A SOCIOLOGICAL STUDY OF FEMALE LITERACY AND FERTILITY AMONG TRIBAL WOMEN IN ORISSA

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By

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CERTIFICATE

This is to certify that the dissertation entitled, submitted by Vandana Barik, **'A SOCIOLOGICAL STUDY OF FEMALE LITERACY AND FERTILITY AMONG TRIBAL WOMEN IN ORISSA'**, in partial fulfillment of the requirement for the award of the degree of this university. This work is original, and has not been submitted so far, in part or full, for any degree or diploma in this university or any other university.

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Chapter I: Introduction

The link between fertility and literacy has become central to issues regarding women. It is being argued that female literacy and education have a positive role in reducing patterns of fertility. Educating women results in improved economic life, a better quality of life and a healthier population. At the same time literacy and education have empowered women by providing increased autonomy in the home and outside it. However, there is not necessarily a direct relationship between literacy and autonomy which affects change in fertility. But it may affect the decision making power of women in economic life, as well as in social life, which means more autonomy over one's own life. Thus, social scientists and development experts are arguing in favour of supporting female literacy in order to control population. Yet, there is no unanimity on this view in the absence of conclusive micro-level data.

Many social demographers and social scientists have tried to establish linkages between female literacy and fertility. In the last few decades, in response to demands of women's movement and the United Nations mandates, national governments and international development agencies have adopted policies and measures to promote women's advancement. The close relationship between education as an offshoot of development and demographic change has been established by recent empirical studies like that of Caldwell (1982), Cleland (1987), Jeyeebhoy (1994), Basu and Jeffery (1996) etc.

The concept of development is not as easy to understand as it is

generally used. Development means a process of change which improves the social, political and economic well-being of majority of population in a country. The first sociological account of development was modernization theory. Modernization specifies particular contents and process of change in course of development. Many sociologists describe modernization as westernization and industrialization (Srinivas, 1966, Singh1996). So development is not an easy concept to define. It is highly ideology loaded. Some see it in terms of a purposive and planned project, others prefer to talk of processes of social transformation. Some define it as the enhancement of individual choice. Others see it as the equalizing of opportunities. Still others see it as redistributive justice. (Kabeer 1994).

The assumption in recent decades has been that "Economic development is gender neutral and both men and women will benefit equally from it" (World development, 1996). In developing countries, economic growth has not meant an increase in income of the poor, especially women. In every sphere, women are considerably behind men on the degree to which they have access to resources needed to attain a better standard of living. Mamta Murthi (2001) is of the view that the role of son preference is the most important cause in sustaining high fertility levels, where women lead lives with little right to make the decision that determine their security and their fertility.

"It is usually assumed that education as an off shoot of development will help individuals to move from traditional attitudes to modern attitudes and behaviour. But the experience of developing countries has

provided sufficient ground for rethinking the supposed straight forward and unidirectional relationship between education and modernization" (Ahmad, 1980: 108). Social, economic, political and cultural factors are also powerful intervening variables (Chanana, 1996). Inspite of all this critique, there is a common agreement that education changes individual attitudes towards life. As Chanana argued that "in the educational discourse education is continuing to be viewed as the sine qua non for promoting changes in attitudes" (1996: 108). Education and literacy have a impact on fertility. 'Income effect can be quite slow and weak. But certain personal and social characteristics, such as female literacy, often have a more powerful influence on demographic outcomes'. (Dreze and Sen, 1998: 80). Various macro-level studies as well as micro-level studies have been conducted, which show varied results across time and spaces. So a more complex explanation of fertility is needed.

Definition of Terms

"Fertility" refers to the actual level of childbearing of an individual or population. The growth of population depends on human fertility. The fertility of women has always being a matter of vital concern to all the people. (Thomson and Lewis, 1965). One possible and important indicator of the level of fertility is the average number of children born per woman of unbroken marriage during the reproductive age. (Agarwala, 1967; Chakrabarty, 1984). Patel (1993) refers to the fertility behaviour as the process of bearing and rearing children. It also includes those factors which directly or indirectly lead to child birth and other demographic

outcomes like child survival and mortality. At this point, it is imperative to define certain other related terms. National Family Health Survey (NFHS) of 1993 defines crude birth rate as the total number of live births for 1,000 population in a given year. The general fertility rate (GFR) according to NFHS in 1993 is total number live births for 1,000 population of women in reproductive age group in a given year. The reproductive age group is considered by NFHS to be between the age of 15-49. Age specific fertility rate (ASFR) is defined by NFHS as the number of live births per 1,000 women of a specific age group in a given year. Total fertility rate (TFR) is interpreted as the number of live births per 1,000 female population if they went through all reproductive yeas at a particular time.

"Education" is a philosophical as well as sociological concept denoting ideologies, curricula and pedagogical techniques of the inculcation of and management of knowledge and the social reproduction of personalities and cultures (Marshall, 1998). Anderson (1968) defines education as including all communicating of knowledge shaping of values. In this sense it is synonymous with socialization. In a broader sense education means the development of character and capabilities, the acquisition of specific skills, the enhancement of intellect (or mind, body and soul) and the training of the social human being (UNESCO, 1957). Genrally education means formalized education as carried out by distinctive institutions, especially school. Chanana, (1996) while studying the links between education and fertility of two generations among Punjabi women in New Delhi, refers to education as the reading

and writing skills and to formal education received at home or at school. The aim of formal education as said by Anderson, (1968) is to prepare the child for the transition from the confined but diffuse relationship of the family to the more impersonal and diversified relationship of a larger society.

While "education" refers to formal training of individuals in a specialized skill for a specific aim, "literacy" is the minimum skill of reading and writing. A literate society is one in which most adult members can read and write at least a simple message (Golden, 1955). UNESCO (1957) defines a person as literate "who can with understanding both read and write a short simple statement on his everyday life", whereas an individual who is functionally literate is able to "engage in all those activities in which literacy is required for effective functioning of his group and community development. Literacy is usually regarded as the minimum skill of reading and writing and education is regarded as a synonym for schooling. While differentiating education from literacy, Jeffery and Basu say, 'Education has connotations of expanding people's mental horizons and leading them out of ignorance and stupidity. Literacy may indeed open up people's social worlds through newspapers, books, letter writing and reading and numerical calculations. Yet schooling does not necessarily provide any of these outcomes. Schooling has connotations of discipline of training to a particular way of seeing the world' (1996: 19).

"Autonomy" is the single most factor to determine individuals

freedom without which one cannot make choices in life. Literacy cannot directly influence fertility of women. Autonomy is the intervening variable, which is affected by literacy and education and thus has impact upon fertility. So it is important to define autonomy here. As stated by Davidson (1982) ' life of the individual can be divided into personal life and social or political life. Personal life includes a person's ability to obtain good healthcare, good education and relative autonomy'. So autonomy tends to be enhanced by factors such as good health and good education and money. These factors are distributed differently by class and gender. Thus, the question arises – is autonomy same as status, esteem or position of women in society? Jejeebhoy (1995) states that the term 'status of women' is unclear, because its interpretation is highly subjective, it varies from setting to setting and it may be high even where women have little control over their lives. So autonomy is the better word to describe women's control over their bodies and life. According to Mason (1984), female autonomy usually refers to 'the extent to which women are free of men's control'. Social demographers and social scientists are interested in the linkage between education and change in perceptions, attitudes etc., which stems from their pre occupation with fertility (Chanana, 1996). Chanana stated that 'women's literacy is of interest as a factor which might promote autonomy which in turn (it is assumed) helps in controlling fertility' (1996: 111).

In general usage, the word "tribe" is taken to denote a primary aggregate of peoples living in an undeveloped condition under a headman or chief. Tribe is a social group bound together by kinship and duty and

associated with a particular territory (Oxford Sociological Dictionary, 1998). Many anthropologists, sociologists, administrators have been involved with tribal problems. But there is difference of opinion regarding the conceptual definition of tribe.

The term 'tribe', in anthropology, was first used to describe communities in Australia, Malanesia and North America, where, very broadly, it came to denote people who did not know the use of writing, lived in backward isolated areas etc (Beteille, 1977). Evolutionary writers of the last century attempted to distinguish between tribal and modern society in terms of differences in their legal and political institutions. Morgan (1877) saw tribal society as having social, but not political organization. Both Morgan and Maine (1861) contrasted the territorial foundations of the modern state with what they considered to be the kinship basis of tribal societies. Anthropologists and sociologists believe that, although having general utility as an idealized type of society, tribal society is in no sense an absolute category. 'Tribal society' can be regarded at most as a loosely bounded area of the opposite end of the continuum to that of 'modern society' (Lewis, 1968).

Coming to India, the Hindu world provides parallel instances of small societies which are culturally and linguistically distinct, but which participate through religion and the caste system in the macroculture and society of Hinduism (Srinivas, 1952; Dumont, 1959). Although it is a common practice to regard these communities as organized tribal units, in the hierarchical Hindu world, here the closed characteristics of tribal

societies in the strict sense are absent.

Beteille describes tribal society ideally 'as a society with a political, linguistic and a somewhat vaguely defined cultural boundary; and as a society based on kinship, where social stratification is absent' (1977: 13). Majumdar defines a tribe as 'a social group with territorial affiliations, endogamous, with no specialization of functions, ruled by tribal officers; hereditary or otherwise, united in language or dialect recognizing social distance with other tribes and castes, without any social obloquay attaching to them, following tribal traditions, beliefs and customs, illiberal of naturalization of ideas from alien sources, above all conscious of ethic and territorial integration' (1976: 241).

In India the interaction between tribe and caste has been going on for centuries. Mandelbaum observes a slow shift from tribe to caste. He writes: 'There is no absolute cultural or social distribution between all tribal and all caste peoples, but rather a range of variation between tribal and caste traits' (1972: 576). Because of the interaction between tribals and non-tribals there existed a tribe-caste continuum. As Bailey says, 'at one end of the continuum is a society whose political system is entirely of a segmentary egalitarian type and which contains no dependents whatsoever, and at the other end of which, is a society in which, segmentary political relationship exists only between a very little proportion of the total society and most people act in the system in the role of dependents' (1961: 7-19).

The problem of race and ethnicity has also emerged in this context.

With the growth of nationalism in Europe, the term tribe came to denote a race of people within a given territory. Western writers of India, generally called orientalists, followed by some anthropologists and sociologists in India now use the term tribe in that connotation. Race generally refers to certain physical attributes denoted to a particular group. Elwin (1963) is of the view that, with the exception of North-East, all the aborginal tribes should be classed as Hindus by religion, but be separated in terms of race. But several ethnographers like Risley (1901), Ghurye (1963), viewed that tribe is different from race. Ghurye (1963) of the view that the proper description of tribal people must refer itself to their place in or near Hindu society and not to their racial differences.

Race is not the same as ethnicity, but the concepts overlap in part because ethnicity, too, is a question of social construction and political struggle. Sociologists stress that a significant part of ethnicity is the belief on the part of people that they descend from common ancestors, share a common culture with coethnics and choose to identify with that ethnic group. (Waters, 1990). So the concept of ethnic group combines both racial and cultural criteria. As Smith (1986) says the term 'ethnic group' is a very broad term, which has been used to include social classes as well as racial or national minority groups in urban and industrial societies and also to distinguish different cultural and social groupings among indigenous populations.

A strong sense of ethnic identity is prevalent among the tribes of India. Language, religious and magical beliefs and practices, food habits,

styles of dress, pattern of habitation are important features of their life which make them distinct from non-tribal groups. Tribes in India today are in search of a sense of ethnic identity, of a sense of belonging and for self-determination in a caste-ridden society. Now some tribes have been making efforts for mutual, ethnic and linguistic revival. Now they want their ethnic autonomy from the rest of Indian population (Singh, 1972).

Theories of Fertility Decline

Fertility is an important indicator of demographic change. Many social anthropologists, social scientists and demographers have observed a drastic decline in fertility in western countries. But the third world developing countries are seen to be still in the process of transition to lower fertility rates. Social scientists and demographers use certain factors such as modernization, gender-variables, economic factors, socio-cultural factors and family-level factors to explain the process of fertility transition.

During mid 1940s demographic studies became a focal point for all social scientists as the problem of population explosion aggravated. Over the years it has been found by demographers that various factors and processes influence the paradigm of transition in fertility.

The theories of demographic transition can be divided into two parts. In first part, all the classic demographic theories would be included. And in post classic transition theories, the wealth flow theory of Caldwell (1982) and micro-economic theories are important.

(I) Classic Demographic Transition Theory

This theory is the main theory in the field of fertility transition. It is based on three phased transition models. The first phase started with high fertility, high mortality and thus slow population growth. Then a transitional phase started with falling mortality causing rapid population growth. And the third phase began with low fertility rates bringing a return to slow or no growth (Davis, 1945 and Notestein, 1945).

This theory was based on modernisation principles, focusing mainly upon social and economic forces. Notestein offered a two fold explanation for why fertility had begun to decline. For him 'in premodern countries fertility had been kept high only by maintenance of whole series of props like religious codes, laws, customs, marriage habits and family organisaton. Education was brief and children began their economic contributions early in life. Women had few opportunities to achieve either economic support or personal prestige outside the role of mother and wife. It is only with modernization, opportunities increase with education for self advancement. Women come outside the role of mother and wife' (1945: 39).

Thompson (1929) and Blacker (1947) explained on the same line that 'Urban industrial society' is the important transition period. The mainstream arguments of the theory are: Fertility is high in poor, traditional societies because of high mortality, lack of opportunities for individual advancement and the economic value of children. All those change with modernization and urbanization, industrialization when

individual's viewpoints change with education and increasing new opportunities.

Classic demographic transition theorists believe that the fertility behaviour of the third world arises largely from ignorance and should be combated with education and guidance. As Bogue guided by classic demographic transition paradigm in his widely respected "Principle of Demography" concludes that 'throughout the world there seems to be a strong inverse correlation between the amount of educational attainment and level of fertility' (1969: 693). This example shows that for the first time, classic demographic transition theory gives importance to the role of education in fertility change.

(II) Post Classic Transition Theories:

(a) 'Wealth Flows' Theory:

The term 'wealth flows' was adopted because income would not include everything covered by wealth. Here wealth is regarded as the stock of the family. The theory emphasizes the fundamental nature of social and economic relations within the family and how changes in one relation has a profound effect upon another relationship.

John Caldwell (1982) is the founder of wealth flows theory. In 1970's, he argued that the essence of all pre-capitalist modes of production was kin based production and relations of production were those between relatives. These relations were unequal and gave material advantage to elderly male members. Thus high fertility yielded economic

advantage in the peasant families. The main aim of high fertility in those families was the stability of relation of production because continuing material advantage was most important.

Caldwell says a complete capitalist mode of production makes high fertility economically disadvantageous. There is a sudden rise in cost of children and a decline in their labour inputs into household production. The major cause is the spread of education, together with a rise in its duration and cost. With the rise of egalitarian society, girls are educated too, partly because of demands of egalitarian ethics, partly because educated husbands want educated wives. The differential in wages is narrowed and educated women gain greater respect in workforce. As the wife's income becomes more important, the reproductive decision becomes a significant immediate economic decision as well as a long term one.

Caldwell links fertility decline to the reversal in net intergenerational flow of goods and services (from older to younger generation). He regards the benefit of non-patriarchal, more egalitarian and modern family where the women get a fair chance to make fertility decisions through education and economic independence.

(b) Microeconomic Theories:

Theories related to micro-economic changes in family structure, especially related to women's status to fertility decline gained prominence in the 80's. The most important of these was of Karen Mason. Mason (1984), after an intense review of demographic literature, proposed that

one of the most important factors that affect fertility is women's education and her social and economic position in the family. These affect, according to her, women's autonomy from male control, economic dependency and social status which, in turn, influence child supply and child cost.

The theories by Gary Becker and the theories of Harvey Leibenstein and Richard Easterlin are also of great significance in this matter. Becker (1960) in his theory, which is an extension of economic theory of consumer choice, treats children like other consumer durables taking into account their costs, time spent on them, household income and preferences. For him the increasing cost of children because of the money and time spent, on their up bringing and education is the soul cause of fertility decline. And it is only the women's education and good position in the family, that decide the preferences in the family in matter of fertility.

Though the theories of demographic transition are guided by modernization process and put much emphasis on development, and on industrialization process and urbanization as the cause of fertility decline, yet these are the theories, which for the first time make female literacy and education as important factors for female autonomy, which in turn influences their fertility decisions. Though these theories talk about education indirectly, only through talking about modernizing factors, still there is general agreement that female education is an important factor which influences their life and their autonomy.

Objectives of the Study:

This study attempts to look at the relationship between literacy and fertility of women in general and tribal women in particular. Does literacy have always a positive impact on fertility change? Is there any difference between tribal women and non-tribal women regarding the impact of literacy on fertility? These are the questions which the study will seek to answer.

Thus the specific objectives of the study are:

(a) To see whether there is a relationship between female literacy and fertility among tribal women.

(b) To compare and study the relationship between female literacy and fertility of tribal women with that of non-tribal women.

(c) Thirdly, to see the intra-tribal differences.

Sample and Methodology

The sample has been drawn from a tribal village of Keonjhar district in Orissa. The name of the tribe is 'Juang' and the village where the study has been conducted is called *'Gomatipur' village. The sample was drawn on the basis of a household survey of the village. There are a total of 110 households. The male population is 303 and female population is 276. Sample consists of all the literate as well as non-literate married women in their child bearing age (i.e. 15 to 45 years approximately). From the

* Note: The name of the village has been changed.

sample of 109 married women, 70 are Juangs, 23 are Scheduled Caste and 16 are Other Caste women.

Data has been collected regarding fertility and education. Interview guide is the main technique used in the study. This is supplemented by observation regarding attitudes, norms, belief system, which may shape their health practices and fertility.

Chapterization

The first chapter is the introductory chapter which starts with the debate on the link between literacy and fertility. The demographic theories by which the study will be backed are also discussed. The second chapter consists of survey of literature. It makes an attempt to put forward salient findings of different demographers, anthropologists and sociologists. The third chapter deals with the conceptual framework, where an attempt is made to see the situation of tribal literacy from a broader perspective. The fourth chapter discusses the findings of the field work done in a village of Orissa. The fifth chapter presents the summary of the chapters and some of the salient findings of the field study.

Chapter II : Review of Literature

A number of factors have been identified by social researchers on the basis of empirical research, which explain differential fertility. Here some findings of female literacy in general and tribal female literacy in particular will be briefly reviewed as it has been found to explain differential fertility level. The whole chapter is divided into two parts. The first part includes general studies of female literacy and fertility. It briefly discusses both empirical findings and secondary statements. It explains the studies in India and studies outside India. The second part includes tribal studies of female literacy and fertility. This part also follows the same pattern as in first part.

General Studies

There is considerable evidence in the literature of a negative relationship between women's schooling and fertility behaviour (Cochrane, 1979). Women's educational attainment is expected to be negatively related to the demand for children because it is associated with the likelihood of employment in modern sector. Better-educated mothers typically demand higher levels of schooling for their children than their lesser-educated counterparts, thereby effectively raising the cost of child to them (Mason, 1984). In effect, better educated mothers demand 'high quality' children, thereby raising the price of child quantity; this increase in price of quantity implies a demand for fewer number of children (Becker, 1991). Schooling is likely also to affect the age of entry into union, and may at the same time influence underlying preferences for

children and attitudes toward traditional practices like prolonged breast feeding and post-partum abstinence and toward innovations such as modern contraception (Cochrane, 1979). Furthermore, better educated mother in third world experience lower infant mortality and child mortality rates, reflecting their positive attitudes and practices towards disease and medical case. The lower mortality translates into a greater supply of children. The combination of reduced demand for the increased supply of children associated with increased women's schooling in turn results in a greater motivation for fertility regulation (Shapiro, 1997).

According to Mandelbaum (1974), among the modern social factors that influence fertility, the education of girls is particularly relevant to family planning policies because increased public investment in it has brought about reduced fertility relatively quickly and with continuing effect. He says that an educated woman is usually less closely confined, physically and psychologically, within her husband's family than is the woman who is brought into their home as an uneducated girl. The educated woman is more likely to feel that she can do something about certain conditions of her life, including the condition of pregnancies in close succession or conceiving during her later reproduction years. Education is the potent consequence that help her in life and is likely to induce her to limit her fertility.

Appleton (1996), focusing on contraceptive use, says that one way in which female education may reduce fertility is by increasing the frequency or efficiency of contraceptive use. It is likely to influence fertility mainly

through age at marriage and duration of breast feeding. Education may have a negative effect on breast feeding. Because it reduces the length of breast feeding. She says irrespective of income effects, female education is commonly assumed to raise the opportunity cost of children. Increase in women's wages due to education will raise the quality of children and thus reduce fertility. Female literacy and education may lead mothers to value the education of their children more highly, inducing a switch in preference in child quantity to child quality. However, she accepted that while this is widely accepted for industrialized countries, it may be less applicable to sub-saharan Africa, where female labour participation is lower, irrespective of education.

In recent years, largely in response to women's movement, there has been much emphasis on issues regarding the health of women and control that women have over their bodies and lives. For instance, Roberts (1981) states that 'although there is a very real sense in which contraception is the responsibility of women, they have limited access to the information needed to make an informed choice. Women are operating within structures which are not of their own making. Men without actually having the power to reproduce themselves have a very direct power over the means of production'.

Murdoch (1980) states that the education of women has a more profound effect on fertility compared with that of men, the educational level of the wife being more strongly correlated with a couple's fertility than the educational level of the husband. Educational level of females is

the strongest and most consistent predictor of fertility. Similarly Mason (1984) argues that women's education helps to postpone the age at marriage and child bearing because early marriage would conflict with staying in school and because education leads to better knowledge of attitude towards and practice of family planning. Women's education is also associated with greater opportunities for employment outside the home and greater domestic power in decision-making.

Growing awareness of the complexity of the effects of education on fertility led to a shift of emphasis from a description of statistical associations to investigation of the causal mechanisms that underlie the relation. Easterline (1976) has shown that education may affect a variety of behaviour with potential either to raise or to lower fertility. According to his "synthesis framework" model, fertility is determined by the supply of children, the demand for children and the cost of fertility regulation.

Cleland and Jejeebhoy (1996) have shown the range of fertility rates by women's length of schooling in selected South Asian countries in late 1980s and early 1990s. Their study shows while in Nepal, Pakistan and India there is a wide gap of fertility decline between illiterate and highly educated or secondary educated women, in Bangladesh and Sri Lanka there is seen that while among illiterates fertility rate is only 2.8, among primary educated women fertility rate is 3.0. For them, the study shows that the relation between literacy and fertility is not so clearly inverse.

Adam-Chak and Ntseane (1992) in a study of the relationship between education and fertility for men and women in 37 sub-saharan

nations during the period of 1960s to 1980s found an interesting result of impact of education. Results indicate that primary school enrollment in 1960 and 1980 for both males and females had a weak negative and non-significant relationship with total fertility rate 15 to 30 years later. However, secondary school enrollment for males in 1980 had a significant negative effect on the total fertility rate 10 to 25 years later. Because they found that though husband's education tends to increase the perceived ability to afford children, other factors may become more important determinants in fertility decline.

Siddiqui (1996) in a cross-country analysis of impact of socio-economic factors on fertility behaviour, collects data from more than 100 countries for the period 1955-1988 and estimates the fertility model. In international comparisons of fertility behaviour, the study shows that in countries like Bangladesh, Dominican Republic, Mexico, Nepal, Pakistan, Peru, Philippines, Colombia and Sri Lanka, education is more cost effective means of reducing fertility than the provisions of family planning services. In most cases, it was found that a marginal decline in fertility in response to an increase in female literacy is higher in high-income counties and it is higher for females in the older age group. This is in conformity with the notion that education with good income has a good impact on fertility decline.

World Fertility Survey (1987) conducted a survey in 38 developing countries during 1980s, which reveals that the mean age at marriage for the average woman with seven or more years of education was almost four

years later than that for the average educated woman. But in many cases, it was found, primary education was ineffectual in delaying marriage. It concluded that only after a threshold level of education, it has an effect on the fertility level.

Economic and Social Commission for Asia and the Pacific (1996) has collected evidence from many countries in Asia which suggests an inverted U-shaped relationship between education and fertility. For instance, in India, the inverse relation between education and fertility occurs only after matriculation In the Philippines and Indonesia, the majority of studies appear to support the inverted U-shaped relation between wife's education and fertility. In the Philippines, the relation occurs among mothers that have completed the sixth or seventh grade of school. In Thailand for most of the various national surveys from 1969 to 1979, an inverse association is apparent between educational attainment and both the expected and the preferred number of children, while a direct relation is evident between education and percentage practicing contraception. In Malaysia, the negative relation between education and fertility was observed to be significant only for women with seven or more years of education.

Economic Commission for Latin America and the Caribbean (ECLAC, 1992) takes a systematic approach to the subject of women's development. It has given priority to the topic of education. It has found that in Latin America and the Caribbean, education exerts a strong influence on demographic trends, affecting the variable that produce

changes in these trends. The education level of the population, which is associated with improvements in living conditions, has played a basic role in the decline of infant mortality. It has demonstrated the relation between the educational level of the mother and the variables of fertility and infant mortality, showing an inverse correlation in all cases. It has been agreed that education affects reproductive behaviour, especially in terms of the information and spread of attitudes, values and beliefs associated with family size. Trends in this region show that women with more schooling tend to marry later and have fewer children.

It is an established fact that fertility rate is affected by education and child mortality rate. Economic and Social Commission for Western Asia (ESCWA, 1989) discusses the impact of paternal and maternal education on the levels and differentials of infant and child mortality in the region of western Asia. Egyptian fertility survey in 1980 found that when the mother's or father's education is used as a measure of status, a pronounced inverse relation is observed with each age-interval infant mortality rate. For example, in this area, the infant mortality rate (IMR) for mothers with no schooling is 158 and is about 89 per cent greater than the rate of 84 for mothers with six or more years of schooling. So fertility rate is high among illiterate women because of high infant mortality within the period over which the child has been exposed to risk of dying.

Ahmad (1990) in a micro-level study on the status of women and fertility in Bangladesh, endeavoured to explore the mechanism through which the status of women could effect the micro-determinants of fertility.

She found education and employment to have a positive effect on the motivation for fertility control, the costs of fertility regulations and on efficiency of the practice of family planning. But she found education below primary level or more literacy not helping much unless it was associated with some opportunities for earning income.

Chaudhury (1980) in his general study of female status in Bangladesh found that education is the most important and crucial one as it broadens one's horizon and provides scope for finding appropriate occupation and acquiring better status on the occupational ladder. Again, potential source of income is also education. Because of existing educational differences in rural Bangladesh, a woman's choice of occupation and source of income are limited. He found that educated women who live in urban area and possibly have role outside home have lower fertility than the uneducated urban women.

Shah (1986) studied female education and fertility level in Pakistan. The Pakistan census of 1981 shows that about 26.2 percent of the population aged 10-plus was literate. The percent literate among males was 35.1 compared with 16.0 among females, while only 7 percent of rural females were literate and 37 percent of urban females were literate. However, the total female educational attainment in Pakistan gives a grim picture. In 1981 census it has been shown that only 15 percent of the urban and 4 per cent of rural females had a primary level of education. Giving centrality to literacy-fertility relation, the level of fertility in Pakistan remains a very important question. The total fertility rate (TFR)

has remained consistently above six children. It has 7.1 during 1970s. It is found that the absence of fertility decline is consistent with low level of education and lack of knowledge of contraceptive use.

Sweezy (1971) discusses the "economic explanation" of fertility changes in twentieth-century America. To him, education is not a major factor determining fertility, rather income changes, and the shifting attitudes that accompany them and direct their expenditure by the households, are more important. He concludes that education or economic factors alone are too simple to explain fertility changes. Education, for him, while recognized as contributing to change, is seen to increase fertility in specific situations of changing attitudes and increasing incomes, especially during the post world war II, that has seriously challenged most fertility explanations.

At the International Conference on Population and Development (ICPD) at Cairo in 1994, consensus was reached on a new agenda for population and development. The ICPD was a triumph for those seeking an end to the great debate that had plagued the population field since the First World Population Conference at Bucharest in 1974; a debate between advocates of development who believed that development is the best contraceptive and therefore, a necessary precondition to sustained fertility decline and those who asserted that family planning services must be implemented to meet the high demand for fertility control which they believed existed. A notably wide gulf remained between those two essentially academic positions. The practical result was ambivalence and

ambiguity in many countries about which approach to take. The ICPD took great strides toward resolving this conflict by placing the population problem in development context focusing attention on individual needs instead of demographic targets. At the ICPD it was agreed that the government should give special attention to the education of girls, the health of women, the survival of infants and young children and in general the empowerment of women. At the same time, comprehensive reproductive health services should be provided to enable couples to achieve their reproductive goals and determine freely and responsibly the number and spacing of their children. (Pachauri, 1999).

After discussing certain general studies out side India, now some studies in India will be briefly reviewed to get a picture of the situation of female literacy of fertility in our country. Registrar General of India (1972) in a occasional paper has demonstrated an inverse relationship between the educational attainment of the women and fertility. The TFR (Total Fertility Rate) indicate that with increase in educational status, fertility decreases in both rural as well as in urban areas.

Dreze and Sen (1995: 168) contend, 'The link between female literacy and fertility is particularly clear. This connection has been widely observed in other countries, and it is not surprising that it should emerge in India too. The unwillingness of educated women to be shackled to continuous child rearing clearly plays a role in bringing about this change. Education also makes the horizon to vision wider, and at a more mundane level, helps to disseminate the knowledge of family planning'.

Cleland and Jejeebhoy (1996) conducted a study to see the fertility rates by women's length of schooling in India during the period of 1972 and 1979. They divided the regions into rural and urban areas. It was seen that in 1972 total marital fertility rate among illiterates was 6.9. It was 7.1 among primary educated women and 5.0 among secondary educated women in rural areas. In urban areas, it was 6.3 among illiterates, 5.0 among primary educated and 4.5 among secondary educated women. It shows in rural areas there is a slight rise in fertility among primary educated women than among illiterates. But in urban areas it was seen fertility rate declined as length of schooling raised. It show that even in regions there is no particular inverse relationship between education and fertility rate.

Bhende and Rao (1969) found in a study of Goa that the average number of children ever born for women is 3.51 for those who are either illiterate or have studied upto primary school level, 4.5 for those who have some secondary school education but have not passed the matriculation examination and 2.57 for those who have either passed the matriculation examination or have studied beyond that level.

Driver (1963) conducted a survey in Nagpur district and classified women into two educated classes, namely, primary school and above primary school. The weighted mean of children born alive among women of all ages was 4.7 for those in the primary school and it was 3.8 for those with education above the primary school.

It is found by an analysis in 1989 by the Registrar General Office

conducting census (1990) that in India there is a great variation regarding fertility rate in South India and North India irrespective of literacy and education. It shows women with no schooling in Tamil Nadu, a southern state record four births, while similar women in Uttarpradesh, a northern state have over six births. Again, it shows women with 10 or more years of schooling in Tamil Nadu and Kerala are characterized by early two births, while well educated women in Bihar and Uttarpradesh have a rate of four to five births.

Chanana (1996) in her study of two generations Punjabi women in New Delhi found that there was a gap of women's education and fertility between the two generations. In first generation there was a wide difference between wife's education and husband's education. The number of children the less educated women had more than educated women. The number of children varied from two to five. In second generation the difference between wife's education and husband's education was not wide though the less educated women had more children than more educated women, the number of children they had was much less than the first generation. The number of children varied from one to three. This study indicates the result in favour of education.

Krishnan (1976) in a study of demographic transition in Kerala clearly lends support to education to be an effective instrument of population control. He has stated "whatever may be the nature of relationship between age at marriage and level of education in different states in India, the relationship is very straight forward and clear in the

case of Kerala". He finds that the age of effective marriage varies from 17.65 for illiterates to 18.68 for literates (below primary) and stays more or less at the same level till it rises further with secondary education. At secondary level, it is twenty. If these relationships are valid, then one can explain the decline in birth rates in Kerala due to consequent rise in the age at effective marriage brought about by continuous and sharply higher rate of female literacy.

As said earlier, education may not always have an impact on fertility. Sanyal (1956) in a study of women's attitude towards contraception in Calcutta conducted a compaign of providing contraceptives in the Baldeodas Maternity Hospital in Calcutta. They provided drugs to control fertility. The drug was at that time almost unknown; still patients were not lacking. In the first month, there were six patients only, but in nine months patients increased to 200. The attitude towards contraception and acceptability of birth control measures can be well understood from this. Most of the patients were uneducated, they could not count and the majority of them any no previous knowledge about even the existence of contraceptive measures. Even then they submitted to this trial with the new drug, just to keep down their pregnancies. This study shows how the attitude of women rather than only education is important for fertility control.

Reddy (1996) in his study of six rural villages exposed to modernization in Chittor district of Andhra Pradesh, took different factors such as caste, education, occupation, income, age at marriage, infant

mortality, the levels of modernization etc. to see the differential fertility level among different castes. It was found that the adoption of family planning is significantly higher among the forward castes, in contrast to the backward and Scheduled Castes and Tribes in the rural population of India. The differential effects of socio-economic factors such as education, occupation, income, demographic and levels of modernization is found to bring proposed changes in the fertility and family planning behaviour of Scheduled Castes, Scheduled Tribes and other castes. Accordingly it is noted that education along with other functions is an important factor for differential fertility effect.

Muthal (1992) in a study tries to find the effectiveness of traditional, mixed and modern attitudes towards fertility control. Randomly choosen 400 women belonging to different ethnic strains from sagar town of Madhya Pradesh constitute the data. An attempt was made to study whether education, income, caste, age and age at marriage have direct association with fertility control. Scaling technique is used. The score above 18 is classified under modern attitude. Score below 5 is under traditional and between 6-11 denotes mixed attitude. As a result the maximum frequency for modern attitudes towards fertility is obtained among higher educated class. Illiterate and primary educated females have very low value of frequency towards fertility. The result shows that persons attitude towards fertility depends upon education.

Sarkar (1981) in a study of education and contraception in West Bengal and Bihar, finds a negative and significant correlation between

family size and education of wives. Data shows that fertility experience of women educated from 1-4 years in Calcutta differed from the never enrolled females in 1978. It also shows high rate of conventional contraceptive practice by more educated wives but not in case of less educated wives. In 1978, not only the modernization effect of baby food use was lower but also the campaign in favour of breast-feeding had started in Calcutta. As a result, reproduction rate of the wife educated in classes 1-4 was not higher than that of never enrolled. This study also found high sterilization acceptance rate for couples in which females were educated for 1-4 years.

Srinivasan (1995) in a case study of Goa found that fertility and mortality levels in Goa have been substantially lower than those of India. Lower fertility has been attributed to several factors, particularly women's relatively higher status in Goan society because of education, higher age at marriage, a higher proportion remaining single through out life, long spells of separation because of husband's leaving Goa for work. Goa's literacy was higher than India's in 1991 and total fertility rate was 2.9. He says because of all the above factors, there is a pervasive desire for a smaller family and the adoption of contraceptive methods among the women in Goa.

Tribal Studies

Harbison (1991), in a study of a group of Garo villages in north-central Bangaldesh, finds that the educational level is very low in Garo communities. 57 per cent of the men have no schooling and the mean for

all husbands is 2.1 years of schooling completed. 70 per cent of the wives reported no schooling, with a mean of 1.2 years of schooling completed. The women reported having 5.5 living children on average. Though they have considerable freedom in decision making, still their illiteracy and low education become factors for high fertility.

As we know the main problem of tribal education in India centres around the lack of equal opportunities when compared to non-tribals. Different studies reveal the low educational enrollments and high dropout rates among Scheduled Tribes in educational institutions.

Srivastava (1971) says that the poor, economic condition of tribes, lack of school facilities, the indifferent and apathetic attitude to education, lack of good home environment are main factors of low educational status. Sujata (2000) states that the presence of acute social hierarchy, gender discrimination and group discrimination have affected the progress of education at societal level. In such a case the scene of female education among tribes is very disappointing.

Pasayat (1997) in his study of literacy situation among tribal women in Orissa finds the literacy situation very disappointing. Most of the tribal people reside in the hill region. Lack of proper communication network in these areas has failed to produce desirable results in the activities of tribal literacy. In many cases, existence and functioning of schools, enrolment and attendance of students are found only in the official records. He says 'even if the tribal people of the state want to liberate themselves and their children from the clutches of illiteracy, they do not avail adequate

infrastructural facilities'. He reported that in the tribal areas, the teachers are found consuming liquor and they sleep even during the school hour without performing their duties regularly. Some of them do not hesitate to misbehave with girl students. The most important problem of low literacy among Scheduled Tribe females is that the children are considered by parents as economic assets of family. At a very early age tribal girls start assisting and supporting their mothers at home. It is widely observed that dropout rates increase when the children, especially girl children, attain the age to undertake even the small odd jobs, whether in the field or at home.

Pandey and Tiwary (1996) studied fertility behaviour of 604 eligible couples in Hill Korwa tribe of Surguja district in Madhya Pradesh. They observe that the total fertility rate among Hill Korwa couples is about half (2.9) of the non-primitive tribal (5.3) and rural couples (5.9) of the same region. A comparison of various socio-economic indices of population has been done to study the possible demographic and socio-economic factors responsible for low fertility level in Hill Korwa tribe, assuming that development indicators are negatively associated with fertility indications. Compared to the Gond tribe of Jabalpur, the hill Korwas have low female mean age at marriage, low literacy rate, low percentage of population engaged in agriculture and high percentage of population above poverty line. These factors are likely to contribute to a high fertility level among the Hill Korwa women compared to Gond women, but the observed total fertility rate among them is about half of that observed among Gond women. Similar contradictory observations are found when the data are

compared with non tribal women. The study shows no significant relation of literacy with fertility among tribal women.

Demographers usually measure the fertility differentials by taking into amount account income, occupation, education, family type etc. However, Mutharayappa (1998) in his study of fertility and family planning among Jenu Kuruba and Kadu Kuruba tribes of Karnataka, tries to prove that these variables are not sometimes sufficient, because tribals usually have very meagre assets and most of them are below poverty line. In certain 'primitive' tribes culture plays an important role in their life. His study shows that fertility is higher among Kadu Kuruba tribe than among the Jenu Kuruba tribe irrespective of similar ecological and socio economic conditions. Inspite of similar level of educational and occupational conditions, among Jenu Kuruba tribe more number of women are using indigenous medicines for preventing pregnancies, while among Kadu Kurubas more women are using modern methods of contraception. The interesting finding is that the women who are using indigenous medicines to prevent pregnancies have lower fertility. The main factor of differential in fertility is found to be their culture. Kadu Kuruba dislike methods of family planning because of several misconceptions among them i.e. health hazards, fear of impotency etc., which cause high fertility among them.

Pandey and others (2000) studied the fertility behaviour of 1388 eligible Gond couples of Jabalpur district in Madhya Pradesh. The study indicated that total marital fertility in the tribe is 4.8 children among women. The fertility rate varies according to age at marriage of women,

education of husband and wife and type of household. The total marital fertility rate was 4.1 for women whose husbands were illiterate and it was 3.8 for those whose husbands were literate. Total marital fertility rate was 4 for literate group of women and 4.3 for illiterate group of women.

Samal and others (2000) studied the Rajis tribe of central Himalayan Region. The study was carried out between January 1997 and August 1997. All eleven villages covering entire population of 531 distributed in 116 households were covered. Total 111 females wee interviewed. It was found that total fertility rate was 6.5 as against 4.0 in 1996. Though the tribe achieved an effective literacy rate of 35.06 percent, a wide gap exists between male literacy (50.68 per cent) and female literacy (16.66 per cent).

Roy and Roth (1991) conducted a study on 23 Juang villages in Orissa in 1975 to see fertility patterns. The variables taken were age at marriage and literacy. Results indicated total marital fertility rate of approximately 6.0 percent. Higher fertility was found in age group of 15 29 years and among illiterates and low educated Juang women.

Many sociologists, demographers and social researchers (Murdoch, 1980; Mason, 1984; Chanana, 1976 etc.) talk in favour of literacy and education in fertility decline. There are others (Cleland and Jejeebhoy, 1996; Pandey and Tiwary, 1990 etc.) who view that the relationship between literacy and fertility is not that clear. They state that different results have been found across time and place. Some sociologists (Siddiqui, 1996; Sanayal, 1956; Reddy, 1996; Mutharryappa, 1998) talk about other social, economic, behavioural factors, which along with

education are important to bring fertility change. In the past few years much has been talked about the threshold level of education to bring about change in fertility patterns (Ahmad, 1990; Basu, 1996 etc.). So it is difficult to give a straightforward view that education always brings about declining fertility level. Nevertheless sociologists do agree that education affects fertility, be it positive or negative.

Thus, from the literature it is seen that the issue of literacy and fertility among women has been studied extensively. A couple of studies concerning the educational problems of tribals have also been included. However, no micro study has yet been taken to establish the link between literacy and fertility among the tribes, especially the Juangs. Therefore, there is a need to look at the literacy of Juang women and to examine whether there exists a relation between literacy and fertility. The next chapter seeks to draw out the major issues raised by the research proposal backed by some statistics at the macro-level to put forward the discussion.

Chapter III: Tribes and Literacy

The tribes of India are varied in terms of their socio-economic and political development. In 1891 census, the term 'Forest Tribes' was used for the tribal communities. In 1931 census, a serious attempt was made to list them as the 'primitive tribes'. In 1935, thirteen of them were called 'backward' tribes. Ghurya has described them as 'so called' aborigines or 'backward Hindus'. Therefore, in general, the word tribe refers to the people who were considered primitive and those living in backward areas (Desai, 1977). The Constitution of India used the term 'Scheduled Tribe' for them. Scheduled Tribes are those tribes, which are listed by the President of India in pursuance of the special provisions of the Constitution. For the first time Article 342 of the Indian Constitution talk about Scheduled Tribe, which the Indian President may specify by public notification (Rao, 1991).

At present, India has the second largest tribal population in the world after Africa. According to 1991 census, the Scheduled Tribe population is about 60.7 million which constitutes 8.08 percentage of the total population of 840.6 million in the country. As per 1991 census, numerically high is the Gond tribe found in Madhya Pradesh, Maharastra, Andhra Pradesh and the Santhal tribe found in Bihar Orissa and West-Bengal.

Some scholars, such as Hasnain (2000) classified the tribes on the basis of language, race, religion and territory. For example, the North-

eastern tribes are found in the states of Assam, Manipur, Mizoram, Sikkim, Nagaland, Meghalaya, Arunanchal Pradesh. The Central Indian tribes are found in Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharastra, some parts of Bihar and Orissa. Tribal people speaking the language falling under Dravidian speech family inhabit the middle. Indian tribe while Tibeto-Chinese language are spoken by North-eastern Indian tribes. On the basis of race, most of the Middle and Central Indian tribes come under proto-Australoid racial type, while most of the tribes of North-east India are included in Mongoloid racial stock. On the basis of religion, tribes of Central India are more or less Hindu in faith. More than 90 per cent of the population of North-eastern India follow Christianity.

Orissa occupies an unique position in the tribal map of India for having the largest variety of tribal communities. In term of concentration of tribal population, Orissa is the eighth largest Indian state. It is the second largest Central Indian state, after Madhya Pradesh. According to 1991 census, around 11.46 per cent of Indian tribes live in Orissa. They account for 22.21 per cent of the population of the state. There are sixty two tribes in the state of which Santhal, Munda, Kondha, Gond, Bhuyan and Juang are prominent tribes. Koraput, Mayurbhanj, Keonjhar and Sundargarh districts have more than 50 per cent of tribal population.

Around 67.64 per cent of the tribal population are covered in the Tribal Sub-Plan (TSP) comprising 118 blocks out of a total of 314 community development blocks in Orissa. The rest of the tribals are scattered in different parts of the state are covered by the Modified Area

Development Approach (MADA). In the TSP and MADA areas special thrust has been provided for the expansion f institutional facilities at all stages of education to narrow down the disparities in tribal areas and other parts of the states in educational development (TSP and MADA, 1985).

The tribes of Orissa share different socio-economic and cultural situations. Behera (1997) describes Orissa as the 'Variegated Storehouse of Tribes'. He is talking about the types of tribal groups. On the one hand, there are backward groups pradising shifting cultivation such as the Kondh, Bonda, Juang and Bhuyan, on the other hand, there are assimilated groups, who are indistinguishable from general rural population of the country, such as Sahara, Kulu, Matya etc. Between these two extremes there are various groups of tribals, whom he found to be in 'transitional stage'. The impact of industry, mining and hydro-electric projects have influenced these tribal groups to a considerable degree. Conversion to Christianity and Hinduism have also played their role in transforming the socio-cultural life of tribals. The tribes in the 'transitional stage' includes tribal groups such as the Santhal, Ho, Bhumiyas etc..

Before discussing education, we must know the sex ratio in general and tribal sex ratio in particular. In India according to 1991 census, the general sex ratio is 927 females for thousand males, while it is 972 females for thousand males among the tribals. In Orissa, according to 1991 census, the general sex ratio is 971 females for thousand males,

while it is 1002 females for thousand males among the tribals. Thus, the female population is more than male population among the tribals in this state. As far as general sex ratio is concerned, Orissa's position is better than the national position.

Education is a key to development. The progress of the tribal population, therefore, largely depends upon their educational advancement. The Education Commission of 1964-66 has emphasized that different tribals are at varying stages of economic development. There is much difference in the skills they have attained and in the technologies they use. A number of special provisions and safeguards are made in the Indian Constitution, which are incorporated in several Articles,* for their progress and development. The Constitution has recognized the significance of education for the social and economic upliftment of tribal people. However, advancement of education among the tribals is not quite satisfactory. As 1991 census shows that literacy rate among the tirbals is 29.60 per cent as against general literacy rate of 52.21 per cent in India.

The situation of Orissa in literacy status is even worse. According to 1991 census, Orissa stands fifth among the most educationally backward states of triabls in the whole country. The literacy rate among the tribals was 22.31 per cent as against general literacy rate of 49.09 per cent in Orissa. During the sixth plan period (1980-85), efforts were made to bridge the

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* Note: Art. 15 – The state is prohibited from discriminating against any citizen on grounds of religion, race, caste, sex place of birth or any of them.
Art. 16 – Equity of opportunity in matters of public employment.
Art. 17 – Abolition of untouchability.
Art. 25 – The right to profess, practise
and propagate any religion.
Art. 39 – Equal justice and free legal a· id.

gap that existed between the levels of literacy of the tribals and of the general population but it was not possible to achieve the goal fully, owing to constraint of adequate resources. During the seventh Five Year Plan (1985-90), another thrust was on the universalisation of elementary education, opening of more educational institutions for the tribal areas, building of hostels, establishment of Ashram schools and adult education centers, colleges and the improvement of infrastructure facilities in the tribal areas. But it also failed to bring the desired improvement (TSP and Annual Plan, 1985).

Tribes and Literacy in India:

After discussing the literacy status of India in general and Orissa in particular, now we must have a look at the literacy status among tribals in India. On the first instance, it is important to compare the growth of general literacy and tribal literacy rate from 1961 to 1991 in India.

Table I: Literacy Rates in India: 1961-1991

Year	General Literacy Rate			Scheduled Tribe Literacy Rate		
	Persons	Males	Females	Persons	Males	Females
1961	28.31	40.40	15.34	8.53	13.69	3.16
1971	34.45	45.95	21.97	11.30	17.63	4.85
1981	43.67	56.50	29.85	16.35	24.52	8.04
1991	52.21	64.13	39.29	29.60	40.65	18.19

Source: Census of India 1991, Series 1, paper 1 of 1993, Primary Census abstract for Scheduled Caste and Scheduled Tribe.

The data in table 1 show that general literacy rate improved from 28.31 per cent in 1961 to 43.67 per cent in 1981 and rose further to 52.2

per cent in 1991. But the general literacy rate of males which was 40.40 in 1961 rose to 56.50 per cent in 1981 and then increased further to 64.1 per cent in 1991. There is no doubt that there has been an appreciable growth in general female literacy from 15.34 in 1961 to around 30 per cent in 1981 and further to 39.3 per cent in 1991, but there is still a wide disparity between male literacy and female literacy rates. Tribal literacy rate increased from 8.53 in 1961 to 29.60 in 1991. As compared to general literacy, the growth of tribal literacy rate is very poor. It is even poorest, while comparing the male literacy and female literacy among the tribals. Tribal male literacy rate improved from 13.69 in 1961 to 40.65 in 1991. But tribal female literacy rate increased only from 3.16 in 1961 to 18.19 in 1991. This shows the wide gap between male literacy and female literacy among the tribals. As our main concern is female literacy, it is needed to compare between general female literacy and tribal female literacy. The data show reveal that the gap between the two is worst.

A comparison of general literacy rates and literacy rates of Scheduled Tribes in different states of India, it will reflect the overall situation of tribal literacy in India. Many social demographers such as Datt (1996) have divided different states into 'high literacy states', 'medium literacy states' and 'low literacy states'. Five high literacy states and five low literacy states in the census of 1991 have been taken in table 2 for comparison. It is to be noted that Orissa and Madhya Pradesh are the Central Indian states which have high tribal population (22 per cent and 23 per cent respectively) other than north-eastern states.

Table 2 : General Literacy Rate and Literacy Rates of Scheduled Tribes in India: 1991

Sl.No.	States	Literacy Rate (General)	Literacy Rate (Scheduled Tribe)
1.	Kerala	89.81	57.22
2.	Mizoram	82.27	82.71
3.	Lakshadweep	81.78	80.58
4.	Nagaland	61.65	60.59
5.	Manipur	59.89	33.63
6.	Orissa	49.92	22.31
7.	Madhya Pradesh	44.20	21.54
8.	Andhra Pradesh	44.09	17.16
9.	Rajashtan	38.55	19.44
10.	Bihar	38.48	26.78
	India	**52.21**	**29.60**

Source: Compiled from Census of India, 1991, Final population Totals, Paper 2.)

The table 2 shows wide variation in literacy rates in the different states. As against a general literacy rate of 52.21 percent, the literacy rate among Scheduled Tribe is 29.60 percent. The state wise literacy rate varies between 17.16 in case of Andhra Pradesh to about 82.71 per cent in case of Mizoram. Though Mizoram stands second in general literacy rate (82.27 per cent), it stands first in tribal literacy rate (82.71 per cent). The reason is that Mizoram with a bulk of population of Scheduled Tribes (93 per cent) devotes all its efforts to improve its literacy rates. Kerala stands at the top in general literacy rate (89.81 per cent) and it stands fourth in the tribal literacy rate (57.22 per cent). Bihar is on the lowest position in case of general literacy rate (38.48 per cent), but it stands sixth in case of tribal literacy rate (26.78 per cent). As said earlier, though Orissa and Madhya Pradesh have high tribal population, the literacy rate of Scheduled Tribe population is only 22 per cent and 21 per cent

respectively.

After a comparison of state wise differences between general literacy and Scheduled Tribe literacy rates, an attempt has been made to compare the state wise male and female literacy. Five high 'high literacy states' and five 'low literacy states' as in table 2 have been taken for comparison. Though the main focus is female literacy, one cannot get a complete picture without comparing it with male literacy. So both female and male literacy rate in the general population and among the Scheduled Tribe population have been shown in table 3.

Table 3: Female and Male Literacy Rates in the General Population and the Scheduled Tribes in India: 1991

Sl.No.	States	General Literacy Rate		Scheduled Tribe Literacy Rate	
		Male	Female	Male	Female
1.	Kerala	93.62	86.13	63.38	51.07
2.	Mizoram	85.61	78.60	86.67	78.74
3.	Lakshadweep	90.18	72.89	89.50	71.72
4.	Nagaland	67.62	54.75	66.27	54.51
5.	Manipur	71.63	47.60	62.39	44.48
6.	Orissa	63.09	34.68	34.44	10.21
7.	Madhya Pradesh	58.42	28.85	32.16	10.73
8.	Andhra Pradesh	55.13	32.72	25.25	8.68
9.	Rajashtan	54.99	20.44	33.29	4.42
10.	Bihar	52.49	22.89	28.40	14.75
	India	**64.13**	**39.29**	**40.65**	**18.19**

Source: Census of India, Paper I, 1991, Register Genera, India.

Table 3 shows that in case of male literacy, Kerala stands at the top (93.62 per cent) and Lakshadweep stands second (90.18 per cent). But in

case of Scheduled Tribes, Lakshadweep stands at the top achieving a male literacy rate of 89.50 per cent, while Kerala stands fourth. Like wise while Bihar has the poorest record of male literacy rate of 52.49 per cent in general population, Andhra Pradesh has the poorest record of male literacy rate of 25.25 per cent among Scheduled Tribe population.

In case of female literacy rate in general population, Kerala stands at the top (86.13 per cent). But in case of female literacy rate among Scheduled Tribe population, Mizoram stands at the top (78.74 percent). Rajasthan has the lowest female literacy rate of 20.44 per cent in general population and also has the lowest female literacy rate among Scheduled Tribe population (4.42 per cent).

As far as comparison between male literacy rate and female literacy rate is concerned, in case of general literacy rate, the gap is highest in the state of Rajasthan (34 percent). The gap is very small in the state of Kerala (7 percent). Like wise in case of Scheduled Tribe literacy rate, the gap between male literacy rate and female literacy rate is highest in the state of Rajasthan (29 percent) and the gap is very small in the state of Mizoram (8 percent).

It is found that the gap between the two is very little in this state of Mizoram (.14 percent). The irony is that, the gap is highest in the state of Kerala (35 percent), which is considered the most literate state of India. However, the overall scenario shows that there is a wide gap between overall female literacy rate and female literacy rate among the Scheduled

Tribes.

Literacy and education are probably the most effective instrument for widening knowledge and providing equal opportunity. Hasnain (2001; 197) noticed, there is still a widespread feeling among the tribals that education makes their boys defiant and insolent and alienates them from the rest of their society, while the girls turn modern or go astray. Besides, some tribal groups believe that their god shall be angry if they send their children to schools run by outsiders. Their ignorance and blind beliefs may be main factors of their educational backwardness.

Another cause of low literacy rate among the women in tribes may be due to early marriage of the girls. Mehta (1969) says that tribal parents view early marriage of their daughter as part of their tradition. As a result, the number of girl students at the high school level drops down considerably. Also there has been no scheme of non-formal education initiated to cover the drop-outs and illiterate adults. Since drop-out rate is higher among tribal women, they suffer more and do not get a chance to be educated informally later in the life (Sachchidananda, 1982). All these factors may cause low female literacy among the tribals in India.

ribes And Literacy In Orissa:

As in India, tribals in Orissa remain in the lowest strata of development even after five decades of planned economic development. They are considered as most backward both socially and economically. According to 1991 census, more than 44.33 lakhs of tribal people above six years of age are still non-literate having no access to any formal

education in the state. Of them nearly 18.68 lakhs are males and 25.65 are females. Focusing on this Pasayat (1995) states that the present status of tribal women in Orissa with respect to literacy is definitely discouraging. After discussing the inter-state differences regarding general literacy and tribal literacy, intra-state differences are discussed to give a detailed picture of tribal literacy from a micro perspective.

Since in the census of 1991, there are only thirteen districts all of them are taken for comparison. Accordingly all the districts are divided on the basis of 'high literacy' and 'low literacy'. All the literacy rates are presented in a descending order in the table 4.

Table 4 : District wise Literacy Rates of General Population and of Scheduled Tribes in Orissa: 1991

Sl.No.	Districts	Literacy Rate (General)	Literacy Rate (Scheduled Tribe)
1.	Puri	63.82	38.94
2.	Cuttack	63.28	21.03
3.	Baleswar	58.75	18.91
4.	Dhenkanal	53.22	22.40
5.	Sudargarh	52.97	37.34
6.	Sambalpur	49.37	32.06
7.	Keonjhar	44.73	24.89
8.	Ganjam	44.26	19.98
9.	Balangir	39.74	24.86
10.	Phulbani	38.64	27.49
11.	Mayurbhanj	37.88	24.10
12.	Kalahandi	30.05	18.54
13.	Koraput	22.66	8.34
	Orissa	**49.09**	**22.31**

Source: Census Atlas, Series 19, Orissa, 1991.

The table 4 shows that, as against an general literacy rate of 49.09 percent, tribal literacy is only 22.31 per cent in Orissa. The district wise general literacy rate shows that, while Puri has the highest literacy rate (63.82 percent), Koraput has the lowest literacy rate (22.66 per cent). There are only 6 districts which have a literacy rate above the state average. These states are Puri (63.82 per cent), Cuttack (63.28 per cent), Baleswar (58.78 per cent), Dhenkanal (53.22 per cent), Sundargarh (52.97 per cent) and Sambalpur (49.37 per cent). From the point of view of tribal literacy rate, Puri district stands at the top (38.94 per cent) and Koraput district shows the poorest literacy rate (8.34 per cent). On the basis of tribal literacy rate, 8 districts have been shown to be above the state average. These districts are Puri (38.94 per cent), Sundergarh (37.34 per cent), Sambalpur (32.06 per cent), Phulbani (27.94 percent), Keonjhar (24.89 percent), Balangir (24.86 per cent), Dhenkanal (22.40 per cent) and Mayurbhanj (24.10 per cent). Cuttack which stands second in general literacy rate (63.28 per cent), stands ninth in tribal literacy rate which is 21.08 percent and is below the state average.

After discussing the district wise differences between general literacy rate and that of Scheduled Tribe, an attempt has been made to compare the district wise male and female literacy rate in general with that of Scheduled Tribes. Male and female literacy rates as been taken into account in the table 5, which follows the pattern of preceding table.

Table 5 : District wise and Sex wise General Literacy Rates and Schedule Tribe Literacy Rates of Orissa: 1991

Sl.No.	States	General Literacy Rate		Scheduled Tribe Literacy Rate	
		Male	Female	Male	Female
1.	Puri	76.82	49.94	52.45	22.77
2.	Cuttack	75.74	50.38	32.83	8.24
3.	Baleswar	72.55	44.57	30.08	7.37
4.	Dhenkanal	68.23	37.34	35.01	9.28
5.	Sundergarh	60.41	39.60	50.13	24.52
6.	Sampablpur	64.69	33.55	47.10	16.83
7.	Keonjhar	59.04	30.01	38.01	11.74
8.	Ganjam	66.77	28.09	32.69	7.02
9.	Balangir	57.26	21.88	41.17	8.65
10.	Phulbani	56.92	20.26	43.93	11.56
11.	Mayurbhanj	51.84	23.68	37.74	10.50
12.	Kalahandi	45.54	14.56	32.00	5.48
13.	Koraput	32.15	13.09	14.61	2.14
	Orissa	**63.09**	**34.68**	**34.44**	**10.21**

Source: Census Atlas, Series 19, Orissa, 1991.

Table 5 shows that Puri stands at the top both in general male literacy rate (76.82 per cent) and Scheduled Tribe male literacy rate (52.45 per cent). Koraput has the lowest rate in general (32.15 per cent) and Scheduled Tribe male literacy rate (14.61 per cent). While Cuttack has the highest female literacy rate of 50.38 percent, Koraput shows the lowest rate of 13.09 percent in general population. In case of Scheduled Tribe female literacy rate, Sundargarh achieves highest rate of 24.52 per cent, as against Koraput which shows the lowest rate (2.14 per cent).

The gap between general male and female literacy rate is highest in the district of Pulbani and Balangir (36 per cent each). The gap is lowest in the district of Koraput (19 percent) followed by Sundargarh (21 percent). From the point of view of tribal literacy rate, the gap between male and female literacy rate is highest in the district of Balangir (33 percent). The gap is lowest in the district of Koraput (12 percent).

A district wise comparison is also made between general and Schedule Tribe female literacy rates. In the whole state, the gap between the two is around 24 per cent. The gap between the two is highest in the district of Cuttack (42 per cent) and lowest in the district of Kalahandi (9 per cent). However, the overall picture shows that there is a wide gap between male and female literacy in general and between general female and Scheduled Tribe female literacy in particular.

It has been noticed from the above statistics that non-literacy is rampant among tribal women. Behera and Nada (1990: 157) state that 'Access to education among tribals in Orissa is sex-specific. It is not uncommon to see a tribal male child continuing his education after class V. on the other hand, the female child drops out of this level or much before that either to work in the house or to avoid financial cost of schooling'. Further they state that among the tribals in Orissa, the sex-role pattern is reinforced by the people of older generation and has caused differences in the behaviour of the two sexes, including benefits of education, to the advantage of the males. Also lack of lucrative job opportunities for women in tribal areas deters the tribal families from

investing in the education of their daughters for a long period.

Literacy is one of the important social variables that has drawn considerable attention of researchers engaged in the study of fertility differentials. Since the focus of the study is to findout the relationship between female literacy and fertility, it is important to discuss the relationship briefly. Year wise female literacy rate and birth rate is shown in the table 6.

Table 6 : Female Literacy Rate and Birth Rate in India; 1951-1991

Census years	Literacy rate (Female)	Birth Rate
1951	8.86	43
1961	15.34	44
1971	21.97	42
1981	29.85	33.9
1991	39.29	30.5

Source : Registrar General India, Sample Registration Bulletin, Vol. XXIV # 1, June 1990.

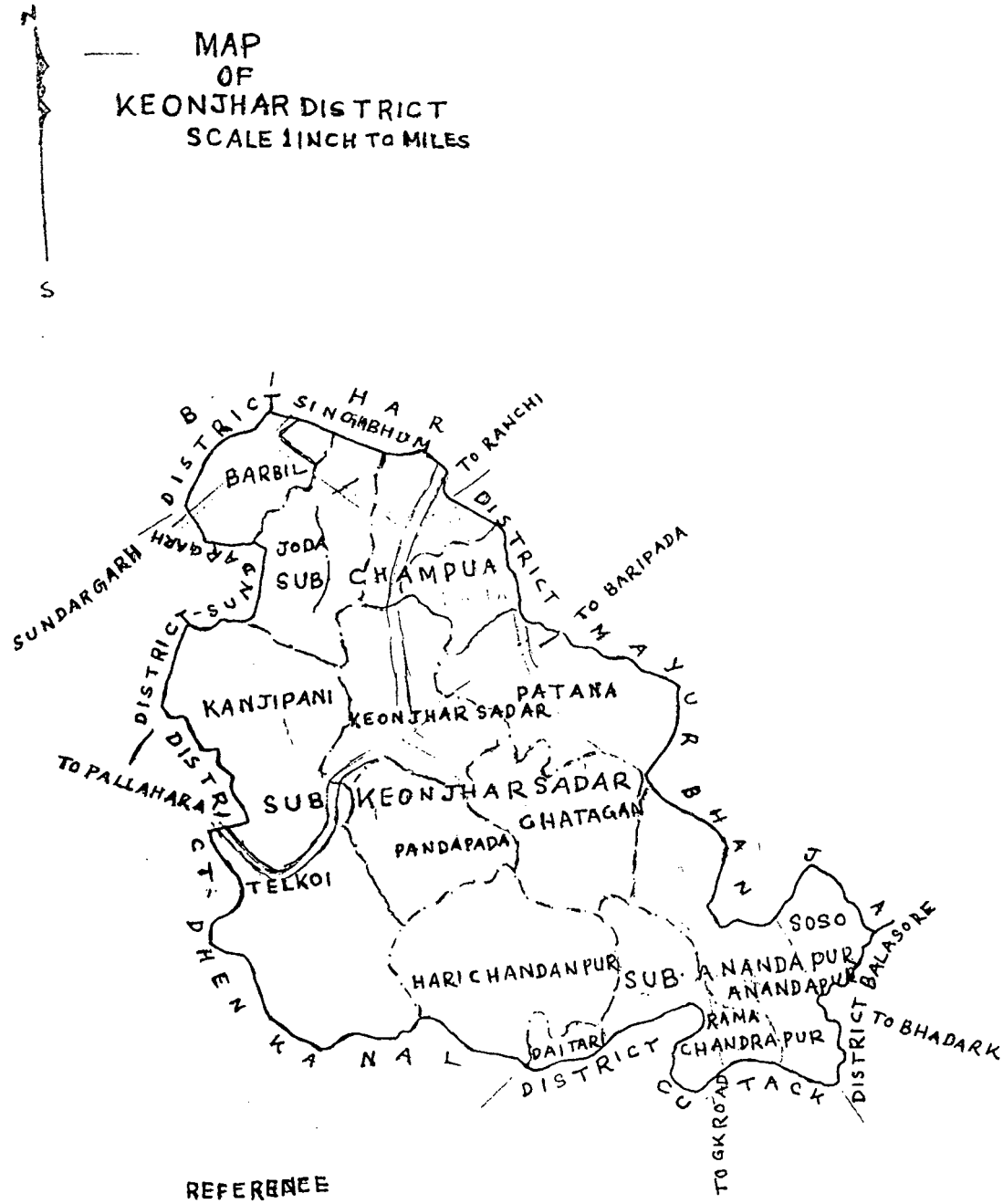
: Census of India 198, occasional papers, No. 40, Report of Export Committee on Population Projections, Office of Registrar General India, 1988.

Table 6 shows that with increase in female literacy, the birth rate decreases. The increase in female literacy is highest during the period of 1981-91 (around 10 percent). And it is seen from the table that the decrease in birth rate is highest during the period of 1971-81. The period of 1981-91 also shows a better result.

Statistics show that female literacy has a definite impact on fertility.

So literacy and education are important factors for the development of any society. Spread of literacy and education in any community, depend on some factors like universal provision of schools, universal enrolment of pupils and universal retention of pupils in the school till they complete the prescribed course. A closer analysis of women's education in general and education among tribal women in particular reveal that difficulties in the educational attainment among tribal women stem from certain factors such as, attitude of the parents towards them during child hood, economic condition of the family and the internal elements of the school system.

To sum up, it has been observed that literacy of both women in general population and tribal women is very low. It is seen that female literacy lags behind male literacy in all the states. As far as tribal literacy is concerned, both male and female literacy is lower than general literacy rate. Moreover, it is observed that birth rate decreases with increase in female literacy rate. The next chapter will attempt to find out whether the increase in female literacy has a negative impact on fertility among tribal women on the basis of a field work done in a village of Orissa.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MAP
OF
KEONJHAR DISTRICT
SCALE 1 INCH TO MILES
DISTRICT SINGHBHUM
TO RANCHI
DISTRICT
BARBIL
SUNDARGARH
JODA
SUB
CHAMPUA
TO BARIPADA
MAYURBHANJ
DISTRICT
KANJIPANI
KEONJHAR SADAR
PATANA
TO PALLAHARA
DISTRICT
SUB
KEONJHAR SADAR
GHATAGAN
PANDAPADA
TELKOI
DISTRICT DHENKANAL
SOSO
HARICHANDANPUR
SUB
ANANDAPUR
ANANDAPUR
RAMA
CHANDRA PUR
DAITARI
DISTRICT CUTTACK
DISTRICT BALASORE
TO BHADARK
TO GK ROAD
REFERENCE
1- DISTRICT BOUNDARY
2- SUBDIVISION BOUNDARY
3- THANA BOUNDARY
4- ROAD
5- RIVER

Chapter IV : Field Study

Part I: Focus on Juang Tribe

This chapter seeks to provide a picture of the field where the study has been conducted. Besides focusing on literacy and fertility among women of the village, it describes the location, its dwelling pattern, the nature of social organization, political process, market and production system from a wider perspective. The main focus is on "Juang" tribe. This tribe is found only in Orissa. The Juangs of north Central Orissa are well known in anthropological literature, over the last one and half a century. The word Juang in the tribal dialect means simply 'man' or 'mankind'. An alternative term, which their neighbours used to address the Juang, was `Pattua` meaning the wearer of leaf- dress. (Rout, 1969). Juangs are strongly built, medium in stature with along head, prominent cheekbones and a broad nose having depression at the root. Their hair is black, curly and skin colour varies from black to dark, brown. On the basis of their Dravidian affinity, their language known as Juang is grouped under Mundari family.

The first account of Juangs was given by Samuells (1856) when he described the Juang male as of ordinary peasantry and the female as wearing no clothes but two large branches of leaves, to cover their lower parts only. Dolton (1872) described the Juangs to be the survival of "the stone age in situ" and he goes on to add that their huts are among the

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smallest that human beings ever deliberately constructed as dwellings. Hunter(1877)highlighted the Juang economy based on hunting and gathering plus shifting cultivation and their dress pattern. Risley (1969) in his work gave an elaborate account of the Juang plan and describes the social status of people to be behind the pale of Hinduism and that no member of any recognized caste will eat or drink with them. In fact even their neighbouring tribe – the Bhuinyas do not accept food or drink from the Juangs. Bose (1929) has given an elaborate account of Juang kinship system. The first exhaustive ethnography of the Juangs was provided by Elwin (1948), who made a comprehensive compilation of Juang folk songs, tales and myths regarding their society, culture and cosmology. The next and more informative account about the way of life of Juang has been provided by Rout(1967). The most recent study of Juangs has been with a development perspective (Nayak et al, 1995).

According to 1991 census the percentage of Scheduled Tribe population in the state is 28.05 percent. Juang population is around 40,000 constituting 1 percent of the total population of the state. The Juang mostly inhabit Banspal, Harichandanpur, Ghatgaon, Telkoi block areas of keonjhar district. They are regarded as the most primitive because of their shifting cultivation and for wearing leaves of trees and are also regarded as one of the most original tribes of Orissa. The population of the Juangs of keonjhar district since 1931-1991 is as follows –

Table 7: Juangs in Keonjhar District

Year	Population
1931	7,029
1941	8,424
1951	7,823
1961	9,768
1971	10,881
1981	15,467
1991	18,782

Source: District Census Report, Keonjhar,1991

The above population figures shows that the Juang population during 1941-51 decreased but it shows an increasing trend there after. The growth rate of Juangs during decade 1981-1991 was 24.43 percent. Integrated Tribal Development Agency (ITDA), Keonjhar, conducted a survey on Juang population during October 1996. The total Juang population of 135 Juang villages of Keonjhar and Dhenknal districts is 19,340. Block wise and sex wise Juang population of Keonjhar is as follows-

Table 8: Block wise and Sex wise Juang Population of Keonjhar

SL. No.	Name of Block	No. of village	No. of households	Population		
				Male	Female	Total
1	Banspal	40	1,539	3,337	3,542	6,879
2	Telkoi	40	864	2,005	1,960	3,965
3	Ghatgaon	44	1,533	3,501	3525	7,026
4	Harichandanpur	11	346	769	701	1,470
	Total	135	4,282	9,612	9,728	19,340

Source : ITDA. 1996, Keonjhar

In last few decades, both government and non-government agencies have implemented various programs for the socio-economic upliftment of the Juangs. The state governments opened a Juang Developments Agency (JDA) in 1978 at Gonasika village of Keonjhar, under the supervision of Integrated Tribal Development Agency (ITDA). It provides inputs in agriculture, free of cost and is expected to provide incentives for income generation schemes. Various food programmes have been implanted to provide wheat, foods and salt to pre-primary and primary school children through mid–day meal programme. This programme is being managed by the Anganwadi workers in different villages. The programme is also extended to pregnant and nursing mothers.

One dispensary with a full time doctor is set up in each Juang village, primarily for the benefits of the Juangs. Even veterinary dispensaries are functioning in some villages coming under the programme. Various educational institutions are also functioning under the supervision of ITDA. An ashram or residential school (now a high school) was started at Gonasika in 1958. The school admits non-tribal children also. Since 1995 a voluntary organisation has started a residential pre-primary school at Gonasika, exclusively for the Juang children.

Many non–governmental organizations (NGOs), namely, VDCIO and BCM provide training, especially to Juang women in various crafts and basketry. They also organize village gatherings to provide information

JUANG DEVELOPMENT AGENCY OFFICE

HEALTH CENTRE

about diseases, cleanliness and sanitation. The Tata Iron and Steel Company (TISCO) has provided housing colonies to many Juang villages.

The 'Juangs' in Gomatipur

There is a popular myth about the origin of the Juang Tribe. Debi(1990) a popular ethnographer of Orissa says that the Juangs believe that they are the first human beings born on earth. Their ancestors were born from a Rusi couple (a saint and his counterpart), who were living in RusiTangar, a hillock near Gonasika in Keonjhar district. Patnaik (1989) classifies Juangs of Keonjhar into two sections, i.e. the thaniya or those who live in their own land called Juang pirh located in Gonasika hills and Bhagudia i.e. those who have fled away from the homeland. A large number of Juangs are found in Dhenkanal district who migrated from Keonjhar in the long past. It is assumed that they came to Dhenkanal during the Bhuinya rebellion in 1861. The rebellion was initiated by the Bhuinyas against the then feudatory ruler of Keonjhar and the Juangs took part in the rebellion. The rebels were brought under control. Out of fear many Juangs fled away to the neighbouring districts to take shelter there.

In 1972, in order to uplift the social, educational and economic conditions of tribals, a tribal development agency under the Indira Gandhi government was established in Keonjhar. This agency popularly known as ITDA (Integrated Tribal Development Agency), for the first time started working for the tribals in Orissa. Especially for Juangs, a Juang Development Agency (JDA) was established and started working in

JUANG VILLAGE IN GOMATIPUR

A JUANG WOMAN WITH HER CHILDREN

Keonjhar. For all these reasons, Gomatipur village is supposed to be the perfect field of study to see developments in every sphere, special focus being literacy, education and fertility.

The village where the study has been conducted is situated under Banspal block in Keonjhar district of Orissa. Keonjahr district is located in the northern part of Orissa between 21 °C 1' N and 22 °C 10' N latitude and 85° 11' E and 86° 23' E longitude with an area of 8330.7 sq. km. The districts divided into two parts – upper Keonjhar and lower Keonjhar. The village Gomatipur comes under the hill ranges of upper Keonjhar.

The village is situated 30 kilometres from the district headquarters and a 9 kilometres from the main road. The road from the highway is a hilly zig-zag road. So no vehicles, not even a jeep, can go on this road. Tribals generally walk, while people from outside go by bicycles or motor-cycles. The village appears calm and peaceful. It is surrounded by forest. The forests here support varieties of vegetation. Some trees like bamboo, jamun, karanja, kendu, mango, jack fruit and sal trees grow in abundance in this area. A kind of tall grass, known as 'sinkunda', grows around the village and is used as thatching grass. Siali creeper whose stem is used for rope making and leaves for cups and plates is also available abundantly. The practice of shifting cultivation and destruction of forests have made the wild animals scarce in the area. However, deers of various kinds, wild boars, samber and monkeys are found in the forest. Elephants, leopards, hyenas and bears are found here. The wild birds include peacocks, wild fowls and pigeons. The village is also surrounded by a large number of

hills and valleys like Boitarani and Brahmani connecting Dhenkanal district. The soil varies from rich loam to gravelly detritus of the hill slopes except plains that are fertile.

The summer season in this area starts at the beginning of March when temperature begins to rise rapidly. May and June are the hottest months. During this period the temperature rises to 40 °C. With the onset of monsoon the climate becomes cool and pleasant. The monsoon breaks out about the beginning of June and continues till the middle of the October. During this period rains are continuous and heavy and nearly 80 percent of the annual rainfall is received during these months. By the first week of October, temperature decreases and in December it falls down to 5 °C to 10 °C.

The Juang house is triangular shaped and the rooms are rectangular in size. The floor and walls are made of earth or clay. The roof is low and sloping both ways. The hut is thatched with locally available green known as Sinkunda. The hut is generally divided in two parts used for sleeping, cooking and for storage. The kitchen is situated in the corner. The Juangs believe that their ancestor's spirit has taken its abode in that place. In the store room, there is a raised platform over which paddy rice, mustard and other materials are kept. The household appliances of the Juang consist of few earthen containers, some baskets, mats, aluminium or brass plates and cups, one or two axes, sickles plough, hoes, arrows and bows.

The village is a settlement with a population of 579. The distribution of villages by sex is shown in Table 9.It shows that out of a total population of 579, 52 per cent are men (303 persons) and 48 per cent are women (267persons). Out of 303 men, 62 per cent are Juangs, 22 per cent are scheduled castes and 16 per cent are other castes. Likewise out of 267 women, 64 per cent are Juangs, 23 per cent are scheduled caste and 13 per cent are other castes. It is to be noted that among 49 other caste men, 10 men are Gaudas (milkman), 11 are Telis (oil man) and 9 are chasas (cultivating caste). And among the 37 other caste women, 16 are gaudas, 12 are telis and 9 are chasas.

Table 9: Village Population by sex

Caste	Male		Female	
Juang	189	62	177	64
Scheduled caste	65	22	62	23
Other caste	49	16	37	13
Total	305	100	267	100

Source : village survey by the researcher

In the village along with Juangs, Scheduled Caste and other caste people are also living together. Juangs have come in close contact with the Panos (harijans) and Gaudas (milkman) .The relationship with Gaudas is symbiotic. The Gaudas supply milk and milk products to the Juangs in their rituals. They serve Juangs as liaisons agents with government officials. The panos are considered untouchable and live in separate settlements. They do menial work for other castes. Besides these

communities, the chasas (cultivating caste) and Telis (oil men) also live with the Juangs. The following table shows the distribution of population by caste in the village.

Table10: Village Population By Caste

Caste	Number of persons	Percentage
Juang	366	63
Scheduled Caste	127	22
Other Caste	86	15
Total	579	100

Table 10 shows that out of total population of 579, the Juangs are 63 per cent (266 persons), scheduled caste are 22 per cent (127 persons) and other castes are 15 per cent (56 persons). Out of the total households of 110, 72 are Juang households and 16 are other caste households. There is one Anganwadi, one school hostel, one dispensary, three open wells, two tube wells and one LAMPS (Large size Agricultural Co-operative Multipurpose Society) in the village.

Shifting cultivation is the focal point of Juang economy in this village. In fact, shifting cultivation or 'toila chasa' as the natives call it, is the lifetime of Juang economy. Crops such as pulses, millets, paddy, vegetables such as beans, cucumber, pumpkin are grown in plots. Pulses and millets are sown around niger and paddy as hedges. The vegetables grow as creepers on the dead and dried up trees. However, the Juang

subsistence here depends to an extent on forest produce such as roots and tubers (Basan, Boinga, Mandei, Tunga, etc.), mango, jack fruit, mahua. Hunting has remained in ceremonial form. The other castes are interested in horticulture along with cultivation and other business. They grow varieties such as papaya, lemon, banana and vegetables such as potato, onion, tomato, brinjal, cabbage, ginger, etc. in their backyards. Though, money is the main mode of exchange in the economic activities in the village, some Juangs still use the method of barter exchange.

Juangs are economically more backward than other caste people. Patnaik (1989) observes that the Juangs depend on shifting cultivation, which is subject to the vagaries of nature. The water sources have not been properly tapped to provide irrigation, as a result of which the yield is poor. The money lenders and liquor vendors who have been exploiting them are also responsible for their economic backwardness. Also market facilities as observed by Mahapatra (1997) are rarely available in this village. There are a few grocery shops, which are run by the non-tribals. The price is always determined under imperfect competition and the Juangs become the sufferers.

In the village, the Juangs are divided into a number of clans and each holds as scared, a particular object, which is regarded as clan totem. Clan is an unilateral descent group whose members trace their origin to a common ancestor. In the village, the clan is called 'Bok'. It is patrilineal. Incest within the clan is considered a serious offence. According to Devi(1990), all the clan in the Juang society may be grouped in two

divisions known as 'Bandhu' and 'Kutumba' clans. In the village, the members belonging to Kutumba clan are considered as parallel cousins and therefore, marriage between members of Kutumba clan is a taboo. Therefore, clan exogamy is practised by the Juangs. For examples, when a person dies all the members of a clan go in mourning. But as a woman after marriage belongs to another clan she cannot observe mourning in death of any member of her father's clan.

Family in the village is mostly nuclear. There are very few joint families in the village. In every family, the father acts as the head of the family. So, families in the village are patrilineal. The descent is traced through male line and property is always inherited by the son after the death of the father. A daughter after marriage goes to live with her husband's family and becomes a member of his family. Family among the Juangs in the village, acts as the primary unit of production, distribution and consumption.

Marriage is the most important event in a Juang's life in the village. Juangs acquire mates through several methods. Patnaik (1991) has described five forms of marriage practised by the Juangs in Keonjhar. These are Kandaria marriage (marrige by arrangement), Ghicha marriage (marriage by capture), Manamani marriage (love marriage), Chora marriage (marriage by theft) and by direct informal negotiation. Widowers can remarry if they like. But there are certain restrictions are there in the village for the widows to remarry. For example, the widow is allowed only to marry her husband's younger brother. Divorce is uncommon among the

Juangs. A man does not like to divorce his wife because he not only looses the bride price paid during his marriage but also has to pay a higher bride price to the girl whom he will marry for the second time (Patnaik 1991).

Juangs in the village generally use classificatory kinship terminology. A single term is used for a number of relations. For example, McDougal (1963) in his fifteen months of field research done among hill Juangs of Keonjhar district, found that Juangs use 'Mamu' for mother's brother and father's elder brother and mother's elder sister's husband.

A Juang woman in the village is expected to become a mother soon after marriage. In case a couple remains childless over a long period of time, they take recourse to divination. When a woman becomes pregnant, she has to observe various taboos. At the time of delivery a midwife or elderly woman from the village is called to assist the expectant woman for easy delivery. As observed by Devi (1990), a woman after delivery needs the help of a midwife who cuts the umbilical cord with a bamboo knife and anoints turmeric pastes and bathes the child in warm water. It is believed that the mother should be secluded and should not be allowed to do any household work during the period of birth pollution, which continues up to 7 days.

The institution of dormitory called 'Madaghara' is their traditional youth organisation, which is still in existence in this village. It is located in the middle of the village. It serves as a community centre for the boys and girls above 8 years, a rest house for the visitors, a store house for communal properties and arts and artifacts are kept safe. Here fire is kept

burning in the middle throughout the year. This fire is considered sacred and is used in firing for shifting cultivation. The village council sits here to discuss important village affairs. Boys and girls above 8 years of age constitute the formal members of dormitory organization. They learn from their elders the traditional customs, value and names of their community. McDougal (1963) says that the 'community house' or 'men's house' symbolizes village unity and the grouping of persons associated with it.

So far as the political organization is concerned, the Juang 'pirh' is divided into six sub–pirhs in Keonjhar. Each sub-pirh has a 'sardar' with a number of 'pradhans' under him. The work of the 'Sardar' is to maintain law and order in the sub-pirh. Gomatipur village comes under 'satkandh pirh'. In the village, there is a village council consisting of some village elders. The council is responsible for maintenance of peace and traditional norms in the village. Devi(1990) observed that the 'Pradhan' is the head man of the council. He decides cases and settled minor disputes in the village such as violation of norms, property cases, quarrels among the villagers etc. There is a religious headman called 'dehuri' who takes important part in the decisions. The person who works as a messenger and watchman is called 'dangua'. He serves as an assistant in the absence of the headman. Patnaik (1991) observes that there is a group of village elders called "BARABHAI" (twelve brothers), who occupy very high position in the political system. They have to remain present in the village panchayat and help the pradhan and dehuri in dealing with such scandals as adultery, prenuptial pregnancy, distribution of land,

construction or repair of dormitory, fixation of day for communal hunt, divorce, separation and any other matter concerning the whole village.

Juangs in the village believe in spirits, which according to them live around hills, forest and rivers. They worship 'Dharam Deota' (Sun God) and 'Basumata' (mother earth). They also worship 'Gramsiri'(Village deity) which is represented by a pointed stone installed in front of dormitory. They observe various festivals like 'puspunei' as a mark of beginning of the agricultural cycle, 'Ambanuakhai' as first eating of mango fruits, pirh puja (for protection of crops), 'Gamaha' (for protection and domestic cattle). The Juangs in this village give high place to music and dancing. They use an instrument called 'Changu'. Girls generally wear saree and special ornaments made of woods and brass. The boys wear dhoti or lungi.

Juangs in Gomatipur are not conscious of the health hazards of instantly living conditions. There are many mango and jack-fruit trees, the shadow of which keeps the ground wet and creates a condition for mosquitoes to breed. For this reason, they suffer frequently from malaria. There are only 3 open wells, which are inadequate. Therefore, they have to depend on streams and a small river for drinking water, washing clothes, bathing and cleaning utensils. They have their cremation grounds near the hill streams. So, the water, which they use for drinking is contaminated.

The diet pattern of Juangs in the village is never systematic. They collect roots and tubers like Tunga, Kanta alu, pani alu, mushrooms from the jungle to supplement their diet. Rice is their most favourite food. But

since paddy cannot be cultivated in the hilly area, they produce crops like mustard, gram, nigers etc., which are taken as substitute. They use mango kennel, which is powdered. On festive occasions meat and pork are added to the main diet. They are extremely addicted to liquor and drink different varieties such as mahuli, rice bears and toddy. It also serves as a medicine for minor diseases like fever, headache, etc. and a substitute for food. They consume liquor often, which diminishes their appetite. Unemployment, extensive poverty, sub-standard housing, poor hygienic habit, unhealthy climate and poor diet are the reasons responsible for wide spread of various types of diseases like diarrhoea, malaria and other infections.

There is only one dispensary in the village. It has one doctor and two nurses. Juangs are reluctant to go to the doctor directly, whom they consider as an alien to their village. They prefer traditional method of worshipping deities and sacrificing animal for recovery. Also the doctor and nurses are not very supportive of the villagers. They do not want to stay in the village and remain absent frequently. Juangs look at family planning as a taboo. As Behera(1997) observed that Juangs consider children to be God's gifts. Even if some Juangs know about the modern methods of contraception, they fear to use them because they believe the community may not accept.

Part II : The Field Study

This part of the chapter describes the data collected from the household survey. Information was collected on the literacy and educational levels, marital status, age and number & children.

Literacy

In Gomatipur, government has started one school (from standard 1st to10th). This school is co-educational and is meant for Juang children as well as those from the Scheduled Caste and Other Caste. There is another primary Ashram school only for Juang children. Pasayat(1997) observes that one of the main objectives of educational planning and the state of Orissa has been to improve scheduled tribe female literacy by accelerating the process of educational development through higher investment and various incentives. Undoubtedly, the past decades have been witnessing an increase in literacy among Scheduled Tribe women. But the census data on literacy do not suggest any significant improvement in literacy among them.

The following table shows educational qualifications of Juangs based on the survey conducted by the researcher in the village. Juangs are divided in two groups as non-literate and literate. The educational qualifications of both men and women are shown.

A JUANG WOMAN READING LETTER

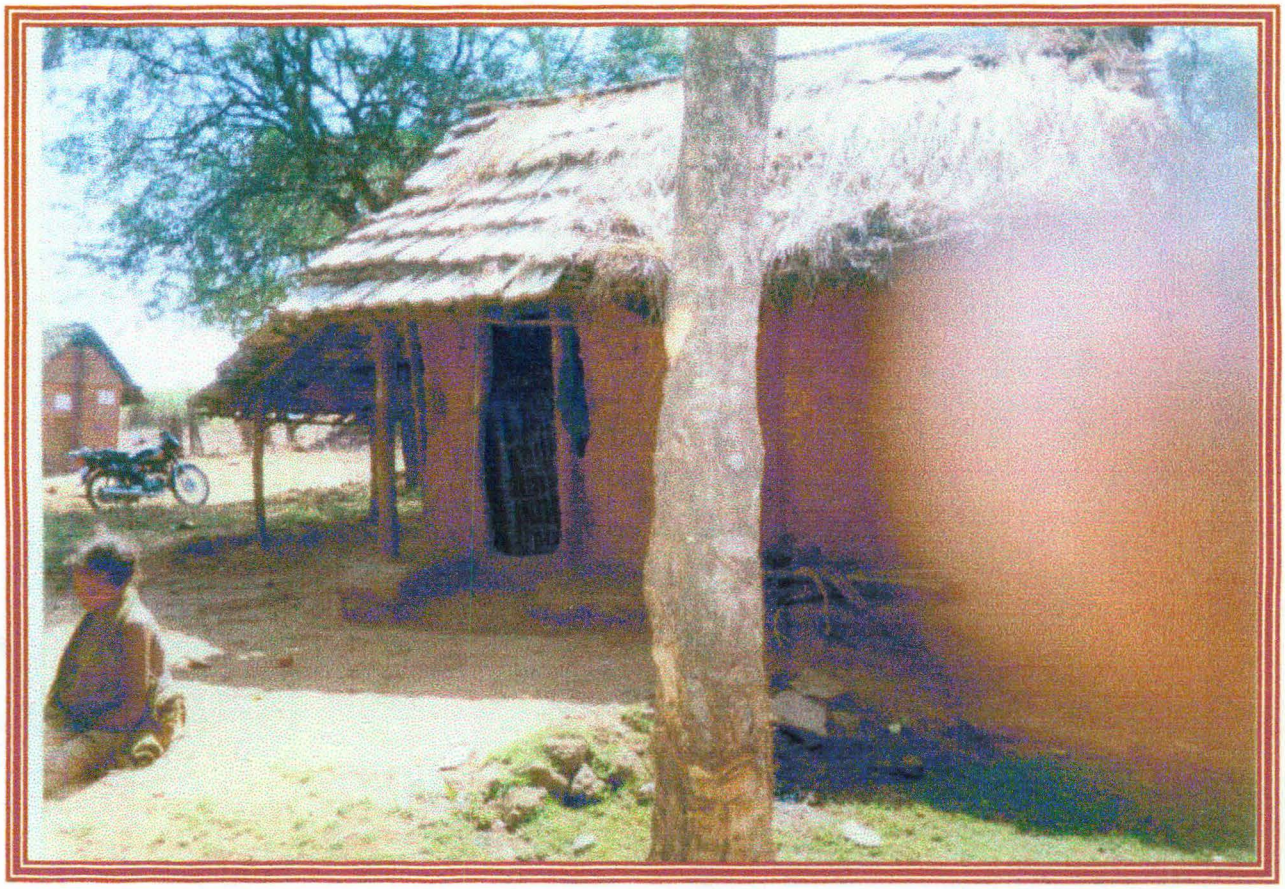

Table 11: Educational Qualification of the Juangs

Educational qualification	Non -literate	Literate		
		Below 1	I-IV	V-IX
Men	79(34%)	68(76%)	36(92%)	6(75%)
Women	151(66%)	21(24%)	3(81%)	2(25%)
Total	230(100%)	89(100%)	39(100%)	8 (100%)

Table 11 shows that 63 percent Juangs are literate(230) and 37 percent are literate (136). Out of 189 men, 58 percent are literate(110) and 42 percent are non-literate (79). Out of 177 women 14.68 percent are literate and 85 percent are non-literate(151 persons).

In the village along with Juangs, Scheduled Caste and Other Caste people are also living. To know the exact educational status of Juang women, a comparison is made between them and Scheduled Caste and Other Caste women. In the following table, all the women are divided into two groups as non-literate and literate.

Table 12: Female Literacy by Caste
(No. and Percentage of Respondents)

Educational qualification	Non-literate	Literate				
		Below 1	I-IV	V-IX	High School and above *	Total literate
Juang	151 (81%)	21 (47%)	3 (47%)	2 (12%)	-	26 (29%)
Scheduled Caste	30 (16%)	10 (22%)	13 (50%)	8 (57%)	1 (25%)	32 (36%)
Other Caste	6 (3%)	4 (31%)	10 (38%)	4 (29%)	3 (75%)	31 (35%)
Total	187 (100%)	45 (100%)	26 (100%)	14 (100%)	4 (100%)	89 (100%)

* Note : Among the the non-Juangs there are some who have studies up to high school or more. Among the Juangs, no one has received this much education.

Table 12 shows that out of 89 literate, 29 percent (26 persons) are Juans, 36 percent are Schedule Caste (32 persons) and 35 percent are Other Castes (31 persons). Out of 187 non-literate, 81 percent are Juangs (151 persons), 16 percent are Scheduled Caste (30 persons) and 3 percent are Other Castes (6 persons). The tables shows that none of Juang women have received education on up to matriculation level.

Marital Status

As the main objective is to find out the link between literacy and fertility among the married women in the village, the first step is to look at the marital status of the women. The following table has divided women into two categories as married and unmarried. Along with Juangs, scheduled caste and other caste are taken in to account.

Table 13 : Distribution of women according to marital status

Caste	Married	Unmarried	Total population
Juang	70 (64%)*	107 (64%)	177 (64%)
Scheduled Caste	23 (21%)*	39 (23%)	62 (23%)
Other Caste	16 (15%)	21 (13%)	37 (13%)
Total	109 (100%)	167 (100%)	276 (100%)

Note : * Out of 70 Juang married women, 2 are widows. Out of 23 scheduled caste married women, 1 is a widow.

Table 13 shows that out of a total of 276 women, 39 per cent are married (109 persons) and 61 per cent are unmarried (167 persons). Out of the 109 married women, 64 per cent are Juang (70 persons), 21 per cent are Scheduled Caste (23 persons) and 15 per cent are Other Caste (16 persons).

The main target group of the study is married women in the age group of 15-45. Table 14 shows their distribution by age. Married women have been divided into four age groups as shown in the following table

Table 14: Distribution of married women by age

Age group	Juang	Scheduled caste	Other caste	Total no of married women	Percentage
15-24	26	10	8	44	42
25-34	22	8	4	34	32
35-44	18	3	3	24	22
45 and above	2	1	1	4	4
Total	68	22	16	106	100

Of the 106 married women 42 per cent are in the age group of 15-24 years (44 persons), 32 per cent are in the age group of 25-34 years (34 persons), 22 per cent are in the age group of 35-44 years (24 persons) and only 4 per cent are in the age group of 45 and above (4 persons). In the age group of 15-24 years, 59 per cent are Juangs (26 persons), 23 percent are Scheduled Caste (10 person) and 18 per cent are Other Caste (8 persons). In the age group of 25-34 years, 68 per cent are Juangs (22 persons), 24 per cent are Scheduled Caste (8 persons) and 12 per cent are Other Caste (4 persons). In the age group of 35-44 years, 75 per cent are Juangs (18 persons), 13 per cent are Scheduled Caste (3 persons) and another 13 per cent are Other Castes (3 persons). Lastly in the age group

of 45 and above, 2 are Juangs and one each is a scheduled caste and other caste.

An effort has been made to see if the number of children varies by age and the educational status of married women. Table 15 shows the educational status of married women in different age groups among the different castes.

Table 15 : Age and educational status of married women

Age group	Literate			Non-literate			Total		
	Juang	S.C.	O.C.	Juang	S.C.	O.C.	Juang	S.C.	O.C.
15-24	12	8	8	14	2	-	26	10	8
25-34	5	6	3	17	2	1	22	8	4
35-44	2	2	2	16	1	1	18	3	3
45 and above	-	-	1	2	1	-	2	1	1
Total	19	16	14	49	6	2	68	22	16

Note: S.C. = Scheduled Caste
O.C. = Other Caste

Of the 68 married women among Juangs, 28 per cent are literate (19 persons). Of the 22 married women among Scheduled Caste, 73 per cent are literate (16 persons) and of the 16 married women among Other Castes, 88 per cent are literate (14 persons). In the age group of 15-24, out of 26 married Juang women, 46 per cent are literate (12 persons). In the same age group, out of 10 married Scheduled Caste women, 80 per cent are literate (8 persons). And all the 8 married women among other caste are literate. In the age group, 25-34, of the 22 married Juang women, 23

per cent are literate (5 persons). Of 8 Scheduled Caste women, 6 are literate. Of 4 Other Caste women, 3 are literate. In the age group of 35-44, out of 18 married Juang women, 11 per cent are literate (2 persons). Similarly, among 3 Scheduled Caste women, 2 are literate. Again, 2 are literate out of 3 Other Caste women. Lastly, in the age group of 45 years and above, both the Juang women are non-literate. There is only one scheduled caste woman who is non-literate and only one other caste women, who is literate.

In the following 2 tables, cross-tabulation is made among different castes. Table 16 includes the literate women and the number of children.

Table 16 : Literate married women and no.of children by caste

Caste	Literate	No. of children		
		Nil	1-2	3-4
Juang	19	2	5	12
Scheduled Caste	16	1	10	5
Other Caste	14	2	6	6
Total	49	5	21	23

It shows that out of 49 literate women, 10 per cent have no children (5 persons), 43 per cent have 1-2 children (21 persons) and 47 per cent have 3-4 children (23 persons). As far as the number of children is concerned, out of 5 women who have no children, two are Juangs, one is a Scheduled Caste and two are Other Castes. Out of 21 women who have 1-2 children, 24 per cent are Juangs (5 persons), 4 per cent are Scheduled

Caste (10 persons) and 28 per cent are Other Castes (6 persons). Of 23 women who have 3-4 children, 52 per cent are Juang (12 persons), 22 per cent are Scheduled Caste (5 persons) and 26 per cent are Other Castes (6 persons).

Table 17: Non-literate married women and no. of children among different castes.

Caste	No. of non-literate	No. of children				
Juang	49	-	5	36	7	1*
Scheduled caste	6	-	3	2	1	-
Other caste	2	-	-	2	-	-
Total	57		8	40	8	1

Note : * One has seven children

Table 17 includes non-literate women and their number of childrens. It shows that of the 57 non-literate, 14 per cent have 1-2 children (8 persons), 70 per cent have 3-4 children (40 persons), 14 per cent have 5-6 children (8 persons) and only one person has more than 6 children. Out of 8, who have 1-2 children, 5 are Juangs and 3 are Scheduled Cwomen. Out of 40, who have 3-4 children, 90 per cent are Juangs (36 persons) and 5 per cent each are of Scheduled Caste and Other Caste women (2 persons) in both castes. Out of 8, who have 5-6 children, 88 per cent are Juangs (7 persons) and only one is a Scheduled Caste woman. One who has above 6 children is a Juang woman.

Another way of observing fertility of women in the village is through observing their opinion about family planning. In the field study,

questions have been asked about whether they support and use any family planning devices. Views of married women among different castes are compared in the following table.

Table 18: Opinions about family planning by marital status and caste

Opinion	Juang	Scheduled caste	Other caste	Total
In favour of	4 (6 %)	7 (32 %)	14 (88 %)	25 (23 %)
Against	49(70 %)	9 (41 %)	-	58(53 %)
No comments	17 (24 %)	7 (27 %)	2 (12 %)	26 (24 %)
Total	70 (100 %)	23 (100 %)	16 (100 %)	109(100 %)

Table 18 shows that of 109 married women, 23 per cent (25) are in favour of 53 per cent (58) are against and 24 per cent (26) did not say anything about family planning. Of 25 women who have favoured family planning, 16 per cent (4) are Juangs, 28 per cent (7) are Scheduled Caste and 56 per cent (14) are Other Caste women. On the other hand, of those 58 women who were against family planning, 84 per cent (49) are Juangs and 16 per cent (9) are Scheduled Caste.

It is found from all the above data that the non-literate women have more numbers of children than the literate ones. Percentage of literate women among the Juangs is less as compared to the scheduled caste and other caste women. So, the main cause for which more Juangs are against family planning is their non-literacy and rigid tradition, which considers a child as God's gift coming to family with His blessings. As Behera(1997) says that, it is unfortunate that the Juang tradition does not allow

married women to adopt any family planning. This is also the case with Juangs in Gomatipur village. If a woman adopts any such measures and it comes to the general notice of the community, she will be debarred from participating in all socio-religious activities. Further, they believe that their ancestors too will not accept water or any other offering from such women. However, it is learnt from a village doctor that the married Juang women secretly take some indigenously prepared medicines and use some natural techniques for birth control.

The other reason for their opinion against family planning may be due to the high rate of infant mortality. Out of 70 married Juang women, seven reported the deaths of their first child during infancy. It is observed that one of the main factors it is the mother's poor health. The women often suffer from the effects of nutritional deficiencies such as anaemia, which also affects the health of born children and leaves them further weakened and vulnerable to diseases. Another cause of high rate of infant mortality may be lack of proper care during child birth. During the field study, one woman described her experience about her child birth and how the child died because of carelessness of her family. In the village the issues of child birth is a woman issue. No male is interested to get involved in it. The day she is expected to give birth, no male member was there to take care of her. Only one local dai was there to attend to her delivery. When some of complication arose, the dai could not do anything and left. Next morning, when she was taken to the dispensary, the child was borne dead. But this type of cases was not found among Other Castes.

Some Juang parents complain that some teachers misbehave with girls in the school. So, they are not interested to send their girls to school. Pasayat(1997) says that the main reason for illiteracy of women among Juangs is found to be parents depending on girl children in family work which does not give importance to education of girl children. Rath(2000) says that the main cause of the illiteracy is the negligence of the teachers who remain absent for half of the academic year and who are involved in various side businesses. Pasayat(1997) again observes that another cause of low literacy among Juangs is teacher's attitude. In the village school, teachers give more importance to other caste children, because they give to the teachers financial assistance in one form or the other which the Juangs are not able to because of their poor economic condition. All these factors contribute to low literacy among Juang girls, which in turn affects their fertility in the later period of life.

There is still a gap between implemented programmme and what has been done actually. The government and NGOs have given emphasis to community level development. In both cases family as a unit has not got proper emphasis. The dispensary never works properly. Doctors and Juang Development Agency(JDA) personnel remain absent frequently. Not much has been done for the development of education, as a prime job of government and non-government agencies has been to look for economic developments of Juangs. But as literacy, education and fertility control are main factors for a community's socio- economic development, it is imperative to look at the relationships between these factors among the Juangs from a demographic and developmental perspective.

In the first section of this chapter, the focus has been on Juang tribe, the Juangs in Gomatipur village and a profile of the village. The role of various governmental and non-governmental agencies is also discussed. The second part consists of the field work. The findings show that tribal women have a low literacy rate than the non-tribal women. It is observed that tribal women have more number of children than the non-tribal women. And most importantly, literate women have fewer number of children than non-literate women. Although it is a small-scale study, it shows that female literacy impacts on fertility and that caste and tribe differences are also significant.

Chapter V: Summary and Conclusions

This chapter starts with the premise that there is a link between female literacy and fertility. It recapitulates the main arguments regarding literacy and fertility. Then it provides brief summaries of all the chapters including the main findings of the study.

Variations in fertility are generally examined and understood in terms of socio-economic factors such as education, income, caste, place of residence etc. It has also been recognized that socio-economic factors can affect fertility only through intermediate variable, which determine the exposure to intercourse and to pregnancy (Visaria, 1999; Jejeebhoy, 1995). These intermediate variables may be age at marriage, use of contraception, duration of breast feeding and length of postpartum amenorrhoea. Researchers agree that literacy and education is one of the socio-economic factors which strongly influences the intermediate variables to affect the fertility level (Cochrane, 1979; Dreze and Sen, 1995 ; Jeffery and Basu, 1996 etc.).

There is a general assumption based on the various studies that increase in female literacy does have a reducing effect on fertility. On this point, the literacy of women is discussed. Literacy of women in general and tribal women in particular as discussed in previous chapters, is very poor. As we know that tribes are socio-economically more backward as compared to other caste communities. The main reason why the education of tribal children in general and of girl children in particular suffers seems to be the demands on children to help their family in its occupational and

household activities and the inability of their parents to afford expenses for continuing schooling (Patel, 1985).

The literacy among tribal women in Orissa is very low. In many cases, the content of education which does not take in to account the socio-cultural environment of the tribes, problems of medium of instruction, lack of good functioning of schools and inadequate infra-structural facilities in these tribal areas are main factors for their illiteracy (Pasayat, 1997; Rath and Behera, 1990; Behera and Nanda, 1990).

On the basis of above studies, an attempt has been made in the present dissertation to examine the relationship between female literacy and fertility among tribal women. The focus is on the link between female literacy and fertility. All the demographic theories which support and supplement the study are discussed. 'Review of literature' presents the finding of various studies carried out by researches, demographers, sociologists and anthropologists. Along with general studies, certain specific studies of female literacy and fertility among the tribals have been cited. Some studies favour the argument that there is a negative link between female literacy and fertility levels. On the other hand, some studies are against the argument raising the question of level of literacy and education to be effective for reducing fertility rate. Some studies have been cited regarding the relationship. Though there are many studies which discuss the education of tribals, little emphasis has been given on the direct link between literacy and fertility among the tribals.

The third chapter uses census statistics and gives specials emphasis to the literacy among tribals. It provides a comparative picture of literacy among women in the general population and among tribal women. It uses 1991 census data taking into account both male and female literacy rate of some selected states on the basis of 'high literacy' and 'low literacy'. It also gives a picture of district wise literacy rate in Orissa to compare the literacy among men and women and among women in general population and tribal women.

In fourth chapter, an attempt has been made to explore the relationship by doing a field work in a tribal village of Orissa. It provides evidence from Juang tribe in the village to bear on the links between literacy and fertility. For purpose of comparison, sample was selected from among the Juangs, Scheduled Caste and Other Castes. Data were collected on age, literacy, marital status of women, number of children etc. These are then cross-tabulated to see the links. A comparison is undertaken to know the differences between literate and non-literate women regarding their opinions about family planning.

It has been found that non-literacy is higher among tribal women in comparison to the non-tribal women. Of the total 89 literate women, only 28 per cent are tribals and rest of the 62 per cent are non-tribals, while comparing the male and female literacy among the tribals, 58 per cent of tribal man and only 14 per cent of tribal women are found literate. This shows a wide gap between male and female literacy among the tribals in the village.

This poor literacy among tribal women may be due to the educational problems in childhood. The important factor may be the parent's attitude towards girl children. Tribal girls in the village tend to drop out earlier because of pressure of household work. There are some girls who have never gone to school. It is heard from some parents who complained of teachers misbehaving with girls in the school. Another cause may be the lack of hostel facilities for girls in the school. There has not been any special programme to teach or educate the dropouts and adult non-literate members in the village. And as the dropout rate is more among tribal girls and there are more non-literate adult tribal women, they sulfur more.

Further, an examination to find out the apathy towards education among tribal children highlights the poor infra-structural facilities and the negative attitudes of teachers towards tribal children. The teachers generally come from urban background and non-tribal families. They look down upon tribals because of their poor economic conditions and different way of behavior. The main reason why the teachers come from outside the village is that there are no educated members among tribals who can become teachers. And those few non-tribals in the village who are educated are less interested in teaching. Moreover, the school teachers coming from outside can not speak the tribal language. This communication gap may be also a reason for which the tribal children are not so much interested to go to school. Again because of poor economic condition, tribal parents are more interested in getting some financial help

from the children than to spend on them by sending them to school. Interestingly, it was found that the Juangs send their children to the school only during meal time because a special day-meal programme has been initiated in the village school. The rest of the time the child helps in the family work. This type of attitude of tribal parents may be because of non-literacy and poverty. It is found that children who are first generation learners tend to dropout earlier than those whose parents are literate.

As the sample of the study consists of all the married women in their child bearing age (15-45 approximately), an attempt has been made to compare them from the women who are not married. Of the total 109 married women, 64 per cent are tribal women and only 36 per cent are non-tribal women. And it is observed that more married tribal women are found in the age group of 15 to 24 as compared to non-tribal women. This may be because of tribal culture of early marriage in the village. Also as many of the girls are withdrawn from school earlier, marriage is the only alternative for them.

As for as educational status of married women is concerned, while only 28 per cent of tribal married women are literate, it is 64 per cent in the case of Scheduled Caste women and 88 per cent in the case of Other Caste women. This shows that more women are literate among Other Castes as compared to tribal and Scheduled Caste women. So far as is compared, the maximum number of women are literate in the 15-24 years of age group among all the three caste groups. Very few older women

among the tribe i.e. those above 25 years of age are literate as compared to the non-tribal women.

As literacy and education are considered to be the most important factors to have impact on fertility level, it has been attempted in the study to examine the role of literacy in the fertility differentials among tribal women. The fertility differentials of tribal women have been compared with non-tribal women to get a comparative picture of impact of literacy on fertility.

It is found that literate women have fewer children as compared to non-literate women irrespective of caste. But differences are found while comparing non-literate tribal women with non-tribal women on the one hand, and between literate tribal women and non-tribal women, on the other. Looking at the number of children by literacy of women, a difference is found among tribal women and non-tribal women. For example, while 63 per cent of tribal women have 3-4 children, 31 per cent of Scheduled Caste and 43 per cent of women from Other Castes have as many children. Thus in this case, the difference is not so wide between Scheduled Caste and women from Other Castes. So for as non-literacy is concerned, while 73 per cent of tribal women have 3-4 children, only 33 per cent of women from the Scheduled Caste have as many children. The interesting finding is that around 16 per cent of tribal women have even more than 5 children which is rare among non-tribal women. From this, it can be inferred that as in. literacy there is no wide gap between women

from Scheduled Caste and Other Castes, there is no wide differences as far as number of children is concerned.

It is found that literate women have fewer children than the non-literate women. But tribal women found to have more number children, be they literate or non-literate while comparing with non-tribals. So not only the non-literacy, but also some other socio-economic factors are responsible for their high fertility.

An attempt was also made to find out the differences in the opinions regarding family planning among the respondents. While most of the women from the Other Castes (88 per cent) are in favour of family planning, most of tribal women (70 per cent) are against it. In case of Scheduled Caste, nearly same proportion of women are in favour of it as are against it. The negative opinions of tribal women may be due to the factors like non-literacy, ignorance, blind beliefs and tribal culture. In the tribal culture, the child is viewed as god's gift and therefore family planning is a taboo. They fear that if they adopt family planning, they may be debarred from the tribal community.

Finally, so far as literacy and fertility are concerned, it may be said that there is an apparently inverse relationship between female literacy and fertility. Education and literacy provide skills and abilities which result in lower fertility through improved ability to acquire new information and to use contraceptive technologies. But other socio-economic factors along with education are also important. For example, in the case of Juangs, along with education, it is the economic condition of

the family and tribal beliefs which play an important role in determining the attitudes to family planning. However, it can not be denied that literate women are more aware of fertility control than non-literate women. Therefore, literacy does have an effect on fertility rate.

Thus the link between female literacy and fertility among the tribals has been studied on the basis of field work. This field study has highlighted the need for micro-studies which may focus on the following:

namely comparative study of different tribal communities may be useful. Again an inter-district comparison may be undertaken among the Juangs. Lastly, the differences in the impact of male literacy and female literacy on fertility level in a particular region may also be studied.

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