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**GENDER RELATIONS AND REPRODUCTIVE DECISION-MAKING IN THE
CONTEXT OF RURAL CHINA IN THE POST-REFORM PERIOD**

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CHAPTER 1: INTRODUCTION

1.1 Research background

In the early 1980s, several years after the introduction of the rural economic reform, fertility levels in China showed an increasing trend (Feeney *et al.* 1989). The fertility effects of economic reform in China have drawn a lot attention from policy makers and researchers both inside China and abroad (Greenhalgh 1994; Zhang 1998a). Some scholars suspect that the economic reform might result in increasing fertility. It has been argued that rural people have higher aspiration of having more children and bigger leeway to base their reproductive decisions on their own interest in the post-reform period (Davin 1985, 1990; Hartmann 1987; Zhang 1998a).

In order to stabilize the fertility level in the new environment, policy makers and demographers have focused their research on investigating the determinants of fertility in the new social economic setting in the rural areas. But such research tend to treat women and men as homogeneous group, and fail to consider women and men's different interest in reproductive behavior and their decision-making power. For example, recently the impact of women's status on fertility has been emphasized by some researchers in China (Zhu *et al.* 1991; Gu and Liu 1993; Liu *et al.* 1994; Zhang 1995). But in such studies, women are assumed as the sole agencies of fertility decision-making or to have consensual fertility desire with their husbands, so that reducing women's fertility desire will automatically reduce fertility level. This is not likely to hold in contemporary China, where society not only inherited a strong patriarchal tradition, but also confront new gender based option structure and power relations. Women and men in such a society may have different reproductive perceptions, interests and decision-making power. Reproductive decision may not come out of consensus. In addition to the conflicts between the state requirement and the individual families, there may also be conflicts between husbands and wives. The consensus of reproductive decision between husbands and wives can not be taken for granted, it is should be open to investigation.

Moreover, the divergent interest in reproduction between husbands and wives may not be confined to the fertility level, but also exist in their ways to reach their fertility level. In order to reach their own fertility desire under current population policy, rural couples have formulated different

strategies to reach their reproductive goals, including paying penalty, taking the risk of aborting pregnancy, sex-selective abortion, accepting female and male sterilization, etc. Such different strategies are not gender neutral, hence may also involve a conflict of interests and a bargaining process between husband and wife. Gender-based power relations within family play key roles in forming such decisions.

Conventional fertility studies have been criticized by feminist perspectives because they neglected gender structural determinants of fertility and focused only on how to reduce fertility level (McDaniel 1996). In such gender blind studies there is no space to consider the other aspects of reproductive behavior, to understand women's own reproductive interests, decision-making power and their well-being as the outcome of a set of reproductive decisions.

The narrow focus of the previous fertility studies should be broadened to include other aspects of reproductive behavior, such as the methods and strategies to reach their reproductive goal and its impact on women and men's reproductive health and general well-being. Women's own reproductive perception, decision-making power and their own well-being as the outcome of such decisions should move to the center of reproductive research. The conventional fertility approaches can not give rise to such a fundamental change. New approaches need to develop to integrate a gender perspective into reproductive analysis. Integrating a gender perspective into reproductive analysis is particularly important for the case of contemporary China where both the patriarchal state and patriarchal families intervene in women's reproductive behavior.

1.2 Objectives of the research

The aim of the research is to discuss the applicability of the bargaining models of household decision-making to understand the impact of the structural factors, the prevalent gender norms and practices on gender relations within families; try to understand how do these factors differentiate husband's and wife's reproductive decision-making power in a particular historical and cultural setting, namely the rural China in the post-reform period. The emphasis will be on both the structural factors and cultural norms and practice. Structural factors include the production system, such as the household responsibility system and related land tenure system, legal regulations and Family Planning Program etc. Cultural factors include social norms about the

gender roles and responsibilities and practice, such as about the sexual division of labor within families, men and women's responsibilities in reproductive domain, and marriage arrangement etc.

Reproductive decisions in this paper do not only refer to the decisions on the individual fertility (level), but also include other aspects of reproductive behavior, such as decisions on the contraceptive methods to regulate fertility and the strategies to reach reproductive goals - the **number and sex of the children**.

1.3 Justification

The key points of feminist critiques on the conventional fertility approaches, such as new household economics and women's status approach are that households should not be treated as gender neutral units. Women should not be considered only for their instrumental roles in reducing fertility, but also their own interest and well-being. Such critique does not mean that households are not relevant in fertility analysis and those women's status is not important to understand reproductive behaviour. Our understanding of reproductive outcome and its influence on women will be more complete if we introduce a gender perspective into household analysis and broaden conventional fertility studies by including other reproductive aspects into our analysis to understand both women and men's roles in a broad range of reproductive decision-making.

The central assumption of population policies in most developing countries including China is the long-term stability of conjugal family as physically, economically, and emotionally closed unit within which children are planned, born, and reared (Lloyd 1993: 3). Rejecting the altruistic family assumption and regarding the reproductive decision-making as a bargaining process has important policy implications. Understanding individual, particular women's reproductive needs and identifying the key factors which influence reproductive bargaining process between husbands and wives are the preconditions to formulate any social policies aimed at creating conducive condition to improve women's decision power, reproductive health and their general well-being. Understanding the intra-family decision-making is even more important in post-reform China where the reform has brought profound social economic changes and new gender features to the society. Individual families now have more choices to negotiate their productive and reproductive decisions.

1.4 Methodology, data and the imitations of the research

The analytical framework of this study is based on the bargaining model of household decision-making. Based on this model, husband's and wife's decision-making power within their family are determined by their well-being independent of their families and their "proper" gender roles and responsibilities. In order to understand these, the gendered nature of the social economic structure and social norms and practice should be examined at the first place. We should understand what life opportunities are opened to individual women and men in the society.

To further explore the issue, my research is guided by following specific questions:

- 1) What are the key institutional factors which differentiate husband and wife's independent well-being in the post-reform period
- 2) To which extent are gender relations within families in the post-reform period still influenced by traditional gender norms and practice?
- 3) How does economic reform redefine husband and wife's "proper" gender behavior?
- 4) What are the impact of population policy and Family Planning Programs on husband and wife's reproductive responsibilities, choices and strategies?
- 5) What are the impact of inter-links of these factors on husband and wife's independent well-being and gender based responsibilities?

Due to the data situation, Chinese case studies used in this paper will be mainly based on secondary data presented in the literature. The previous research concerning economic reform, traditional cultural norms and fertility behavior in China have provided plenty of facts which have been "buried" or mis-specified based on old approaches. This study will re-looks at these "old" facts based on a new approach, bargaining model of household decision-making. My personal observation based on my research work and seven months working experience in the Family Planning Commission of Rongchen County of Hebei Province in 1991 will be supplement the data in the literature.

Ideally, after such theoretical exploration, the next step is to test the empirical relations between influential factors and reproductive decision-making variables based on the data collected through anthropological intensive case study or sample survey. Because most of the fertility studies and

surveys done in China are explicitly or implicitly based on the assumption that husbands and wives can be treated as a homogenous groups and have a narrow focus on reducing fertility level, the data collected for such studies are difficult to serve this study. The relevant data are extremely limited. Due to the lack of data, an attempt to test the model by examining the statistical relations between possible influential factors and decision-making variables, or by intensive ethnographic case study have to be left to further investigations. This study will provide a theoretical guide to collect data needed for applying bargaining model to reproductive decision-making analysis in contemporary China.

1.5 Organization of the paper

In the following, Chapter 2 will first present a brief critical review of three popular analytical approaches to fertility and the previous studies on fertility in China, then introducing bargaining models of household decision-making, and its relevance to reproductive decision-making analysis. Based on the bargaining model, Chapter 3 will elaborate on the impact of social economic and cultural factors on husbands and wives decision-making power within families in post-reform rural China. Chapter 4 will focus on the impact of Chinese population policy and Family Planning Programs on women's reproductive choice. Since population policy directly influences individual reproductive behavior, it deserves a separate chapter. In chapter 5, I will briefly elaborate on the drawbacks of data collection in previous fertility studies and propose a methodology to collect empirical data to apply the bargaining model to a gender sensitive reproductive decision-making analysis.

CHAPTER 2 : THEORETICAL BUILDING: PREVIOUS APPROACHES TO FERTILITY AND THE BARGAINING MODELS OF HOUSEHOLD DECISION-MAKING

Worldwide fertility decline has provided the empirical impetus for studying human reproductive behavior. Different streams of theories concerning fertility behavior have been developed during last half century. A large body of studies, based on different theoretical schools, has greatly improved our understanding of human reproductive behavior. However, with more data available,

the limitations of existed fertility theories have also become clear. Existing theories face difficulty in explaining the various fertility patterns and complicated relations between human reproduction and related social economic dynamics. The development of feminist theories and a gender perspective, as well as empirical studies, help to expose some problems of existing approaches to fertility. Not only do new perspectives need to be procreated, the concept of fertility itself needs to be broadened, and based on the new perspectives, conventional demographic data collecting design needs also to be revised.

In most analytical approaches to fertility, such as demographic transition theory, household economics and even women's status approach, women's own reproductive interest and their roles in reproductive decision-making remain ambiguous. Women either vanish in the homogenous household, or are emphasized for their instrumental roles in reducing fertility. There has been reluctance to consider women's position as a separate problem with importance of its own (Sen 1987: 2). Such a theoretical gap has exerted substantial impact on development policies, in particular on population policies.

The development of related social theories have not only exposed the theoretical drawbacks of existed fertility analysis, but also shed a new light on this field. The bargaining models of household decision-making provide a broader analytical framework which treat women as distinct agents with their own interest and decision power and permit gender as a dimension to enter the framework.

2.1 Previous fertility theories and limitations

In this chapter, I intend to review three important approaches to fertility, namely the demographic transition theory, new household economics and women's status approach. These three approaches have exerted a wide impact on fertility studies in China. I will show the lack of gender perspective in these mainstream fertility theories and empirical studies and the urgent need for introducing such a perspective.

2.1.1 Demography transition theory

Demographic transition theory presents one of the early attempts to understand fertility change. Based on the observation of the historical trend of populations and socio-economic developments in some Western countries, the classic transition theory, developed by Davis and Notestein, generalized a three stage demographic transition pattern composed of a pre-transition stage of high fertility, high mortality, and slow population growth; a transitional stage of falling mortality and time lag fertility decline, thus rapid population growth; and modern stage of both low fertility and mortality relating to a return to slow or no growth (Davis 1945 and Notestein 1945, cited in Greenhalgh 1995: 5). Deeply rooted in the modernization theory which described a general progress pattern for third world development, classic demographic transition theory sees such tripartite demographic transition as the result of broad forces of modernization such as urbanization and industrialization and as a homogenous and progressive process for all populations (So 1990, cited in Greenhalgh 1995:7).

Fertility decline was seen by this theory as the consequence of modernization which trigger the changes in people's attitude from favoring big family to small family size. Based on this theory, a lot of cross-sectional statistical analysis of the relationships between the indicators of modernization and fertility level of populations has been done. The indicators of development level, such as urbanization, women's education level, etc. have been directly related to the aggregate fertility level of the population (Poston and Gu 1987; Zhu *et al.* 1991; Hermalin 1978; Richards 1983; Yue 1989: 351-353). But how such modernization exerts impact on micro reproductive behavior is not the concern of the theory. It provides no explanation on the mechanisms, by which social economic development triggers such attitudinal changes in the family desire of individuals.

Faith in the classic demographic transition theory was greatly challenged by the Princeton University-based European Fertility Project in 1960s. Designed to test the transition theory, the result of this empirical study provides little support for economic and social hypotheses of transition theory, and instead brought about a cultural or diffusion interpretation of fertility decline. The diffusion interpretation on fertility decline, classified by Greenhalgh as "post-classic fertility transition theory", deviated from the broad emphasis on social and economic modernization. The

problem of this approach is its narrow focus on the attitudes toward birth control (Greenhalgh 1995:7).

The demographic transition theory, which has extensive influence, particularly on population policy making in developing world, has lost theoretical terrain because of its simplicity, over generalization, descriptive nature and inconsistency with empirical evidences. The criticism of transition theory is not new (Richards 1983: 698). Out of this criticism, different strands of approaches with more micro-level orientation have been developed in both economic and sociological streams to explore the causal mechanism of fertility dynamics.

2.1.2 New household economics

As one of the most influential economic theories of fertility, new household economics initially developed by Gary Becker, deepened the understanding of fertility behavior at micro-level. As a branch of theory of consumer choice, in this school, children are treated as “consumer durables” costing time and money and providing benefits to parents (Becker 1960). Fertility behavior is seen as the result of rational choices of maximizing utility of the household under the constraint of price, time and income, etc. Parents make rational choice between having their own children or other consumption goods. Having another child or not depends on a maximizing economic calculus of the household. Fertility decline is explained by the increasing cost of children including the direct cost and indirect cost or opportunity cost. The increase of direct cost is due to the market demand for the higher quality of children, which leads to higher demand for education expenditure on children; the increase in opportunity cost relates to the value of human time in the market, such as a rise in women’s employment opportunity in the market. Hence increase in direct cost and opportunity cost of time devoted to children contribute to fertility decline (Becker 1965, 1976). The later development of this school by Harvey Leibenstein and Richard Easterlin broaden the consumer model by taking into account the social and biological constraints on the economic calculation of fertility decision-making and exert more influence on fertility studies (Leibenstein 1975; Easterline and Crimmins 1985, cited in Greenhalgh 1995).

Compared with conventional economic theories, which lack attention to the household as economic site, new household economics signify a fundamental change in terms of analytical area. The

economic calculation enters the private sphere of household. The household arrangement of fertility behavior is analyzed in economic terms and entered the purview of neo-classical economics. This greatly improved the fertility interpretation by bringing down the fertility analysis to micro level. But this approach also suffers from some serious problems.

The basic assumption of this school, adhered to also by later approaches, is that husband and wife **have a single utility function and the same interest which can be best represented by an altruistic household head.** Households are seen as wholly co-operative and homogenous units with altruism. The fertility decision- making unit is the homogeneous household, governed by rational choice made by the altruistic household head whose preferences reflect his concern for the welfare of all other family members. Fertility strategy is part of the household's general economic strategy of maximizing its single utility. The increase in the women's wage in the labor market will reduce household demand for children because the household members pool their income and allocate the time of all family members to satisfy a common set of preferences including common preference for children. The cost of having children is the same for spouses. There is no conflict concerning household resource allocation, including locating women's time in reproduction or production and in the household or in the market. The intrahousehold conflict concerning reproductive behavior is theoretical **disregarded by altruistic assumption.** The economic principle of self-interest only operates in the market (the relation between market and household) not within the households (Folbre 1986a).

Becker moves beyond this assumption with his Rotten Kid Theorem by recognition of the self-interest of other family members. The self-interest of other family member does not lead conflict, but altruistic behavior to avoid hurting themselves. The positive transferring resources of the altruistic household member to other selfish members is efficient in inducing altruistic behavior of the other selfish but rational family members, like the rotten kid (Folbre 1986a, 1998; Lundberg and Pollak, 1997: 79). The full co-operative nature of the household with a single joint utility function is not challenged by his "rotten kid theorem". The disagreement and negotiation still play no part in household decision-making.

Further more, related to the altruistic assumption, a household in the new household economics is also seen as a super-stable unit, once formed, it will not face the possibility of breaking up. In

other words, the altruism dose not only guarantees the satisfaction of each member, but also the solidarity of the household, although the break up of marriages persists in both developed countries and developing countries.

The assumption of “altruistic” household head raised feminist critique for ignoring the gender inequality, hence it’s patriarchal bias (Folbre 1983, 1986b; Elson 1991; Mariamme A. and Julie 1993). The large empirical evidence exposed by the feminist scholars has shown the existing significant gender based inequality or patriarchy authority within the household (Folbre 1986a, O’Laughlin 1998; Sen 1987; Dwyer and Bruce 1988). The cost of bearing and rearing children may differ substantially for spouses within one household (Evans 1989). In developing countries, opportunity cost of having children may not mean loss of household production time, but loss of mother’s personal leisure, hence the ‘price’ of children could be modified by the changes in relative bargaining power of men and women. Patriarchal control over women can ensure men’s ability to shift the cost of children to mother (Folbre, 1986a, 1983). Moreover, the cost of having children and planning birth is not only confined to the economic domain, but also related to women’s health, which may not be easy to measure in economic terms, but need also to be considered.

In new household economics, fertility behavior has been standardized into economic analysis with homogenous and super stable household as the analytical unit. Gender based divergent interest have been dissolved in common preference and single household utility. Women’s position is not viewed as an independent important issue.

2.1.3 Women’s status approach

Another theoretical approach concerning fertility determinants developed in sociological stream focuses on the impact of (improved) women’s status on (reducing) fertility. The works of many different scholars are related to this ambiguous approach. And because of complexity of the concept of women’s status, in the empirical studies, women’s status tends to be reduced to women’s education and employment status which are easy to measure.

Strictly speaking, women’s status approach is not a sophisticated approach with its own analytical framework. Many studies focused on the empirical relations between women’s education, labor

participate and fertility and illustrated certain patterns between them (Yue 1989; Hashmoto 1970, Whyte and Parish 1984, cited in Zick and Xiang 1994). But the explanations of such patterns are associated with other fertility models. Related to Bongaarts fertility model, some studies emphasized on the roles of education in rising women's age at marriage and its effect on reducing fertility (Yue 1989; Zhu 1991; Mahmud *et al.* 1994: 152). Some scholars, influenced by diffusion interpretation, focused on the roles of education in increasing women's knowledge and use of modern contraceptives (Lavelly and Freedman 1990, Michael 1973, Yang 1987, cited in Zick and Xiang 1994). Others, borrowing the concepts of the new household economic model, assume that higher education level or labor participation rate would reduce women's fertility desired by increasing the value of women's time in the labor market, the indirect cost of children (Hashmoto 1970, Whyte and Parish 1984, cited in Zick and Xiang 1994; Mahmud *et al.* 1994: 152).

The assumptions of many of these conventional studies of women's status and fertility are that women are sole decision-makers or men and women have consensus reproductive preference. The intra-household determinants of fertility decision remain untouched. Women in these studies have been emphasized mainly for their instrumental roles in reducing fertility level, not in their own interest and right. In this sense, we have to say that the conventional women's status approach does not differ from other gender blind fertility approaches and lack a gender perspective in nature.

Inspired by the development of feminist theories, the literature on women's status and fertility have evolved since 1970s from a narrow focus on specific indicators and instrumental treatment of women's status to reduce fertility to a broader concern with women's autonomy and decision-making power. Emphasis has been shifted to women's own perception of their well-being (Mahmud *et al.* 1994: 151). The new perspective with broader concern and different emphasis needs to be further developed. Moreover new data must be gathered. The data collected for conventional demographic analysis do not fit this new development.

The theoretical weakness in the study of reproductive behavior has significant impacts on policy making in developing countries. For example, focusing on women's roles in reducing fertility and neglecting women's own interest in the reproductive domain can lead to gender biased population policies. In many developing countries, policy makers show little awareness of the implications of their policies for women's lives. Hence the theoretical clarification will help to correct such policy

bias and give women due consideration. In the case of China where the state intervenes strongly on individual's reproductive behavior, such theoretical clarification is more important.

2.2 Previous studies on fertility behavior in China

Anti-natal population policies have been carried out in China for nearly three decades and fertility levels have experienced a dramatic decline. The determinants contributing to the fertility decline in China have been a topic of interest both in China and abroad. There is a large body of the studies concerning the impact of Family Planning vs. social economic development on fertility decline (Birdsall 1983; Poston and Gu 1987, Zhu *et al.* 1991; Yue 1989). Social economic development is believed insufficient to cause such rapid fertility decline and Family Planning Programs are seen as important contributors to such an induced demographic transition. The research around fertility decline has mainly been done at the macro-level by using aggregate data. These studies related social economic variables of certain groups of people to their fertility levels or fertility desires and suggest certain patterns of relation. They explained such patterns based on micro economic theories or demographic transition theory, or just show the pattern without explanation (Zhu 1991; Poston and Gu 1987; Yue 1989). Such aggregate level studies provide some useful hints and reveal certain patterns, but can not provide a clear picture of what happens at the micro-level behind these demographic dynamics.

It has been well recognized that in the post -reform period, the population control policy might not work as well as before due to the reduced control of government on individual people and the big difference between the state population requirement and rural people's reproductive preferences. How to reduce household fertility desire becomes an appealing topic for both researchers and policy makers (Zick and Xiang 1994). Based on the altruistic assumption, families have been seen as co-operative units with consensual reproductive preference and the decisions made at this level are assumed to be optimal for both the families and the individuals within it. Hence the final strategies to approach families' reproductive goals have same impact on husbands and wives.

In recent years, the impact of women status on fertility draws more attention from Chinese researchers (Zhu *et al.* 1991; Gu and Liu 1993; Liu *et al.* 1994; Zhang 1995; Zheng and Chen 1995). Women's "desired number of children" showed up as a key question in many fertility

surveys (Hermalin and Liu 1990). Women's education or other indicators have been related to women's actual fertility, or fertility desire. The studies suggest that women with higher education level tend to have lower fertility level without questioning women's decision power and men's roles in reproductive behavior (Zhu *et al.* 1991; Zheng and Chen 1995). In some cases, men's fertility desires were included in the survey, but have not been analyzed (Zheng and Chen 1995; Zheng 1995). The questions whether women and men have consensual reproductive goals, who controls the decision-making and what are the impacts of such decisions on women have not entered fertility studies within China.

Moreover, since the reproductive decision-making is not a purely individual or family domain in China, family reproductive decisions have to take the policy requirement into consideration. But the population policies have never been implemented without confronting resistance, particularly from rural society. The reproductive decisions can not be seen only as a matter of number of the children. Bearing the "extra" (referring to the child beyond the policy requirement) child may be at the cost of an economic penalty for the household, and may also be at the cost of women's health because of the risk of a forced family planning operation. Families, as the locus of decision-making, mediate the impact of population policy on husband and wife. Understanding the factors involved in the reproductive decision-making can also help us to understand the policy influence on women, which have been absent from the research.

2.3 An alternative theoretical framework: the bargaining models of household decision-making

The feminist critique on of the romanticisation on the domestic domain as a full caring refuge and the concern for intrahousehold inequality pose a serious challenge to conventional micro-economic theories and its analysis of fertility. Since 1980s, there is a growing recognition of the limits of the altruism assumption of new household economics and the role of bargaining and conflict within the family or household (Haddad *et al.*1997; Folbre 1986a). Research has shown that there is pervasive gender inequality, even violence within households in both developed and developing countries (Folbre 1986a, 1991; Sen 1987; Dwyer and Bruce 1988; Pearson 1996). The household arrangements for both production and reproduction, or for consumption and leisure are not

necessary formed by the consensus of all family members, and the final decision can be more favorable to one gender than another (MacDonald, 1993:12).

The theoretical questions raised by feminists can not be solved by only criticizing the old models. Opening the black box of the household needs alternative analytical frameworks. Concerning reproduction, the central question is **how the systematically inferior positions of women inside and outside the household affect the reproductive decision-making and women's welfare as a result.** Concretely, if there are different interests between the genders within the household, how does the household make their decision on the household arrangement, such as the intrahousehold resource allocation? Concerning fertility behavior, if husband and wife have divergent preferences, then how do they make their decisions and what are the major determinants for their decision-making power?

In order to capture the intrahousehold relationships, the theoretical challenge is to develop an analytical approach to identify the mechanism through which the households derive their decisions from divergent interests. Moreover, the reproductive behavior is not confined to the economic domain and decisions around reproduction are not only constrained by economic forces. The formation of women's and men's fertility preferences and making choices are also deeply embedded in the cultural norms. The models to capture the reproductive decision-making need to allow non-economic factors to enter into the picture. In recent decades, based on game theory, a set of bargaining models of marriage and family's decision-making has been prompted. Unlike the new household economics based on arbitrary altruism assumption, the bargaining models of household decision-making incorporates both co-operation and conflict of individual family members into the economic models to trace the intrahousehold relations. The bargaining models of household decision-making can be broadly divided into two groups: non-cooperative bargaining model, the models relying on non-cooperative game theory and the co-operative bargaining models, the model relying on co-operative solutions to bargaining among individuals (Haddad *et al.* 1997: 7).

Early attempts of the co-operative bargaining models are initiated by Manser (1980), McElroy and Horney (1978). They brought the tools of game-theoretic approaches into the household allocation to interpret the intrahousehold inequality and gender based power relations - the questions left

unanswered by new household economics. According to Manser and Brown, there are potential gains to men and women to form households. Gains from marriage result from the presence of household shared goods and from love and companionship, which must be specified in the individual utility functions, and requires reaching an agreement on the distribution of those gains from marriage (Manser and Brown 1980).

The basic argument of the co-operative bargaining approach is that within the household different members have heterogeneous utility functions based on their possible conflicting preferences and interests. All the individual household members seek to maximize their utilities, the decision-making is derived through bargaining and negotiation by referring to their independent threat points (the outcome of failing to reach agreement). The bargaining power of household members are the functions of their maximal levels of utilities outside the household boundary, which serve as threat points in determining an individual's bargaining power (McElroy 1990: 560; Folbre 1986a:18).

Since the classic co-operative model is the husband and wife bargaining model, the threat point has been specified by both Manser and Brown (1980) and McElroy and Horney (1981) as divorce. The early versions of this approach generally conceptualized the threat point in terms of the relative earnings and wealth of different members, such as "hypothetical unmarried after-tax marginal wage rate" (McElroy *et al.* 1981). The later developments along this line have gone beyond the conventional economic analysis and broadened the concept to include a range of parameters, termed by McElroy as "extrahousehold environmental parameters" (EEPs). EEPs determined by exogenous governmental and structural factors, such as an individual's access to resource outside the household, the social policy of income transfer, the legal system for property settlements, the marriage market and marriage institution, etc. (McElroy, 1990:578; Kabeer 1995: 4). For McElroy, the threat point is the withdraw from the household or divorce. So anything that makes an individual better off outside the marriage increases that person's share of marital utility by increasing his (or her) bargaining power. The distribution of well-being among family members depends not only on the prices and total family income, but also on individual family members' threat points, individual independent economic opportunities outside that family (McElroy 1981, 1997: 54). Feminist economist Nancy Folbre put forward these points by deliberately bringing a gender dimension into the analysis. She points out that many of the EEPs are gender specific,

therefore the EEPs should be termed as gender-specific environmental parameters (GEPs) (Folbre 1997, cited in Himmelweit 1998). Through such external threat points, the gender relations within the household are clearly situated in the gender specific social economic and political structure of the society.

The threat points of the co-operative model provide the analytical links between the intrahousehold relations and household dissolution and the links between the intrahousehold relations and extrahousehold social economic setting (McElroy 1990: 597). But this divorce-threat version of the co-operative model suffers from a credibility problem. The threat of divorce may not always be credible. McElroy himself points out that “ the co-operative models requires that the threat point represent credible threats. In the context of small daily decision, it is not credible for either spouse to threaten to leave the marriage. Ultimately only credible threats ensure that the co-operative solution agreement is enforceable” (McElroy 1996: 59). But such a limitation does not undermine the model’s power in explaining the long term “marriage cycle’s decisions, such as those concerning fertility (ibid.: 59).

Recognizing the credibility problems of the cooperative models, the noncooperative bargaining models have been also developed. Like divorce-threat bargaining model, the noncooperative models also treat marriage as a co-operative game. But the threat point of this game is not divorce but a noncooperative equilibrium defined in terms of traditional gender roles and gender role expectation (Lundberg and Pollak 1997:76). Within the existing marriage, a noncooperative equilibrium can be reached through a strategy in which each spouse takes the other spouse’s strategy as given. The traditional division of labor and responsibility suggests a “separate-spheres’ equilibrium in the household. Husband and wife take their responsibility based on the gender-specific roles, maximize their utilities and makes decisions within his or her own sphere to the constraint of their individual resource, productivity and preferences. Only minimal co-ordination is required. In this model, the division of labor is based on socially sanctioned gender roles. Husband and wife provide their contributions in their own sphere without explicit bargaining. Such a voluntary contribution equilibrium exists as the noncooperative default allocation and the internal threat point from which the two parties proceed their bargaining. Since the expected transaction cost for the reallocation is relatively high comparing with expected gain, husband and wife may prefer to remain in such noncooperative solution (ibid. 1997: 76).

In this model, one spouse treats the level of household public good provided by the other spouse as fixed and decides the quantity of his/her private good and the quantity of public good he or she will supply. So husband and wife's utilities are interdependent because of the joint consumption of public goods. The joint consumption is seen as an important source of gains of marriage, both spouses benefit from joint consumption of household public goods. In the absence of co-operation, the quantity of public goods and services will be less than the amounts that could be produced by **the individual contributions. In a stable bargaining environment and repeated noncooperative games**, the Pareto optimal equilibrium can be sustained by threat of punishment. The bargaining parties will not try to seek one period gain from deviating from the agreement to avoid to be punished by their spouse in the following period (Lundberg and Pollak 1996: 150).

For the noncooperative bargaining model, social norms influence women and men's well-being within the household by forming "proper" gender behavior of husband and wife, "self-evident way to -play"(Kreps 1990, cited in Lundberg and Pollak 1996: 151), which channel the behavior of marital partners to one equilibrium among many without explicit bargaining (Lundberg and Pollak 1996: 156). Thus, in the noncooperative models, the social norms and practice, such as gender notions around reproduction are endogenous to the models (ibid.: 152).

Both the co-operative and the non-co-operative models use a noncooperative solution as the threat point for bargaining. The difference lies in that the co-operative models use the external threat point which is individual utility outside the household and the noncooperative models put more emphases on internal threat point. But since individual rationality ensures that no one will accept less utility within household than she would receive if she or he withdraws from that household, the external treat point is valid for both co-operative and non-co-operative models. The co-operative and noncooperative bargaining models are not incompatible but complementary under the general assumption of existing divergent utility functions among family members and more than one decision-making agent within one household (ibid.: 154).

Although the bargaining approach originated from the economic model, it is possible to integrate institutional and cultural factors into the household bargaining analysis through the threat point decided by GEPs and by social constructed preferences of men and women or by the internalized "self-evident way to play". Along this line, Sen takes a further step and propose a co-operative

conflicts bargaining model which departs from standard economic analysis by explicitly internalizing the non-economic terms, such as socially constructed perception, gender dimension and social norms into the model (Sen 1987).

In his model, concerning the gender division, households face two different problems simultaneously: co-operation (adding to total availability) and conflict (dividing the total availability among members). Social arrangements regarding who does what, who gets to consume what, and who makes what decision is seen as the response to this combined problem of co-operation and conflict (Sen 1987: 13). Social norms and institutional factors affect the intrahousehold gender relations both by forming women and men's external threat point, in his terminology "breakdown" or "fall position", and by endogenous parameters such as "perceived interest", and "perceived contribution" etc. Household arrangements concerning gender division are the result of bargaining. The existence of many choosable collusive arrangements—each such arrangement being better for both persons than the breakdown position (the outcome of failing to cooperate), but there is difference among these choices. Some of them are worse than others for one party, but are better for another party than other choices. Since both parties are aware of the outcome of the breakdown position and the choice between any such collusive arrangements and the decision is a matter of co-operation. Shared interests and differentials between two parties lead to both co-operation and conflicts (ibid.: 18).

The solution of bargaining depends on a variety of possible influences, including the bargaining power of the two sides (ibid.:18). "The fear of the breakdown position would tend to govern bargaining process and strongly influence its outcome"(ibid.:22). Sen identifies three major directional features which are likely to influence the bargaining outcome:

Breakdown well-being response. This is related to the relative levels of well-being of individual family members in the case of breakdown of co-operation. If in the case of a breakdown, one person is going to end up in more of a mess than it appeared previously, that is going to weaken that person's ability to secure a favorable outcome. Personal breakdown position can be defined by the objective aspect of well-being, or perceived interests (ibid.: 22).

Perceived interest response. The perceived interest may affect the bargaining outcome in the form of choosing a solution based on received interests, not the level of well-being. If an individual's perception of self-interest are to attach less value to his or her own well-being, then the collusive solution tend to be less favorable to that person's well-being (ibid.: 24). The divergence of perceived interest with objective well-being allows for the possibility of the co-existence of a range of individual utility functions within the household, from purely selfish utility at one end to purely **selfless one at the other (Kabeer 1995: 5)**. The socially constructed hierarchy of interest and priority within the household, which have been widely recognized to favor the male over the female, are therefore endogenized in this model.

Perceived contribution response. When a household member is perceived as making a greater contribution to household prosperity, the collusive solution tends to be more favorable to that member (ibid.: 25).

Sen's model does not differ substantially from the co-operative bargaining model. The threat point, in his terminology "breakdown response", remain the general qualitative property of co-operative conflicts. But he introduced the concept of "perceived interest" and "perceived contribution" into the model, which are not conventional objective economic terms and are influenced by the norms, value system of specific cultural system. People perceive through custom and practice to have certain rights and responsibilities. Therefore in his model, the cultural and institutional factors affect the bargaining outcome both through the external breakdown position and through endogenous perceived interest and contribution.

Like all the theories, the bargaining approach has both merits and limitations. The cultural and social dimension of this approach gives this model both the advantage, which allow the non-economic variables to enter the economic model of bargaining, and the problems of identifying and measuring such culturally directed subjective perceptions, such as the "perceived interest" and "perceived contribution". As Sen points out the main drawback of the 'bargaining problem' applied to gender divisions is the formulation of the 'problem' itself. The perception of interest is neither likely to be precise, nor unambiguous and it is difficult to distinguish between the perception of interest and an objective notion of well-being (Sen 1987: 21, cited in O' Laughlin 1998).

The bargaining models of household decision-making have different versions and entail complex mathematical modeling of game theory. Recent developments along this line brought more social and cultural elements into the framework. Under the same general assumption, these different versions do not contradict one another, but are complementary. But removing the common preference assumption, and allowing multi-utility functions and multi-agents for decision-making within the model, make the modeling very complex. The quantitative analysis is highly demanding on data. This makes the model difficult to use in practice (O' Laughlin 1998: 13).

The bargaining models, both the co-operative bargaining models and the non-co-operative models do not explicitly deal with the decision-making concerning reproductive behavior and do not inform why different family members prefer a certain outcome, such as why husband and wife might have a different preference for children. But the threat point bargaining models allows for individuals to have divergent preferences, and hence opens up an analytical space for considering gender based interests and power relations as a dimension of household decision-making to provide new insights into the reproductive decision-making process. This framework gain importance with the increasing feminist concern with the gender inequality within the household. Concerning reproductive decision-making, the bargaining approach shows certain advantages to take a gender dimension into the analytical framework.

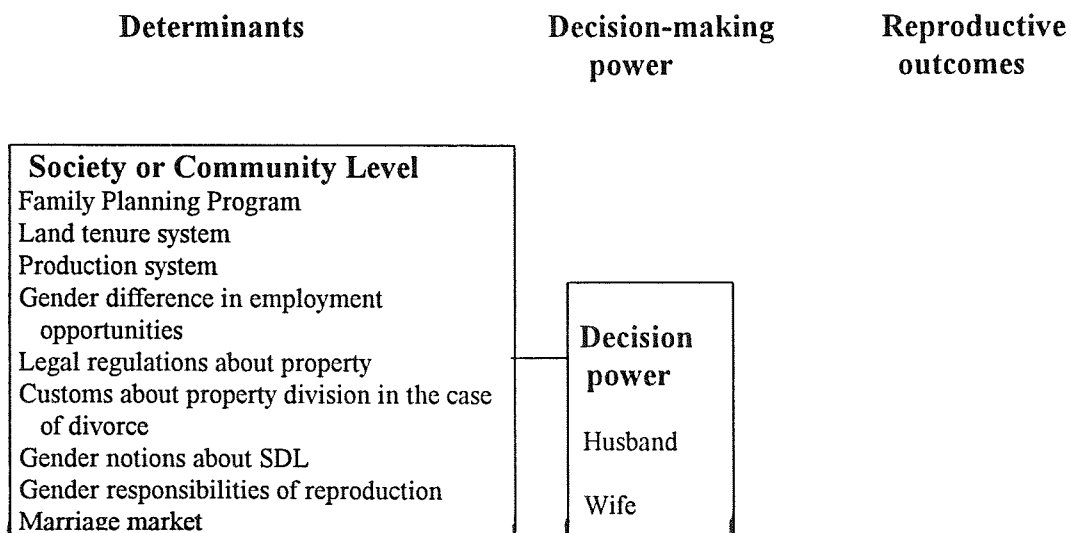
First, comparing to other household arrangements, reproductive decisions are more influenced by culture and custom, such as husband's and wife's perceived responsibilities to reproduce family line. Not any standard economic model can give satisfactory explanation about it. But in the bargaining model, social norms and practice enter the bargaining sphere and have an effect on the distribution of women and men's well-being within the household. It is possible to look at the impact of cultural factor on decision-making. For the noncooperative bargaining model, social norms may influence women and men's well-being within household also by forming a "proper" gender behavior of husband and wife, hence to channel the behavior of marital partners to one equilibrium among many without explicit bargaining (Lundberg and Pollak 1996: 156).

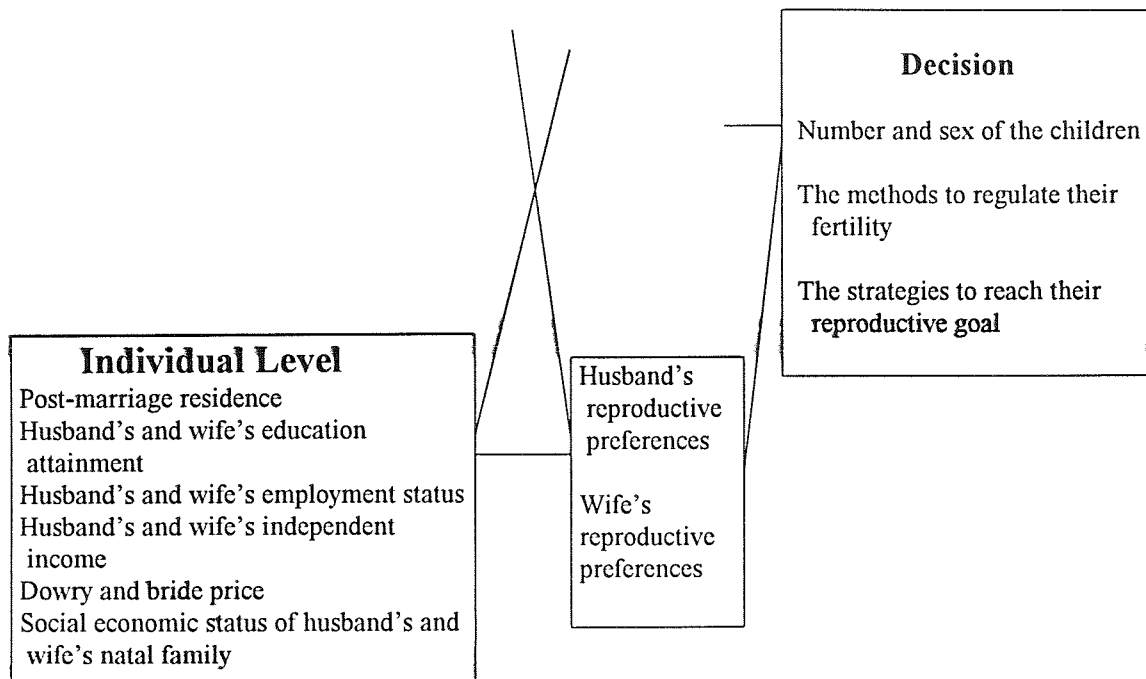
Second, this approach permits to investigate the impact of structural gender inequality at society level on gender inequality within the household. The gender relations within household and outside the household are connected. The power within the household is seen as a result of an

asymmetrical position in the economy and society beyond the household (Himmelweit 1998). If the gender relation within household is our concern, then the alternatives for women and men's life, their well-being beyond the household boundary, including the marriage market and social norms and various institutions will matter for each party's well-being within the marriage. Folbre points out that "Because major differences in bargaining power derive from objective differences in the economic position of men, women, and children outside the family, this approach leads rather inevitably towards a more structural analysis of patriarchal inequalities"(Folbre 1986a). This features give this model an important advantage to consider gender sensitive social policies.

Applying bargaining models to family reproductive decision-making, the analytical framework can be summarized as in Figure 1. In the model, the husbands and wives' decision-making power are determined by factors at both the macro levels and the micro level. These factors together determine the men and women's independent well-being and husband and wife "proper" behavior. At the macro level, structural factors frame the general gendered opportunities structure opened to individual women and men. At the micro level, the family and individual characters further differentiate the husbands and wife's independent well-being and gender notions among families. The individual characters are the reflection of structural factors. The general pattern of individual husband and wife's characteristics are decided by structural factors, but gender relations are not the same among families due to the existence of differences in individual husband and wife's social characteristics. These structural factors (including gender ideology) and individual factors work together to form the husband and wife's decision-making power and have final impact on reproductive outcome, which include both the number and the sex of children and the methods and strategies chosen to reach their reproductive goals.

Figure 1 Bargaining Model of Reproductive Decision -making





The husband and wife's reproductive preferences are put in the dotted line box because these factors are exogenous to the bargaining model. Exogenous to the model does not mean their preferences are independent of the societal and individual factors. The final reproductive outcomes are the result of negotiation between the husband and wife based on their reproductive preferences and decision-making power.

Husband and wife's decision-making power is conceptually important to this model, but not easy to measure directly. There are two possible methods to measure indirectly. The first is through identifying women and men's perceived power in making such a decision; and the second is through comparing their reproductive preferences and outcomes. Both these two methods concern personal perception issues and pose a challenge to the conventional large-scale demographic data collecting method. In the last chapter, I will come back to the data collecting issue of applying this model to reproductive decision-making.

In the following two chapters, I will use this conceptual framework to guide my analysis by identifying qualitative relations between social economic institutions, gender notions and husband and wife's independent well-being and their "proper" behavior, hence their decision-making power in contemporary rural China. Sen points out that household decision-making "is far too complex and basic to be 'resolved' by any kind of simple model"(Sen 1987: 4). By using bargaining framework, this paper only tries to take one step towards drawing the whole picture.

Concretely, I attempt to use this framework to show how the social economic setting and traditional gender norms have reshaped the individual men and women's "proper" behavior and their independent well-being in general, and how population policy and its implementing features have shape men and women's "perceived" reproductive responsibilities and option structures in particular. Marriage and family institutions, Family Planning Program, men and women's property rights, the sexual division of labor, and social gender norms relating to these aspects are considered as key parameters in shaping the spousal internal and external threat points for their reproductive decision-making.

CHAPTER 3: RURAL ECONOMIC REFORM AND ITS IMPLICATIONS FOR GENDER RELATIONS WITHIN THE FAMILY

Based on the bargaining framework which I described in chapter 2, gender relations within families and husband and wife's relative bargaining power are influenced both by structural factors and cultural factors through determining their gender differentiated independent well-being and "proper" gender roles and responsibilities. The rural economic reform which mainly intended to increase economic efficiency has not only led to substantial changes in social economic structures, but has also redefined gender notions. All the changes brought about by the reform policies have occurred in the context of existing gender norms, practice and social institutions. The gender relations within families in contemporary rural China are the result of a complex combination of history and the new reality. New features of gender relations are subject to both the past pattern and to the new social economic setting as the process of continuity and discontinuity of the history.

Following I will briefly summarize the major features of economic reform with the reference of pre-reform period as the starting point. Then I will examine the impact of the contemporary social economic setting on women and men's independent well-being and on their "proper" gender behavior. Emphasis will be given to husband and wife's access to land, property right, and sexual division of labor, employment opportunities and family and marriage institutions. The traditional gender relations within the family, the respect of proper gender roles and responsibilities, which are deeply embedded in the patriarchal family institution, will also be briefly reviewed.

3.1 The major features of rural economic reform

The most important change brought about by economic reform in rural China is the introduction of the household responsibility system and the related de-collectivization process. The changes in other institutions are closely related to it. Since the collectivization in the late of 1950s, three levels of administrative system were set up in the rural China: the commune, the production brigade and the production team. All the means of production belonged to different levels of the collective units. The land belongs to the state, but the collective units have the users right. The production teams were the basic unit for organizing agricultural production and accounting. All the laborers work for a production team and earn the workpoints. They were given certain work everyday by the production team director according to their skill, age and sex etc. They needed to ask permission from the director of the production team for leaving from work. Remuneration was, in cash or in kind, based on the laborer's total workpoints. Dependent family members could get a certain amount of grain by deduct equivalent amount of cash earned by the laborers of their families. The amount of income and grain that each family could get, depended on the agricultural performance of the production team and each family's total workpoints (White 1992: 236).

The collective units provided basic needs, food, education, and health care for peasants. Peasants could expect to get help from the collective unit if they faced some difficulties (White 1992: 237). The "Five Guarantee System" provided the basic needs for the old people when they lost their labor force and have no children to depend on (Zhang 1998a: 109). The collective units at different levels also controlled the limited job opportunities for young people in non-agricultural sector and the opportunities of entering higher levels of education. Under such a system, families were not the production unit, but the basic unit for consumption, property holding and reproduction.

Since the end of 1970s, rural China experienced a gradual de-collectivization process. The household responsibility system was introduced and spread to all the rural areas. Since the early time of 1980s, the rural administrative system also shifted to a new system: township - administrative village - natural village. Land was contracted to each family based on the number of persons or number of labor of the household or on both. In the initial stage, it was designed as that any population change of the family due to birth or death, exit of a daughter or the entry of a wife were followed by an adjustment of the family land holdings. But it was soon recognized that frequent readjustment would reduce the family's incentive to invest in land and long-term production and lead to overexploitation of land and a management problem (Jacka 1997: 43-44). In 1984 the central government stipulated that the contract term for land could be prolonged to 15 years (Huang 1995). Every two to three years, the villages make minor adjustments for land according to population change of each family. But this modification in policy did not eliminate the problems mentioned above and as many villages have distributed most of their arable land, redistribution became very difficult (Xu 1997: 58). Different land tenure schemes have been developed in different regions. Some regions follow the policy of "periodical adjustment of land according to family population change". Other regions do not redistribute their land, but follow the "fixed land policy" which means villages do not increase family land if family's population increase and do not reduce their land if family's population decrease"(ibid.: 59).

Under the household responsibility, families became the basic unit of production, consumption and accounting. The living standard of families mainly depends on the agricultural performance and other sideline activities of the families and the remittance from the migrant labors. With the deepening of the de-collectivization process, collectives have retread from providing public service. Peasants need to pay user fees for medical care and increased tuition fees for children's education (Zhang 1998a). After reform, all the aspects of rural people's life are organized based on the individual family, income generation, division of labor, old age support, contingency coping, conflict solving, etc. Families became a much more significant unit for rural women and men's life, but with new gender features. The relationships between family members, both between husband and wife and between generations, and the relationships between the newly formed families by marriage with their natal families, have not remained as the same as in the collective period. The micro reproductive decisions are made in the new intermediate context with different gender features.

3.2 Sexual division of labor and women's perceived responsibilities and contributions to families

Until the early time of this century, a married women was referred to by her husband as “the person inside my home” (“nei ren” or “wo jia li de”). An old saying the “men take care outside, women take care inside” reflect the traditional notion of a sexual division of labor. The culturally defined value of footbinding for women helped to retain such a division. This division of labor was challenged both ideologically and in practice since the founding of new China. Collectivization and the need for women labor for state building provided the structural conditions for women stepping out of their traditional sphere. In rural China women were encouraged by the state to participate in the agricultural production, rural infrastructure construction and finally became obliged to work in the production team (Croll 1985; Song 1993). The old gender ideology that a good women should restrain her sphere to the home has been broken up.

Before economic reform, in rural communes, both male and female laborer work for the collectives and earn workpoints. How many work points a laborer could get per day depended on the workload and the evaluation of the laborer's ability. Usually a standard working day would be 10 work points, so that for the tough work a strong male laborer can get 10 points and a young female laborers may get 6-8 points (Zhang Xiaoquan 1997; Salaff 1973: 114; Kelkar 1988: 134). But usually women and very young male laborer and old male laborer were regarded as half labor and got a light work load and earn less work points. The distribution unit was the family. The family's total amount of distribution of income including grain and cash were based on the total workpoints of the family members, but individual payments were listed separately. The income and grain of the family members was added together and handed to the family head. Women's economic contribution to the family were both measurable and visible through the public measuring process, although their contribution to the families might not be identified as much as men. However, engaging in the collective production did not change women's roles in households. Advocating men to share housework was not as successful as encouraging women to work outside the household (Salaff 1973:111). Women “naturally” kept on taking care of the entire traditional domestic chores: cooking, weaving, mending, cleaning, and taking care of the young and the elderly.

Since the introduction of the household responsibility system, families regain the right to make arrangements for their labor. The average size of land per rural farming family is very small. On average, it is only 9.2 mu (0.61 ha) in the mid 1980s (Huang Qinghe 1995). Labor is redundant for agricultural production. Releasing the restriction on other economic activities made it possible for rural families to diversify their family's economies. Non-farm economic activities, such as working in the township or village, or private enterprise or running some business or work in the urban areas as migrant laborers, gained increasing importance in total family income. Division of labor became necessary to increase the family income. But under the restriction of shifting in permanent residence from the rural to an urban area, most rural migrants are temporarily based in the urban areas and go there without their families. Rural labor can not accomplish their employment transformation from rural to an urban areas completely. Rural families do not want to give up their land. Even though growing grain on small plot of land is not profitable at all, they will retain some labor to engage in that in order to keep the right to contract the land for security reasons. And the restriction on the free transformation of land, make it problematic and unpredictable for the families who want to expand their production scale and specialize in agricultural production.

Under the above conditions, the division of labor has not only been achieved by division among the families, but mainly takes the form of sexual division of labor within families. In order to increase economic income, most families divided their labor in subsistent agricultural production (including sideline) and non-farm activities. A survey conducted in eight provinces in 1989 show that 95% of the rural households that operate a business also undertaking farming activities (including gardening, animal husbandry, fishing and fielded crop) (Entwisle *et al.* 1995).

The effects of economic reform on gender inequality, particular on the sexual division of labor has drawn a lot attention from researchers (Jacka 1997; Zhang 1998b:194; Entwisle *et al.* 1995; Taylor 1988; Wolf 1985). Some argue that the family-based commodity economy has increased the domestication of women and obscured women and men's economic contribution to the family. Many researchers show that there has been a tendency of women's concentration in farming and home chore (Zhang 1998b; Gao Xiaoxian 1994; Jacka 1997; Entwisle *et al.* 1995; Taylor 1988; Wolf 1985). The factors that contribute to such a trend are complex. The family's strategies for survival and advancement are influenced by gender norms and different opportunities opened to men and women. The actual arrangements may involve both co-operation and conflict. The

traditional norms influence gender division of labor and women's perceived responsibility in reproduction which were not challenged effectively in the collective period (Entwisle 1995). And since de-collectivization, collective social services have been removed gradually; women have been forced to become the only source for help the weak, the sick, the elderly, and the young (Dalsimer and Nisonoff 1987). In such a situation, increasing economic opportunity outside their home may be not very useful to women who are burdened with these tasks.

Since the 1980s, the appeal for women to return to the domestic domain and restore the traditional sexual division of labor in mass media reflects the intensified conflict in making decisions on the gender division of labor within families (Nijeholt 1991). The old saying "men take care outside, women take care inside" is used by modern men to retain women in the domestic domain and more subsistent agricultural production to maximize family income and security. The roles of social expectation on men and women's "proper" sphere have been redefined in the economic reform process and provide ideological ground to bargain for a solution. The intra-family gender division of labor has been restructured due to the combination of the shift in the new structural system and consolidation of traditional gender roles assigned to men and women.

It should be remembered, that across China there have been some variations in patterns of sexual division of labor. The existing trend of agricultural feminization can not be generalized as the unique model of sex division of labor for all the families and as having same prevalence in different regions with different social economic structure hence opportunities. Both individual features and structural factors can make some difference at micro-level or regional level.

Engaging mainly in subsistent agricultural production and reproduction, women's perceived economic contribution became much more invisible than before and their perceived responsibilities in reproduction has been enforced. That sons and male laborers are given higher value than girls and female labor should not be a surprise to us in such a situation. Since women's access to land, the key means of agricultural production, is subject to their marriage status and is somewhat problematic under the patrilocal post-marriage residence and current land tenure system, the access to non-farm employment opportunities are important for women's economic independence. The feminization of agricultural production and women's domestication can place women in vulnerable positions in terms of their independent well-being. Compared to women, men have more

opportunities to earn cash and have ensured user's right to land independent of their marriage status.

3.3 Marriage and family system and women's property rights and access to resources

In China, both in past times and in the contemporary period, women's poor access to family property and productive resources have been deeply rooted in the patriarchal, patrilocal and patrilineal family and marriage system. Women's low and inferior status within families in Chinese history have been widely recognized by researchers (Stacey 1983; Wazir 1987). The patriarchal, patrilocal, and patrilineal family and marriage system and foot-binding practice make Chinese women a unique example of gender oppression. The system typically followed patrilocal post-marriage residence which means that the bride moves and lives with her husband family upon marriage; family name was carried along the male line; the senior male family head had dominant rights over other family members. Under such a marriage and family system, women were not independent persons in the society. Their contacts with society had to go through their husband, father, sons or male relative. Their whole life were identified as someone's daughter, wife and mother. For these three stages of their life, they were supposed to follow three types of obedience: to their father before marriage; to the husband after marriage; and to the son after the death of her husband.

The typical patrilocal post-marriage residence system mean that married man and woman do not form their own family, but a bride enters and becomes a member of her husband's natal family. Therefore, a new wife with different surname is an outsider to the village and to the whole family. Separation from her familiar environment and network and the restriction on her contact with the outside world mean she is somewhat isolated and vulnerable. Her formally accepted position in her parents-in-law's family can only be achieved after she gives a birth to a child, particularly to a boy. Continuity of the family name by having a son is the most important responsibility for the young couple, particular for the wife. Even today the following old sayings are well known in Chinese society: "There are three unfilial behaviors, the most severe unfilial behavior is to have no son".

Both the newly married couple and her husband family's were eager to see the birth of a son. The newly married wife needed to give birth to son to please her parents-in-law and to enhance her

status in her new home, the husband and parents-in-law want to accomplish the continuity of the family. Sexual behavior was closely related to this reproductive responsibility and was not the private business of the young couple, but business of the family and a concern of the parents-in-law. Before 1949, if a woman could not give birth to a son, it was regarded as quite reasonable to divorce her or get a concubine. In such a situation women had no way to object, even no right to show their jealousy in the case of her husband taking a concubine (Zhan 1996: 277). A woman's status in the family is closely related to whether or not she has sons. Therefore, giving births to sons is her most important gender responsibility and in her personal interest.

Under this marriage and family system, once a woman got married she had little chance to get rid of her marriage out of her own initiative. "A married daughter is splashed water, can not be taken back". Whatever treatment she may suffer, a wife, in general had no right to seek a divorce. There were few socially accepted reasons for women to divorce their husbands. Like the old saying expressed "if you married a dog, live with that dog; if you married a chicken, live with that chicken". Only under the conditions of her husband beating or killing one of her family members or having illicit intercourse with her mother, she could divorce her husband (Zhan 1996). But social restrictions on the husband were different. Derived from Confucian classics and even sanctioned by the law of the country, under seven conditions men could divorced their wives: disobedience to the husband's parents; barrenness; adultery; jealousy; incurable disease; excessive gossip; and theft (Zhan 1996). For a woman, divorce meant she had to return to her natal family and was expected to marry out again.

Re-marriage for a divorced woman was much more difficult than a divorced man because of the value attached to women's virginity. Divorced women were considered as second class women, their value in the marriage market was much lower than that of other women. If they did not come from very rich family, in most situations they could only expect to re-marry with men from poorer families or men with some defects. The patrilocal marriage and patriarchy and patrilineal family institution make that women during their whole life do not have their own home. They are temporary members of their natal family and outsiders to their husband's family. The subordination of daughters-in-law in traditional China has been well-recognized (Yang 1959; Zhan 1996).

Under such a marriage and family institution, a women had no independent income or property except some dowry, and her access to resources attached to her relation with her husband or sons. Land was the key resource for rural people's living. Inheritance to land was patrilineal, it was not possible for women to own or inherit land in their own right. They would normally lose all the access to property in the case of divorce, even though they had contributed their labor since marriage. They had to leave the home with nothing. But the situation for men was different. **If the marriage broke up, men could continue to stay in the same house with all the family property and live there with his new wife if he remarried.**

Since the founding of socialist China in 1949, the unequal gender relations in Chinese society have undergone substantial changes. But male domination over female is deeply embedded in traditional culture and the patriarchy, patrilocal and patrilineal marriage and family system in Chinese society. The traditional gender notions attached to this marriage and family system still exert strong influence on women and men's "proper" roles, responsibilities, their access to resources and their property rights. The social relations of gender in contemporary rural China are not only the result of new social economic policy ("extrahousehold environment" factors), but also of traditional cultural inheritance

Since 1949, the government has made great effort in marriage reform, forced marriage and keeping concubines has been prohibited. **Women's right for divorce are guaranteed by marriage law.** After 40 years of a socialist campaign for gender equality, there have been some adjustments in this traditional marriage and family system, the patriarchal authority of the family head is reduced to some extent, but the patrilocal post-marriage residence has not really been challenged. Although uxorilocal marriage historically existed in most areas of China as a solution for the families who have no son, and has been advocated by government, particular since the introduction of the "one child" population policy, patrilocality is still persistent as the dominant form of post-marital residence. A survey data which cover 4 provinces of China show that from 1950s to the late of 1980s, there is little change in the total percentage of patrilocal marriage. During the whole period and in the rural areas of 4 province, namely Hebei, Shaanxi, Shandong and Guangdong, patrilocal marriages remain at high proportion of around 80%. Among them, the proportion of two years co-residence with husband's parents also remain very stable at a relatively high level (Lavelly and Ren 1992). Patriarchy, patrilineal, and particular patrilocal post-marriage residence do not exert impact

only at the ideological level. Intertwined with other social institution, they can have an important influence on women's and men's independent well-being.

In the collective period, patrilocal marriage meant that when a woman got married, she would move to her husband village, and automatically became a production team member of her husband's family and was excluded from the production team of her natal family. A couple could form a joint family with the husband's parents (typical patrilocal residence) or nuclear family, but they lived in the groom's village. Because most rural people's lives remained at a subsistent level, it was quite difficult to build new houses. Most new couples had to live together with the husbands' families even though they may have a separate family budget and cook and eat separately. Married women could only work in her new home's villages to earn workpoints.

In the rural area, land and housing were most important resource for production and living. Collectivization of land reduced the power of the family head to control over the young generation. Since all land belonged to the collective unit, women's access to resources was through their labor and was guaranteed through their right to work in the production team. Rural women and men could join or leave the production team because of marriage, non-farm job opportunities, and join or return from the army and be recruited by higher vocational school, colleagues and university. People could not keep access to land if they left the production team due to the above reasons. Since all land including the plot for building a house belonged to the collective unit, rural families did not have real property right for the houses, but had user's right for the houses they built. They could apply to the collective for a piece of plot nearby their house to build a new house for their son if they planned to marry. They could also rebuild the old house or build more rooms attached to their old house. The house could be inherited through the male line if they had male descendant, but they could not sell out their house.

In the case a woman became a widow, she could continue to live in the same house. If she was young, she was expected to return to her natal family and likely to remarry and move to her new husband's village (Salaff 1973:109-110). She could not claim any valuable property from her former marriage, such as the house, which would belong to her parents-in-law's family even her family had divided from her parents-in-law's family. But if she had reached senior age and had a son, she was likely to continue to live in the same family and house(ibid.:109-110). In the case of

divorce, unless she was aged and had an adult son with whom she could live, she would return to her natal family. The house she lived in would be left for her husband. In both cases of widow and divorce, if she returned to her natal family, she was eligible to become a member of the production team again. Children, in particular the male children usually stayed with the former husband's family. When a divorced or widowed woman came back to her natal village, she did not have the right to apply for a piece of land to build a separate house for her or her children from her natal production team. She had to stay with her parents or brothers and was expected to marry out again. Her return could make the living condition of her natal family worse off. If her married brother also lived in the same place, she may not be welcomed by her sister-in-law. As a widow or divorced daughter, her position in her natal family is not so "legitimate" according to the custom. She could be pushed to accept a non-desired marriage.

The patrilocal post-marriage residence has been "inherited" by the post-reform period, but with some new features. As in the collective period, rural families can rebuild, extend, or build a new house for their sons' marriages. But after the economic reform, with the significant increase in income, more and more rural households can afford to build a new house for their son's marriage. This allows more new couples to set up their own families instead of joining their parents-in-law's families. Having a new house has become a precondition of some women to agree to get married (Zhang 1998a). Older generations tend to adhere to more traditional gender norms than younger ones and have a higher aspiration to have more children. Living separately from the parents-in-law may lead to less influence from them.

In the post-reform period, land tenure systems have become more diverse and dynamic and there is no national law regulating land property rights, user's right and land transaction. Household responsibility combined with patrilocal post-marriage residence make women's access to land and other resources more complicated and problematic in all forms of marital status: being married, divorced or widowed.

In the case of marriage, when a newly wed woman changes her official residence to her husband's village, she loses her access to land in her natal village and is entitled to get a share of contract land from her husband's village within 2-3 years when the village makes the land adjustment. But in reality, she may become landless for a longer term since a village redistributes its land only

periodically. This waiting period can be different from village to village. Women's legal entitlement to land is subjected to different local regulations in different regions. In many regions, contract terms for land have been extended to more than 15 years, and most of the land has been distributed to individual families. In addition, different form of land transference have been taking place, it is becoming more and more difficult for a village to redistribute land. Many villages start to follow the "fixed land policy". In regions where non-farm economic opportunities are limited, land is still the most important resource for living, and a landless position can have detrimental impact on the family economic status and women's position in the family. It is reported that in a village conducting "fixed land policy" in Sichuan province, the following had become a common saying: "You do not have any land, so for what reason do you still want to eat and dress decently?" (Xu Ping 1997: 61).

In the case of widowhood and divorce, women's access to land in her natal village is even more problematic when she returns to her natal village. If her natal village has not yet taken back the land from her natal family, she is entitled to that land again. But if the village has reclaimed the land for other use, such as redistribution, she may face difficulty in getting land again due to above reasons and the expectation she will remarry soon. But the prospect of remarriage for divorced and widowed women are not optimistic due to the unchanged traditional gender biased value of a woman's virginity.

Since economic reform, rural families can accumulate private property assets including savings, durable consumption goods and means for agricultural production and household run businesses. In the case of divorce, women have to move out of the house. Her right to bring valuable family property with her is not sanctioned by traditional custom and there is no national legislation to make concrete regulations about the two parties' property rights in the cases of divorce and widowhood.

Under such conditions, in the case of divorce, men do not lose their right to use their own share of land and it's also possible for him to keep the user's right of his divorced wife's land for some period. He tends to get most of the family property. The social stigma attached to a divorced man is much less than that attached to a divorced woman. His prospects of getting married again are not greatly reduced because he is a divorced man. The major economic cost of divorce and

remarriage for men are marriage expenditure and the bride price which are believed to show a significant increasing trend since the economic reform (Jacka 1997; Zhang 1998a). But the higher expenditure for men's marriage can not be simply considered as a favorite external condition for women. In such a case, the breakdown position may take the form of divorce, but a case of domestic violence when conflict can not be solved through bargaining and if there is no effective legal or customary protection for women. It was reported that in the early 1990s, over 90% **husbands in the rural areas habitually beat their wives** (Beijing Review 15.11.1993, p.18, cited in Pearson 1996). Severe domestic violence has also been reported (Jacka 1997, Xie 1992). The social economic dependency of wives on their husband and the difficulties of seeking redress, we have discussed above, should be considered as the one of the important reasons for its prevalence(also see Honing and G. Hershatter 1988, cited in Pearson 1996).

But women are not passive victims in the process of reshaping gender relations. They also develop their strategies and take the new opportunities in the changed social structures to help themselves to enhance their position within their families. Under the entire social constraint, women are not able to completely challenge traditional family and marriage easily, but they can make adjustments within it. Various strategies have been taken by married women. Married women may try to keep their relations with their natal families to enhance their security. The relation between married daughter and her natal family have been attributed new features. Although most newly wed women move to their husband's family formally, in the household responsibility system, married women have more freedom to visit their natal families. They can join the production activities in their natal families. Field studies have reported that married daughters do not only visit their natal family very often but also live in their natal families from time to time in the early years after marriage (Zhang 1998a:127-128; Judd 1994). Since the household became an independent economic unit, married women can make more contribution to her natal family, join economic activities or even create economic co-operation between her family and her natal family. The increased prevalence of a small intermarriage circle not only makes such contributions and co-operation possible, but may also be the result of such desire. Either joining her natal family's activities or create co-operation between her family and her natal family can increase a woman's independent economic security.

Another adjustment in post-marriage residence initiated by women is directly related to their access to land. Some women take the strategy to maintain the basic form of patrilocal post-marriage

residence, but make a less visible but important change. They move to their husband's villages upon marriage and form their families there, but do not change their official residence after they get married until the contract land is adjusted in her husband's villages (Zhang 1998a: 128). By taking such a strategy, they can keep their land share in their natal villages. They can join their natal family's agricultural production and set up very close economic relations with their natal families.

3.4 Conclusions

The effects of rural economic reform on gender relations have drawn some attention in the academic field. Some scholars suspect that the household responsibility system restored the gender oppression within the family which existed before the collective period and reinforced the power of men over women and the old over the young within household (Davin 1988; Robinson 1985). The All-China Women's Federation (ACWF) claims that reform enhances women's status by providing more choices for women (ACWF 1993, cited in Zhang 1998b: 193). Others argue economic reform is more likely to reshape, rather than restore the features of old gender inequality (Zhang 1998a). The findings of this research tend to support the latter argument. The key structural changes have exerted complex and dynamic effects on gender relations within families by redefining "proper" gender behaviour and shifting individual women and men's independent well-being, and hence their threat point for bargaining.

In both the collective and post-reform period, the traditional marriage and family system has not only functioned at an ideological level, but has significant gender implications, which need substantial policy attention. Under the current socio-economic settings and marriage and family system, women's property rights and access to resources are problematic. This can have important impacts on their independent well-being hence their threat point for bargaining. If a woman gets married and moves to her husband's villages, her access to land is not guaranteed by current land policy. She may become landless for a short period or even long term. After marriage, if the co-operation between her and her husband fails, divorce is most probable result. In the cases of divorce and widowhood, there is no clearly insured legal right for women and the children under their guardianship to have access to land and housing, the key resource for production and living both in their natal or in her husband's village. Women's entitlement to family property and resources is closely attached to their marriage status. In all form of the marital status, women face

the risk of being denied their entitlement to resources. Men's access to these resources is not threatened by marital changes. In the case of divorce, men tend to keep the household property. The combination of current marriage and family system and social economic and legal structure continue bolster the husband authority and the wife's insecurity.

The new pattern of sex division of labor within the family means that women's are participating **relatively less in non-farm and cash earning employment opportunities. This further reduces** women's alternative living opportunities outside their current marriage. The traditional notions concerning women and men's "proper" responsibility, in particular women's unchallenged roles in reproduction roles influence for such a division. Men's calls for the return of the traditional sexual division of labor reflect the existing conflict and the importance of gender notions in bargaining for a solution. In most of the cases women become the losers of such bargaining.

The current social norms are still discriminating divorced women more than men. The chances of having a reasonable second marriage for divorced men are bigger than for divorced women. Further more, the divorce may not only be the result of failure to co-operate. Domestic violence may be another form of threat for women. The prevalence of wife beating may to some extent reflect **woman's lack of alternative life opportunities and lack of effective legal intervention in such behavior.**

The systematic empirical data concerning this issue are still very limited. It is too early to make a conclusion on the general effects of reform on gender relations. But it is quite clear that although women have figured out some strategies to protect their interest, new land tenure system intertwined with current marriage and family institutions, have exerted negative impact on women's access to resources and their entitlement to the most important family property-housing and land. Hence this needs to be addressed by social policies. Some of the detriment gender effects should be seen as the intertwined effects of existed gender norms, marriage and family system, the household responsibility system and lack of intervention of social policies or legislation than considered only as the result of household responsibility system. The lesson can be drawn here is that any social economic policies are implemented in the existed gender ideology and institutional structure, and may exert intertwined effects on gender relations. Policy makers should be sensitive to the gendered nature of existing structural, social norms and practice. Under the current situation,

in order to emancipate women and to improve their bargaining power within families, there is an urgent need for concrete gender sensitive policies to protect women's property rights for land, housing and other family property, particularly in the case of marriage formation and divorce and widow settlement.

CHAPTER 4: POPULATION POLICY AND ITS IMPACT ON WOMEN'S REPRODUCTIVE CHOICES

Population control policy has been carried out in China for more than 20 years. The basic premise of the policy has remained unchanged. Fertility should be controlled and remain at a low level to check the population growth in order to speed up economic growth. Government intervention has been thought to be necessary to control individual reproductive behavior in the interest of common good, at least in terms of long term interest. In order to achieve this demographic goal, intensive Family Planning Program has been implemented by Chinese government at countrywide level since the beginning of 1970s.

Total fertility level in China at the end of 1960s was nearly as high as 6 (Chen 1985:145). After one decade of the Family Planning Program, fertility level had been reduced to a very low level comparing to other developing countries. Total fertility rate dropped to 2.7 in 1978 and declined further afterward to little above the replacement level at the early 1980s, and remained at a low level in the 1990s(Feeney *et al.*1989: 305; Zhang 1998a: 44). Such a rapid fertility decline in developing countries is unprecedented and has draw a lot of attention at the international level. Although some researchers argued that social economic development in China has contributed to fertility decline (Poston and Gu 1987; Birdsall *et al.* 1983), there is no doubt that the population policy played a vital role in such rapid demographic transition. The population control policy in China has been considered very successful in terms of its effectiveness in achieving the state's demographic goal, reducing fertility, and hence population growth. But at same time, this program remains most controversial in terms of its influences on women. Its demographic success has been widely criticized by human right and reproductive health advocators for its violation of individual reproductive rights and women's health (Aird 1990; Banister 1987; Davin 1990). Strong state intervention and its implementing features have significant influence not only on the aggregate

fertility level of the population, but also on the micro reproductive decision-making process and outcome. In this chapter, I will first briefly illustrate the major features of the Chinese population policy and Family Planning Program, and then examine its impacts on individual women's reproductive choices.

4.1 The evolution of the population policy

First stage: "Later-sparsar - fewer" population policy (1970s)

The early effort of advocating for family planning in China can be traced back to the early 1950s and 1960s. But the countrywide intensive population control policy started from the early 1970s. In 1973, the State Council set up the Leading Group for Family Planning, which was to be responsible for carrying out the Family Planning Program countrywide and instituting a more comprehensive policy to limit fertility. The dominant theme of the policy in this period was "later-sparsar - fewer" birth. The word "sparsar" advocated a four-year interval between births, "fewer" advocated having two children, and the "later" encouraged later marriage and giving birth at a later age (United Nation 1989: 39).

At this early stage, the delivery and service of contraceptive was built into the primary health care system based on China's government subdivisions. The primary health care system was based on the county - commune - brigade three level system under the leadership of the Ministry of Health at the national level and Health Bureau at provincial level, prefecture level and county level. There was the Leading Group for Family Planning Program from the national level until the county level, which provided the special funds for family planning service, but family planning service was provided through the original primary health care system. The lowest level of this three-tier primary health care system was the brigade health clinic, staffed by one or two barefoot doctors, responsible for primary health care and contraceptive services, and to accompany people, usually women to the commune hospital for birth control operations (Chen 1985; World Bank, 1983). At the brigade level the Family Planning Program was supervised and coordinated by the brigade cadres, particular the cadres of the Women's Federation. The barefoot doctors and commune hospital doctors were trained and supported technically by the County Family Planning Office and the costs of family planning services were also financed by County Family Planning Office (Chen

1985:135-137; World Bank 1983; Davin 1985:45). Through this system, modern contraceptives were available to rural Chinese people for the first time.

In this period, birth control efforts were intensive with an emphasis on raising people's consciousness for population problems and the necessity to reduce fertility. Under the central planning administrative system, the population control policy is quite effective. In order to avoid to be considered as "backward", individual families had to take the government advocacy into consideration. Although there were some over-enthusiastic cadres who tried to persuade couples to take responsibility to follow government recommendation strongly, generally speaking in this period the individual couples could still make their final choices in deciding whether and when to have a child and which contraceptive methods to use. Physical coercion did not used to push couples to accept contraceptive methods. But it was from this early stage that women were gradually expected to take the responsibility for family planning. Most of the contraceptive methods issued in rural areas are women based (Chen 1985:139-142). Men's expected responsibility in family planning is mainly supporting their wives practicing birth control.

Second stage: "One child" policy and modification (1980 - now)

Not satisfied with the relative high population growth rate, the central government start to intensify population control policy by requiring that each couple have only one child at the beginning of 1980s. The clauses relating to birth control were written in the important national law documents (Marriage Law in 1980, cited in United Nation, 1989: 43). In order to control population growth more efficiently, the State Family Planning Commission was established in 1983. Family Planning Commissions were set up at various administrative levels, provinces, municipalities, autonomous regions, counties, township and villages. Family Planning Service Stations responsible for the providing family planning service were set up at county and township levels. The privatized village clinic withdrew from providing family planning services (Zhang 1998a: 220). The Family Planning Program was separated from the health care system in terms of administrative system. At the village level, connecting the state policy and the rural family, Family Planning Programs are managed by the village family planning commissions which are comprised of village leaders and family planning cadres (ibid.:215). Population control polices are implemented through birth planning and various family planning quotas. The national birth plan and quotas are translated

into sub-plans and quotas to different administrative levels. In order not to exceed the quotas, the local Family Planning Commission depends on providing daily service, the forceful family planning campaigns and even reporting false statistical data.

The intensification of population control in the beginning of 1980s coincided with the introduction of the household responsibility system. The policy has confronted strong resistance from peasants. **In 1983, the mandatory sterilization for couples with two children, IUD insertion for women with one child and abortions of unauthorized pregnancies were required by the Family Planning Commission (Davin 1990).** Coercive abortion and sterilization were widely used in this period, particular in the family planning campaign periods. It was reported that between September 1982 and the end of 1983, approximate 16.4 million women and 4.2 men accepted sterilization operations (Banister 1987). Economic incentive and penalties have been widely used to ensure people's compliance (Davin 1985:37, 48-51; Gu 1996: 52). But on the other side, rural families also try many ways to give birth to more than one child and to at least one son. They try to hide their pregnancies, to take out the IUD, to pay the fine to have more children, and to pursue sex-selective abortion. Conflict between rural families and family planning officials also intensified. Family planning workers described the family planning as the most difficult job in the world.

In order to reduce the growing tension between government and rural people, in 1984, the Central Committee issued "Document No. 7" which allows more couples to have a second children under some conditions(Davin 1990). In most regions, rural couples are permitted to have a second child if the first one is a girl. Because of a big surge in fertility in the mid 1980s, the central government re-enforced the implementation of family planning in the late 1980s. "One vote veto all system"(Yi Piao Fou Jue) was introduced in the late 1980s. "One vote veto all system" means that at the province, prefecture, county and township levels, the evaluation of a major cadre's overall performance is related to their performance in fertility control work. Their work is given low assessment if their performance in birth control work is not efficient, no matter how well they do their work in other spheres (also see Zhang 1998a). Through this system, the state wishes to give higher pressure to major officials at different levels to support the fertility control work. This provides further incentive for government officials to carry out the family planning campaigns frequently.

4.2 The features of the Family Planning Program at the grass root level

Population policy should not only be examined in terms of its end (demographic goal), but should also consider its means, in what ways this policy has been implemented. At the early stage, Chinese Family Planning Program was very much characterized by persuasion work. From the introduction of a more strict population policy at the end of 1970s, the divergence between policy requirement on the individual fertility level and individual fertility desire has become so large that persuading rural people to comply with the policy requirement becomes extremely difficult. Forceful methods seem unavoidable to reach the state's target of population growth.

In the collective period, the implementation of the population control policy and the Family Planning Program in rural areas was based on the extensive structure of government control over rural people. Since the economic reform, Family Planning Programs are managed at grass root level by village Family Planning Commissions based on the requirement from higher-level Family Planning Commissions and government. Their jobs include collecting family planning fines, distributing contraceptives, supervising, and persuading couples to follow the policy requirement (Zhang 1998a: 215).

The de-collectivization has reshaped the relations between the state and local cadres and individual families. Rural families have become more and more economically independent of the collectives. Not only are collecting family planning fines and persuading couples to accept family planning operations more difficult, but village cadres themselves also largely lost their incentive to take these responsibilities. The village cadres' economic income depends much more on their effort to devote to their own families' income generation activities. The reward for being a village cadres is not as attractive as before the reform (Greenhalgh 1994:366; Zhang 1998a).

In order not to exceed the birth plan, birth control became heavily dependent on the frequent family planning campaigns. All the family planning campaigns have been launched, supported and directly supervised by higher level authorities. Usually, each year two to four family planning campaigns are imposed on rural people. Campaign orientated Family Planning Programs have substantial effects on rural people's life and their reproductive decision-making and outcome.

Since the early 1980s in most regions the policy requirement can be briefly summarized as sterilization for couples with two children, IUD insertion for women with one child, and abortion of unauthorized pregnancies. But each campaign has its emphasis, and villages get very concrete quotas, such as number of abortions and later term abortions, IUD insertion, sterilization and amount of family planning fines. Family planning tasks are given highest priority during the campaign time (two weeks to one month) and all the other government departments are supposed to **support such campaigns by contributing their cars and officials, working time etc.** The campaigns start from the mobilization, the families which have “problems” are informed and visited by cadres and are required to pay a fine or accept an operation. Since most of the families with “problems” usually would not cooperate voluntarily, a unified action will be taken. During unified action, a group of cadres, sometimes supported by cadres or a family planning working team from a higher level government, visit the target families one by one to solve their “problems”, ask them to pay fines in cash or in kind as collateral or accept family planning operations. The actions usually take place in the late evening or early morning. Women bearing “extra” children, who are “eligible” for insertion of IUD, and one person (usually the wives) from a couple who are “eligible” for sterilization are collected by cars from their homes to go to the places where they get operated.

During the campaign period, when families are visited, they usually try to negotiate with cadres and are given some choices in most of the situations. The choices are based on the severity of their deviations from the policy requirement, the emphasis of the campaigns, the quotas the villages have to complete in that campaign, the sex of the children the couples have, and social status of the families. Families can choose between accepting abortion of the second pregnancy or paying a fine if their first child is boy, between accepting sterilization of one spouse or paying a fine if they already have two children or between paying a fine plus sterilization and aborting the third pregnancy. If a couple has two girls and they know the third pregnancy is a boy, they will try to pay the fine rather than have an abortion, and most of the time, the village cadres would agree after negotiation if the abortion quota is not very high for that campaign. Sometimes negotiations between village cadres and family have taken place before the unified action. If the families have three or more children, they are usually required to accept sterilization, and perhaps they also need to pay a fine. Women who have one child, particularly if they have one son already and the interval is less than 3 years, will be required to accept IUD insertion.

Because of its effectiveness in reducing fertility, the family planning campaign has been institutionalized as a powerful fertility control method. Some local family planning cadres even do not take the persuasion and service work during the normal time very seriously, but to a large extent passively depend on the campaigns (also see Zhang 1998a).

Although there is no explicit policy to attribute the birth control methods to women, in practice **almost all the family planning methods are targeted on women, particularly the forceful methods.** During the birth campaign, outright coercion for abortion, IUD insertion and sterilization operations are used. Most times, it is the wives who are forced to accept the birth control methods. Despite the fact that tubal ligation is a more complicated and intrusive procedure than vasectomy, sterilization operation are highly concentrated on women. In 1992, 95% of all sterilization was performed on women (Beijing Review, 24.10.1994, cited in Pearson 1996). Women were chosen both by the family planning officials and by the families to accept the sterilization. This gender selection has been taken for granted both by the families and by the family planning cadres. Gradually, even women themselves also take it for granted.

4.3 Women's reproductive strategies and the effects of population policy on women's threat point for bargaining

In rural China, both husband and wife still have strong incentives to have more than one child, in particular to have a son. Many studies on the fertility desire of rural women and men show that the majority of them prefer to have two children including at least one son if they are not constrained by population policy (SWSCC data¹; Hermalin and Liu 1990). But the fertility desire for husbands and wives may not necessary remain the same under the intervention of current population policy, since the cost for the "extra" child is different for husbands and wives. More important, the gender features of the Family Planning Program also shift the threat point of husband and wife for their reproductive decision power. The formation of family reproductive decisions is deeply influenced by the state population policy requirement and its campaign oriented implementing methods.

¹ The Survey on Women's Status in Contemporary China. The survey was conducted by the Population Institute of Chinese Academy of Social Science, cooperated with the Population Program of the East-West Center, USA in 1991.

Traditionally women were held responsible for giving birth to boys, and this notion has not changed (Davin1990:83). From the moment a woman gets married, she is expected by the whole family to give birth to a boy whether she lives with her husband's parents or not. In rural China, from the beginning of the Family Planning Program, almost all the birth control methods, particular the forceful ones are women oriented. Women are expected by the policy to take a major responsibility to regulate their pregnancies, and hence the perceived responsibility of producing children is at the same time also "officially" transferred to women's shoulders. Women's traditional role and responsibility in reproduction has been enforced by the Family Planning Program through such women oriented practice. Women internalize this responsibility through the traditional norms and current family planning practice. For wives to accept sterilization, and to take all the responsibility of reproduction are officially identified as their "proper" gender roles. No explicit bargaining is needed.

Facing the intervention of state population policies and the frequent family planning campaigns with different requirements, rural people do not just accept the policy requirement, even during the campaign period. They will try whatever way to reach their reproductive goals. Rural women and men have developed their own reproductive strategies. The final reproductive decisions depend on the husband and wife's and sometimes the parents-in-law's reproductive preferences and their decision-making power. Under the current policy and social setting, rural women's bargaining power and possible strategies for their reproductive behavior are limited. Following I will elaborate the rural women's most possible reproductive strategies. Since women are expected to have the first child as soon as possible after they married, even if their marriage is early, they are most likely to be free of intervention from rural Family Planning Program at the this stage. The differentiated reproductive strategies are taken after they have the first children.

First strategy. Following the policy requirement to not have more than two children. After the birth of the first child, having a second child, and then following the policy requirement to stop having more children no matter whether or not the couple has a son. Available studies (e.g. SWSCC survey) on husbands and wives' fertility desire show that most men and women prefer to have two children including a son. If the couple do not yet have a son, unless the husbands really do not mind only having daughters, taking this strategy, wives might be considered going against the will of the whole family. This can have an impact on her well-being and decision power in other

spheres. Studies concerning rural household decision-making in rural China in the early 1990s show that except in the households where wives live away from the farm most of the time and were mainly involve in non-agricultural activities, in all other households, women's decision-making power in agricultural activities within household is positively related to having a male child, and the husband's decision-making power is negatively related to having a male child (Chen Huajie 1996: 43, 74). Given women's perceived roles in reproduction, if they have managed to give birth to a boy, they are seen as making an important contribution to their families, otherwise they are regarded as in debt to the families. Here we can see how perceived contribution can impact women's bargaining power within the family. Since having male children become an important determinant of women's general position in the families, unless the couple's first child is a boy, women are unlikely choose this strategy even if their husbands do not show a strong desire for having a male child. Having a male child can be a strategy of her life cycle consideration. Only in the situations that women can get support for such a choice from their husbands, or women have a general high position within families because of their economic contribution to the families or other external factors, women can afford this reproductive choice without significantly damaging their lives.

Second strategy. Trying to have a son by having more children. After the births of the first two children, manage to have the third child (if the first two are both girls), but facing the possibility of forced abortion in the next family panning campaign. The family needs to pay a fine for the third one no matter if it is a girl or a boy and the wife will face a high risk of sterilisation in another family planning campaigns. Family Planning Program depends heavily on the campaign, but not on the routine service, and each campaign has a different emphasis. The fluctuations in implementation and the limited choices faced by rural couples have strong effect on risk taking behaviour of women's reproductive behaviour. Some women who carry unauthorised pregnancies or are "eligible" for sterilisation may just run away from the village and come back when the campaign is finished if their "problem" is "severe" or if they are poor and can not pay the penalty (also see Gu 1996:45). But as campaigns are very frequent, home and farm works are not easy to leave, this is not easy to manage. But if women are sterilised before giving birth to boys after the births of two or three girls, the families lose their last hope having male offspring. In such a situation women's position within the families may be worse off. The worst situation is divorce or abused by their husbands. Such practices are not only exceptions.

In the early 1980s, there were widespread reports of the ill-treatment and violent beating of the mothers of baby girls (e.g. Remin Ribao, 3 March 1983, cited in Davin 1990: 85). *Women of China*, the official journal of All China Women's Federation reported several cases of women who bore daughters rather than sons and they were abused by their husbands and mother-in-laws and forced to divorce (cited in Agatha Wong 1993; Jacka 1997: 51). How serious the situation is can be understood by the fact that protecting infant girls and their mothers, and prohibiting maltreatment of mothers were included in the former Premier Zhao Ziyang's report to the Fifth National People's Congress (Kelkar 1988). Because most sterilisation operations are performed on women, after the divorce, the husband can try to get married to another women to have another try for male children. As a rural informant confirmed the patriarchy family prefers sterilisation of daughter -in-law rather than of son with a divorce strategy as a possible alternative for having another try for male children (Dalsimer and Nisonoff 1987). But the sterilised women will face a very pessimistic future to get a reasonable marriage. The other possible consequence of failing to bear male children also includes domestic violence. Mistreating wife because they failed to bear male children has been reported (Xie 1992; Dalsimer and Nisonoff 1987). Even when families do not mistreat the wives explicitly, but the disappointed attitude may show up in many ways and women themselves may also feel guilty because of their "mistake". Women-focused coercive sterilisation here clearly shifts women's relative threat point by reducing women's opportunity to have children and to remarry.

A study concerning the material mortality in Sichuan show that in the year 1989-1991, maternal mortality ratio for planned pregnancy is 92.0 per100,000 live births, and for unplanned pregnancies is 397.1 per 100,000 live births. The study suggested that the high risk of maternal mortality among women having pregnancy outside family planning is partially attributable to less prenatal care and medical treatment for pregnancy-related complications and partially related with the higher psychological pressure because of violation of population policy (Ni and Rossignol 1994). Related studies show that high psychological pressure can induce a higher risk of various pregnancy related complications (Herrear 1992, Sydsjo 1992 and Boyce 1989, cited in Ni and Rossignol, 1994). If the higher psychological pressure is associated with the higher risk of mortality, the high risk may be not only from the pressure of violation of the policy, but also from the family pressure to give birth to a boy.

If women choose this strategy, they have to take a high risk for their health due to high maternal mortality, forced abortion, forced sterilization and the possible deteriorating impact on their position within families and even the possibility to be divorced or abused by their husbands and parents-in-law.

The third strategy: Sex-selective abortion. The abnormal high sex ratio at birth, particular for the higher parity in China since 1980s show that sex selective abortion has been widely used by rural families to reach their reproductive goal (Hull 1990). The families which have one or two daughters usually take this strategy. Most of such families will try to have second child and wish to have a son. And this is permitted in most of the rural areas. If the second child is still a girl, and the family want to have a third child, they need to pay the penalty for that and the wife face a higher chance to be forced to accept abortion and sterilization. In order to minimize the economic loss and make sure they can have a son, sex-selective abortion of female fetuses has been used as a strategy. The sex of the fetuses can only be identified after 5-6 month of pregnancy, so if the fetus is found as a girl, then abortion is preferred. But the wives have to bear the extra physical cost and risk to have later-term abortion, sometimes repeated abortions in order to get a son.

Many county and township level hospitals and family planning stations in many areas of China have equipped with ultrasound-scanners. It is estimated that on average there are 6 ultrasound-scanners at county level hospitals and family planning stations and 4 at the township level (Croll 1995:165). The machines are not equipped to identify the sex of the fetus, but with such high availability at county and township level, it is not very difficult to get access to such services through asking the help from personnel who work at the position. Although there is no accurate information on the prevalence of using this technology to determine the sex of the fetus, in the late 1980s, the press reports (China Daily, cited on Australian radio, 8 December 1988 and Beijing Review, 10-16 July 1989, cited in Hull 1990:74) on using ultrasound technology to detect the sex of the fetus and sex-selective abortion indicate widespread government concern and the severe extent of this issue.

Women are well aware of the mental and physical suffering of such later term abortion and particular the repeated abortions and its impacts on their health or on their lives. Why do many women choose to do that? We do not know the concrete decision-making process in each the

family. But comparing the possible consequences of this strategy with the other two strategies can help to understand this “choice”. If the household prefers to have another child by ignoring the policy requirement then women usually “voluntarily” take the risk of physical suffering from sex-selective abortion. Compared to the possible results of other strategies, such as ending up with two or three girl children, pay fines, high risk of forced abortion, sterilization, abused by the husband’s families or divorced by their husbands, sex-selective abortion is even a better choice for many women. **In this strategy, we can see how perceived gender responsibilities which are enforced by the population policy force women to choose such a strategy and bear physical suffering and the risks for their health and even for their lives.**

The reproductive choices for women within families are reduced by the population policy. But women’s opportunity outside that marriage is also reduced by the policy, such as women oriented sterilization. There is no related social policy to provide protection on women’s well-being and their independent life opportunities and there is even no effective government intervention to protect women from domestic violence when they are abused by their families because they are not allowed by the population policy to give another try of having a boy. Under such conditions, women’s choice to be pregnant, to have later term abortion, and to accept sterilization can never be regarded as **free choices**. Women’s reproductive strategies are strongly guided by their perceived reproductive responsibility for the families and their independent well-being outside those marriages, **such the opportunity to remarry or start their own lives (also see Chapter 3)**. What Lukes (1974) has called ‘power as non-decision making’ (Kabeer 1995:7-8) is clearly reflected in reproductive decision- making in contemporary rural China.

4.4 Conclusions

The strong intervention of the state on the individual reproductive behavior and the women-targeted Family Planning Program in contemporary China have exerted a deteriorating impact women’s reproductive choices and decision-making power. Women’s traditional roles and responsibilities in the reproductive domain have been enforced by the women oriented forceful Family Planning Program. Accepting the sterilization, abortion and contraceptive methods are officially identified as women’s sphere and women’s responsibilities. Forced or “voluntary” sterilization of women reduces women’s possibility to remarry, but men can remarry and try to have another child.

Women's perceived responsibility of producing a son for families and the economic penalty for an "extra" child and risk of sterilization for women after giving births to two children force women to choose sex-selective abortion and bearing the physical suffering and the risk for their health.

Gender biased Family Planning Program intertwined with traditional gender norms reduce women's bargaining power in the reproductive decision-making both by enforcing traditional **gender roles in reproductive domain and by changing the external threat point, such as sterilising women**. The policy implications of such findings are obvious. "Women-targeted" and coercive Family Planning Program focusing on women's roles in reducing fertility and neglecting their own interest in the reproductive domain has deteriorated individual women's right to make reproductive decisions, their general emancipation and well-being. Policy makers should be aware of the implications of current policies for women's lives and give due consideration of women's own reproductive interests. The existing gender relations within families should be taken into the policy consideration. And men's responsibilities and men's participation in family planning need to be given more attention.

CHAPTER 5: THE ISSUE OF DATA COLLECTION IN APPLYING THE BARGAINING APPROACH TO REPRODUCTIVE DECISION-MAKING ANALYSIS

In the previous two chapters, based on the bargaining approach, I have shown how traditional gender notions and post-reform social economic institutions have reshaped men and women's positions in their families to bargain their reproductive decisions. But the analysis is tentative and indicative. No effort has been made to test the models by using either qualitative data from intensive case studies or quantitative survey data. The original plan of writing this paper includes a chapter of quantitative analysis to test the models and identify the important factors related to women and men's decision-making power based on the Survey on Women's Status in Contemporary China (SWSCC) conducted in 1991. But this plan was given up after carefully exploring the data. Like many other fertility surveys conducted in China, the SWSCC study was also designed based on the conventional approaches to fertility analysis, particularly on the women's status approach. The data collected for such studies do not fit to apply to the bargaining

models. Applying a new analytical approach needs not only the new perspectives, but also the new design for data collecting. In this chapter, I will briefly review the main problems of previous fertility surveys in China and try to elaborate on how to collect data needed to apply the bargaining models. The SWSCC survey, which was considered as a well designed survey, will be employed as a major example to show the problems of previous fertility data collecting.

5.1 The problems of data collection in the previous fertility studies

The previous surveys concerning fertility in China have been based on the assumption that there is only conflict between the state requirement and an individual family's reproductive goals, but within family there is no divergent preference between husband and wife. The focus of these studies is how to reduce this consensual fertility desire. Similar questions concerning fertility desire have been asked in many demographic surveys in 1980s and 1990s in China. Such as "If there were no limits set by the family planning policy, you and your spouse would like to have ___ children"², or "If present government policy had not existed, how many children would you personally like to have in your whole life"(This question was asked to women).³ The SWSCC survey goes one step further to include a question concerning fertility decision-making. Two key questions were designed in the questionnaire: 1) How many children do you want to have if there were no restriction of population polices (this question were asked to both husband and wife); 2) In the issues of pregnancy and giving birth to children, whose desires do you follow (This question was asked to wives only). The structured answers for this question are a) you made the decision; b) your husband made the decision; c) you discuss with your husband; d) you discuss with your parent-in-law; e) you discuss with your parents. Ignoring the survey methodology problems, such data collecting design confront several problems concerned with its analytical approaches.

Firstly, most studies are based on the assumption that husbands and wives share consensual fertility preferences. The survey designers do not make a clear distinction between the husband and wife's desire. Some studies do not even bother to mention whether fertility desires are from husband, wife or family (Hermalin and Liu 1990). Even if some studies go one step further to

² Shanghai Survey of Desired Family Size. The survey was conducted in 1993 and 1984 (Hermalin and Liu 1990).

³ China's In-Depth Fertility Survey. The survey was conduct in 1985 (Hermalin and Liu 1990).

differentiate husband's and wife's desire and given concern on decision-making, because the analytical framework is not based on the divergent preference assumption, the related question have not been carefully designed. The SWSCC survey can serves as a good example to elaborate the importance of theoretical framework in survey design.

The comparison of the husband's and wife's fertility preference and the distribution of decision-making on fertility behavior from SWSCC data (Table 1) show that the majority of couples share the same preference on the number of their children if there were no restriction of the population policy, 1/4 of the couples have different preferences on the number of children. But the credibility of such high percentage of couples sharing the same fertility preference of this survey is susceptible because there is no requirement on the survey procedure to control the spousal impact on answering this question, such as husband and wife should not be together when they were asked this question. Since there is no clear awareness on the importance of the difference in fertility preference of husband and wife, although the fertility desire were asked both to the husband and the wife, no attention were paid to survey method.

Concerning fertility decision-making, the majority of women choose the answer that fertility decision are made through "discuss with the husband". The interesting thing is that among women who have different fertility preference with their husbands, 85% of them also choose the answer that decisions are made through "discuss with the husband". The problem is that if they do not share the same preference, then the answer of "discuss with the husband" does not answer the question about the decision-making. The survey result of this question can not provide any information of decision-making process and even the information of whose preference the final decision followed or will follow. Since there is no clear theoretical approach lying behind this question, the survey result of this question fails to provide telling information on fertility decision-making.

Table 1: Husband's and wife's fertility preferences and decision-making

Total	Same preference	Different preference
5219	1293	3926
100%	24.77%	75.23%
Distribution of fertility decision-making		
Total	1293(100%)	3926(100%)
Decided by women	105(8.1%)	236(6.0%)
Decided by husband	81(6.3%)	149(3.8%)
Discuss with husband	1001(77.4%)	3331(84.8%)
Discuss with parents	22(1.7)	48(1.2%)
Discuss with parents-in-law	11(0.9%)	21(0.5%)
Other	67(5.2%)	132(3.4%)
Missing value	9(0.5%)	9(0.2%)

Source: the SWSCC data.

Secondly, these surveys were only concerned with how to reduce fertility instead of women's empowerment and well-being. Based on my knowledge, all the surveys ask the question about fertility desire under the condition of no restriction of population policy, none of them are concerned with husband and wife's fertility preference under the current policy. And the other aspects of reproductive behavior are not included by most of the studies. As I have mentioned that if we are also concerned about the policy impacts on women, the question should not only ask about the fertility desire without population policy. It is also important to understand the fertility preference of both husband and wife under the current population policy. This is a valid and important question not only because the cost of "extra" child is not equally shared by husband and wife, but also because husband and wife's bargaining positions are differentiated by women-oriented Family Planning Program in contemporary China. In order to understand the policy influences, we should understand men and women's fertility desire and decision-making process under the current policy. And if the study aims at not only reducing fertility, but also women's well-being, the survey should also include the questions concerning other aspects of reproduction, such as men and women's preference on methods of regulating their fertility and their decision on that.

Thirdly, ignoring the possible problems of poor sampling design and non-response errors, the reliability of the data regarding a set of reproductive preferences and decision-making power in

large-scale sample survey are also confronts skepticism because of the response errors due to the respondents' ability and willingness to response to such survey questions (Hermalin and Liu 1990).

5.2 The methodology of collecting data for applying bargaining approach to reproductive decision-making analysis

Based on the model described in chapter 2 (Figure 1), husbands' and wives' decision-making power on reproductive behavior are determined by their independent well-being and social norms of their gender responsibility and roles, both of which are influenced both by the factors at the society and community levels and the individual level. At the society level, the factors include the institutional factors and the social norms, all of them tend to be gender biased in contemporary China. At the individual level, the characteristics of wife and husband of each family can also have certain impact on their independent well-being and their perceived interests, contributions and "proper" gender behavior, hence their decision-making power. Based on the bargaining framework and findings of this research, to test the validity of the bargaining models in China in the period of post-reform, the following hypotheses can be formed:

1) Post-marriage residence has an impact on women's decision-making power within the family. Women with uxori-local marriage and intra-village marriage have higher decision-making power than women with the adjusted patrilocal, and non-typical patrilocal post-marriage residence. Women with the typical patrilocal residence have the least decision-making power. The typical patrilocal post-marriage residence refers to the marriage where couple lives together with the husband's parents. The non-patrilocal post-marriage residence refers to the marriage where couple set up their new home in the husband's village, but does not live together with the husband's parents. The adjusted patrilocal post-marriage residence refers to the marriage where couple set up their new home in the husband's village, but wife does not shift her official residence(register residence) there. This hypothesis can be tested by statistical empirical analysis or intensive case study.

Based on the findings of this study, women's post-marriage residence has an impact on their independent access to resources and their property rights under the current land tenure system and legal or custom arrangement. Since women's independent access to resources and their property

rights are crucial for their independent well-being, according to the bargaining model, they influence women's threat point and their bargaining power.

2) "Fixed land" policy has a negative impact on a wife's decision-making power compared with the "periodical adjustment of land" policy. This hypothesis is important in the current period, because under the different land policies, women face different possibilities to get contract land in the case of marriage, and to reclaim the land in their natal villages in the case of divorce.

3) Prevalent property settlement in the case of divorce has an impact on husband and wife's decision-making power. The more the divorced women can get usually, the higher decision-power of the married women in the community. China is a very big country with regional variations, and different legal or custom arrangements concerning women's property rights may have different impact on women's decision-making power.

4) Wives with a higher education level tend to have a higher possibility of better independent well-being, hence the decision-making power. This hypothesis is based on the assumption that women with a higher education level have more opportunities in labor market.

5) Wives make higher independent economic contribution(as a percentage) to the families has more decision-making power.

6) Wives who have non-farm employment or income have higher decision-making power. Based on this study, women's access to key resources-land for agricultural production is problematic and is not independent from their marriage status. The non-farm employment may make an important contribution to their independent well-being and hence to their decision-making power. Besides, the income generated from non-farm employment is also more visible, hence may perceived as more important contribution to the families.

7) The value of dowry is positively related to a wife's decision-making power. In contemporary China, the dowry may influence women's decision-making power both by relating to women's perceived contribution to the family and as her independent property. Dowry is considered as a woman's own property. She can bring that with her to her natal family in the case of divorce.

8) Wife's decision-making power is positive related to her natal family's social economic status, such as yearly family income, or whether they are government officials, but negatively related to her husband's natal family's status. The social economic status of husband and wife's natal family may be related to their decision-making power because its possible impact on spouses' well-being in the case of divorce.

9) **Wives with a son have higher decision-making power in her consequent reproductive behavior.** As we discussed in chapter 3 and 4, giving birth to a son is still perceived as women's important contribution to the family.

10) Women who have accepted the sterilization operation have less decision-making power compared to others. This hypothesis is set to test to the impact of the marriage market on women's bargaining power based on the analysis that divorced women who had sterilization operation face more difficult to remarry than other divorced women because of continuing the family name is still considered as an women's important responsibility.

Data needed for testing analytical power of the bargaining models through these hypotheses should include following contents:

First, structural or institutional factors. Identifying the key structural factors which differentiate women and men's opportunity structures, hence their independent well-being. Based on this study, these factors should include the gendered nature of the land tenure system under the household responsibility system (including regulations or practice on women's rights to reclaim land and housing in the case of divorce); women and men's legal and customary right to family property; the dominant form of the property settlement in the case of divorce; regional population policy and family planning implementing methods. In China, the whole country has adopted the household responsibility system, but the differences is existed within this system. Some regions follow the "fixed land" policy, others follow policy of "periodical adjustment of land according to family population change". The divorce settlement on property is not exactly the same among different regions or communities. Such variables can enter the multi-level statistical model as regional level variables in the case of quantitative analysis. But most of such data can not be obtained through structured questionnaire survey of the individuals. They need to be collected by checking

government regulations, or statistical records, discussing with government officials, and should be supplemented by ethnographic community study.

Second, the gender ideology. Identifying the gender norms regarding the proper gender roles and responsibilities and the practices which are the key factors in non-cooperative model. Gender ideology should include social norms regarding women and men's reproductive roles and responsibilities and sexual division of labor. It is possible to form a set of questions for sample survey, but it is not easy to measure and capture reliable data on such issues through a large scale, but short term survey. The intensive comparative community case study may provide a better solution. The dominant gender norms may vary from region to region. Within the same region, individual variations may also exist due to their different education background or experience.

Third, the individual characteristics. Actually, the individual characters are the reflection of structural factors on individual women and men. The general pattern of individual characteristics of husband and wife reflect the impact of structural factors, but the micro-level difference may differentiated gender relations among families. In China, post-marriage residence, husbands and wives' education attainment, employment status and independent income, dowry and bride price and social economic status of husband and wife's natal families. Such individual features are relatively easy to capture and measured by both in sample survey and anthropological case studies.

Forth, husband and wife's reproductive preferences. Finding out if there are divergent reproductive preferences and interests between husbands and wives. Reproductive preferences should include a broad range of reproductive preferences, such as husband and wife's reproductive goal-the number and sex of desired children, sexual relations and contraceptive methods. Identifying the husband and wife's reproductive preferences and the difference between husband and wife is crucial for the whole analysis. For a structured questionnaire survey, questions can include: How many children do you want to have under the current population policy and how many girls and boys? What contraceptive method do you like to use, and what method you are using? If one of you need to accept sterilization, who do you wish to accept that and who has accepted that (in the case of one of spousal have accept operation)? What strategies have you used or want to use to reach your goal? The structured answer concerning strategy question can include: 1) only want to have two children (in some areas is one, based on policy requirement), no matter they are girl or boy, 2) pay

penalty, 3) sex-selective abortion, 4) get pregnant, if not permitted, accept abortion, 5) stay away from the village for several months when wife gets pregnant. For all the questions, husband and wife should be investigated separately.

Fifth, husband and wife's reproductive decision-making power. As the output of the model, the differences between a range of reproductive decisions and women and men's preferences can be seen as the result of relative decision-making power of husband and wife within each family. Identifying husband and wife's decision-making power, we can compare husband and wife's preferences on number, sex of the children and the actual outcome and their preferences and actual practice of methods to regulate their fertility to reach their goal.

Identifying husband and wives reproductive preference and the actual outcome, we can trace a marriage cohort of couples through their reproductive life, but this is not realistic in terms of time and funding for a research project. Recollecting data from couples who have gone through their reproductive period can also be used. The difficulty of recollecting survey is getting the reliable data on reproductive preferences and other influential factors at decision-making time and not at the survey time.

Whichever of these two methods to be used to identify the differences between preference and the actual outcome, it is difficult to employ such data in a quantitative model because it involves a time dimension into the analysis. A simplified method is to directly focus on husband and wife's subjective perception about the decision-making power at the survey time. Such subjective perceptions have the same time reference with independent variables, hence are easy to use to test the relations between these two sets of variables in a quantitative model. The questions need to be carefully designed and husband and wife should answer such question without the presence of his/her spousal or parents- in-law to avoid their influence in choosing answers. The questions should be asked next to the questions about reproductive preferences. An example of a question asked to wives in the questionnaire can be (for each item of preferences): "if you and your husband have different opinion, whose desire the final decision will be followed?" The possible answers can include: "your desire, your husband desire, and husband and wife's compromise as the third choice".

Conventional demographic studies have favored the large-scale sample survey aimed at establishing the quantitative statistical relations between explanatory variables and dependent variables. It is easy to find out that in applying the bargaining models to reproductive decision-making analysis, we need a very demanding data set at different levels, and need to deal with variables which concern the intimate sphere of personal life and data which are difficult to quantify, particularly in the case of a non-cooperative models which require information on the husband and wife's gender ideology.

Furthermore, reproductive decision-making is actually a negotiation process, and all the influential factors are intertwined and work together to influence women's decision-making power, but such inter-links are not easy to test by a large scale survey. In chapter 3, I have shown how the post-marriage residence and land tenure system work together to deprive women's independent life opportunities. The short-term, large-scale sample surveys are not good at detecting such personal subjects, decision-making process and the interactive effects of independent variables.

To test the bargaining model, the quantitative analysis based on large-scale survey should not be considered as the only way to collect empirical data. Applying bargaining approaches to empirical studies needs context-specific study, dealing with personal subjects, intimate knowledge concerning personal perceptions on gender notions, sexual relations, contraceptive use, and decision-making process. To get accurate intimate knowledge, one needs to have a rapport with interviewees, and a long time acquaintance with informants is prerequisite for observing the process, discussing such questions and collecting reliable information. Therefore a few communities of ethnographic study can provide more meaningful information in the area of personal sphere, the insight of the decision-making process, and the interactive effects of the influential factors on reproductive decision-making power and process (Greenhalf 1994, 1990). Through long-term residence and close contact with local families, researchers can get a deeper understanding about individual women and men's lives, their perceptions about their proper gender roles and responsibilities and practice, their productive interest, their concern, fear, their strategies and problems to reach their goal through personal observation and daily discussion with them. For example how women form their own strategies to reach their goal against their husband's unwillingness and the policy restriction, or how and why husband can impose their reproductive preference on their wives. The disadvantage

of such ethnographic study is the finding of the study can not be used to make generalization to other regions.

In China, based on my experience, discussing family issues such as husband and wife's ideas about gender roles, responsibility among men or women and mixed group are common. Women tend to not talk about sex related issues with an opposite sex, but to talk with female friends with a similar age or a slightly elder women. There is no strong idea of privacy. But women are very shy to discuss such issue with people they are not familiar with, particularly those women who are younger than them. After getting familiar with them, such discuss is possible and local people are more likely to discuss some personal issue with a person from outside because there is less risk of their secrets leaking to other villages. But discussion had better start from other family issues to make women more comfortable for discussing sensitive issues. But men rarely discuss issues related to their sexual sphere either among male friends or with other women. Directly discussing such issue with men may lead to adverse attitude. It is easier to discuss such issue with a man with his wife's attendance. Some information can also be obtained through observing the conflict solving processes. Various cautions have to be made to conduct such ethnographic studies based on different cultural context.

Large-scale survey and ethnographic study have their own advantages and weaknesses. But there is no dichotomy of these two methods of study. Large-scale survey has the advantage of making comparative analysis both at the regional level and micro-level and elaborating general patterns and relations. For the cooperative model which emphasis more on the impact of objective independent well-being, if we use simplified dependent variable- subjective perception on decision-making power which is relatively easy to measure, it is feasible to set up the empirical statistical relations between this dependent variables on one side and regional and micro level influential variables on the other side. Although the dependent variables of perception on decision-making power are category variables, the recent development of statistical techniques has been able to solve this difficulty by the logistic regression model. Even in such a case, the ethnographic study also helps to collect the background data for a large-scale survey. A properly designed sample survey demands deep understanding the issue at first place. Ethnographic case study can help to set up a background for such sample survey design and provide the explanation for existed statistical relations found by quantitative study. Based on the above analysis, intensive ethnographic case

studies supplemented by sample survey, which can cover larger sample size and several regions, should be considered as the best solution for collecting data needed for testing the explanatory power of the bargaining models in reproductive decision-making analysis.

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