suspicions of infidelity from husbands. On the one hand, the research evidence seems to suggest that there was an immediate deterioration of gender relations. On the other hand, without a fuller and more extensive examination of gender relations in this setting, it is less clear whether there were other compensating—perhaps even overriding—benefits to women resulting from their ready access to contraception.

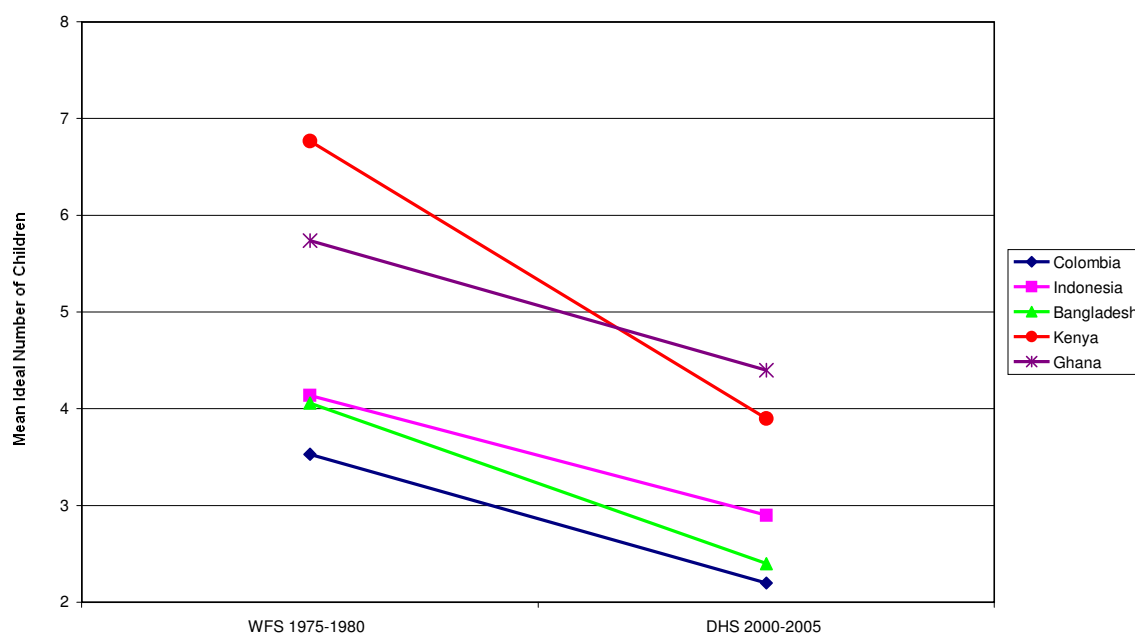
Most importantly, it is least clear what the longer term implications are for shifts in the gender system, since fertility declines and fertility control at the time of the Navrongo study were in their very initial stages. In this strongly patriarchal setting, children still have enormous social and economic value—especially to men—and in fact, marriage is still very much a bargain where men

pay bridewealth to ensure sexual and reproduction access and control over women. Using contraception blatantly defies that bargain. As a consequence, the resulting tensions in gender relations may well be indicative of a shake up of the existing gender system strong enough that men and extended family members see women's contraceptive use as undermining the entire basis for their power and privilege. Conversely, the tensions could also be indicative of men's ability to reinforce existing power relationships, thus preventing any serious transformation in gender systems. It is only by reviewing a wider body of evidence, over a longer time frame, that we can assess which scenario plays out in this society.

A different strand of demographic research also provides some indirect evidence for the possibility that smaller family sizes and women's ability to control childbearing may be catalysts for significant shifts in women's lives and options. When taken together, the research on desired family size and unmet need indicates a strong and increasing motivation among women in developing countries to control their childbearing. In fact, over the last two decades, this research seems to point toward women in an increasing and diverse range of countries seeking to gain such control, many times desperately so.

Extensive data now show that whatever may have been the origins of family planning programs and population control policies originally—the state, international donors, ideologues--at this point in history, large majorities of women in the developing world themselves want small families (e.g., Rutstein 1998; DHS Stat Compiler). For the most part, desired family size among women in most Asian and Latin American countries ranges between two and three children, and although the number of children women in sub-Saharan Africa want is considerably higher, there have been declines there as well (e.g., Rutstein 1998; DHS Stat Compiler). The significant shift across the past quarter century is evident as we compare family size desires as expressed by women in select countries in the World Fertility Surveys undertaken in the mid to late 1970s, with comparable data for Demographic Health Surveys undertaken between 2000-2005. As Figure 1 shows, family size desires have fallen in countries in every region of the developing world.

**Figure 1: Mean Ideal Family Size, Selected Countries, World Fertility Surveys and DHS (2000-2005)**



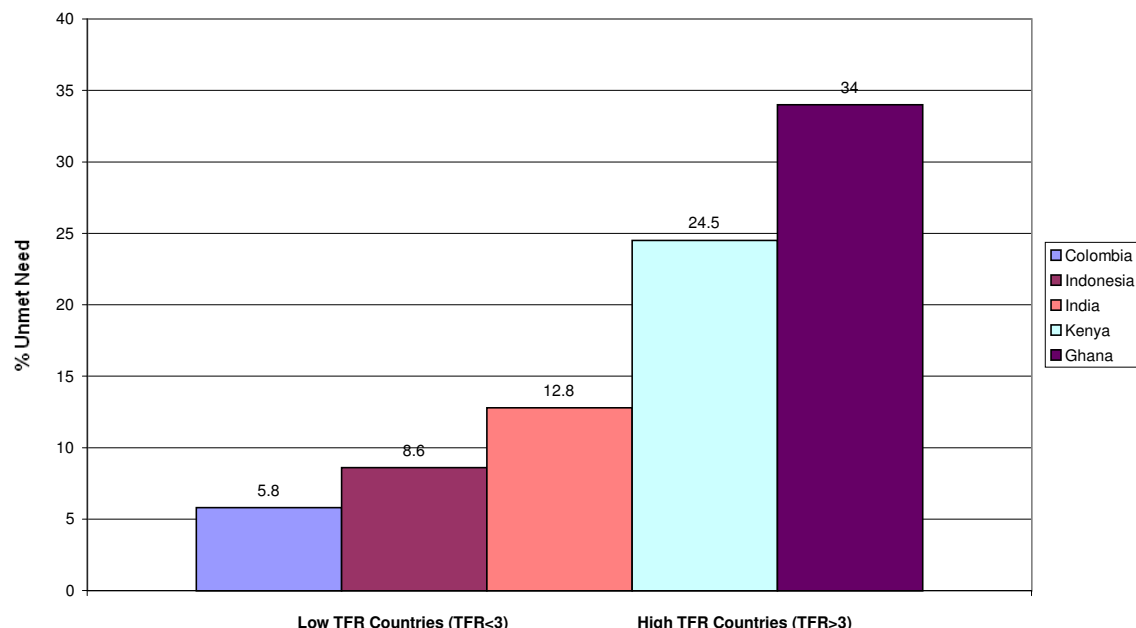
Data source: Rutstein 1998; DHS Stat Compiler.

Essentially, as the fertility determinants literature would suggest, women's demand for children today is focused largely on quality rather than quantity. Translated in terms of the real lives of women, this means that women see greater potential for survival, success, and upward mobility for themselves, their children, and their families with smaller families (McDonald 1996; 2000). Many women are also acutely aware of the health costs and childrearing burden that they bear with large families or multiple pregnancies. Equally, as the world opens up and aspirations rise, younger women especially recognize not just the physical costs of bearing many children, but the opportunity costs in terms of their own aspirations. These connections suggest that women see smaller families as something that is in their own interest, and it is important for researchers and policy-makers to better understand not only how women define their interests, but if, when, and how they succeed in achieving them (McDonald 2000).

Existing data also show consistently that significant proportions of women in the developing world are yet unable to access and use fertility control options to realize their desired family size (e.g., DHS Stat Compiler, United Nations 2007) Increasing demand among women has not been met with

adequate services and supply of contraceptive options and unmet need levels continue to be substantial, especially where fertility levels are high. As Figure 2 shows, unmet need spans across Asia, Latin America, and Africa, and is higher in countries with higher TFRs.

**Figure 2: Unmet Need for Family Planning, Selected Countries, DHS 2002-2005**



Data source: Demographic and Health Surveys, Stat Compiler, Accessed April 27, 2009.

The value of smaller families for women also becomes clear as we examine the evidence from studies documenting the range of hardships women often go through in their determined efforts to gain access to family planning. In many cases, women have borne stigma and violence, undertaken surreptitious efforts, and borne extreme physical and social risks in their efforts to realize their reproductive goals. For example, research from Bangladesh indicates the willingness of early family planning adopters to brave the social stigma of using contraception when it was considered taboo. Once they opened the door to fertility control as an option, however, large numbers of women followed their lead, resulting in rapid family planning adoption and declining fertility rates in the 1990s. Schuler et al. (1997) document that in fact, over the next decade, family planning became so common, that the direction of the stigma reversed itself, with non-users being seen as socially deviant rather than users. Research from Brazil documents that fertility declined despite the lack of

a public sector family planning effort as well as restrictive laws against abortion. Highly motivated women met their unmet need for fertility control through the private sector and the black market, undertaking a self-defined use of misoprostol to control their childbearing, often risking their health because of a high incidence of incomplete abortions (Costa 1998). Clearly, women in these situations were seeing benefits of significant importance to them to undertake the substantial risks in their effort to access fertility control options.

Given the challenges that many women in the developing world have faced in order to gain access to family planning, abortion, and reproductive control more generally, it becomes especially important to conduct a fuller, more systematic assessment of what gaining such control allows women to do or not do. What scenarios do the new realities of lower fertility levels present for women in Asia, Africa, Latin America, and the Middle East? Have they led to women achieving larger life goals and aspirations? What new challenges and opportunities emerge for women, men, families, societal institutions, and what issues now need to be on the policy agenda?

#### A CONCEPTUAL FRAMEWORK

In this section, I attempt to synthesize some of the major themes from the theoretical and empirical literature to develop a conceptual framework and some basic parameters for further research on the implications of fertility declines and fertility control for gender relations in developing countries. The framework lays out a broad map of how fertility declines and gender systems might be connected. I begin by defining the core parameters underlying the framework, as well its key elements. I then lay out some of the research questions that the conceptual framework might be useful in testing.

The framework proposes that a shift to lower fertility regimes has the potential to result in positive and transformative shifts in gender systems. This potential for a positive trajectory is not automatic, but reliant on the presence of positive conditions in a broad range of contextual factors. It also depends on the nature and type of the fertility control options available, how they are delivered, and their role in determining fertility levels. Depending on these factors, the resulting shifts in benefits to women may be largely at the individual or household level, and mostly in terms of wellbeing, or they may be broader, at the societal level, and signify shifts in gender systems.

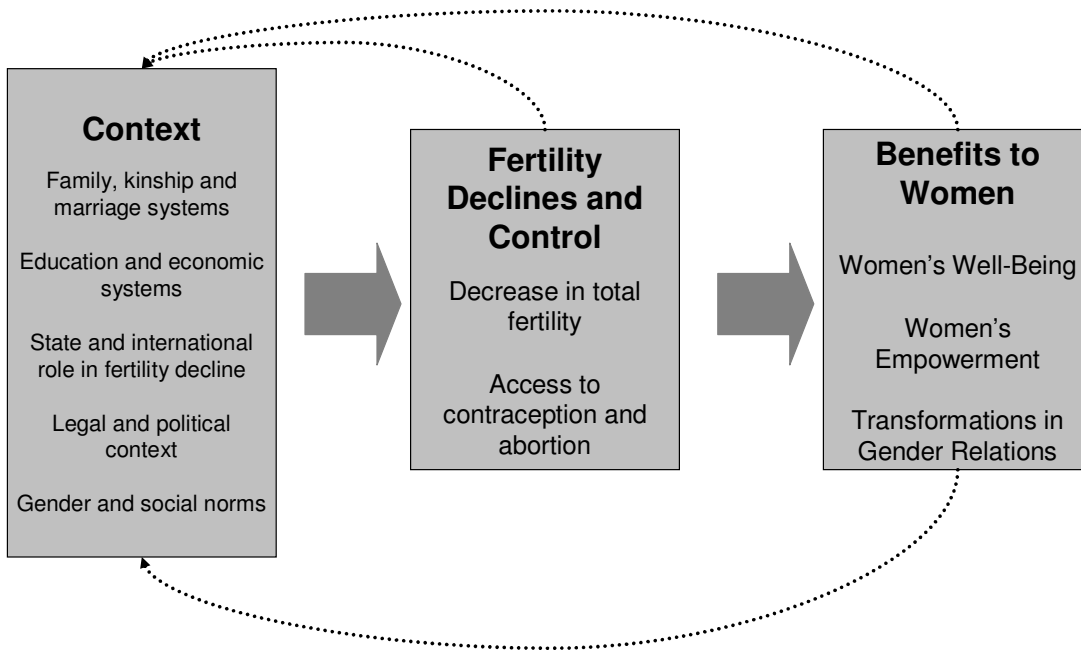
Based on the theoretical and empirical discussion, I propose that at the societal level there are four “conditionalities” emerging from the interplay between contextual factors, fertility declines, and the nature of fertility control that are likely to determine whether the resultant trajectory leads to fundamental and positive shifts in gender systems. These conditionalities are worth focusing on as the basic backdrop in addressing specific research questions. The greater the number of these conditionalities that are met in a society, the more likely it is that the pathways specified in the framework result in fundamental shifts in gender systems.

1. Has childbearing become a less valued asset, and have the motivations for controlling women for their reproductive capacity decreased?
2. Has the combination of decreasing social and economic value of children and increasing access to contraception resulted in the separation of sexuality and procreation?
3. Are women spending significantly smaller portions of their lifespan in bearing and rearing children, and are they incorporating significant other tasks and roles?
4. Is access to contraception an important factor in giving women the opportunity to take advantage of other life options more effectively and strategically?

The framework is depicted in Figure 3, and illustrates the contextual factors on the left, fertility control and declines as the core drivers in the middle, and benefits to women at three different levels as the major outcomes on the right. Although the figure emphasizes the directional movement from contextual factors to fertility declines to benefits for women, this is an iterative relationship, where unquestionably, benefits to women can also facilitate social and economic change as well as fertility control and declines.



**Figure 3: Conceptual Framework- Fertility Declines and Control as they Benefit Women**



#### *Contextual Factors*

Fertility control, fertility declines, and shifts in gender relations never occur in a vacuum, and the social, economic, political, and normative conditions which shape and accompany the processes of contraceptive access and declining fertility are critical in determining whether these processes fulfill their transformative potential for gender relations. The factors most likely to condition the impact of fertility declines and contraceptive access on gender relations include: family, kinship, and marriage systems; educational and economic systems; the role of state and international actors in population policies; the broad legal and political contexts; and the strength of gender and social norms.

### *Fertility Control*

The means for fertility control as conceptualized in this framework include both contraception and abortion. Access to contraception or abortion can be seen along a continuum from low/none to high, and is typically defined by a combination of availability, cost, and the range of methods available. The literature suggests, moreover, that there are three characteristics of fertility control options that are especially important in affecting women's life options and gender relations. First is the effectiveness of the available fertility control options, which makes hormonal and permanent methods more reliable than other contraceptive options, or medical and surgical abortion, more effective than homegrown or unsafe techniques. The second dimension is the extent to which women control a method, as opposed to depending on a partner. Finally, the delivery mechanism is also a critical dimension. Methods such as sterilization or surgical abortion, for example, require significant provider engagement as opposed to temporary methods that can be delivered over the counter, at community locations, or through home delivery.

### *Fertility Declines*

A point self evident in the demographic literature more generally, but not always in the empirical research or policy debates on gender and fertility, is that fertility declines are aggregate processes, reflecting change in reproductive behavior for *societies over time*. The fertility decline continuum ranges from cases where some women are beginning to have fewer children, to cases where lower fertility levels are spread more broadly. The two points of relevance for our argument are how far birth rates fall, and how quickly. Conceptually an even more complete demographic regime change would include not only pervasive low fertility, but also low infant and child mortality, longer life expectancy, possible shifts in desired sex composition, delayed first births, and so on.

Thus, our argument is most likely to hold true for societies already past their experience of significant declines in fertility rather than those in the early stages of the process. Clearly, a longer time past the completion of the transition allows for a longer period in which transformations can take place, as well as a more viable historical picture; this may be one reason why there is a much stronger empirical record on developed rather than developing countries. Empirical data from societies in the early or middle stages of fertility decline may show minor gains, may be inconclusive, or may be counter-indicative altogether.

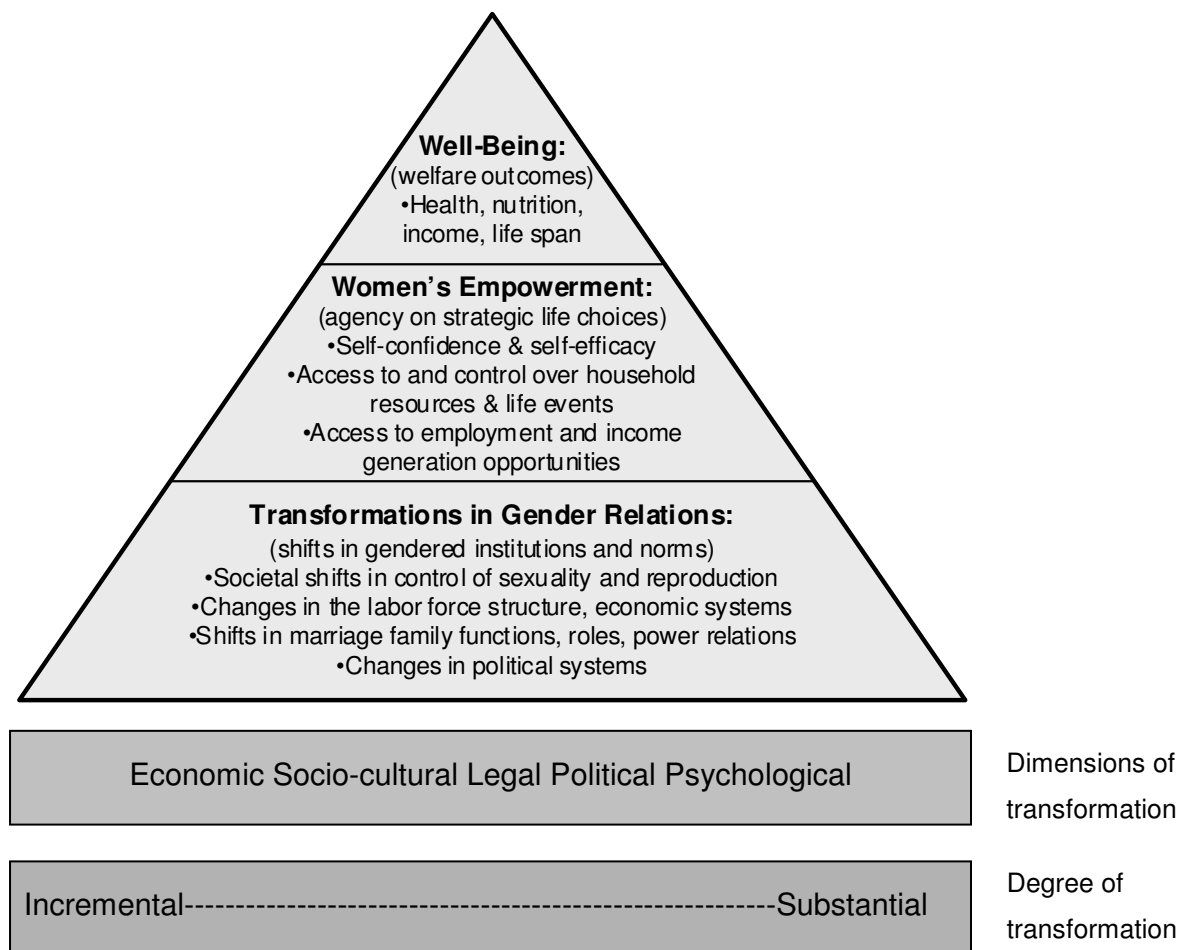
*Benefits to Women*

In this framework, benefits to women refer to fundamental long run, large-scale benefits triggered or catalyzed by access to fertility control and the shift in fertility regimes. We consider three types of benefits, deeming each incrementally more powerful in terms of shifting gender relations:

1. Improvements in women's well-being in terms of better health, nutrition, increased income, education, reduced violence, longer life span, and so on: Here the concern is to assess if women are significantly better off in terms of the basic human condition.
2. Women's empowerment in terms of the expansion in their ability and freedom to make strategic life choices where this option was previously denied them (Kabeer 1999; Malhotra and Schuler 2005): Empowerment is a process that occurs over time and involves women as agents who have the ability to formulate choices, control resources, and enact decisions that affect important life outcomes. Strategic life choices encompass a number of domains from very personal and family decisions such as whether and when to marry or have children, to interactions in the public domain such as the ability to be mobile, to work for a wage or run a business, to vote, run for office, or to participate in networks and coalitions. Clearly, having access to contraception and abortion gives women significantly greater control over at least one very highly strategic life option—the number and timing of childbearing. The extent to which this is a meaningful life choice depends in part on the contextual factors (for example, women's desires for the sex and composition of their children and ability to act on them may still be highly constrained by patriarchal norms and institutions or by state regulations and policies). Similarly, when and how this strategic life choice serves as a catalyst for other choices for women in developing countries is a question to be tested empirically.
3. Increased gender equality as evidenced by demonstrable shifts, if not radical transformation, in social, economic, and political institutions and in societal norms and ideologies: Structural and functional shifts in institutions such as marriage, the family, the work place, the political system, and the media can signify women's increased status, bargaining power, and transformed gendered power relations. These can occur not only at individual, household, or community levels, but also at wider structural levels of law, business and management, capital and trade markets, local and national government, and in international development bodies, political institutions, and media discourses.

Finally, it is important to note that rarely does change of any sort result in a unidirectional impact on gender relations. Thus, reproductive options and change are likely to create negative repercussions for women in some dimensions and at some levels, while also yielding benefits in other dimensions and levels. The conceptual framework offers an opportunity for assessing whether there is a substantial and identifiable net positive effect.

**Figure 4: Benefits to Women- Welfare, Empowerment, and Transformation in Gender Relations**



The primary question this framework aims to answer is:

What have the changes of the last 25-50 years meant for women in developing countries, not just in terms of welfare and rights, but in terms of real opportunities, meaningful options, and fundamental power shifts?

Answering this question will require assessing whether, how, and when women's access to fertility control options and related demographic shifts resulted in women's empowerment and significant transformations in gender relations. Some of the specific research questions that can help answer this larger question include:

1. Is there a transformation and how extensive is it?
2. Is it largely positive or are there significant counterbalancing implications?
3. Are there tipping points---in terms of certain levels of fertility or contraceptive use---when we know that some of the four conditionalities are on their way to being met?
4. What are the contextual conditions and trajectories that lead to the most positive transformations in gender systems and what can we learn from them?
5. Does it matter to the trajectory if the agenda for fertility control was controlled externally, by elites, or by women themselves?
6. Do investments in strong family planning programs or in broader reproductive health matter?
7. Are some fertility control options more empowering for women than others?
8. What is the time frame within which demonstrable shifts in gender relations occur?

## CONCLUSION

There is a strong theoretical, empirical, and conceptual case for increased research and policy attention to the large scale, potentially transformative implications of fertility declines and fertility control for gender relations. Such a focus also has considerable strategic and practical value for revitalizing the population field with an even stronger, more vibrant link to gender issues.

In the past, feminists and the population field have faced an uncertain relationship, at times collaborative, and at times contentious (Presser 1997). Focusing on the potentially transformative and positive implications of demographic shifts for gender relations is an opportunity to see the

population-gender connection in terms that furthers the fundamental concerns of both constituencies. For feminists, women's well-being, reproductive rights, and control and empowerment have been at the core of policy advocacy in the population field. The focus on the gender implications of fertility declines would be an important means for continuing this commitment while at the same time moving forward historically and addressing the policy challenges of the 21<sup>st</sup> century. For those who developed and mobilized the Cairo agenda, moreover, it presents an additional route to carrying forward a policy framework that advocates for broad-based social change in gender relations. For the population constituency, the policy and practical relevance is equally compelling. The fertility-gender connection is a route to exploring potentially large-scale social benefits of demographic shifts. For both constituencies, the connection is a route to exploring the population-gender connection through a new pathway that is especially relevant to the emerging realities in developing countries.

Moreover, in the past decade, gender issues have gained ground in the development agenda and this focus would be an important way to connect the research and policy concerns of the population field to those of the larger development community. The increased legitimacy of and attention to women's empowerment and gender equality as a development priority presents feminists and demographers with an opportunity to forge a broader connection and outreach on gender, population, and development issues. By focusing on the gender implications of demographic shifts, the population field can bring its considerable historical experience and expertise to the table, not only to reenergize the gender and development connection, but also to consider new and interesting pathways and partnerships for moving this connection forward in the 21<sup>st</sup> century.

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