

**Community-Based Factors
Affecting Contraceptive
Discontinuation**

***An
Anthropological
Study***

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**COMMUNITY-BASED FACTORS AFFECTING CONTRACEPTIVE
DISCONTINUATION: AN ANTHROPOLOGICAL STUDY***

by

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Foreword

Selected findings of this study were previously released through preliminary reports, papers presented at national and international conferences as well as journal articles. In each case, these have been well received by family planning specialists and social scientists in a variety of disciplines. Indeed, this has provided added encouragement and highlighted the study's importance for Thailand and other nations.

While this document represents the final report, it should be viewed as the first in a series of reports and articles which will discuss in greater detail the different aspects of contraceptive use and discontinuation among rural Thai women of reproductive age. In particular, what is the relationship between a woman's reproductive life span, her family's development and her contraceptive use and discontinuation practices? How well are her family planning needs being provided for at each stage in her life? What is the relationship between family structure, the value of children, contraceptive use and discontinuation, and parental old age security concerns? What family planning education strategies can be most effective considering differences in community communication networks? But above all, who are the most important family planning actors in Thai communities, when and why?

In closing, it is with sincerest hope that this report's data and information will be of value not only to family planning policy makers, program officials and administrators. In addition, students in population research and applied anthropology may gain deeper insights by analyzing the data further as well as using the study itself as a springboard for new projects and ideas.

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Community-Based Factors Affecting Contraceptive Discontinuation: An Anthropological Study

ABSTRACT

This report identifies factors associated with community structure and organization which affect contraceptive use, continuation and discontinuation among married Southern and Northeastern Thai women of reproductive age. In particular, it examines the roles of different interpersonal networks, as well as identified community leaders, in women's and couples' contraceptive use decision-making. The discussion also focuses on when and in what ways both of these groups (interpersonal networks, leaders) affect the transmission of community and family norms and beliefs about family planning as well as contraceptive information which affect fertility.

From June 1987 - April 1988, the research project was carried out in Thailand's Southern and Northeastern regions, and their provinces of Trang and Surin, respectively. Both regions exhibit relatively slight reductions in the total fertility rate compared to that of the nation. In all, project personnel studied four research villages, that is, two villages in each province. Provincial and district results obtained from Thailand's Third Contraceptive Prevalence Survey as well as monthly Ministry of Public Health reports show these areas as low in contraceptive prevalence and high in fertility.

Anthropological methods and concepts, along with a conceptual framework originating in a convergence model of communication, formed the study's base. Data collection utilized a basic household census and mapping, participant-observation with key informant interviewing, life history interviews and social network analysis, and a structured household fertility survey.

The study's main finding is that community-based factors affecting contraceptive discontinuation require a diachronic analysis. Specifically, usage changes occur as a woman passes through three key reproductive life span stages, namely, Stage 1 -- Pre-Childbearing; Stage 2 -- Childbearing and Childrearing; Stage 3 -- Family Size Achievement. The mechanisms which cause discontinuation include community norms and beliefs concerning such broad but integrated areas as: childrearing patterns, infant feeding patterns, age at marriage, family planning self-management, attitudes towards family size, contraceptive method appropriateness (e.g., prevalence, convenience), infertility beliefs, personal privacy, kin group membership, and confirmed side-effects. As a woman seeks information on contraception, these come into play through separate types of community social networks. The most common social network types are intimate, effective and extended. Their degree of influence, however, varies between regions and the reproductive life span stages.

Furthermore, the domain of family planning decision-making and contraceptive discontinuation is different between Southern and Northeast Thailand. In the South, this domain is family-centered wherein family and kin group members influence a woman's decisions. Its Northeastern counterpart, though, is more personal and non-familially centered. This suggests the need for different types of family planning education strategies which are sensitive to different communication channels and their influence. Each, however, should aim to increase awareness and encourage contraceptive continuation among target groups and audiences.

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PART I
STUDY BACKGROUND

1.1 Thailand's Socio-Economic and Demographic Context

Over the past twenty years, Thailand's annual economic growth has averaged 7 to 10 percent in real terms. This has been done largely by putting its scarce resources in areas of high growth potential. Although Thailand is still a predominantly agricultural country, agriculture's share in the national output has continually decreased. Manufacturing and services sectors, however, have increased their share. These significant structural and economic changes have led to an increase in urbanization and industrialization, large-scale changes in migration from rural to an urban pattern, a rise in female labor-force participation, improvement in educational levels among both sexes, and an expansion of electrification, communication, transportation and computerization capabilities, to name only a few (Yoddumnern-Attig 1990).

While these socio-economic changes have taken place, Thailand has also experienced a "reproductive revolution." Between 1969 and 1979, fertility declined by about 40 percent. Contraceptive prevalence among women of reproductive age increased from under 15 percent in 1969 to nearly 60 percent in 1981. The rate of population increase fell from 3.22 to 1.6 percent between 1960 and 1988. More crucially, only a generation ago married women averaged 6 to 7 live births. By 1981 though, only one woman in ten wanted more than three children (Knodel et al. 1984; Yoddumnern-Attig 1990; Yoddumnern-Attig and Podhisita 1989).

Simultaneously, the nation's population has rapidly aged. For the last 20 years, people over 60 years of age have almost doubled in gross number. This growth, moreover, has been faster than that of the entire population (Attig and Chanawongse 1990; Sangsingkeo et al. 1986). In 1980, there were 2.3 million aged persons from the total population of

46.5 million (or 4.9 percent of the total population). By 1990, this had grown to over 3.6 million out of 56 million (or 6.4 percent of the total population). Such an increase in mass longevity, though, has brought with it considerations of social welfare for the elderly and old age security within families.

In rural areas especially, the population age structure is shifting along with familial patterns of survival. By 1970, the former was a pyramid shape with high numbers of children located at the bottom and relatively few elderly at the top. Currently, it is more columnar shape with fewer children at the base and relatively larger numbers of middle age and elderly persons. The latter group, in particular, is to grow even more by the year 2000 (Sangsingkeo 1986; Sethaput 1989).

For the nation, a new social security law is in the offing, awaiting official approval. Within families, parents are realizing that their old age security can no longer depend upon their children. Rather, they are seeking alternative strategies for maintaining their economic and social welfare. Some of these include increased savings, reliance on other kin, and the restructuring of inter-generational power and authority relations. In other cases, parents are not transferring property before their deaths. This is to encourage at least one child to care for his or her parents until the end of their lives (Attig and Yoddumnern-Attig 1991; Yoddumnern 1985).

1.2 Family Planning Action

Despite these changes and their potential consequences, however, the Thai government still aims to reduce the fertility rate to 1.3 percent. Yet a major stumbling block is that family planning has had little success in Northeastern and Southern Thailand. Their fertility rates remain 2.46 and 3.06, respectively (Chayovan et al., 1988). To encourage family planning acceptance, the National Family Planning Program (NFPP) has increased contraceptive and family planning

information coverage. Social marketing has promoted birth control methods and educated users about their proper use (Viravaidya, 1988). As a result, rural Southern and Northeastern people have family planning knowledge, and they possess positive attitudes towards it. Nonetheless, their practices show little change.

This dilemma persists because family planning decisions depend on many variables (e.g., cultural, social, economic, psychological). Some of the most important include family structure, composition and organization community communication structures interpersonal relationships community beliefs and values roles of key leaders and personal achievement, goals, expectations and preferences, to name only few.

1.3 Literature Review

1.3.1 Characterizing Community Relations in Thailand

Examining the above variables and their interaction can help to understand the family planning decisions of woman and couples. Alternatively, it can also lend key insights into their decisions to discontinue contraception. To begin this investigation though, requires an initial exploration into the nature of Thai community relations.

To date, there are roughly three streams of thought running through the scholarly literature. First, Embree (1950) characterized Thai society as a "loosely structured social system" compared to Japanese society. By this he meant that Thai behavior is unpredictable and not strictly regulated by any norms or regulations. The second stream opposes Embree's theory and claims that the Thai social system is tightly organized along normative and regulatory lines (Calavan 1974; J. Potter 1976; Moerman 1966; Punyodyana 1969; S. Potter 1977).

In characterizing Thai society in either of these extremes, the results of behavioral studies in general have been questionable. For example, Embree's loose structure paradigm quickly gained in popularity and influence. Thereafter, anthropologists working in Thailand became curiously reluctant to explain Thai social structure in any other way. Embree's theory implied that the attempt would prove fruitless (S. Potter 1977). This problem arose mainly because Embree's observations of Thai social behavior were superficial. They did not account for any deeper normative structures. Thai society is, in fact, characterized by numerous sumptuary laws and customary practices which work contrary to an individual's personal desires. As a result, the loose structure stereotype is a strategy by which the Thai deal with conflicting situations through non-stressful means (Yoddumnern 1985).

Another example is Riley's (1972) study which examined Thai social structure to find a way to control the nation's population growth. Unfortunately, Riley found no answer about the relationship between family organization and population dynamics in rural Thailand. The main reason for this stems from his reliance on Embree's loosely structured paradigm. Riley's (1972:257) main thesis is that:

The Japanese success (relatively speaking) in controlling population growth may have been dependent on the "tightness" of family organization, which implies that most women will unequivocally share the fate of offspring (other groups will not help care for them, or assimilate them, except by marriage). In addition an excess of children will worsen the economic lot of her entire, well-defined co-residential group; they also share the fate. Such a situation may provide an incentive for birth control (by whatever means) that would be weaker in Thailand where the organization of co-residential groups is weaker.

Riley's assumption is certainly not the case for Thailand. On the one hand, the nation's rapid decline in fertility disproves his hypothesis (cf. Kamnuansilpa and Chamrathirong, 1985; Knodel and Debavalaya 1978; Krannich and Krannich 1980). Furthermore, in-depth studies of Thai family structure show strong inter-personal organization as per rights, duties and responsibilities. These center around such aspects as economics, descent, religion and inter-generational obligations (Kanjapan 1985; Yoddumnern 1981, 1985).

Failure to link Thai social structure characteristics to other behavioral aspects points out the flaw in the "loose versus tight" dichotomy. Moreover, these two streams of thought are static in nature; they fail to consider an appropriate time depth. This temporal dimension can account for how social change has altered and modified the Thai social system over time.

This research project, therefore, followed a third stream of thought. It viewed contemporary Thai community and family structure as well as fertility diachronically. Changes are the result of a blending of external contacts along with internal ideological and developmental changes which can affect reproductive behavior (cf. Cunningham 1969; Lowe 1982; Yoddumnern 1985). As a result, Thai social and family structures are consequences of a long process of adaptation.

This project did not examine community relations to determine how to label them ("tight versus loose"). Rather, the research centered specifically on understanding key social and cultural features such as social relations, patterns of communication, perceptions of ideal family size and composition, religious morales, child care patterns, old age security, leadership and the like. The research then focused on how these features interrelated with different types of social networks. This information then led to a better understanding of the nature and dynamics of interpersonal communication networks. This shed light on how the community communication structure interrelates with community-based factors and

contraceptive information to influence women's and couples' decisions to continue or discontinue using modern contraceptives.

1.3.2 Fertility, Reproductive Behavior and Thai Community Structure

During project planning, prior research on fertility and reproductive behaviors gave insights along three research lines. First, many studies have addressed the major variables determining a married woman's reproductive behaviors and contraceptive decisions (Chamrathirong and Stephen 1986; Knodel et al. 1982). These include age, duration of marriage, education, occupation, religion, and place of residence. Further, family composition is also important. In the Republic of Korea and Malaysia, couples who have already reached their desired number of sons become family planning adopters. While this is also the case in India, differences exist among men and women concerning the desired number of sons. These differences also vary from one cultural setting to another (ESCAP 1987).

Parallel to this concentration, a second research area centers on the biomedical and psychosocial factors affecting contraceptive continuation rates (Boonplang 1990; Leoprapi and Thongthai 1989; Sunyavivat et al. 1982). Here, special emphasis has been on the individual as the main level of analysis. For Thailand, Leoprapi and Thongthai (1989) report that a high percentage of current and ever users of nonpermanent contraceptive methods perceived or reported no change in their physical, psychological and behavioral conditions after using any one of the nonpermanent contraceptive methods.

Neither of these two research areas, however, examined how various community-based determinants (e.g., norms, values, social networks) influence women's and couples' contraceptive *discontinuation* decisions. Efforts do exist which explore the interrelationship between

fertility behavior (i.e., decline), family planning, and changes in family and community structure (Yoddumnern 1985).

The third line of research investigates how community members and social groups influence an individual's or couple's reproductive behaviors. In a cross-cultural context, empirical evidence reveals that important social groups (e.g., friends, cliques) help shape family planning behaviors (Fernandez and Vancio 1982; Lee 1977; Onn 1987; Rogers 1977; Yadav 1967). Their key characteristics (e.g., connectedness, leadership) also play a role in this process. In the Republic of Korea and Malaysia for example, general clique agreement and leaders' opinions influence contraceptive method selection (ESCAP 1987).

For Thailand, contraceptive method preference varies by community and region. This is due in part to community-based factors which regulate contraceptive use decision-making (Kamnuansilpa et al. 1988). Among Central Thai women in Lopburi province, local health officers are the most influential persons affecting contraceptive use (Sirikulchayanonta 1989). In studying a Thai-Lao village also in Central Thailand, Yoddumnern (1981) notes that a nuclear family often lives in the same compound with other kin yet in separate dwellings. Nonetheless, the nuclear family often depends for its survival upon these same kin. Moreover, this residence pattern establishes social networks which restrict the nuclear family's independence and freedom. Such extra-household networks often carry over and dramatically influence many life course activities and decisions. The most evident are reproductive behaviors and family planning decisions.

On a related line is a study by Kanjanapan (1985) in North and Northeast Thailand. Results show that besides parents and co-residing relatives, other important persons influence a couple's reproductive behaviors. Friends, neighbors and other relatives also affect the couple's decisions concerning contraceptive use. In Northern Thailand, furthermore, family planning acceptance is high. There also exists

strongly-knit groups of female kin (Davis 1973; Delaney 1977; S. Potter 1977; Turton 1972; Yoddumnern 1985). These female kin ties form a social network structure wherein members discuss family planning information and sanction certain methods (Mougne 1978; Retherford 1979).

On a larger scale, lineages and associated spirit cults form the basis for social relations and obligations in Northern Thai villages (Yoddumnern 1985). Through social norms and sanctions, these institutions control a woman's reproductive behavior to benefit and perpetuate the lineage. This control extends to a woman's life course decisions, including the timing of her marriage, her choice of a spouse, post-marital residence, the number of children she produces, and the acceptance of family planning services.

In sum, prior research provides valuable information on the relationship between overt community and family structure, on the one hand, and reproductive decision-making on the other. They have not, however, fully investigated the former's influence on contraceptive discontinuation in Thailand and its Southern and Northeastern regions (Yoddumnern-Attig and Podhisita 1989).

1.3.3 Contraceptive Discontinuation

Prior studies have focused on either the reasons for discontinuing various methods or related service problems. In particular, cross-national studies indicate that the highest number of discontinuers are contraceptive pill users. Among these individuals, side effects or the rumor-induced fear of side effects were the most common reasons for contraceptive discontinuation (Ballweg et al. 1974; Lee 1972, Parsons et al. 1980; Phillips 1978). An Iranian study (Dana et al. 1978) also made the interesting point that medical side effects occurred most often among urban, better educated and more experienced pill users. However, rumors of side effects eventually increased the number of rural contraceptive discontinuers.

Besides side effects, Phillips (1978) found that among Filipino pill, condom and rhythm acceptors aged 25, husband's support was an important predictor of continuation. Along with this support, Navarro (1979) also cites method failure, method inconvenience, and lack of motivation as major determinants of contraceptive discontinuation.

In rural Thailand, the discontinuation rate as per the contraceptive pill is higher than that of urban areas (Sunyavivat et al. 1982; Kamnuansilpa and Chamrathirong 1985). The most frequently mentioned reason for discontinuation is side effects (Charoenlert and Leoprapi 1976; Kamnuansilpa and Chamrathirong 1985; Permpaengpun 1984). Kamnuansilpa and Chamrathirong (1985) have suggested that the government should not only aim at recruiting new acceptors to the family planning program. Rather, it should also work to maximize both continuation and quality of contraceptive use objectives.

In summary, contraceptive pill users are the group most likely to discontinue contraception. The causative factors include actual and feared side effects, interpersonal networks and the communication of information. In particular, one crucial area requiring investigation in Thailand is the nature and origin of feared side effects. Another important factor is the dissemination of family planning rumors in the community. For example, through what communication channels are rumors spread? Are such rumors used as a community control mechanism to regulate female reproduction and the discontinuation of modern contraceptives; and if so, when and why? This is particularly important in light of earlier research about the effect of community structure and organization on fertility behavior.

1.4 Project Objectives, Purpose and Summary of Major Findings

From these and other works, the present study had as its main objective *to determine the inter-related factors associated with village/*

community structure and organization which affect the discontinuation of contraceptive methods among married women of reproductive age. Three subsidiary objectives guided data collection and analysis. The first was to examine the roles of different interpersonal networks (e.g., kinship, neighbors, friends, other peer groups) in women's and couples' decision-making on the use and discontinuation of contraception. The second was to investigate the role of those individuals identified as community leaders on contraceptive use decision-making. The final objective was to identify when and in what ways both of these groups (interpersonal networks, leaders) affect the transmission of community (including family) norms and beliefs about family planning as well as contraceptive information and use which affect contraceptive discontinuation and fertility.

The project's purpose was to improve future family planning services by identifying key community-based factors which lead to contraceptive discontinuation. Once these factors are identified, family planning personnel at all levels will be more sensitive to their existence within communities and their effects on individual decision-making. Thereafter, NFPP officials can develop and place family planning policies and programs on more rational and reliable bases.

From June 1987 - April 1988, the research project was carried out in Thailand's Southern and Northeastern regions, and their provinces of Trang and Surin, respectively. As noted earlier, both regions exhibit relatively slight reductions in the total fertility rate compared to that of the country. In total, project personnel studied four research villages, that is, two villages in each province. Data collection utilized a basic household census and mapping, participant-observation with key informant interviewing, life history interviews and social network analysis, and a structured survey on household fertility.

The study's main finding is that community-based factors affecting contraceptive discontinuation require a diachronic analysis.

Specifically, usage changes occur as a woman passes through three key reproductive life span stages, i.e., Stage 1 -- Pre-Childbearing; Stage 2 -- Childbearing and Childrearing; Stage 3 -- Family Size Achievement. The mechanisms which cause discontinuation include community norms and beliefs concerning such broad but integrated areas as: childrearing patterns, infant feeding patterns, age at marriage, family planning self-management, attitudes towards family size, contraceptive method appropriateness (e.g., prevalence, convenience), infertility beliefs, personal privacy, kin group membership, and confirmed side-effects. As a woman seeks information on contraception, these come into play through separate types of community social networks. The most common social network types are intimate, effective and extended. Their degree of influence, however, varies between regions and the above reproductive life span stages.

Moreover, the domain of family planning decision-making and contraceptive discontinuation differs between Southern and Northeast Thailand. Among Southern women, this domain is family-centered wherein her family and kin group members influence her contraceptive decisions. Its Northeastern counterpart, though, is more personal and non-familially centered. Hence, a need exists for different types of family planning education strategies, and these should be sensitive to differences in communication channels and their influence.

1.5 Organization of the Report

This report contains three major parts and ten chapters. Part I discusses the study's background (Chapter 1), research design and methodology (Chapter 2) as well as study areas and population characteristics (Chapter 3). Chapter 4 presents the project's conceptual framework to show how the results of various data sources converge. It also contains the project's main research questions.

Part II describes the project's major research results, i.e., the community-based factors affecting contraceptive discontinuation. Beginning with Chapter 5, this Part gives an overview of three major determinants of reproductive behavior -- culture, character and consociates. Also included is an illustrative case study drawn from the research data. Following this, the study's results center around a woman's reproductive life span. Specifically, Chapter 6 focuses on a woman's pre-childbearing stage and such considerations as types of social networks, age at first menstruation, social pressures against seeking contraceptive information before marriage, menstruation and sex education, age at marriage, and birth control preferences after marriage and between regions. Chapter 7 then addresses characteristics of a woman's childbearing and childrearing stage including information seeking behavior, role of community leaders, social networks and their influence, contraceptive side effects, child care patterns, breast-feeding and community beliefs surrounding contraceptive method use, change and discontinuation. This chapter ends with a discussion of the domain of family planning decision-making and contraceptive discontinuation among the Southern and Northeastern research communities.

Thereafter, Chapter 8 presents information about family size achievement, including community beliefs and norms about under- and over-achievement. Chapter 9 then answers the study's research questions as a means to show the dynamics of contraceptive use and discontinuation. Finally, Part III (Chapter 10) delineates the study's major conclusions and recommendations with special reference to future studies and program policy implications.

Chapter 2

RESEARCH DESIGN AND METHODOLOGY

2.1 Overall Research Design

An investigation into how a community influences its members' contraceptive decisions and practices requires two basic considerations; first, an understanding of community and family structure in general; and second, insights into patterns of relations which regulate contraceptive behavior and fertility. To achieve this task, the research utilized a combination of both anthropological and demographic approaches. Overall, the anthropological approach focused on community and family structure. It aimed to understand the organization of existing interpersonal relationships and their degree of social influence. The demographic approach emphasized the fertility level; the statistical outcome of contraceptive prevalence and the behaviors of the people under study.

The research design, shown in Figure 1, delineates the project's overall selection process and research operations. It also presents the specific data collection techniques and their relative position within the research design. The quantitative data collection methods (census, survey) provided information on: 1) contraceptive prevalence, 2) the differentiation of continuers and discontinuers, 3) characteristics of each group on a broad scale, 4) type of contraceptives used, and 5) degree of satisfaction or dissatisfaction with specific contraceptives.

The qualitative, anthropologically-oriented methods gave further insight into: 1) the community context (i.e., structure, organization) in which both continuers and discontinuers reside, 2) community authority patterns, 3) community network structure and the dissemination of information about contraceptive use practices, 4) family structure and function, 5) social control mechanisms characteristic of personal, family

Figure 1. Project Research Design Model

VILLAGE SELECTION PROCESS

1. Thailand's National Contraceptive Prevalence Survey 3 (CPS3)

Regions for Research

2. Ministry of Public Health Monthly Reports

Research Provinces and Districts

3. Village Surveys and Profiles

Research Communities

RESEARCH OPERATIONS

4. Household Census and Mapping

Demographic Information for Sampling

5. Participant-Observation and Key Informant Interviewing

selection of

6. Life History Interviews

Contraceptive
Continuers Discontinuers

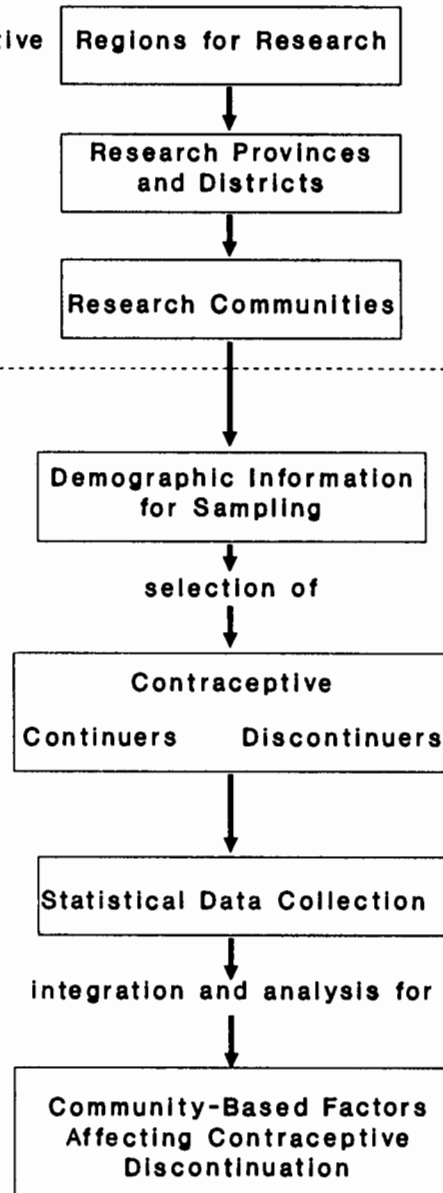
7. Network Analysis

8. Household Fertility Survey

Statistical Data Collection

integration and analysis for

Community-Based Factors
Affecting Contraceptive
Discontinuation



and community networks as they affect contraceptive use choices and decisions, 6) the socialization of community beliefs, norms and values about ideal family size, and 7) intergenerational attitudes as per family and kinship support and reproductive behavior.

Census and survey methods, therefore, collected quantitative data; anthropological techniques centered on qualitative data. These latter techniques included participant-observation with key informant interviewing, life history collection and network analysis. Combining these different methods produced a completed set of detailed, complimentary and statistically supported data. This formed the basis for a comparative analysis. This analysis focused on intra-community diversity to place important socio-cultural features into synchrony with other variables. This helped to show how they impinged on women's and couples' contraceptive continuation and discontinuation decisions.

In conjunction, a cross-community examination was also achievable. The intent was to identify underlying similarities and differences in community network structures, norms and values affecting reproductive behavior. Lastly, this investigation used various techniques to assess macro-level factors (e.g., family planning programs). Special focus was on how these affect people's access to and continued use of contraceptives. The result is a more holistic understanding of contraceptive discontinuation determinants within the community structure and at village, family and individual levels.

2.2 Study Locations and Methodology

From June 1987 - April 1988, the project was carried out in Southern (i.e., Trang province) and Northeastern (i.e., Surin province) Thailand. As noted, both areas exhibit relatively slight reductions in the fertility rate. In total, project personnel studied four research villages (two villages per province). Selection relied on provincial and district results obtained from the Third Contraceptive Prevalence Survey (Kamnuansilpa

and Chamrathirong 1985) as well as from monthly reports of the Thai Ministry of Public Health. Special focus centered on areas of low contraceptive prevalence and high fertility.

2.3 Data Collection Phases, Methods, and Respondents

Data collection entailed four main phases. Each applied different techniques and sought specific, yet complementary, types of data for each. These phases are: 1) a basic household census and mapping; 2) participant-observation with key informant interviewing; 3) life history interviews and social network analysis; and 4) a structured survey on household fertility and community networks.

2.3.1 Household Census and Mapping

The project began with a short household census and mapping. Together, they provided standard demographic data on such factors as age, sex, household composition, educational levels, economic status, occupations, and each community member's place of residence. It also addressed current contraceptive use or non-use patterns among married women of reproductive age (15-49 years). Data included not only current household residents but also those who had temporarily migrated to other areas and would return before the project's completion. This is particularly the case for the Northeastern province where post-harvest seasonal migration is high. Further, it allowed the researchers to become acquainted with community members and the externals of daily life.

2.3.2 Participant-Observation with Key Informant Interviewing

Participant-observation with key informant interviews utilized a pre-tested, standardized open-ended interview guide. Several studies have documented this tool's benefits and precautions (cf. Scrimshaw and Hurtado, 1987; Soonthornthada, 1989). The key informant interviewing

comprised two main groups, community leaders and married women. A snowball sampling method (Pituckmahaket 1989) was used in each case to recruit key informants, to collect background data on each community, and begin tracing the community's existing social networks.

To begin, researchers interviewed the village headman in each community. After the interviews were completed, researchers then asked each headman to recommend two other knowledgeable community leaders as well as three married women who would be valuable key informants. This process continued until interview data from each group showed consistent patterns which indicated information saturation (Pituckmahaket 1989). In total, project personnel interviewed twenty married women per village (in total 80 interviews). Researchers also interviewed approximately ten community leaders per village (40 total interviews). Respondents were knowledgeable, willing and available to participate in the interview process.

Questions for this method encompassed five topic areas, namely: 1) community level attitudes and values concerning birth control, 2) community organization, 3) the roles of men and women, 4) family structure and function, as well as 5) the availability, acceptance and use of various contraceptive methods (both traditional and modern). Each topic encompassed descriptive and structural questions. The former sampled each person's knowledge. The latter pinpointed how each respondent discussed and related her/his experiences, opinions, attitudes and practices. Contrast questions identified how respondents differentiated important attributes (e.g., quality of contraceptive method, leaders), needs and events in their own words and perspectives. To assure replicability, each question was written out in advance exactly the way it was to be asked during the interview. In general, respondents freely expressed their points of view but within the limits of each question and/or topic. Rather than focusing on answer comparability, the interview elicited a range of answers. This helped to identify common themes and patterns within and between interviews.

2.3.3 Life History Interviewing and Social Network Analysis

Overall, life history and social network analysis monitored the function, relationship and reproduction of families and individuals over time. For each village, researchers interviewed approximately ten to fifteen women of reproductive age 15-49 years (in total 50 interviews). Women were selected using a combined dimensional and random sampling technique.

To start this process, the principal investigators initially divided the married women of reproductive age (MWRA) into two main categories, current contraceptive users and contraceptive non-users. Thereafter, they were subdivided again based on age (19-29; 30-39; 40-49), occupation (agricultural: self-employed; paid workers) and ethnicity (especially for the Northeast). Respondents in each sub-category were then randomly selected. Half of the overall interview sample comprised current contraceptive users, while the remaining half were non-users, i.e., discontinuers. Once again, respondents were knowledgeable, willing and available to participate in the interview process.

For the interview process, a pre-tested, standardized open-ended interview guide addressed six topic areas, namely: 1) individually perceived changes in village and family organization; 2) changes in contraceptive use within village families; 3) affiliations with community members as per closeness and contact over time; 4) role of community leaders in disseminating family planning information; and 5) women's family planning decisions.

2.3.4 Household Fertility Survey

Finally, project personnel conducted a household fertility survey of all ever married women of reproductive age in each community (n = 300). The survey comprised a pre-tested, single structured interview

schedule. The latter covered the topic areas noted above for the key informant interviews. This survey was conducted last because, at the project's beginning, many village women had temporarily migrated for off-farm employment.

2.4 Interviewers and Training Procedures

Four research assistants collected the project data. Each researcher possessed a Bachelor's degree in one of the social sciences and had conducted prior field research. In addition, they could easily converse in the local dialects. Before the actual fieldwork, researchers underwent one month of intensive classroom and field training. Topics included anthropological and demographic principles, data collection techniques, data organization (sorting, filing) and analysis as per the research project's objectives. Research assistants also conducted a brief field study to familiarize themselves with the project's methodology and data collection instruments. After this stage, principal investigators along with the researchers discussed problems and ways to improve data collection instruments.

2.5 Fieldwork Operations

After training, research assistants entered their respective communities (one person per village) to become familiar with community life and gain acceptance from its members. In total, each researcher lived in her village for nine consecutive months. During this time, each researcher wrote detailed, expanded field notes for each qualitative interview conducted. They also sorted and filed the data as previously taught during the project's initial training.

To assure the collection of accurate, complete and detailed data, the principal investigators visited each community on semi-monthly to monthly bases. Their time consisted of observing each researcher's performance and in providing on-going support and supervision.

Principal investigators also reviewed field notes to identify areas needing elaboration. Additional activities included assessing data quality, determining if any interview procedure or question needed modification, and identifying any other aspects needing attention. During this time, investigators also began preliminary data analysis. This highlighted additional areas of inquiry as well as verifying existing information and developing initial conclusions.

2.6 Post-Fieldwork Operations

After fieldwork completion, the principal investigators conducted a workshop wherein they interviewed the research assistants, individually and collectively. Interviews centered on obtaining researchers' overall perceptions and impressions about the communities. Research assistants thus became project key-informants, and their information was used to check the reliability of collected data. This allowed for a greater depth of analysis in addition to controlling for personal factors and experiences which might affect data quality. Data analysis then encompassed such areas as computerization, cognitive maps, and conceptually clustered variables which brought together related information. Of special note were any recurring patterns or themes (Scrimshaw and Hurtado, 1987; Yoddumnern-Attig, 1989). The aim was to build a logical chain of evidence aimed at understanding the community-based factors affecting contraceptive discontinuation over time and which would guide the development of future family planning education programs.

Chapter 3

STUDY AREAS AND POPULATION CHARACTERISTICS

This section describes the study areas and population characteristics. Firstly, it presents a provincial profile to place the research communities in their larger population, education and economic contexts. Provincial information derives from Thailand's Population and Housing Census for 1980, the National Statistical Office, Office of the Prime Minister. This is the most recent census (results from a 1990 census are not yet available). It was particularly applicable during the project's proposal development and research process (1986/1987). Thai governmental sources do not expect any large-scale changes in the provincial information from that time until now. Thereafter, the villages and their socio-cultural and demographic contexts are presented, followed by a description of the women sampled in the household fertility survey.

3.1 The Northeastern Context: Surin Province

3.1.1 Location and Divisions

Surin is located in the Northeast region of Thailand and approximately 457 kilometers from Bangkok. Its land area covers about 8,124 square kilometers, and it has common boundaries with Maha Sarakham and Roi-Et in the north, Srisaket in the east, Buriram in the west, and Kampuchea in the south. Surin consists of 11 districts, 2 sub-districts, 106 communes, 1,470 villages, and one municipal area.

3.1.2 Population Structure

Age and Sex Structure. The total population (as of 1980) was approximately 999,795 persons. Of these, 496,178 were males and 503,517 were females. Males thus represented 49.63% of the total population, while females were 50.37%. The highest population percentages were in the age groups of 5-9 years and 0-4 years, respectively. The dependency ratio (proportion of population aged under 15 years and aged 65 years and over per 100 population aged 15-64) was about 85.

Fertility . The average number of children ever born alive were 4,222 per 1,000 ever married women. This average was higher in the non-municipal area (4,251/1,000) than in the municipal area (3,330/1,000). About 43.72% of women aged 15-49 years remained single for the municipal area and 32.93% for the non-municipal area. The singulate mean age at marriage for Surin women was 22 years for the entire province. About 36% and 24% of currently married women aged 15-49 years in the municipal and non-municipal areas, respectively, reported practicing any method of contraception.

Migration, Distribution and Settlement. The definitions of "urban" and "rural" areas are not clearly defined. Consequently, these terms refer to municipal (urban) and non-municipal (rural) areas in the 1980 census. The latter notes that only 2.97% of the total population was residing in the urban area. From 1975-1980, about 10.17% of the population aged five years and over in the municipal area in-migrated from other provinces. This is compared to only 1.89% for the non-municipal rural area.

3.1.3 Educational Structure

Educational structure in this report refers only to literacy, school attendance and educational attainment. Out of the population aged 10 years

and over, 86.76% were literate. The literacy rate for males was 90.39% and 83.26% for females. The percentage of literate persons in the municipal area was higher than that of the non-municipal area. Urban-rural and sex differentials in school attendance of the population aged 6-29 years were similar to those of the literate persons aged 10 years and over. The percentage of persons who have a higher education than the elementary level was seven times greater for the municipal area than the non-municipal area of Surin.

3.1.4 Economic Structure

Farmers accounted for the largest occupational group at 92.42% of the total population aged 11 years and over. This was followed by sales workers; craftsmen, production workers and laborers; and professional, technical and related workers, respectively. In the municipal area, the highest percentage of the population worked as sales workers (about 31.74%). The next ranking occupations were professional, technical and related workers; craftsmen, production workers and laborers; and service workers, respectively. Not surprisingly, in the non-municipal area, the highest percentage of the working population comprised farmers (about 94.26%), followed by craftsmen, production workers and laborers, sales workers, professional, technical and related workers, respectively. Farmers represented the highest percentage both for males (about 90.98%) and females (approximately 93.82%). For males, the next most prevalent occupations included craftsmen, production workers and laborers; professional, technical and related workers; and sales workers, respectively. Among women, these groups were sales workers; professional, technical and related workers; craftspersons, production workers and laborers, respectively.

3.2 The Southern Context: Trang Province

3.2.1 Location and Divisions

Trang province is in Thailand's Southern region, approximately 828 kilometers from Bangkok. Covering an area of about 4,918 square kilometers, this province has a common boundary with Nakhon Si Thammarat in the north, Krabi and the Indian Ocean in the west, Satun and the Indian Ocean in the south, and Phatthalung in the east. Trang has 6 districts, 79 communes, and 473 villages; there are 2 municipal areas.

3.2.2 Population Structure

Age and Sex Structure. Trang's total population size, as noted in the 1980 Population and Housing Census, was approximately 446,656 persons. Of these, 221,985 were males and 224,671 were females. Males thus represented 49.70% of the total population. The highest population percentage in this province were in the age groups of 5-9 and 10-14, respectively. The dependency ratio was about 82, similar to that of Surin.

Fertility. The average number of children ever born alive were 4,077 per 1,000 ever married women. This average in the non-municipal area was higher (4,156/1,000) than that of the municipal areas (3,415/1,000). These figures are close to those of Surin. Also similar is the singulate mean age at marriage of women, which in Trang was 23 years. Approximately 37% and 29% of married women aged 15-49 years in the municipal and non-municipal areas, respectively, reported practicing any form of contraception. This rate is only slightly higher than that reported for Surin.

Migration, Distribution and Settlement. The urban population represented only 13.63% of the total population, a figure higher

than that of Surin due to a greater number of municipal areas in Trang. During the previous five years (1975-1980), 7.71% of the municipal population aged 5 years and over were in-migrants from other provinces, compared with 2.25% of the non-municipal area.

3.2.3 Educational Structure

Out of Trang's total population aged 10 years and over, 88.17% were literate. The literacy rate for males was 91.81% and for females 84.64% (slightly higher than those of Surin). Once again, the literacy rate was higher in the municipal areas than their non-municipal counterpart. Trang's urban-rural and sex differentials in school attendance of the population aged 6-19 years were similar to those of the literate persons aged 10 years and over, as in Surin. The percentage of municipal persons who possess a higher education than the elementary level was three times that of the non-municipal area. This is a smaller difference than that of Surin.

3.2.4 Economic Structure

As in Surin, the largest occupational group in Trang was farmers at 73.88% of the total population aged 11 years and over. This was followed by craftsmen, production workers and laborers; sales workers; and professional, technical and related workers respectively. The former two were of reverse importance in Surin. For the municipal areas, the highest percentage of the population worked as sales workers (23.36%), followed by craftsmen, production workers and laborers; farmers; and service workers, respectively. For Surin, no farmers resided in the municipal area.

In the non-municipal area, the highest percentage of the population worked as farmers (81.71%; lower than Surin), followed by craftsmen, production workers and laborers; sales workers; professional, technical and related workers, respectively. As in Surin, the farming group represented the highest percentage for both males (70.71%) and

females (77.46%). Trang's percentages in this respect are lower. These were followed by craftsmen, production workers and laborers; sales workers; transport equipment operators and related workers, respectively, for males. Among women, these categories were craftsmen, production workers and laborers; professional, technical and related workers.

3.3 Family Structure, Post-Marital Residence and Inheritance in the Research Provinces

Perhaps the most common feature of both provinces is family structure. In general, families in each province are of the stem- or nuclear-type. This depends, though, upon a household's particular stage in the family developmental cycle. Matrilocal residence is the norm in both provinces, although patrilocal residence is found more frequently in the South than the Northeast. In the former pattern, a daughter and her husband will co-reside with the woman's parents until another daughter's marriage. In this residence resudebce pattern, men are the authoritative heads of the households and this position transfers from father-in-law to son-in-law. Regarding inheritance patterns, ideally parental property is divided equally among any surviving children without regard to sex. In actuality though, the remaining daughter who cared for the last surviving parent usually receives a larger portion of the properties (esp. the original house and its associated land and equipment).

3.4 Community and Family Socio-Cultural Profile

3.4.1 Surin Villages

The Surin research villages were comprised mainly of Thai of Lao descent who practice the Buddhist religion and speak a Northeastern Thai dialect (mutually intelligible with the Laotian language). Other minority ethnic groups include Thai-Khmer and Thai-Chinese. Major occupations include rice farming and hired labor, which occurs in farming's off-season or when the harvest is poor.

The social and family organization exhibited in the two research villages of Surin province centers around females. The settlement pattern for houses is predominantly rural and compact, rather than dispersed. Norms of matrilineal and uxori-local residence also characterize this area. This type of residence pattern leads to strong familial ties with the wife's parents and family which come into play in times of need. Evidence of overt male dominance is either absent or ambiguous, however familial authority transfers from father-in-law to son-in-law. Property inheritance often follows the female line.

3.4.2 Trang Villages

People living in the Trang villages are, for the most part, Buddhist of Thai nationality who speak the Southern Thai dialect. However, the Islamic religion and Chinese culture have influenced this area due to historic circumstances (e.g., migration, trade routes). Regarding occupations, most individuals work as hired laborers, often in local rubber plantations. Rice farming is conducted, but mainly for home consumption rather than for sale.

The social and family organizations of the Southern Thai are somewhat different from their Northeastern counterparts. The two communities in Trang province are rural and dispersed (rather than compact). Most families are nuclear, however post-marital residence varies depending on local resource constraints and negotiations made between the concerned families. A bilateral system appears to exist in this area. In times of need (i.e., emergency loans, information, social support) for example, individuals and couples will turn to either the husband's or wife's family, depending upon the degree of social and geographic closeness. Further, within family and community contexts, male authority predominates, especially regarding economic decision-making (which may be due, in part, to the influence of Islam and Chinese cultures even among the Buddhist population).

3.5 Demographic Profile of the Research Areas

Table 1 (Appendix) provides a demographic profile of the research villages, two in the Northeast (Surin) and two for the South (Trang). Together, the two Northeastern villages contain 156 households and 721 people, while in the South there are 222 households with 986 people. Despite this marked difference in size, the communities in both provinces have about the same number of married women of reproductive age (15-49), that is, 145 in Surin and 155 in Trang. The two areas are also similar in terms of the number of married women of reproductive age (MWRA) who are currently using any modern methods of contraception (105 in the Northeast, 106 in the South). This information shows that family planning methods are equally prevalent between the research communities in both provinces. Concerning contraceptive discontinuation, 9% and 17% of MWRA in Surin and Trang, respectively, have used birth control methods in the past, but were no longer doing so at the time of the survey. The overall discontinuation rate is 13%. In Surin, 18% of MWRA have never used any form of family planning compared to 14% for Trang.

3.6 Characteristics of the Sample Women

The household fertility survey covered all MWRA in each community ($n = 300$). Characteristics of the sample women are given in Table 2 (Appendix). They are presented cumulatively, since the community patterns between regions were the same. In general, these women are distributed fairly evenly across age groups, except for those in the youngest and oldest categories. About half of the sample women are 31 years of age or younger. This suggests that almost 50% of the sample is in the prime age of reproduction.

Nearly all of the women are literate, although only about 60% can read and write well. Slightly more than one-fifth of the sample have received a higher education than the 4-year primary level.

Nearly two-thirds of the women (60.4%) are from households which earn less than 20,000 baht per year (800 US\$ annually). These households, therefore, have a low economic status.

Regarding marriage, 47% of the women married at or before the age of 19 years. The mean age at marriage is 20 years. On the average, they have about three living children, although a substantial proportion (27%) have more than this number. Contraceptive use is as noted above in section 3.5 and Table 1 (Appendix).

Chapter 4

CONCEPTUAL FRAMEWORK

Undertaking community-based studies requires a clear conceptual framework. It is needed in understanding how the results of various sources of data converge as well as in formulating clear answers to research questions.

4.1 Early Frameworks

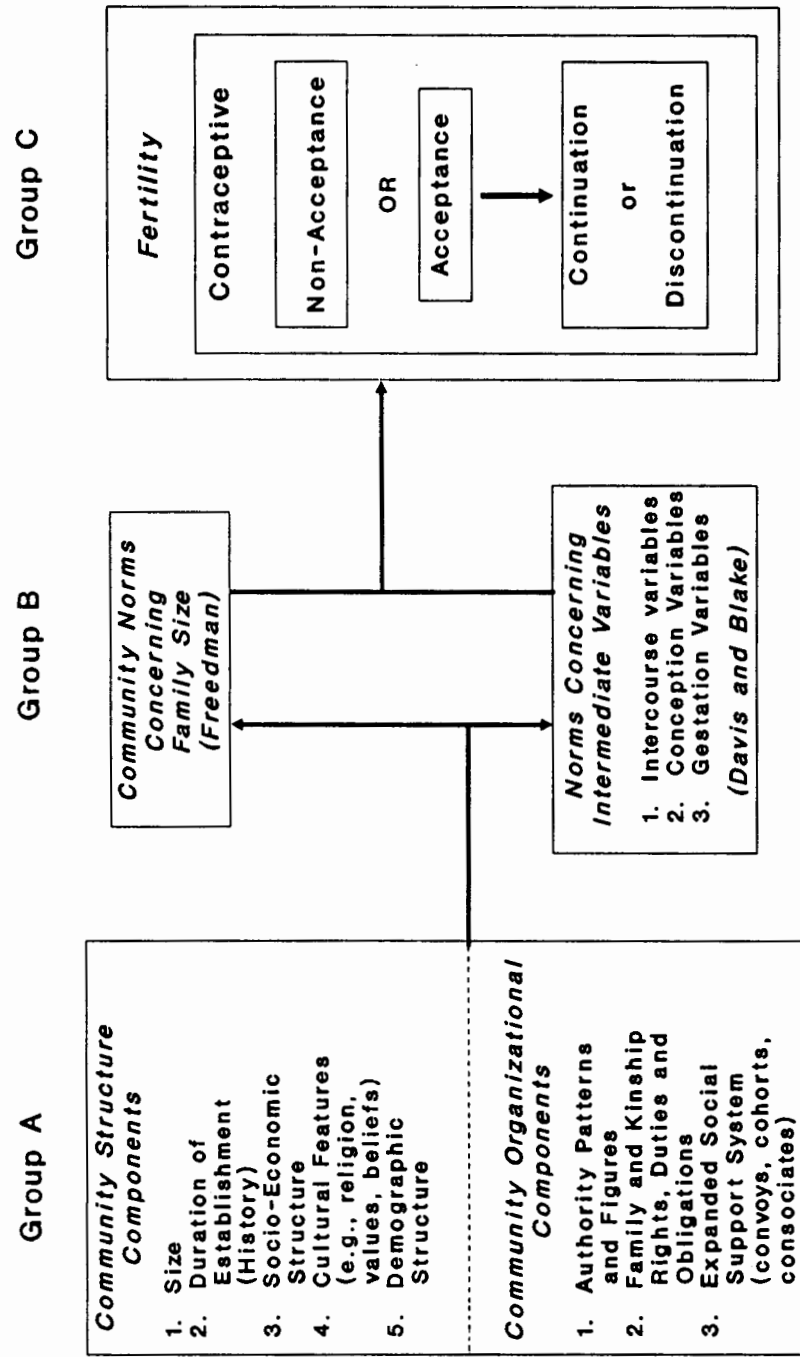
One early model which linked community factors to fertility behavior is that of Davis and Blake (1956), as shown in Figure 2. In short, Davis and Blake classified particular "intermediate variables" as a means to analyze fertility behavior. The three sets of intermediate variables are those influencing exposure to intercourse, conception and gestation (Group B, lower box). In Davis and Blake's model, these variables link institutional mechanisms (Group A) with fertility (Group C). In essence, any social or cultural features noted in Group A must operate through these intermediate variables as a means to influence fertility. Freedman (1963) later modified this model to include community norms about family size that also affect fertility (Group B, upper box).

While this conceptual framework is valuable, unfortunately it does not specify the channels of influence through which the intermediate variables and family size norms operate. These are crucial, however, for the development of family planning education programs.

4.2 Convergence Model of Communication

Within rural communities are well-established social networks and patterns of informal communication and influence (Hubley 1986; Kanaaneh 1979; Marshall 1971). An interesting study by Rogers (1977)

Figure 2. Conceptual Framework by Davis and Blake (modified by Freedman)



involved a detailed social network analysis of reported sources of family planning advice. He was able to show how the inappropriate choice of a group leader caused the failure of a mothers' club program in a South Korean village. The leader was someone whom none of the village women identified in the survey as a potential source of advice.

That interpersonal communication can facilitate or obstruct behavior change has become a part of conventional wisdom. Research studies in this area, moreover, have adopted one of two orientations (ESCAP 1987). The first relies on linear models of communication where interpersonal communication entails a sequence or series of actions. A classic case is the communication process characteristic of family planning education, i.e., a focus on source/sender-message-channel-receiver (Hubley 1986). This process, though, is mechanical and is a result of emphasis on destructured individual bias (Rogers and Kincaid 1981). To overcome such problems, a "convergence model of communication" has taken hold (Kincaid 1979; ESCAP 1987). Based largely on systems analysis, the convergence study focuses its attention on interrelationships between individuals, subsystems (e.g., families, cohorts, consociates), and systems (e.g., communities). Information here represents an outcome of action. For family planning, a woman's actions -- like the selection or discontinuation of a particular birth control method -- often lead her to share her experiences with other members in the community. This information sharing may lead to further actions including the first time selection of a birth control method by non-users up to that point, or the re-selection of birth control methods by other users. This sets up an information exchange cycle which is iterative in nature.

Since interpersonal relations are the key focus, network analysis helps to identify community communication structures. Its basic unit of analysis is the dyad which contains two individuals connected by strong or weak communication links. Information flow need not depend on a high degree of integration or frequent contacts, though this is debatable (Lice and Duff 1972; Kim 1983, as cited in ESCAP 1987).

Above the dyad is the social network, or clique, level. A social network comprises those series of linkages existing between individuals within certain social contexts (e.g., community, family, reference groups). These can act to mobilize community members for specific purposes and under specific conditions (Whitten and Wolfe 1973).

A social network analysis centers either on a central person/node or category (e.g., contraceptive discontinuers, continuers). It explores the categorical, structural and personal resources of that person and his/her personal network. It can also look at the broker and patronage relationships between his/her network and those of other significant persons (e.g., community leaders, heads of households, traditional medical personnel, spouses) (Whitten and Szwed 1970a,b).

These networks delineate the dyadic roles and obligations individuals have accumulated over their life course. These arise out of the rules, or structure, of their community. They also serve to place individuals in its organization. By tracing such networks empirically, a community's structure and organization appear as well as their influence on individual reproductive/contraceptive decisions.

Many factors can determine the formation of social networks in a given community. Four of greatest descriptive use in this project are *ascriptive indicators* (e.g., kin group, family, age), *achievement indicators* (e.g., educational level, occupation, income categories), *proximity indicators* (e.g., physical and social distance), and *functional indicators* (e.g., health service provisioning, family or community leadership, interpersonal assistance).

To determine social network characteristics required the collection of information on features associated with each of the above four indicators. It also called for information about the roles of formal and nonformal leaders and health service providers. To identify the communication structure for contraceptive use also required data on

frequency of contact and extent of psychological closeness. Considerations were also needed in terms of openness, that is, the degree to which networks allow new members to enter; degree of network overlapping; and the potential number of different network types which a woman allows to influence her family planning decisions and actions.

This study applied the conceptual framework noted in Figure 3 to organize thoughts and data. It is an adapted version of a framework used by the Economic and Social Commission for Asia and the Pacific (ESCAP 1987) to investigate community communication networks and family planning behavior in the Republic of Korea, India and Malaysia. Using this framework, the project investigated the interrelationship of the model's various factors to: (1) determine the influence of the four indicators on the community communication structure, (2) the creation and characteristics of specific networks, (3) the affect of community-based factors as well as (4) contraceptive information flow on (5) a married woman's use and/or discontinuation of family planning methods.

4.3 Research Questions

From the conceptual framework, the following research questions served as a guide for data collection.

2.2.1 Assuming that a community with a small population size and a long history will have a more closely-knit social network system, will this situation negatively affect contraceptive continuation, especially where children serve as perpetuators of community structure, organization and values?

2.2.2 Do high parental expectations as to old age security negatively affect their children's continuous use of contraceptives?

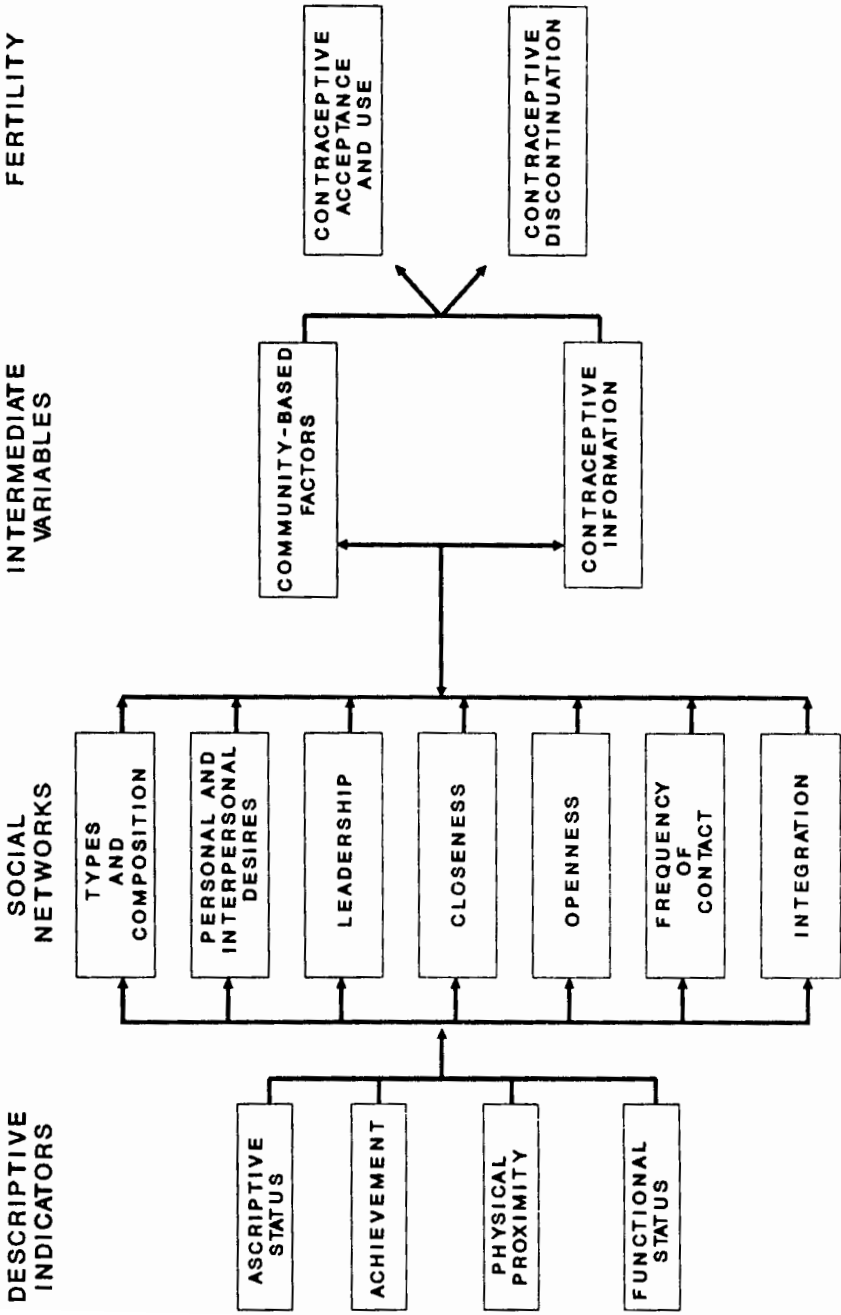


Figure 3. Social Network Formation and Influence on Contraceptive Use

2.2.3 Is high contraceptive discontinuation more likely to occur in communities with few alternative contraceptive methods as sanctioned by community norms or general availability?

2.2.4 Does a high degree of conjugal autonomy as per sources and modes of income positively correlate with a high degree of conjugal decision-making concerning contraceptive acceptance and continuation?

2.2.5 Does a high degree of conjugal autonomy in contraceptive continuation decision-making positively correlate with nuclear families and negatively correlate with extended or stem family organization?

2.2.6 Do negative attitudes concerning contraceptive acceptance and/or continuation by community and family leaders positively correlate with high rates of contraceptive discontinuation?

2.2.7 Do the opinions of female community or family leaders have a greater impact on contraceptive discontinuation than those of male leaders?

PART II

**COMMUNITY-BASED FACTORS AFFECTING
CONTRACEPTIVE DISCONTINUATION OVER
THE FEMALE REPRODUCTIVE LIFE SPAN**

Chapter 5

CULTURE, CHARACTER AND CONSOCIATES CONSTRAINTS TO REPRODUCTIVE BEHAVIOR

Thailand's entrance into the industrial world as brought with it two unsettling phenomena. On the one hand, mass productivity has raised the hopes that material want might at last be overcome. Yet, fears abound that many will continue to be alienated from the output of their labors. Simultaneously, increased longevity and reduced reproductivity have raised the hopes that everyone born human may enjoy the fullest quality of life possible. It also brings with it questions of employment, role changes, family stability and old age security.

In short, a new pattern of constraints and opportunities is shaping the lives and livelihoods of the Thai people at each stage of their respective life courses. This situation calls for a clearer look at the biographical timelines of human maturation, particularly of women who embody the potential and actual ability to reproduce humankind. Each woman (or man for that matter) is the handiwork of many individuals over many years. Their growth, moreover, reflects not only the priorities of today, but the lessons of yesterday, and the human material of tomorrow.

5.1 Growth and Reproduction

Each woman's growth is a biological event which can be described through trends and stages within that person. Yet growth as a human event is cultural as well as biological. It represents the mutual building of biographies, a collective molding and self-shaping of lives according to a heritage of cultural values. Each woman represents an *individual* -- a unique center of initiative and integrity -- as well as a person who is a moral actor in her community's dramas.

Like all human phenomena, growth is the child of circumstance, built by opportunity, retarded by constraints. Whether there are limits to personal growth remains unsolved, but the apex for most societies rests on a woman's reproductivity; their hope for the future. A woman's desire or ability to time her growth as well as reproductive activities is largely limited by three orders of constraints: the cultural, the individual and the social. In an anthropological sense, culture can be thought of as a legacy of idioms and values which give each human life a point and a purpose. Early on, a woman is enculturated -- infused and informed about acceptable timetables for growth and the roles and duties which they prescribe. She is given an inherent cultural listing of the accumulated knowledge, experiences, beliefs, and attitudes of the group with which she is associated. High on this list is her responsibility as a procreator of new life. The timing with which this takes place is shaped, in part, by such culturally defined roles and timetables.

But each woman has her own distinctive features, her mark of identity and individuality created by both nature and nurture. This represents her character and through it she interprets how she will become a certain person within the general guidelines set by her culture. Her desire to accept the roles of wife and mother rests on her and her alone, as does her desire to avoid pregnancy through contraceptive means.

A woman, however, usually does not apply cultural codes to herself in isolation; other people must interpret them for her as well. Her character and growth as well are shaped by her family, community and larger society through a series of social relations, built up and extended over time. But more importantly, her reproductive potential becomes in part a property of others, particularly of those who are her consociates. Consociates are people she relates to across time and in some degree of intimacy (Plath 1980). They are friends, family, spouses, kinsmen and colleagues joined together in separate, often overlapping networks. Figuratively speaking, consociates represent a special jury which examine and confirm the course of a woman's being. More dramatically, they

heavily influence her major life course decisions, such as those related to reproduction, since such decisions have an impact not only on herself but her "significant others" and social milieu. Consociates thus represent a primary social resource concerning information and validation as well as restraint in imposing limits on personal actions.

Culture, character and consociates are thus the threads making up the fabric of a woman's life. The process is long, and different patterns can be seen at different points in her life course. In particular, her maturation into a woman, a wife, a mother and a grandmother highlight points at which each thread stands out as affecting her decisions and the overall shape of her life.

To view this process dynamically, and within the confines of the present project, let us turn to the life history of one young woman as she and her consociates shape her reproductive life span decisions within the setting of a rural Northeastern Thai community.

5.2 One Woman and Her Quest for Birth Control

Camouflaged amongst the low hills, sparse forests and parched rice fields of Surin province sits the village of Ban Phet [pseudonym]. While not distinctive in its present state, some twenty-three years ago it was the cradle into which one young woman -- Nang Gao [pseudonym] -- was born. For as long as she can remember, Nang Gao has known periods of hardship and opportunity. Shortly after her birth, her father died in an accident which shortened Nang Gao's childhood even more than is usually the case in rural Thai life. Since her mother needed to devote most of her time to the rice field and other economic pursuits, Nang Gao along with her elder sister and brother assumed the major household chores. As soon as she was able, she also worked at any job which was available and that would increase her family's meager savings.

Nang Gao started menstruating when she was 16 years old. Shortly thereafter, her brother moved to Lopburi province as a construction worker, while her sister migrated to Bangkok in search of a better job. Periodically, they would send what little money they had saved back to Nang Gao and her mother, all the while hoping that Nang Gao could find a firm economic foothold which could ensure her a productive life and old age security for her mother. Her brother took a special interest in this quest and managed to enroll Nang Gao in a beauty school with the hope that one day she would have her own beauty parlor. At 19, Nang Gao received her certificate in hair styling and went to stay with her sister in Bangkok in order to take additional courses in hair styling and tailoring.

By the time Nang Gao began menstruating, she had indirectly heard of birth control through various friends and relatives, including her brother, sister and older community members. Whenever she needed to go to the village health center, she also listened in on family planning conversations and consultations but was afraid to ask questions for fear of being scolded. Nang Gao knew it was not proper for a young unmarried woman to know about birth control. They should not be interested in sex before marriage. It would probably lead to adulterous behavior. Over the radio however, Nang Gao heard several programs informing the public about various methods of birth control, from using intrauterine devices to contraceptive pills. Once, a neighbor's child ate all of the pills in her mother's birth control pack, and Nang Gao had to help rush the child to the health center.

When Nang Gao was 20 years old, her mother died, so Nang Gao went to live with her sister who had since returned to Ban Phet. Later on, Nang Gao met a young, handsome army recruit. Unknown to friends or family, they started having sexual relations, and Nang Gao secretly hoped that one day they would be married.

Since she did not want to get married immediately Nang Gao asked the community health worker to give her birth control injections, but she objected since Nang Gao had not already borne a child. According to the health worker, injections might cause Nang Gao to become infertile. Calling upon her own informal knowledge about birth control, Nang Gao resorted to taking birth control pills from her sister's cabinet. Unfortunately however, she was not sure of the dosage and only took three pills. Moreover, they made her dizzy and nauseous, so she stopped taking them. The result? Nang Gao became pregnant.

When Nang Gao's sister found out, she was extremely angry and ordered her to get an abortion. Nang Gao objected though; she thought it was a sin. Consequently, her sister threw her out of the house. Nang Gao did not want any family problems and hoped to make amends with her sister, so she consulted health center personnel about an abortion. But at the health center, the staff advised her against an abortion. They also felt it would be a sin to destroy life, and against the Lord Buddha's teachings. Nang Gao next confided to her boyfriend that she was pregnant, and he was adamantly against an abortion. To avoid any problems, the young man's parents encouraged them to get married and keep the child as their own. Nang Gao agreed and, by age 22, she had both a husband and a child. Since she and her husband did not want another child right away, they consulted the health center staff about birth control. They were advised that her husband should use condoms, but they decided in favor of an IUD instead because Nang Gao was still breast-feeding her child. "Afterwards," she thought, "I'll ask the health center staff for an injection." She did not want an injection now since she feared it would pollute her breast milk. Presently, Nang Gao is 23 years old, the mother of one child, and the owner of a seamstress shop in Ban Phet. She is still using an IUD because it does not interfere with sexual relations or the nursing period.

5.3 The Intertwining of Culture, Character and Consociates

Nang Gao's life history gives us initial insight into the workings of family planning at a personal level. In terms of culture, community conventions dictate the timing at which unmarried women can seek and use contraceptives. In other words, the community value system restricted Nang Gao's access to birth control information before marriage. This system also carried over into Nang Gao's family. Through socialization, her sister adopted the view that unmarried women should not use birth control or have children out of wedlock. The Buddhist religion, its canons and adherents also restricted Nang Gao's family planning options, especially in terms of abortion.

Yet Nang Gao's own character and desires worked to promote premarital sexual relations despite limited birth control knowledge and an absence of contraceptive protection. Even after she became pregnant, she still wanted to keep the child in the face of almost overwhelming familial pressure.

But playing major roles were her consociates. Although Nang Gao attempted to gain access to birth control, social and peer group beliefs dictated that such methods were only for married couples. Furthermore, differing advice from community members and health personnel, as well as a lack of active family planning education, caused Nang Gao confusion and frustration. But even in the face of such opposition, she took the initiative and tried to use contraceptive pills, even though she admittedly did not know when and how many pills to take. Consequently, her efforts to obtain birth control ended in misinformation and, ultimately, failure. Nang Gao was fortunate, however, in that she gained support from her husband and his family. Without this, she would have been ostracized from both her family and community unless she had undergone an abortion.

Chapter 6

STAGE 1 -- PRE-CHILDBEARING

The following sections are presented according to the chronology of a woman's reproductive life span. As noted earlier, this period comprises three approximate stages: Stage 1 -- Pre-Childbearing (Chapter 6); Stage 2 -- Childbearing and Childrearing (Chapter 7); and Stage 3 -- Family Size Achievement (Chapter 8). In part, these stages are not mutually exclusive. Certain practices like breast-feeding as well contraceptive knowledge may cross-cut stages. Between stages, moreover, are important considerations (e.g., social networks, role of leaders) determining contraceptive use and discontinuation

6.1 Community Social Networks

Three types of social networks are most common in both the Northeastern and Southern research communities. These networks represent the communication structure which transmits community beliefs and information about reproduction, contraceptive use and discontinuation. The first group corresponds to Boissevain's (1974) intimate network. This network consists of a woman's primary links as derived mainly from ascriptive (e.g., family) and functional (e.g., mutual assistance) indicators. Proximally, it also involves by a high degree of daily contact and emotional closeness. Network members largely include persons in a woman's family or kin group (e.g., her mother, elder or younger sisters, close female cousins). They can also include her husband and his family, if the latter is living nearby.

The second network is an *effective network* in Boissevain's scheme. It also comprises primary linkages, but ties are less ascriptive in nature (except for age). Rather, they consist of more achievement (e.g., age, education, similar experiences) and functional features. In

proximity, the degree of closeness equals or exceeds that of the intimate network (as per certain issues such as contraceptive initiation). However, this may also entail a lesser degree of daily interpersonal contact. This social network is broader and comprises significant consociates found within close friends, peer groups and/or neighbors.

Finally, an *extended network* exists among village women. This network contains the lowest degrees of closeness and contact of the three networks. In composition, this network mainly consists of local health personnel (e.g., government trained midwives, community nurses, volunteer community health workers) as well as formal or non-formal community leaders (e.g., village headmen, monks, teachers). Network membership originates from functional characteristics (i.e., interpersonal assistance) and ascriptive indicators (only in the sense of being community members). Inequality in achievement (knowledge, education, experience) accounts for greater social distance amongst members.

These networks, though, are not mutually exclusive. For one young woman in Northeast Thailand, her husband was a health post worker, so technically he is a member of both her intimate and extended networks. Moreover, a sister or neighbor may be either an intimate or effective network member depending upon the degree of closeness and proximity. Networks also often cross-cut or intersect between individuals. That is, suppose woman A is a friend of woman B, who is a friend of woman C. While woman A does not know woman C, woman B will communicate the latter's information to woman A. Woman B is therefore the intersecting node between two separate networks, those of woman A and woman C. To keep this discussion as simple as possible, though, the three networks are kept separate except where their intersection is significant.

6.2 Menstruation Education

In both research provinces, young girls begin menstruating at the age of 14 to 15 years. Menstruation is a right of passage, for it marks the girl's entrance into womanhood, and it is a sign of marriageability. Community and family members, though, consider this to be too young an age for marriage. At this same time, members of a girl's social networks (intimate, effective and extended) encourage her to begin acting like a woman and not a child. In particular, she must not participate in children's play or continue to associate with male friends within her effective network.

In Stage 1, a young girl's social networks also inform her about reproduction and associated behaviors only when the need arises. The first form of reproductive information seeking is "*menstruation education*." "This communication process only begins when a girl starts menstruating and not before. Members of a girl's intimate network (e.g., mothers, grandmothers, elder sisters) are primarily responsible for educating the girl about reproduction. They also tell her how to care for her body during menses and about specific food taboos associated with menstruation. These include not eating ice, coconut juice or other foods which are culturally "*cold*" in quality. Women believe that such foods will cause stomach aches and cramps.

A young girl's effective network members do not play a major role in communicating menstruation information. This is logical since they are going through the same life course transition at roughly the same time. Extended networks only come into play when the girl's menstruation appears to be abnormal.

6.3 Lack of Family Planning Awareness and Its Consequences

Before marriage, community norms and values state that Stage 1 women should not have premarital sexual relationships. As noted in Nang

Gao's life history, community members also believe that a woman should not even know about sex before marriage. Such knowledge might cause her to enter adulterous relationships and practice immoral behaviors. Therefore and ideally, members of a woman's social networks do not provide her with formal sex education before marriage. However, information is sometimes passed informally and secretly, usually through an effective network member. Most often, this occurs when one friend begins having sexual relations and tells another friend about it.

Family planning knowledge and information are the domain of married women only. Community members will look down upon unmarried women who seek contraceptive methods. They, along with the woman's social network members, may also publicly condemn such women via gossip. This threatens not just the woman's community status. Her family will also be under scrutiny for improper childrearing practices and a failure to socialize important community values.

But this does not mean that unmarried Stage 1 women do not know about birth control and family planning. Rather, they are the *passive recipients* of information originally channeled to other persons within their social networks. For Nang Gao and her co-respondents in both provinces, effective networks (and especially friends) play a prominent role in communicating and obtaining birth control information than either intimate or extended networks. Such shared information can entail types of contraceptive methods, procedures, their relative effectiveness and side effects. As a young girl's interest heightens (possibly due to premarital sexual relations), she then becomes an active seeker of family planning information. Usually, her sources of information are media-based (e.g., books, pamphlets) or through confidential discussions with effective network members, as illustrated by the following cases.

I started my menstruation when I was 15 years old. At that time, I didn't know anything about birth control. I just

heard about it. I learned about the contraceptive methods when I got married. (30 year old Northeastern woman)

My older sister told me about menstruation. Later, I overheard her talking to a friend about taking the Pill. This friend was secretly having sexual relations with her boyfriend, and she was on the pill so she wouldn't get pregnant. She was caught and they punished her. I also read a neighbor's book about birth control when she wasn't home. (22 year old Southern woman)

Community and family members, therefore, do not view family planning as a preventive measure for unmarried Stage 1 women. Instead, family planning and contraceptive use are strictly marital activities through which couples can organize their families.

The problem which arises is that many women know about family planning before marriage, but their information is oftentimes incorrect or incomplete (e.g., lack of knowledge about pill dosages). Premarital sexual relations and the lack of premarital family planning education among young unmarried girls, therefore, can have dire personal consequences. The most dramatic is unwanted pregnancies which may lead to abortions. Alternatively, the young woman's family (or that of the man's) may force her into marriage before she is psychologically ready for motherhood. In the process, members of her intimate, effective and extended networks may alienate her, and thus she loses their support when she needs it the most.

To partially solve this problem, health personnel should be encouraged to educate young women early using accurate information, appropriate methods, messages and channels of communication. Personal bias must be avoided, as in Nang Gao's case and the health worker's religious views on abortion. Opportunities should be provided for dialogue and discussion to allow learner participation and feedback in understanding

birth control, its methods, and their respective implementation requirements.

6.4 Age at Marriage and First Birth

The age at marriage and marital patterns of women in both study areas are quite similar. On the average, women marry at age 17 to 18 years. Most women give birth within one to two years after marriage without first considering the use of birth control methods. This is because the first child's birth signifies a stable marriage and, in part, legitimates the union (cf. Benedict 1952; Yoddumnern 1985).

During pregnancy and after delivery, members of a woman's intimate and effective networks advise her on appropriate food habits as well as child care practices. Consequently and along nutritional lines, women may ignore "proper" food intake as per quantity and quality (Merican 1989). Pregnant women, for example, do not to consume green vegetables or yellow fruits in excess, because they would increase indigestion and diarrhea. Fatty or oily foods are believed to cause a fetus to grow large and lead to a difficult delivery (Sawangdee and Isarabhakdi 1988). Breast-feeding mothers often discard colostrum, and infants are allowed to suckle only at the second day or later (Merican 1989:2).

Family planning considerations usually begin after the birth of the first child. However, not all women desire a child immediately after marriage, and they utilize specific birth control methods to avoid conception and gestation. For Southern and Northeastern respondents in their pre-childbearing years, contraceptive pills are selected over IUDs or injections. Women believe these latter methods will dry-up the womb or uterus and cause infertility. How social networks influence contraceptive selection and discontinuation is the focus of the following Chapter.

6.5 Summary

In short, Stage 1 -- Pre-Childbearing of a woman's reproductive life span includes the following characteristics as gleaned from the research data for Northeastern and Southern Thailand.

1. Three major social networks operate to channel information about reproductive behavior: intimate, effective and extended. These are based on degrees of closeness and proximity as well as ascriptive, achievement, proximity and functional indicators.

2. A girl begins menstruating at age 14 or 15 years, signifying her entrance into womanhood. Her intimate network members provide menstruation education. The other networks have relatively little influence in communicating such information at this stage.

3. Community-based factors (values, religion) restrict family planning information to married women only, and this is supported by the beliefs and advice of a woman's social network members.

4. Formal sex education is not provided, although information about reproduction and birth control methods are gained passively through media materials as well as informally through effective networks.

5. Despite evidence of premarital sexual relations, family planning is not viewed as a preventive measure among unmarried women, but a marital activity aimed at organizing the family.

6. As a result, while some women may have heard about family planning and specific birth control methods before marriage, only a few actually know how to use them.

7. Consequently, unwanted pregnancies leading to abortion or forced marriage arise. This may also include ostracism from the family and/or community.

8. Women marry at age 17 or 18 without full knowledge of how to use contraceptives properly. In most cases this is not a problem, since couples usually desire a pregnancy soon after marriage in order to legitimize/consummate the union. For couples who do not want children, contraceptive pills are selected over IUDs or injections in both research provinces due to infertility fears.

Chapter 7

STAGE 2 -- CHILDBEARING AND CHILDREARING

7.1 Illustrative Case Studies

7.1.1 Nang Noi

At age 19, Nang Noi was married and went to live with her husband in the village of Ban Dawn, Trang province. Because she had never heard of birth control, she became pregnant within only five months. Actually, Nang Noi was quite happy. Now her marriage was complete, and her family was just starting. She and her husband were also able to build a new house. "There were too many people," she exclaimed "and we were expecting another."

Immediately after her daughter's birth, Nang Noi began breast-feeding her child on a full-time basis. Consequently, she decided not to use any form of contraception, since she felt it might pollute her breast milk and hurt her daughter. After one month though, Nang Noi started partial breast-feeding. She then began using the pill, because many people in her community advised her to use it. Both her husband and her mother-in-law, moreover, reminded her that the pill would help space her next child (some two years later) while keeping her in good health.

Before finishing her first package of pills though, Nang Noi began to feel dizzy and nauseous. The local health worker advised that she stop taking the pill and go to the hospital to have an IUD inserted. Fifteen days after insertion however, Nang Noi began bleeding and the doctor replaced the old IUD with a new one. One year later, Nang Noi and her family noticed that she was becoming very weak and was losing weight quickly.

So, she had the IUD removed. Within six months, Nang Noi was pregnant again.

Presently, Nang Noi has two children and is not willing to use contra- ceptives because she is afraid that the side effects will permanently harm her.

7.1.2 Nang Dee

Nang Dee was married when she was 19 to a man from her natal village in Ban Phon, Surin province. After marriage, she learned about birth control methods from her husband who was a health post volunteer. She also attended training sessions in family planning at the health center, and talked with her close friends and relatives about what methods they were using.

At the age of 20, Nang Dee became pregnant and was urged by her elder sister to have pre-natal check-ups. Three months after her son's birth, she went to receive advice from a doctor at the district hospital about what family planning method he would recommend. He advised an injection and she received her first shot during this time.

When she returned for her second scheduled visit to receive another injection however, she was told that the supplies had run out. Nang Dee was exceedingly frustrated; she returned home and did not use any other birth control method.

Nang Dee's gave birth to a second child at the age of 23. Thereafter, she began using an IUD, because at the time family planning promotions were giving 100 baht as an incentive.

After two years, Nang Dee became worried that she had had the IUD for too long a time. "Maybe it would stop working," she said. So

the district hospital doctor replaced it with a new one. Unfortunately three months later, Nang Dee became pregnant again with her third child.

Nang Dee did not want this child partly because she was the wife of a health post volunteer, and he was supposed to promote family planning activities. Nang Dee thus went to the hospital and had an abortion. At the time moreover, there was medical concern that Nang Dee had conceived outside of the womb. In her community however, a rumor started that Nang Dee had to have an abortion because it would help support her husband's efforts to disseminate family planning information.

Three months later, Nang Dee returned to the hospital and asked the doctor to sterilize her. The doctor's schedule was too tight at that time, so Nang Dee returned home. Presently, Nang Dee's husband is using condoms since he feels they are safe and convenient.

7.2 Roles of Community Leaders

Of special interest for this study is the role community leaders play in family planning, generally, and contraceptive discontinuation especially. Several cross-cultural studies have shown that community leaders' views are one important community-based factor affecting women's reproductive behaviors (ESCAP 1987). Specifically, Lee (1971) called this factor a normative decision, since it represents a norm for the community to follow. An actual decision, however, is generally influenced by a factor called the descriptive decision which oftentimes stems from a woman's social networks. This factor determines which measure a woman should employ, whether to change the method or discontinue using contraceptives. At this level, a community leader's role appears to be less vital in decision-making than the roles of other social networks (i.e., intimate, effective). Health personnel, on the other hand, can act like community leaders in establishing ideas about family planning (i.e., a normative decisions). They can also act like a social network for women

(descriptive decision) when they need to change contraceptives or discontinue to use a certain method.

7.2.1 Community Leader Types and Qualities

According to statistical results, over 55% of the women cited village headmen, members of the village council, their assistants and school headmasters as comprising "community leaders" [62% for Surin and 48.7% for Trang] (Table 3, Appendix). Twenty percent stated that community leaders are friends or respected community members [17.3% for Surin and 22.7% for Trang]. These two categories roughly correlate to formal leaders (in the former case) and non-formal leaders. The latter category also encompasses relatives; 12% of the respondents cited these people as leaders [6.7% for Surin and 17.3% for Trang]. Surprisingly, only 4% of Northeastern respondents cited local health and medical personnel as community leaders. Among Trang women, such persons were not cited at all.

Women in both provinces have different approaches about leadership. In Surin province, women gave greater importance to the formal leaders (esp. village headmen and village council members) and their political affiliations. Trang women, though, placed more emphasis on respected village members (informal leaders) and thus their interpersonal qualities. In each case, though, community leaders were mainly men aged over 45 years. However, more female leaders exist in the Northeastern villages, and these ranged in age from 30 to 44 years. In the South, community leaders were predominantly men aged over 40.

In sum, while male leaders were more common, Surin women preferred young, female leaders who have a demonstrated official leadership quality. Trang women, on the other hand, orient themselves more towards older, male leaders of high respect. Women in the two research areas hold the same view about family planning. Namely, this domain belongs to women rather than men, in general, or male leaders

specifically. Respondents feel more at ease discussing contraception with other women.

7.2.2 Community Leaders, Family Planning and Family Size

When asked about family planning, Northeastern leaders stated that after the birth of a couple's first or second child, they should practice birth control. However they did not specify any particular or preferred method. In the Southern communities though, 73% of the leaders did not want to get involved in discussing family planning. Only 25% talked about birth control, but they only mentioned vasectomies and no methods associated with women. Since most community leaders in the Northeast and Southern regions are male, they thus have little if any influence on the family planning behavior of community members. These male leaders also view family planning as being within the female domain and the responsibility of users and health workers. They would become involved in the decision-making process only if it involved their wives. Regarding family size, 56% of the leaders had no suggestions about family size [50% for Surin; 62% for Trang] (Table 4, Appendix). Of those making suggestions, 20% recommended 1 to 2 children [26% for Surin; 14.7% for Trang]. The next highest category was 2-3 children [10.3% overall; 12% for Surin; 8.7% for Trang]. Consequently, leaders hold few opinions about family size. For those who do, preference is for a family size of 1-2, although 3-4 is acceptable. As noted later, this is due to family composition factors, i.e., a desire to have at least one boy and one girl.

7.3 Information Seeking Behavior

After the birth of her first child, a woman will seek information about childrearing and appropriate, socially acceptable birth control methods. Interviews revealed that women most often turn to their intimate and effective networks for advice, especially parents and relatives as well as close friends and neighbors. Specifically, when Northeastern women consult intimate network members about childbearing, childrearing and

birth control (though this is not common), their descending order of importance is sisters, mothers and other relatives (Table 5, Appendix). Southern women overwhelmingly consult their mothers about these same topics. After mothers, Southern women will consult husbands about childbirth and childrearing most often, while sisters take precedence in terms of birth control. Among their effective and extended networks, Southern and Northeastern women most frequently consult their neighbors (Table 6, Appendix). This is not surprising, since in rural Thailand a woman's neighbors are usually her relatives. This represents an overlapping of intimate and effective networks. Both Southern and Northeastern women show similarities in obtaining birth control information and services. In a way, their family planning information seeking is a conformed type. That is, when a woman seeks birth control services, she will usually go to the local health facility with a member or members of her intimate (e.g., sister) or effective networks (i.e., friends). Intimate network companions are more characteristic of Southern women, while Northeastern women prefer friends. Nevertheless, a woman and her companion (s) usually prefer a certain type of method (e.g., hormonal versus non-hormonal). Alternatively, they may have had similar experiences using the same method. This type of companionship is considered as a source of moral and social support. More often than not, the method they choose is one which is widely accepted in that particular community. Through network channels, a woman is introduced to the most appropriate and socially acceptable family planning methods. The goal is to socialize her about community family size norms. It also provides an opportunity to re-enforce a desired birth spacing (i.e., two years). In this context, extended network members (i.e., health center personnel) act as family planning distributors. Intimate and effective network members operate as influencers in selecting, discontinuing or re-selecting a birth control method.

However, a difference exists between Southern and Northeastern women as per channels of communication and the types of social networks called upon in contraceptive decision-making. In the South, information

seeking behavior first begins with members of the woman's intimate network. These include her kin group members (i.e., mother, elder or younger sisters, close female cousins) who are older and have experience in using contraceptive methods. If intimate network members are not available, or if the woman wants reconfirmation in terms of her method choice, she will inquire among close members of her effective networks (who are not uncommonly within her kinship group).

Among Northeastern women, effective and extended (i.e., health worker) networks are the most influential sources of information, even greater than the intimate network. Women reported being too shy and feeling ashamed to talk about menstruation, sexual behavior and family planning with parents (especially the mother) or sisters. They felt more comfortable talking to close friends or health personnel.

Regarding a husband's role in family planning decisions, Southern women confided in their husbands more often than their Northeastern counterparts (Table 5, Appendix). Inquiries rested mainly on family size rather than contraceptive selection and use. Southern husbands, therefore, lay the foundation for normative decisions, but not descriptive decisions. For example,

Concerning family planning and the number of children we are going to have, my husband takes care of that, and I obey him because he is the breadwinner. But I am in control of choosing what type of contraceptive I want to use. (22 year old Southern woman)

7.4 Preferred Birth Control Methods

For Southern women who are not breast-feeding, the contraceptive pill is the most prevalent method reported in the research villages. Convenience in obtainment and an ability to control its use are major reasons cited for this preference among current users. Injections are

not favored since they are viewed as too painful. They also stop menstruation which leads the women to believe that this method is unnatural. Further, since Southern men generally do not like their wives to expose themselves to health workers (a situation cited not only by the research informants, but also Southern migrants interviewed on a post-project basis in Bangkok), IUDs are not common among the women in this study. Tubal ligations are also unpopular and discouraged by woman's parents-in-law. The latter fear that such a procedure will lead to adulterous behavior. Among men, vasectomies are not prevalent, since men see birth control as a woman's responsibility. They also fear that a vasectomy will weaken their energy to work and their sex drive. Men believe condoms are inconvenient.

Unlike their Southern counterparts, Northeastern Thai women commonly use IUDs as the main means of birth control after their first child is born. They prefer IUDs for their convenience. Once inserted, the IUD does not cause women to worry. Furthermore, health personnel can easily remove the IUD when a woman wants another child. Newly married women who do not have children, though, use the contraceptive pill. This selection is determined by two main factors. Firstly, local health personnel do not like to use IUDs on a woman who has not had a child. In addition, they are aware that, even with an IUD, the mother may become pregnant.

7.5 Child Care Patterns, Breast-feeding and Contraceptive Method Use

Child care patterns play a significant role in the family planning behaviors of women in both regions. They regulate the type and timing of contraceptive used according to community norms and beliefs about child survival, growth and development. Community social networks operate to transmit such norms and beliefs as noted above. However, childrearing and child care patterns are different between the regions. As a result, differential patterns of family planning behavior also exist.

Further, while breast-feeding can be considered one form of contraception, in this context breast-feeding and the community beliefs surrounding it are major determinants of contraceptive selection, change and discontinuation. Moreover, it is an invaluable focal point for understanding changes in contraceptive use patterns over the woman's reproductive life span in general.

7.5.1 Southern Communities

In the Southern communities, most women breastfed their babies, but only after one or two days have elapsed since the child's birth. Southern women believe that immediately after birth, mothers do not have enough milk and until the mother's milk appears to be normal, they will feed their babies formula milk. Thereafter, mothers will continually breast-feed their children for a month (on the average) and then return to their normal activities. At this time, the baby will be left with either paternal or maternal grandparents or elder siblings. If neither of these are available, the mother will hire a baby-sitter. This person can either be a 9 to 13 year old individual or an elderly person. For women who work on rubber plantations, they must arrive there at around (4:00 a.m.), since rubber trees are tapped in the early morning when the sap is flowing freely. The hired baby-sitters stay overnight at the woman's house and care for the baby until the woman returns the following day. Care entails feeding the infant with formula milk, and breast-feeding will resume when the mother returns.

For their services, young baby-sitters receive 3 baht per night (US 12 cents) while elderly baby-sitters receive 5 baht (US 20 cents). If no baby-sitter can be found, mothers will take their babies to the plantation with them and breast-feeding will continue during this time. Supplementary foods (e.g., mashed banana and rice) are introduced into the babies diet when they are approximately 3 months old. By the age of 6 or 7 months, they change from formula milk to sweetened condensed milk. They believe that by this age babies are healthy enough

(less susceptible to disease) to consume this type of milk. Moreover, sweetened condensed milk is more readily available, much less expensive, and cognitively closer to breast milk than commercially-prepared milk formula substitutes. Breast-feeding will continue during this time, but only when the mother is available. Children are weaned from breast milk when they are about one year old, though they will continue to be given sweetened condensed milk until the age of 18 months.

After childbirth and until the infant is fully weaned, contraceptive use patterns change. In particular, breast-feeding mothers do not utilize pills for fear that the breast milk will dry-up or become contaminated. This belief stems from the folk concept of the relationship between blood and milk, in that anything consumed by the mother will mix with the blood in the mother's veins and be turned into milk for the baby (cf. Mougne 1978; Vong-ek 1991). As an alternative, they will resort to either natural family planning or condoms.

7.5.2 Northeastern Communities

In the Northeastern communities, most women fully breast-feed their children for 12 to 18 months, with mothers taking almost sole responsibility for the children during this time. Supplementary food in the form of mashed or pre-masticated rice is also given usually beginning three to four days after birth. Other foods such as vegetables which are soft and easily digestible are gradually integrated into the infant's diet to familiarize the child with an adult diet and as an aid in weaning. After weaning, children are left with maternal grandparents (by virtue of the matrilocal/uxorilocal residence patterns) or the mother's female siblings. The hiring of baby-sitters was not reported either in this study or from other studies of Northeastern Thai communities. If the mother does not have someone to care for the baby, the child will accompany her to the rice field.

The duration of breast-feeding for Northeastern women, therefore, is much longer than that of women in the Southern communities. However, whereas Southern women utilize milk formula and sweetened condensed milk as supplementary foods beginning just one month after birth, Northeastern women more often utilize solid (though soft) foods almost immediately after birth. The caretaking patterns between the regions are similar in that close female relatives may be involved. But in the South, caretakers may also be obtained from the husband's family or through hiring non-family members.

After childbirth, Northeastern Thai women commence breast-feeding shortly after delivery. Breast-feeding mothers generally do not resume using any form of contraception until after six months, since it is believed to interfere with milk production and/or the woman's health. Specifically, the Southern belief that contraceptive pills will dry-up or pollute the mother's breast milk is also held by Northeastern women. After six months, IUDs are inserted as a mechanism for birth control.

7.6 Contraceptive Method Change

Other than breast-feeding, women in both regions expressed similar reasons for changing birth control methods. These include: 1) side effects, either actual or rumored; 2) friends or neighbors who have heard about better methods; 3) extended use of one particular method; and 4) failure of the current method. In the third case, women often change methods after an extended and uninterrupted period of time. This is due to the prevailing belief that using one specific method continuously and for a long period will harm a woman's health (e.g., cause infertility). For the final reason -- method failure -- women who are supposedly sterilized have become pregnant and were forced to undergo induced abortions. Not surprisingly, women who have been sterilized oftentimes use an additional form of contraception, such as injections, to assure that they will not become pregnant.

7.7 Side Effects and Contraceptive Method Discontinuation

7.7.1 Actual Side Effects

Similar to contraceptive method change, contraceptive discontinuation occurs among women in both regions who have used one method for an extended period, or who have experienced (or have heard about) method failure and its consequences. In addition, the desire to have a child is also one logical reason.

But more significantly, the main over-arching reason for contraceptive discontinuation as reported in both regions (and for the nation in general [Kamnuansilpa and Chamrathirong 1985]) is side effects. Women who have experienced significant adverse reactions to one method (e.g., contraceptive pills) often discontinue contraception all together to preserve their health.

Among the research villages, women in Trang province reported actual side effect experiences more often than their Surin counterparts. However, the percentage of women who discontinue using a particular method (esp. pills) is higher in the Northeast (92.2%) than in the South (76.5%). Among Southern women, those who receive intimate network support show a lower percentage of discontinuation (74.6%) than women without such support (82.6%). In the Northeast, women who receive support from their effective and extended networks exhibit a lower rate of discontinuation (Boonplang 1990).

7.7.2 Side Effect Rumors

Rumors of side effects are also common. Survey results show that 39.4% of Northeastern women and 49.3% of Southern women knew about side effects through rumors. In the research communities moreover, rumors which cannot be traced back to an original source/person do not determine contraceptive discontinuation. When asked about birth control and its side effects, approximately 37% percent of

Northeastern women and 19% of Southern women said they did not believe the rumors because they had not experienced side effects themselves. In Surin, 29.3% of the women were convinced if they or someone they knew had first-hand experience with side effects. This same situation existed among 52.7% of Southern women.

In other words, unconfirmed rumors ("hearsay") are not grounds for discontinuation. If a rumor is confirmed through a significant person's experience, it does to a very great extent lead to contraceptive discontinuation (especially in Trang). The actual event is a confirmation for the decision to stop (or not start) using that particular method. Sources of side effect information and their influence on the discontinuation decision, though, differ between the Northeast and the South. In the Northeast, confirmed rumors can pass through any form of community network in reaching the woman. Moreover, the side effect need not occur among a woman's intimate, effective or extended networks only, although the information about its occurrence often reaches the women through these networks (especially the effective network). As long as it is experienced by some community member, the woman considers that it is confirmed.

In Southern communities, however, the rumor is considered confirmed only when the side effects are experienced by someone belonging to the woman's kinship circle. This situation may cross-cut intimate and effective networks, particularly when kin group members also belong to the latter network. Their rationale is that if a side effect is experienced by a member of her kin group, a woman has a good chance of experiencing it as well. Among non-kin, the likelihood of its occurrence is believed to be small, if not non-existent. This fear is grounded and perpetuated in the folk notion (and the kin group/community norm it establishes) about right and wrong substances in food and medicine. If a contraceptive method is wrong for one member of the kin group, it is felt that it might be wrong for other members as well. The possibility of experiencing side effects thus becomes greater. If experienced by non-kin

group members, this possibility is over-shadowed by the belief that the method may still be right for the individual.

7.8 The Domain of Family Planning Decision-Making and Contraceptive Discontinuation

While Northeastern and Southern women view family planning as a woman's prerogative, several findings shed light on the actual domains of family planning decision-making. Moreover, these are different for the communities in each region.

7.8.1 Southern Women: Family Planning as a Family-Centered Affair

First, in Southern Thailand family planning is a family-centered affair. Women seek contraceptive information from family and kin group members, even to the extent of asking their husbands for advice. Discontinuation of contraceptive methods, moreover, depends heavily upon the experiences and support of family and kin group members, especially for rumored and actual side effects. Effective and extended networks have little, to no, influence on contraceptive selection, use and discontinuation.

As a result, the family planning communication structure among Southern women is narrower. Her influential consociates rest largely (if not solely) within her kin group. This can easily restrict the amount of family planning information each woman receives, since there are fewer appropriate and influential channels. To promote contraceptive continuation among Southern women, therefore, will require that programs be family - or home -based.

7.8.2 Northeastern Women: Family Planning as a Personal, Non-Familial Affair

Among Northeastern women, this picture is entirely different in that family planning is a personal, non-familial affair. In the first case, Northeastern Thai families are oriented around females, with mothers being the "symbol" or center of the family unit. However, when Northeastern women do ask intimate network members about family planning, sisters are more important than mothers. The latter are only more important than "other relatives." A woman's information seeking, therefore, is already starting to distance itself from the family center. Likewise, a husband is not a source of information or influence, especially since he is one of the woman's two nuclear family focal points; the other is the woman, herself.

Of greater significance, Northeastern women consult effective and extended networks more often than their own family members. Even when a family member is a neighbor, a woman will consult her before any co-residing family members.

Lastly, survey results show that Northeastern women are more likely to discontinue contraception if they are not supported by effective and/or extended networks (Boonplang 1990). As noted above, contact among any of a woman's social network members, not simply her intimate (family) network.

Consequently, a Northeastern woman's communication structure is broader, containing several important relationships and numerous channels. As a result, much information can potentially reach the woman, but she (her "character") must decide for herself which types of information are most relevant to her, and in line with the community's culture and her consociates. Her contraceptive use and discontinuation decisions are based more on personal, non-familial factors as grounded in actual circumstances. Programs to encourage contraceptive continuation,

therefore, need to target cohorts of women, those the same age, who have had similar experiences and who are in the same reproductive life span stage. Discussions also need to be held in a non-family environment by informed health personnel.

7.9 Summary

Overall and unlike other studies, community leaders have little, if any, effect on a woman's choice of a contraceptive or its discontinuation. Women in the study regions prefer temporary methods of birth control although there is a differential acceptance of hormonal versus non-hormonal methods. The most important factors in the selection and continuation processes are personal control, beliefs concerning breast-feeding and infertility, child care patterns, convenience, confirmed side effect rumors, and, in the South, cultural values concerning personal privacy and kin group appropriateness.

Beliefs and norms related to any of these are transmitted within the community as a whole through a woman's intimate, effective and extended networks. In the Southern communities, intimate networks are the main communication channel in seeking information and advice about contraception. Alternatively, effective and extended networks have a greater influence in the Northeast.

These networks, in and of themselves, can overlap with those of other members where one person may be a member of two or more separate effective networks, and this person serves as the overlapping node (point of intersection and cross-communication). In the Northeast, this overlapping of networks is more pervasive than in the South, since Northeastern women utilize more networks than their Southern counterparts.

In both regions, side effect rumors must be substantiated in order for a woman to discontinue a certain method. Southern women look to

their intimate networks, i.e., kin groups. If a member has experienced a side effect, this increases the likelihood that her relatives will also; it also increases the chances of contraceptive discontinuation. Northeastern women require similar confirmation through their social networks, and especially effective networks.

Lastly but most important, the domain of family planning decision-making differs between the two regions. In the South, the family is the center of the communication process, which suggests that family planning programs should be more home-based. Among the Northeastern women, their communication structure is broader, and it is not family-centered. In this case, intervention programs should target female cohorts and the improvement of health personnel knowledge.

Chapter 8

STAGE 3 -- FAMILY SIZE ACHIEVEMENT

This stage covers couples who have attained their desired family size. It primarily includes couples who have children and do not desire subsequent births. However, this stage can also encompass couples who, by choice or due to physiological problems, do not have children. This stage, therefore, can be divided into two sub-stages, namely, family size over-achievement and under-achievement as assessed by the community and a woman's social networks.

8.1 Sub-Stage 1: Family Size Over-Achievement

Community members in the two research areas share the same attitudes toward family size. That is, two children constitute the family size norm. Women who continue to have children past this size (especially in excess of three children) will be subject to community ridicule, most notably through their effective networks. They are criticized as being too traditional and conventional, as well as being less intelligent as to the circumstances of everyday life and the misfortunes (e.g., economic, social) a large family can incur. Members of a woman's social networks will then put pressure on her (through suggestions or criticisms) to adopt either temporary or permanent contraceptive methods, depending upon the number of children. Except in rare cases, she will not be urged to discontinue contraception, although she may be urged to change methods if problems (e.g., side effects) arise. At this stage, therefore, a woman's social network's merge in terms of influence, rather than having differential influence as in prior Stages. One exception to this family size norm exists, however. A couple's final family size will depend greatly upon its composition. An earlier ESCAP (1987) study noted that in the Republic of Korea and India, preference

for sons determined family size. In the former case, family planning was adopted by couple's who already have two sons.

In both Trang and Surin, the ideal family contains one son and one daughter. If a married couple has two boys, they will try to have another child in the hopes that it will be a girl. The same action will occur if the couple has two girls. Consequently, family size often exceeds the norm, and without penalty.

8.2 Sub-Stage 2: Family Size Under-Achievement

Community members, and especially members of a woman's social networks, also utilize opposing arguments when a couple wishes to have fewer than two children. Many of these arguments are also presented when a childless woman is socially-perceived to be too old to still be in the pre-childbearing stage (Stage 1), and who has not yet entered the child-bearing and childrearing stage (Stage 2).

In essence, a one child family is viewed as a risky situation. If the child dies or deserts his/her parents, the latter will have no one to replace the child and they will lose one potential form of old age security. An only child will also have no siblings to depend upon and seek support from in times of need or emergency. A psychological argument is also presented to the couple in that an only child will be lonely since he/she will have no playmates at home.

Childless families are totally frowned upon. Without a child, a family is not complete; only a child can make it legitimate, not the act of sexual intercourse. For women in particular, giving birth to a child changes her status in that she is considered a mature women, rather than a person who is between immaturity and maturity (Benedict 1952; de Young 1955; Yoddumnern 1985). But most significantly, childless couples are believed to have no source of old age security; a significant point since Thailand does not have a functioning governmental social security

system. Consequently, the community will urge a woman to discontinue using any form of contraception if they see no logical reason for her not to have a child.

In extreme cases when a couple cannot have a child, they may acquire a foster child or *luuk kaw ma liang*, which literally means a child who someone has asked to care for. These children may include either abandoned children who are cared for by consanguineally or affinally-related kin group members; or more usually children of family members who have agreed to "loan out" a child to a childless couple within the family. Foster parent ties, in this case, only partially replace those of the original family. Only in very rare instances will a child who is not a member of the wife's or husband's kin groups be adopted. Such a child is referred to as *luuk bun tham*.

8.3 Sub-Stage Summary

In Stage 3, community norms and beliefs control pre-family size and family size achievement levels. Methods of birth control reflect these levels in that temporary methods are socially acceptable prior to reaching a family size of two, although certain methods are preferred over others depending on the woman's reproductive life span stage and its conditions (e.g., breast-feeding as opposed to feeding with breast milk substitutes). Permanent methods or the continued use of temporary methods before this size is attained are heavily discouraged by a woman's social networks in both regions. In the South though, a woman's kin group is especially influential. Effective and extended networks are consulted, though, about permanent contraceptive methods. The latter can have a greater impact on a woman's health, and thus additional information is often sought. After the attainment of the ideal family size, permanent methods of female birth control are acceptable and, in certain cases, encouraged by members of each social network.

Chapter 9

DYNAMIC USE OF CONTRACEPTION

This section answers the research questions proposed during the project's planning phase. Its aim is to bring out new issues surrounding contraceptive use and discontinuation as well as family and community considerations.

9.1 Community Size, Social Networks and Contraceptive Discontinuation

The first research question assumed that a community with a small population size and a long history will have a more closely-knit social network system. It then asks, "will this situation negatively affect contraceptive continuation, especially where children serve as perpetuators of community structure, organization and values?"

From this research, the answer is "not necessarily". Even in the research communities (which are relatively small and have long histories), their social network systems are quite diverse. Networks range from intimate to effective and extended. These may cross-cut each other through any one or more persons (e.g., neighbors as relatives).

These networks affect a woman's contraceptive decisions differently, often depending upon her reproductive life span stage. For family size under-achievement, these networks may promote contraceptive use and discourage discontinuation. In family size over-achievement, they may encourage the discontinuation of temporary methods in favor of permanent ones. A woman's social networks also differentially communicate information about contraceptive side effects. They therefore may directly or indirectly affect the discontinuation of a certain method or contraception entirely (provided the woman has not reached the

family size achievement stage). How these networks influence each woman's decisions will depend upon the type of network and the person (kin or non-kin group member) who has experienced the side effect.

Furthermore, as many reports have noted (cf. Knodel et al. 1984; Yoddumnern 1985; Yoddumnern-Attig and Podhisita 1989), rural community members now realize the benefits of small families within Thailand's changing economic and historical structures. Parents also realize that they may need a child as a source of old age security. Despite long-held norms, values and beliefs, communities and families are targeting a family size which: 1) does not over-burden the couple economically and in the short-run; while 2) assuring that the community and family will continue and be provided for in the long-run. These considerations regulate a woman's contraceptive selection, use and discontinuation as per her reproductive life span stage.

9.2 Old Age Security and Contraceptive Discontinuation

The second research question asked if high parental expectations about old age security would negatively affect their children's use of contraceptives. This question can be briefly answered in one of two ways and in considering family economics. First, if a couple has not achieved a community- or kin group-accepted family size, concerns about old age security do not appear to take precedence, provided that the family is currently economically secure. Parental concern and considerations about the young couple's future are more important. Contraceptive discontinuation is encouraged, provided the family can support another child and the latter is not born too close to its older sibling (i.e., within 1 to 2 years). This is particularly the case for women in Stage 1 (Pre-Childbearing) and those who have not yet attained Stage 3 (Family Size Achievement).

Alternatively, if the woman has reached Stage 3 -- Family Size Achievement (i.e., over-achievement), and she still appears to want more

children beyond that which is socially and economically proper appropriate, then her parents (but more likely her social networks) would encourage her to discontinue temporary contraception in favor of a permanent method. She could then spend more of her efforts in economic pursuits which would not only benefit her parents but also her children.

In sum, old age security concerns as per the wife's parents only come into play when she has achieved a community-accepted family size. Moreover, among community leaders the belief that a family should have several children in order to help the parents appears to be lessening (Table 4, Appendix).

9.3 Contraceptive Availability and Discontinuation

The third research question asks, "Is high contraceptive discontinuation more likely to occur in communities with few alternative contraceptive methods as sanctioned by community norms or general availability?" Unfortunately, the widespread coverage of modern contraceptives in Thailand hinders any attempt to fully answer this question. However, it does bring up two important considerations. First, wide coverage does not mean high availability. In several case studies, women stopped using a contraceptive because supplies ran short. They were willing to continue contraception, but their method was not available. Rather than switch to another method and face potential side effects, they discontinued contraception altogether. The NFPP, therefore, should consider a better contraceptive availability evaluation system to insure regularly available supplies to its service centers.

In the research communities, many types of modern birth control are available, acceptable and sanctioned by community norms, except in the case of IUDs in the Southern region. Relative availability is thus not an issue. However, a woman's relative access to contraceptives is important. Many factors operate to restrict the alternatives she has in

contraceptive selection; further, the fewer the alternatives, the more likely she will discontinue contraception.

Young, unmarried women have no alternatives; they are not supposed to use contraceptives, or even know about them. Their relative access is zero, despite a high level of relative contraceptive availability. For married women in their childbearing and childrearing stages, relative access to and discontinuation of a particular method are determined by whether or not the woman is breast-feeding, infertility fears, confirmed side effects, and in the South, cultural values concerning personal privacy and kin group appropriateness. As a result of these, a woman may discontinue one form of temporary contraception in favor of another, depending upon her social circle and stage in the reproductive life span. Among women who have achieved their ideal family size (Stage 3), relative access is again restricted largely to permanent birth control methods. These are preferred over temporary ones, since additional children would not benefit the family in economic terms.

9.4 Conjugal Economic Autonomy and Contraceptive Discontinuation

The fourth research question asks if a couple is economically independent, does this give them a high degree of conjugal decision making concerning contraceptive acceptance and continuation. Research results indicate that while the final decision as per the acceptance and continuation of contraception lies with the couple, the wife's social networks play a key role in selecting alternatives and in sanctioning the final method of choice. This stems largely from their experiences and the social support they give in providing such advice and in helping the woman to initially obtain contraceptives.

9.5 Conjugal Autonomy, Contraceptive Continuation and Family Type

Does a high degree of conjugal autonomy in contraceptive continuation decision-making positively correlate with nuclear families and negatively correlate with extended or stem family organization? Contraceptive continuation, according to this report's findings, is not generally affected by family type. Rather it depends upon the degree to which the woman includes her female family members within her social network system. By extension, this means the degree to which she can communicate with significant others (whether or not they reside in the same house). In the South, female kin who comprise the woman's intimate social network play a key role in her contraceptive information seeking behavior and continuation. This is followed by her effective network of friends and family members, and then her extended network containing local health personnel. Where a female family member is contained in all three networks (i.e., relative, neighbor, local health worker), she may have a great deal more influence than simply family type. For Northeastern women, family type is also not important, especially since intimate networks are the least influential.

9.6 Community and Family Leaders and Contraceptive Discontinuation

The sixth and seventh research questions address how the attitudes of community and family leaders -- both male and female -- affect contraceptive discontinuation? Among the research communities, the majority of village leaders are male, and within families males are the authoritative heads. These persons, however, have little if any influence on the family planning behavior of female community members. They represent a normative decision category, but the woman's descriptive decisions come from herself and her social networks. The only exception is when a man is a health worker, and he is perceived to have a high level of knowledge about contraceptive methods, be they for men or women.

Male leaders also view family planning as being within the female domain and the responsibility of users and health workers. They would become involved in the decision-making process only if it involved their wives, and it also involved that they practice a contraceptive method as well.

Where leaders are female and are significant members of a woman's social networks, they can influence contraceptive selection, use and discontinuation. But their suggestions rest on: (1) what stage a woman has attained in the female reproductive life span (especially whether or not she is breast-feeding or has attained her family size), (2) the leader's own experiences, attitudes and knowledge about certain methods in addition to those she has learned about through her own social networks, as well as (3) existing community beliefs, norms and values. If the leader has a negative attitude towards certain methods, and it is supported by any or all of these other factors, then she can greatly influence contraceptive discontinuation.

PART III
CONCLUSION

Chapter 10

CONCLUSION

10.1 Contraceptive Discontinuation: Major Points

Among women interviewed in the Northeast and Southern research villages, the community-based factors which influence family planning behavior are numerous, complex and inter-related. They become evident by focusing on separate stages of the woman's reproductive life span, and their influence changes accordingly. For women who are unmarried or newly married in either region, contraceptive knowledge may be evident, but they do not generally use any contraceptive method. For unmarried women, use of contraceptives implies poor morals, which may reflect not only on a woman but also her natal family, their values and socialization practices. The use of contraceptives by newly married women, though, suggests that the marriage is not legitimate or stable, and the couple is still immature. Moreover, the use of IUDs or injections, in particular, may lead to infertility and childlessness; a state which is totally unacceptable to the community, even though it may be compassionately understood.

After the birth of the first child, women select certain methods through the information provided by differing social networks. In the Northeast, effective and extended networks serve as the most important sources of information, and contraceptive selection or discontinuation depends largely on the community norms and beliefs about breast-feeding, child survival and development, the origin of side effect information, and infertility. Furthermore, it also rests on whether or not the couple has achieved its ideal (community perceived) family size. This Northeastern network pattern also holds, for the most part, for Southern women. However, intimate networks play a greater role in influencing contraceptive use and discontinuation, with beliefs concerning personal privacy playing a secondary role.

In analyzing how community communication structures influence family planning decisions and discontinuation, two regional patterns have appeared. Firstly, among Southern women family planning is largely a family-centered affair. Information on the selection, use and discontinuation of birth control methods operates through the family/kinship context. This calls for family planning education programs which are home-based. Messages should be focused towards channels which will effectively reach into the home as opposed to the community at large. It must also build on the ideas, concepts and practices already existing within the family environment. Among Northeastern women, their communication structure is broader, as it encompasses intimate and extended networks more than intimate ones. Hence, their family planning and contraceptive discontinuation decisions are non-familial based, and they depend on personal decisions about the relevance of received information. Efforts to improve contraceptive continuation, therefore, should focus more on female cohorts and consociate groups, rather than a home-based approach.

10.2 Need for Further Studies

This study is the first of its kind in Thailand to use the convergence theory of communication, social network analysis and a diachronic perspective to discover the community-based factors affecting contraceptive discontinuation over a woman's reproductive life span. Although a beginning has been made, more detailed efforts are needed before the community communication structures in Thailand's differing regions can be fully and holistically understood. Some suggestions for future research based on the experiences gained so far include the following.

- (1) In order to target family planning programs more realistically, additional in-depth communication and network analyses are required among a larger number of Northeastern and Southern Thai communities. At the substantive level, information on community networks and their

characteristics is not sufficient to arrive at specific categories of networks (especially since much overlapping exists), to compare networks of different types, and to draw conclusions on network behavior. More studies in different rural community settings would help to arrive at more reasonably valid generalizations.

(2) Such studies should be expanded to cover other Thai regions as well as specific ethnic groups (e.g., hill tribes) who have shown little reduction in fertility and/or high rates of contraceptive discontinuation.

(3) Moreover, a similar study is also needed among the urban poor, and especially migrants from Northeast and Southern Thailand. Their reasons for contraceptive discontinuation in addition to the structure of their communication networks will most likely vary from those found within the study. In-depth studies based on ethnographic and demographic research can then identify determinants of family planning use and their relationship to conditions of poverty and over-crowdedness. This will have implication for new family planning education strategies as well as health education efforts aimed at sexually transmitted diseases such as AIDS.

(4) This present study offers a picture of a woman's reproductive life span, but it mainly addresses women who are presently of reproductive age. Further analyses need to be made with elderly community women and significant cohorts to see where this model deviates from the past, under what conditions, and in what ways positive information can be used to combat contraceptive discontinuation. This is important, since older community members are often important family planning influencers.

(5) Further diachronic studies are needed into the nature and influence of female leaders in affecting contraceptive use and discontinuation in each Thai region.

(6) Additional research is also needed about the process of information diffusion within a specific social network type and the mechanisms used to induce behavioral change. Whereas this study looked at community-based factors, another investigation should examine family-based factors with the hope of developing a home-based approach for family planning support.

(7) Finally, action-based communication programs require development and testing aimed not only at controlling contraceptive discontinuation among married women, but promoting informed contraceptive use among village youth. This is especially necessary considering the current status of AIDS and other sexually transmitted diseases.

10.3 Program Policy Implications

Findings from both regional studies have profound policy implications. Some of them fall into the category of long-term strategies, while others are relevant for improving the service delivery aspects in order to increase levels of family planning performance and reduce discontinuation. Major policy implications are as follows.

(1) As alluded to above, one of the most crucial variables is early education of teenagers, female adolescents and young never married women regarding sex and family planning. This particular factor not only influences social network formation to a large extent but also the communication roles of network members. This vital aspect requires more attention and also allocation of more resources. Through education, contraceptive method failure caused by inaccurate knowledge will also be reduced, if not totally eradicated. In addition, it will encourage these groups to consider family planning at an earlier stage than after the birth of their first child.

(2) Family planning at the community level is now in the hands of local government health and medical personnel as well as volunteer village health workers. They are expected to provide information and services both in the home and at the local health facility. Unfortunately though, this individualistic approach not only poses a problem in terms of coverage but it also makes the achievement of program objectives difficult. These field staff should thus recognize the importance of community communication structures such as different types of social networks and the effects of culture, character and consociates on family planning behaviors in village settings.

(3) Local family planning advocates can achieve a community orientation by introducing convergence models of communication in both basic and orientation training programs. These models should specifically deal with the community as a holistic unit and an individual's experiences with certain family planning methods as the basis for exchange of information in the community should be given to the identification of specific types of social networks and their differential influence on contraceptive use and discontinuation.

(4) At the village level, local health personnel can identify significant social networks if they are given interpersonal skills training (if needed) and are armed with a few basic questions such as: Have you ever discussed birth control with a person who is currently using a specific method? Have you ever discussed birth control with a person who has stopped using a certain method, either temporarily or permanently? Have you ever discussed family planning with other community members? Whom do you contact in the community for information on family planning or the selection of birth control methods? These questions will help target the key community contraceptive influencers. Programs can then concentrate on these selected persons as the means to communicate and distribute family planning information, rather than on all individuals in the village.

(5) Consequently, for family planning promoters to be truly effective, they must be encouraged to take into consideration three main aspects: 1) the differential acceptance of certain contraceptive methods over a woman's reproductive life span; 2) the roles of different social networks in regulating contraceptive method selection, change and discontinuation; and 3) the mechanisms by which rumors are spread and confirmed. Without these considerations, family planning providers may encourage the use of socially inappropriate methods for women, which can lead to increased contraceptive discontinuation. Moreover, if the method causes overt side effects, this occurrence may not only cause the individual to cease using contraceptives, but also persons within her social network. The fear of side effects may also be perpetuated through inter-personal social network information. Furthermore, by being cognizant of these three factors, family planning providers can more readily identify contraceptive use problems and locate the core persons/leaders in the community which may prove maximally effective in implementing an intervention strategy.

(6) As for community-level development workers (even in non-health sectors), regularly scheduled short-course training programs designed to increase their knowledge about family planning, birth control and community dynamics are strongly encouraged. On one level, this will increase the accuracy and efficiency of their work, as well as their own confidence in working sensitively with community members. Relatedly, they (in addition to all levels of governmental health workers) will begin to see that the quality of services, rather than the quantity, is the real indicator of program success. It ensures that problems are dealt with in a preventive manner (before they become out of control) and thereby decrease rates of contraceptive discontinuation and drop-out.

REFERENCES

- Attig, G. and B. Yoddumnern-Attig. 1991. Dynamics of Male Familial Power, Control and Old Age Security. Unpublished manuscript. Institute for Nutrition, Mahidol University at Salaya, Thailand.
- Attig, G. and K. Chanawongse. 1990. Thailand Taps Older Skills. *Far East Health* 11 (3):27-29.
- Ballweg, J. et al. 1974. Family Planning Method Change and Drop-Outs in the Philippines. *Social Biology* 21(1).
- Benedict, R. 1952. *Thai Culture and Personality*. Data Paper No. 4. Ithaca: Cornell Southeast Asia Program.
- Boissevain, J. 1974. *Friends of Friends: Networks, Manipulators and Coalitions*. Oxford: Basil Blackwell.
- Boonplang, A. 1990. *Psychosocial Factors and Patterns of Family Planning Behavior: The Case Studies of Surin and Trang Provinces*. Unpublished M.A. Thesis, Institute for Population and Social Research, Mahidol University at Salaya, Thailand.
- Calavan, S. 1974. Aristocrats and Commoners in Rural Northern Thailand. Unpublished Doctoral Dissertation, University of Illinois, Urbana-Champaign.
- Chamratrithirong, A. and E.H. Stephen. 1986. *Determinants of Contraceptive Method Choice in Thailand*. IPSR Publication No. 98. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.
- Charoenlert, V. and B. Leoprapi. 1976. *Report on Continuation Rates and Use-effectiveness in Bangkok Metropolis: 1975*. Bangkok: Institute for Population and Social Research, Mahidol University.

- Chayovan, N. et al. 1988. *Thailand Demographic and Health Survey 1987*. Bangkok: Institute of Population Studies, Chulalongkorn University, and Columbia, Maryland: Institute for Resource Development/Westinghouse.
- Cunningham, C. 1969. Characterizing a Social System: The Loose-Tight Dichotomy. In *Loosely Structured Social Systems: Thailand in Comparative Perspective*. Hans-Dieter Evers (ed.), pp. 106-114. Cultural Report Series No. 17, Yale University, Southeast Asian Studies.
- Dana, J. et al. 1978. Causes of Clinic Drop-Out Among Iranian Pill Users. *Journal of Biosocial Sciences* 10(1).
- Davis, R. 1973. Muang Matrifocality. *Journal of the Siam Society* 61(2).
- Davis, K. and J. Blake. 1956. Social Structure and Fertility: An Analytic Framework. *Economic Development and Culture Change* 4:211-235.
- de Young, J. 1955. *Village Life in Modern Thailand*. Berkeley: University of California Press.
- Delaney, W. 1977. *Socio-Cultural Aspects of Aging in Buddhist Northern Thailand*. Unpublished Doctoral Dissertation, University of Illinois, Urbana-Champaign.
- Embree, J. 1950. Thailand: A Loosely Structured Social System. *American Anthropologist* 52:181-193.
- Economic and Social Commission for Asia and the Pacific (ESCAP). 1987. *Community Communications Networks and Family Planning Behavior*. Bangkok: United Nations.
- Fernandez, M. and J. Vancio. 1982. *Social Networks as Catalysts of Change: A Socio-structured Approach to Family Planning*. Manila: Institute of Philippine Culture, Ateneo De Manila University.

- Freedman, R. 1963. Norms for Family Size in Underdeveloped Areas. *Proceedings of the Royal Anthropological Institute* 159(Part B):220-245.
- Hubley, J. 1986. Barriers to Health Education in Developing Countries. *Health Education Research* 1(4):233-245.
- Kamnuansilpa, P. and A. Chamrathirong. 1985. *The Third Contraceptive Prevalence Survey in Thailand*. Bangkok: Research Centre, National Institute of Development Administration; Institute for Population and Social Research, Mahidol University; and the National Family Planning Program, Ministry of Public Health.
- Kamnuansilpa, P. et al. 1988. *The Phenomenon of Single Contraceptive Villages: An Application of the Minisurvey Data Collection Tool*. Unpublished paper. Bangkok: National Institute for Development Administration.
- Kanaaneh, H. 1979. Communication Networks in the Arab Village -- Implications for Health Education. *International Journal of Health Education* XXII:29-31.
- Kanjanapan, W. 1985. *A Study of the Relationship Between Fertility Behavior and Size, Structure, and Functions of the Family in Thailand*. IPSR Publication No. 92. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.
- Kim, J. 1983. On the Concept of Strength of Interpersonal Ties: Theoretical and Methodological Issues. Paper presented at the 33rd Annual Conference of the International Communication Association, 26-30 May, Dallas, Texas.
- Kincaid, D.L. 1979. *The Convergence Model of Communication*. Honolulu: East-West Communication Institute, Paper 18.
- Knodel, J. and N. Debavalya. 1978. Thailand's Reproductive Revolution. *International Family Planning Perspectives and Digest* 6:84-97.

- Knodel, J. et al. 1982. *Fertility in Thailand: Trends, Differentials, and Proximate Determinants*. Washington, D.C.: National Academy of Sciences.
- Knodel, J. et al. 1984. Fertility Transition in Thailand: A Qualitative Analysis. *Population and Development Review* 10(2):297-328.
- Krannich R. and C. Krannich. 1980. *The Politics of Family Planning Policy: Thailand - A Case of Successful Implementation*. Monograph 19, Center for Southeast Asian Studies. Berkeley: University of California.
- Lee, S. 1972. *A Study of Acceptance and Continuation of Oral Contraceptives Among Women in a Rural Area*. Sociological Evaluation of the Family Planning Programmes and Research Activities in Korea. Korean Sociological Association.
- _____. 1977. *Systems Effects on Family Planning Innovativeness in Korean Villages*. Doctoral Dissertation, University of Michigan, Ann Arbor.
- Lee, W. 1971. *Decision Theory and Human Behavior*. New York: John Wiley & Sons, Inc.
- Leoprapai, B. and V. Thongthai. *Contraceptive Practise of Thai Women 1987*. IPSR Publication No. 138. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.
- Lice, W. and R. Duff. 1972. The Strength of Weak Ties. *Public Opinion Quarterly* 36: 361-366.
- Marshall, J. 1971. Topics and Networks in Intra-Village Communication. In *Culture and Population: A Collection of Current Studies*. S. Polgar (ed.). Durham, North Carolina: Carolina Population Center, University of North Carolina.
- Merican, Z. (ed.). 1989. *ASEAN Food Habits*. Kuala Lumpur: The ASEAN Sub-Committee on Protein.

- Moerman, M. 1966. Ban Ping's Temple: The Center of a Loosely Structured Society. In *Anthropological Studies in Theravada Buddhism*. M. Nash et al. (eds.). Southeast Asian Studies Culture Report Series No. 13. New Haven, Connecticut: Yale University.
- Mougne, C. 1978. Changing Patterns of Fertility in a Northern Thai Village. In *Nature and Man in Southeast Asia*. P.A. Scott (ed.). School of Oriental and African Studies. London: University of London.
- Navarro, R. 1979. Why People Stop Using Contraceptives. *Initiatives in Population* vol. 5, nos. 1 & 2.
- Onn, F.C. 1987. *Communication Network and Population Interrelationships: Case Study of Malaysia*. Kuala Lumpur: Faculty of Economics and Administration, University of Malaysia.
- Parsons, S. et al. 1980. Continuation of Contraception on Java-Bali: Preliminary Results from the Quarterly Receptor Survey. *Studies in Family Planning* 11(4).
- Permpaengpun, S. 1984. *Factors Affecting the Continuation Rate of Pill Acceptors*. Unpublished M.A. Thesis, Faculty of Social Sciences and Humanities, Mahidol University at Salaya, Thailand.
- Phillips, J. 1978. Continued Use of Contraception Among Philippine Family Planning Acceptors: A Multivariate Analysis. *Studies in Family Planning* 9(7):182-192.
- Pituckmahaket, O. et al. 1989. Sampling Procedures in Qualitative Research. In *A Field Manual on Selected Qualitative Research Methods*. B. Yoddumnern-Attig et al. (eds.), pp. 29-40. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.
- Plath, D. 1980. *Long Engagements*. Stanford, California: Stanford University Press.

- Potter, J. 1976. *Thai Peasant Social Structure*. Chicago: University of Chicago Press.
- Potter, S. 1977. *Family Life in a Northern Thai Village*. Berkeley: University of California Press.
- Punyodyana, B. 1969. Social Structure, Social System, and Two Levels of Analysis: A Thai View. In *Loosely Structured Social Systems: Thailand in Comparative Perspective*. Hans-Dieter Evers (ed.), pp. 77-105. Cultural Report Series No. 17, Yale University, Southeast Asian Studies.
- Retherford, R. 1979. A Theory of Rapid Fertility Decline in Homogeneous Populations. *Studies in Family Planning* 10(2):61-72.
- Riley, J. 1972. *Family Organization and Population Dynamics in a Central Thai Village*. Unpublished Doctoral Dissertation, University of North Carolina, Chapel Hill.
- Rogers, E. 1977. Network Analysis of Diffusion of Innovations. In *Communication Research -- A Half Century Appraisal*. D. Lerner and L. Nelson (eds.). Honolulu: East-West Centre University Press of Hawaii.
- Rogers, E. and D. Kincaid. 1981. *Communication Network: Toward a New Paradigm of Research*. New York: Free Press.
- Sangsingkeo, V. et al. 1986. *Long-Term Plan for the Elderly in Thailand (1986-2001)*. Bangkok: Department of Medical Sciences, Ministry of Public Health.
- Sawangdee, Y. and P. Isarabhakdi. 1988. *The Determinants of Villagers' Consumption Behavior of Vitamin A Rich Foods: A Case Study of the Northeast of Thailand*. IPSR Publication No. 128. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.

- Scrimshaw, S. and E. Hurtado. 1987. *Rapid Assessment Procedures for Nutrition and Primary Health Care*. Tokyo: United Nations University Press.
- Sethaput, C. 1989. Changes in Population Structure in Rural Thailand. *Journal of Population and Social Studies* 1(2):259-278.
- Sirikulchayanonta, C. 1989. A Study of the Use of Model Mothers as Family Planning Motivators in a Thai Rural Village. *Journal of Population and Social Studies* 1(2):241-258.
- Soonthornhdada, A. 1989. Constructing Qualitative Research Interview Guidelines. In *A Field Manual on Selected Qualitative Research Methods*. B. Yoddumnern-Attig et al. (eds.), pp. 58-69. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.
- Sunyavivat, S. et al. 1982. Study of Discontinuation of Oral Contraceptive Pill Users in Ban-Rai Rural Area of Thailand: A Psychosocial Aspect. *Journal of Social Sciences* 19(4):66-77.
- Turton, A. 1972. Matrilineal Descent Groups and Spirit Cults of the Thai-Yuan in Northern Thailand. *Journal of the Siam Society* 60(2): 217-256.
- Vong-ek, P. 1991. *Differentials in Duration of Breast-Feeding in Central and Northeast Thailand*. Final report to the World Health Organization, Special Programme in Research, Development in Human Reproduction, Geneva.
- Whitten, N. and A. Wolfe. 1973. Network Analysis. In *Handbook of Social and Cultural Anthropology*. J.J. Honigmann (ed.), pp. 717-746. Chicago: Rand McNally College Publishing Company.
- Whitten, N. and J. Szwed. 1970a. *Afro-American Anthropology: Contemporary Perspectives*. New York: Fress Press, Macmillan.

- _____. 1970b. Introduction. In *Afro-American Anthropology*. N. Whitten and J. Szwed (eds.), pp. 23-62. New York: Free Press, Macmillan.
- Yadav, D. 1967. *Communication Structure and Innovation Diffusion in Two Indian Villages*. Doctoral Dissertation, Michigan State University, East Lansing.
- Yoddumnern, B. 1981. *Premarital Use of Family Planning: Effects on Age at Marriage*. IPSR Publication No. 48. Bangkok: Institute for Population and Social Research.
- _____. 1985. *Continuity and Change in a Northern Thai Village: Determinants and Consequences of Fertility Decline on Northern Thai Family Structure*. Unpublished Doctoral Dissertation, University of Illinois, Urbana-Champaign.
- Yoddumnern-Attig, B. 1989b. Data Analysis and Report Writing: What to Know Before You Start. In *A Field Manual on Selected Qualitative Research Methods*. B. Yoddumnern-Attig et al. (eds.), pp. 41-57. Salaya, Nakorn Chaisri, Nakorn Pathom: Institute for Population and Social Research, Mahidol University.
- _____. 1990. Thailand's Socio-Economic Context and Its Implications for Child Health and Development. In *Early Childhood Towards the 21st Century: A Worldwide Perspective*. B.P. Chan (ed.), pp. 475-486. Yew Chung Education Publishing Co.; Hong Kong and New York.
- Yoddumnern-Attig, B. and C. Podhisita. 1989. Community-Based Factors Affecting Contraceptive Use Patterns and Discontinuation Over the Female Reproductive Life Span: A Preliminary Anthropological Analysis. *Journal of Population and Social Studies* 1(2):151-166.

Appendix

Table 1. Demographic Profile of the Research Areas

	Surin (Northeast)	Trang (South)	Total
Number of households	156	222	378
Total population	721	986	1,707
MWRA*(15-49 years)	145	155	300
MWRA using a family planning method	105	106	211
MWRA family planning discontinuers	13	27	40
MWRA who have never used family planning	27	22	4

*Married Women of Reproductive Age

Table 2. Characteristics of the Sample Women

Characteristics	Percent	Number
Age (in years)		
15-19	4.3	13
20-24	17.0	51
25-29	23.0	69
30-34	19.3	58
35-39	17.3	52
40-44	12.7	38
45+	6.3	19
Total	100.0	300
Education		
No education, illiterate	3.3	10
Can read and write with difficulty	32.7	98
Can read and write well	42.3	127
Higher than a 4-year primary education	21.3	64
No response	0.3	1
Total	100.0	300

Table 2. Characteristics of the Sample Women (cont.)

Characteristics	Percent	Number
Annual Household Income (in baht*)		
<_ 4,999	17.7	53
5,000 - 9,999	21.0	63
10,000 - 19,999	21.7	65
20,000 - 29,999	15.3	46
30,000 - 39,999	9.0	27
40,000 - 49,999	6.7	20
>_ 50,000	8.7	26
Total	100.0	300
Age At Marriage		
<_ 19	47.3	142
20-24	39.0	117
25-29	11.0	33
30+	2.7	8
Total	100.0	300
Number of Living Children		
0	1.3	4
1	23.3	70
2	28.0	84
3	20.3	61
4	12.0	36
5	15.0	45
Total	100.0	300

*1 US\$ = approx. 25 baht

Table 3. Respondents' Identification of Leaders by Research Area

Leader Types	Surin Percent (No.)	Trang Percent (No.)	Total Percent (No.)
1. Village Headmen, Assistants, Village Committee Members, School Headmasters	62.0 (93)	48.7 (73)	55.3 (166)
2. Friends, Respected People	17.3 (26)	22.7 (34)	20.0 (60)
3. Relatives	6.7 (10)	17.3 (26)	12.0 (36)
4. Sisters and their Husbands	4.0 (6)	4.7 (7)	4.35 (13)
5. Father/Mother	1.3 (2)	4.7 (7)	3.0 (9)
6. Husband	1.3 (2)	0.7 (1)	1.0 (3)
7. Village Health Personnel, Village Doctors	4.0 (6)	0.0	2.0 (6)
8. Others	0.7 (1)	0.0	0.35 (1)
9. Don't Know	2.7 (4)	1.3 (2)	2.0 (6)
Total	100.0 (150)	100.1 (150)	100.0 (300)

Table 4. Leaders' Views on Family Size by Research Area

Leader Types (No.)	Surin Percent (No.)	Trang Percent (No.)	Total Percent
No Suggestions	50.0 (75)	62.0 (93)	56.0 (168)
Suggestions	47.4 (71)	36.1 (54)	41.7 (125)
1. 1-2 Children	26.0 (39)	14.7 (22)	20.3 (61)
2. 3-4 Children	12.0 (18)	8.7 (13)	10.3 (31)
3. 5-6 Children	0.0	1.3 (2)	0.7 (2)
4. Should have few children; more children, more work	8.7 (13)	10.7 (16)	9.7 (29)
5. Better to have more children; parents can depend on them	0.7 (1)	0.7 (1)	0.7 (2)
6. Not important	2.7 (4)	1.3 (2)	2.0 (6)
7. Don't know	0.0	0.7 (1)	0.3 (1)
Total	100.1(150)	100.1(150)	100.0 (300)

Table 6. Respondents' Information Seeking Among Effective and Extended Network Members

Relatives	Surin Respondents			Trang Respondents			Total	
	Childrearing Childrearing	Birth Control	Percent (No.)	Childrearing Childrearing	Birth Control	Percent (No.)	Childrearing Childrearing	Birth Control
1. Neighbors	70.0 (105)	63.3 (95)	Percent (No.)	79.3 (119)	80.7 (121)	Percent (No.)	74.7 (224)	72.0 (216)
2. Close Friends/ Classmates	7.3 (11)	4.0 (6)		3.3 (5)	1.3 (2)		5.3 (16)	2.7 (8)
3. Friends from Other Villages	0.0	5.3 (8)		0.7 (1)	2.7 (4)		0.3 (1)	4.0 (12)
4. Colleagues	0.0	0.0		2.0 (3)	1.3 (2)		1.0 (3)	0.7 (2)
5. Relatives	0.0	0.0		2.7 (4)	1.3 (2)		1.3 (4)	0.7 (2)
6. Others (Midwives, Health Personnel)	0.0	0.0		0.7 (1)	2.0 (3)		0.3 (1)	1.0 (3)
7. Not applicable	22.7 (34)	27.3 (41)		11.3 (17)	10.7 (16)		17.0 (51)	19.0 (57)
Total	100.0 (150)	99.9 (150)		100.0 (150)	100.0 (150)		99.9 (300)	100.1 (300)

Table 5. Respondents' Information Seeking Among Intimate Network Members

	Relatives			Surin Respondents			Trang Respondents		
	Total								
	Childrearing Childrearing	Birth Control	Percent (No.)	Childrearing Childrearing	Birth Control	Percent (No.)	Childrearing Childrearing	Birth Control	Percent (No.)
1. Woman's Parents	26.0 (39)	19.3 (29)	19.3 (29)	60.0 (90)	52.0 (78)	43.0 (129)	35.7 (107)		
2. Husband	6.0 (9)	8.7 (13)	8.7 (13)	13.3 (20)	12.7 (19)	9.7 (29)	10.7 (32)		
3. Sisters/Brothers	29.3 (44)	28.7 (43)	28.7 (43)	11.3 (17)	19.3 (29)	20.3 (61)	24.0 (72)		
4. Other Relatives	18.0 (27)	18.0 (27)	18.0 (27)	11.3 (17)	10.0 (15)	14.7 (44)	14.0 (42)		
5. Others (e.g., in-laws)	0.7 (1)	0.7 (1)	0.7 (1)	0.0	0.0	0.3 (1)	0.3 (1)		
6. Not applicable	20.0 (30)	24.7 (37)	24.7 (37)	4.0 (6)	6.0 (9)	12.0 (36)	15.3 (46)		
Total	100.0 (150)	100.1 (150)	100.1 (150)	99.9 (150)	100.0 (150)	100.0 (300)	100.0 (300)		

