#### Skewed Child Sex Ratio in Rural India: Revisiting 'Landholding-Patriarchy Hypothesis'

# Srinivas Goli<sup>1</sup> and Perianayagam Arokiasamy<sup>2</sup>

**Abstract:** A central tenet in eco-feminism states that male ownership of the land has led to patriarchal culture and to date, the patriarchal currents running through rural lives of Indian society. The imbalance in sex ratio is an outcome of the patriarchal intra-familial economic structure coupled with the perceived cultural and economic utility of boys over girls. This paper explores the relevance of 'landholding-patriarchy hypothesis' for explaining the dynamics of sex discrimination and its relation to family building strategies by taking reference from global and Indian contexts. It is evident from the paper that landholding is closely associated with sex ratio patterns. The sex ratio of the population shows an increasing trend with size of the landholding. This relationship is attributed to the higher preference for sons in order to maintain large sizes of landholdings in accordance with the cultural context of division of labour in Indian society.

#### I. Background

Land has been and continues to be the most significant form of property in rural India. It is a significant determinant of economic well-being, social status, and political power. Land is the first critical economic resource on which men got their control in the earliest stages of human civilizations from where they started dominating other walks of human life. However, there is substantial evidence that economic resources in the hands of male household members often do not benefit female members in equal degree. The independent ownership of land is crucial for promoting the empowerment and wellbeing of women. As peasant women in Bodhagaya; Bihar said on first receiving land on their own names in 1982:

We had tongues but could not speak
We had the feet but could not walk
Now that we have the land
We have the strength to speak and walk!
(Quoted in the Agrawal's: A Field Of Once Own; Gender and Land Rights)

Patriarchy at economic level is also related with division of labour. The gender division of labour is a central feature of gender inequality, both in its economic aspects and its social construction of gender identities (Huber, 1991; Lorber, 1994). The most primitive form of division of labour was based on 'household' in which the men would do outside chores and women did the domestic chores (Durkheim 1983). Thus, the interaction and exposure of men with the outside social world somewhere influenced the authority structure, making men more authoritative (Morgan, 1887). The role of female labour under different land use pattern explained by *Boserup* clearly indicates that female labour lost its importance gradually with

<sup>&</sup>lt;sup>1</sup> Research Scholar, International Institute for Population Sciences; Mumbai; 400088; sirispeaks2u@gmail.com

<sup>&</sup>lt;sup>2</sup> Professor, International Institute for Population Sciences; Mumbai; 400088; parokiasamy@yahoo.co.uk.

development of agricultural patterns from traditional common land cultivation to highly intensive and contemporary mechanized agriculture system, where, men got more importance than women did. *Naila Kabeer* producing her experience with Dhaka's (Bangladesh) women workers said "the rural migrants coming overwhelmingly from the landholding families had no experience of working outside the home; whereas, the migrants predominantly from poor and landless families had fewer household restrictions and less stigma attached to the women engaged in wage work". In poor families, the power relationship between husband and wife could be equal because men do not hold much authoritative control due to the lack of enough property (land) to pass on. Engels also noted that poor women were employed outside the home, and poor husbands had relatively few legal rights. As a result, there was no material basis for husbands oppressing their wives (Sydie, 2002).

The imbalance in sex ratio is an outcome of a set of multifaceted factors. During the last two decades, considerable debate has taken place and due attention has been paid to different dimensions of female deficit, particularly in India (Miller, 1981 and 1989; Sen, 1990; Kishore, 1993; Agnihotri, Das Gupta, 2000; Bhat, 2002; Croll, 2002; Arokiasamy; 2004). For the first time, the numerical imbalance between male and female was identified in 1970s (Visaria, 1971, Natarajan, 1972). An important article titled "more than 100 million women are missing" by Sen, 1990 brought to focus the increasing gender discrimination.

The patriarchal intra-familial economic structure coupled with the perceived cultural (religious or caste-based institutional norms) and economic utility of boys over girls is the original determining factors of degree of son preference and the inferior status of women in India (Dyson and Moore, 1983; Miller, 1981; Das Gupta, 1987; Kishor, 1993). Son preference is in the interest of the family lineage, whose continuity depends on sons alone while daughters are considered as the transient members of the kin group (Arokiasamy, 2007). In short, sons are perceived to provide support to their parents, both before and after marriage, while daughters move on to their husband's family and provide very little economic and emotional support. Daughters are considered as net drain on parental resources in Patrilineal and Patrilocal communities (Das Gupta, 2000). More importantly, in the Hindu religious traditions, sons have been considered necessary for the cremation of deceased parents in order to provide a safe passage from this world to next (Arnold et al, 1998).

Similar to rest of the world in their primitive stages of civilization, we too worshipped goddesses and held women in high esteem. Those families are organized along the matriarchal and not on patriarchal lines, where women were physically more resilient than men (Harris, 2007). Why was it then that the female sex was labeled as "weaker" and males began to control the family and society? How patriarchal systems of family appeared on the earth? How matriarchal system of family has been expunging from our society? The present paper seeks to answer these questions based on existing theoretical evidences and reference from global and Indian historical contexts. At empirical examination this paper has paid attention to the household 'landholding-patriarchy hypothesis' for explaining the dynamics of sex discrimination at the household level and its relation to family building strategies in India.

# II. Explaining skewed sex ratio in India

Sex ratio is a humane index of society and nation. It is also an important indicator of status of women in any society. Sex ratio is defined as the number of females per 1000 males in India and as number of males per 100 females in global context. Sex ratio in India is highly masculine compared to most other regions of the world. The male female ratio has increased from 103 in 1901 to 107 in 2001 census, in India. What is alarming is the dramatic drop in child sex ratio (0-6 age group). Census of India, 2001 shows the increase in the sex ratio of children aged 0-6 years from 104 in 1981 to 108 boys per 100 girls in 2001.

National Family Health Survey (NFHS, 1998-99) shows that the sex ratio at birth in western states of India is abnormally high, exceeding 110 males per 100 females (Arokiasamy, 2007). Researchers have given considerable attention to the cultural context of female deficit and persisting regional variations in different dimensions in India (Sen 1990; Agnihotri 2000; Dasgupta and Bhat 1995; Miller 1981; Visaria 1969; Arokiasamy, 2007). These variations have attracted considerable attention in literature, dominated by one major feature; 'the north – south' divide. This refers to the highly masculine sex ratio in northern states and female favorable sex ratio in southern states of India.

#### III A. Explaining the Landholding - patriarchy hypothesis: Global context

Gender refers to the roles, attitudes, values and relationships affecting women and men throughout the world (Kimmel 2007). Patriarchy is a set of social relations with a material base

that enables men to dominate women. However, the extent of inequality varies from country to country, society to society, religion to religion and caste to caste (Uberoi 1995; Geeta 2007; Omvedt 1975). Defining women's oppression and theorizing of patriarchy is difficult without considering its ever-changing meaning (Geeta, 2007; Omvedt, 1975). Virtually majority of the human society are patriarchal. However, the question which remains unanswered is "what is the origin of patriarchy and women's sub-ordination?" Does it existed since the beginning of human society or it came into existence with emergence of ownership of private property with surplus production in agriculture? The Anthropologists, Social biologists and Sociologists have explained it in different ways from time to time with different hypothesis. The Andocentric Sociologists and Anthropologists (including the influential 'socio-biological school of today) brought the concept of divine creation of male superiority. It continued to insist that the maledominated family co-existed with human society since 'man the hunter' synthesis held sway in the 'social' world. However, in the later part of 19<sup>th</sup> century the Radical and socialist intellectuals challenged this view successfully (Lerner, 1987).

In the nineteenth century, Frederic Engels, listing a few hints from Marx and the researches of the anthropological pioneer Lewis Henry Morgan, evolved a new hypothesis, which stressed on the emerging class differentiation and man's successful control of property. The surplus was the base for the emergence of state, family and male patriarchal control. Engels in his hypothesis notes that, "with the patriarchal family, we enter the field of written history". Male gained power within the family and in society with the development of agriculture (land centric activities). As we moved from hunter-gatherer society to agrarian society, the animals (cattle, horses, etc.) became instruments of labour on which male got control and took with them. In addition, with the domestication of animals and farming, human being started producing surplus and this promoted the concept of private property (Omvedt 1975, 1982).

So long as societies were very close to subsistence, survival of a family depended on cooperation of both male and female and societies were non-hierarchical (Omvedt 1975, 1982). However, with the agricultural surplus, it became possible for some to control more of the household production than others. With the upward mobility of the group, women are withdrawn immediately from the outside work (Das 1981; And Desai 1984; Omvedt 1975, 1982). The mobility strength of men, along with their control over tools and animals made them property

(land) owners, and they wished to have a means of passing this property to their male children. With this, the matrilineal form of descent was replaced by male line of descent and the paternal law of inheritance in the family.

#### III B. Explaining the Landholding - patriarchy hypothesis: Indian context

Patriarchy and landlordism worked hand in hand for centuries, in ways that reinforced the hierarchy of the caste and class, the landlord controlled every facet of the villagers. In India, through out the history, patriarchy enjoyed the solid support of religion and its hold on India is so strong that still the ancient epics dictate the women's behavior (Sarvate; 2004, George, Desai; 2005, Geeta; 2007). As we mentioned in earlier part of this paper that in primitive civilization, we worshiped Nature and Mother Goddess (Altekar 1962; Thaper 1975; Wadley 1977; Jayaswal 1981). During this period there was no male god and status of women was high, but by the time of later Vedic period, we started worshiping male god. There is an assumption that marrying of the male god (god king) with the goddess led to the establishment of strong and imperialistic kinship in the family (Upadhyaya 1974; Mukherjee 1978). This is the origin for hypothesis of Aryan patriarchy and Dravidian matriarchy (Upadhyaya 1974; Harris 2007). Thus, the result today is that the women in most of south Indian states and Sri Lanka (earlier part of Indian subcontinent) have high status as compared to the Nordic belt of India. There are many historical evidences about female discrimination and female feticides' in those areas where landholding patriarchal families are dominant in number and power (Kakar 1981; Dyson and Moore 1983; Vishwanath 1998; Krishnaraj and Desai 2004; Harris 2007; Ravinder Singh 2009).

During colonial period, British officials identified skewed sex ratio, missing girls and female infanticides in both north and west India. Upper caste landowners, who wielded power at the local level, practiced female infanticides (Vishwanath 1998, Ravinder Singh; 2009). British residents reported that Rajas in Benares and Rajkumar in Jaunpur district destroyed their female children (Ravinder Singh; 2009). In west India, Gujarat practiced female infanticide. According to the reports of British officials, the castes which resorted to the practice of female infanticides were Rajputs, Jats, Ahirs, Gujjars, Khutris and Moyal Brahmins in north, Rajputs of peninsular Gujarat, Lewa Patidars and Kanbis of mainland. These castes were dominant landholding families at the local level in different parts of north and west India (Das 1981; And Desai 1984; Vishwanath 1998, Ravinder Singh; 2009).

In Punjab region of north-western India, the Bedi Kahtri families practiced female infanticide extensively in the 19<sup>th</sup> century (Vishwanath, 1998, Ravinder Singh; 2009). As recorded in major letter reported to the Punjab board of administration in 1851 "the Bedis were an influential landholding caste of Sikh khatris who claimed high rank among Sikh khatris". It is an undoubted fact that there are 1,000 families of Bedis who, for the last 400 years, have destroyed many of their female offspring". The Bedis received girls in marriage from khatri families of lower status and they refused to marry their daughters to boys from lower status families and instead resorted to female infanticide (Das 1981; And Desai 1984; Vishwanath, 1998, Ravinder Singh; 2009). Still these traditions are playing important role in their family building strategies. This is the reason why this part of India is facing female deficit from the years long. Further more, the inventions in medical technology and pre natal diagnostic test has resulted in huge magnitude of sex selective abortions. This differential stopping behavior led to skewed sex ratios in north-western part of India (Ravinder Singh; 2009).

Earlier Studies call attention to the status of women shaped by culture (Dyson and Moore 1983; Dasgupta 1987; Berrman 1993; Madan 1993). Differential kinship systems in north and south and the process of assimilation of the women into the family of her in-laws have informed the bulk of this analysis which largely has been qualitative. However, the debate on the cultural aspects has not moved much beyond highlighting north south divide, which is not adequate (Agnothri; 1996).

In the light of above background, we have formulated two parallel hypothesis for this study: I. "In the states which are dominated by skewed household landholdings with dominant landlords, patriarchy is strong and leads to skewed sex ratios; in these states sex ratios(male/female) increases with increase in household landholding size. II: "In the states which have uniform household landholdings, or traditionally tribal communities or where, historically women were involved in various land rights movements and women owned land or homestead agriculture still in practice, sex ratio (male/female) has decreased or remained unchanged with increasing household landholding size".

In the present paper, we argue that household 'Landholding-patriarchy hypotheses' are fundamental to the structural institutional factors, which are influencing fertility preference of the family. Landholding of the household therefore is certainly a crucial determinant of the child sex preference. This is a well-established hypothesis in the history of the human society. However, recent analysis of sex ratio and sex preference has ignored this crucial hypothesis. The present day analysis tends to focus greatly on the autonomy, education and health of the women and their relation to sex ratio. When gender development indicators are improve and an evidence of decrease in son preference (IIPS and Macro Internationals 2005-06; Das Gupta et al. 2009), there should be corresponding improvement in sex ratio, but why such improvement is not happening. Why Dowry system is strengthening; marriage and dowry under capitalistic patriarchy are more materialistic than ever (MARAG publication, 2003). What still remains are that India is an "agrarian" society and "the land ownership" is a significant property right and fundamental to socio-economic status.

Given such strong theoretical background, this paper is an attempt to revisit the long neglected household '*landholding-patriarchy hypothesis*' and re-establish evidences from recent National Family Health Survey -3 (NFHS-3, 2005-06) data.

#### IV. Objectives:

To explain the existing research gaps the following specific objectives are considered:

- 1. To empirically examine the household 'landholding and patriarchy hypothesis' in terms of child sex ratio (CSR), Sex ratio at birth (SRB), and sex ratio at last births (SRLB) in selected states and socio groups.
- 2. To explain the linkages between landholding and women' work participation, freedom of decision making and movement; and resulted sex ratio trends in India and selected states

#### V. Data source:

NFHS- 3 collected information from a nationally representative sample of 109,041 households, 124,385 women age 15-49 years, and 74,369 men age 15-54 years. The NFHS-3 sample covers 99 percent of Indian population living in 29 states of India and provides information on various household, women and child characteristics. The household, person's, women's and birth history files data are used in this analysis. We used key variables like sex

ratio at birth, sex ratio of the child population aged 0-6 years, sex ratio at last births and last two births, overall sex ratio at birth during 2004-06, and 2002-04, and sex preference for the analysis.

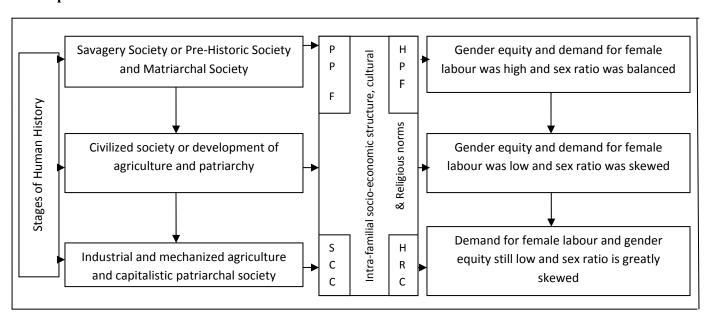
#### VI. Methodology:

The methodology in this paper comprises of theory building followed by the search for statistical evidence through sex ratio related estimations and finally seeks convergence between theory and statistical evidence for better understanding. The first part of the paper seeks to build a theoretical background by revisiting literature associated with the family 'landholding -patriarchy hypothesis' and its historical roots in Indian society and gives theoretical exploration of reasons behind emergence, continuous strengthening and its varying regional context in India. Second part examines the evidence through the estimation of sex ratio. We have used international definition "male/female \*100" in the estimation of sex ratio at birth, sex ratio of child population aged 0-6 years, sex ratio of last births and last two births for global comparability. Third part of methodology is to explain the convergence of theory with statistical evidences, and testing of landholding and patriarchy hypothesis in Indian context.

We selected two states each from four socio-cultural and geographic regions of India. Compared to formal classification, we followed the flexibility in selecting the states to get good picture of analysis. According to NFHS -3, the family landholding size in India ranges from 0.1 acres to 500 acres and the situation varies from state to state. The size of the household landholding in states like Bihar and Gujarat are more than the national size. On the other hand, the household landholding size in West Bengal and Kerala is only 13 and 37 acres respectively. In this paper, the land classification does not follow the standard pattern (Marginal, Small, Medium, and Large farmers) for the purpose of better analysis. We have classified the landholding households into three categories: household with very small landholding (less than 1 acre), medium landholding (1.1 to 10 acres) and large landholding (10 and above) for prudent comparison between different categories. Our interest is to demonstrate the distinction between very small landholding households and large landholding households and their differentials in sex ratios.

Conceptual Framework has been used to understand the complex relationships between household socio-economic setup, mode of production and their corresponding gender status in different stages of human history. It is evident from the following framework that the status of women and gender equity has been condensed as society transformed from savagery society to modern industrial and capitalistic society. During savagery society production unit was based on household and all the household members equally participated for earning livelihood and there was no private property since there was no surplus production. As agriculture developed, simple division of labour based on gender developed and this was for the first time confined to her role in household chores. In agriculture for instance, women can engage themselves in water-regulation, transplants, weeding, but not ploughing. In today's capitalistic society the economic system and mode of production became so complex that women's work at household was regarded as unproductive and uneconomic, thus the socio-economic status gap between men and women enlarged with enlarging complex mode of production and division of labour. In present study, households are assumed to make choices which they perceive to be in their own interest, within the given constraints. It is accepted that gender differentials in allocation of household resources and choices regarding sex of child may be severely constrained by cultural norms, tradition, and type of mode of production, market demand and assets.

# Conceptual framework<sup>3</sup>



Note: PPF = Production Possibility Frontiers of Economic System; HPF = Household Production Functions; HRC = Household Resource Constraints; SCC = Social and Cultural Constraints

<sup>&</sup>lt;sup>3</sup> The frame work is based on the **Engels'** concept of stages of human history and family; **Boserup** concept of stages of land use pattern and demand for female labour and **Behrman** concept of intra-household allocation of resources

## VII. Findings:

Table 1 shows the number of households under different landholding categories by states in rural India. From this table, it is evident that India is still a semi feudal society, where land is concentrated among families of few social groups. States like West Bengal and Kerala, where land reforms were implemented and landholding is less skewed; the proportion of households having 10 and above acres is negligible.

Table 1. Number of Households under Different Landholding Category in Selected States/India, Rural; 2005-06

Clata	Land less rural	Siz	e of the landholdi	ng in acres	
State	households	0.1 to 1	1.1 to 10	10.1 and above	Total
Punjab	2001	166	516	93	775
Haryana	1373	217	483	67	767
Rajasthan	1203	408	1256	191	1855
Uttar Pradesh	3992	2836	2483	120	5439
Bihar	1491	750	552	63	1365
West Bengal	3913	1265	589	5	2063
Orissa	1520	1067	947	49	2063
Madhya Pradesh	2581	578	1856	170	2604
Gujarat	1808	278	683	137	1098
Maharashtra	4959	478	1768	228	2470
Andhra Pradesh	4256	748	1251	99	2098
Kerala	2391	362	152	3	517
India	59566	17104	22474	2121	41699

Source: based on NFHS-3

Table 2 shows the distribution (frequency) of the child population aged 0-6 years by sex, size of landholding in the rural areas of selected states and India. In this table, it is evident that in all the landholding categories, the number of females is low as compared to males. In west Bengal, Kerala and Madhya Pradesh, the situation is little different. Here the gap between female and male child population is not large and it is decreasing further with increasing landholdings. The sample size in all the categories also indicates that the sex ratio computation based on this sample is reliable.

Table 2. Number samples of child population aged 0-6 among different landholding category of Selected States/ India, Rural; 2005-06

			Siz	ze of the land	holding in	acres		
State	0.1 to 1		1.1	1.1 to 10		above	T	otal
	Male	Female	Male	Female	Male	Female	Male	Female
Punjab	54	43	191	140	38	31	283	214
Haryana	82	72	259	184	49	42	390	298
Rajasthan	199	193	734	648	163	111	1096	952
Uttar Pradesh	1795	1646	1606	1408	106	91	3507	3145
Bihar	534	524	370	300	36	20	940	843
West Bengal	486	456	237	235	2	5	725	696
Orissa	381	398	375	341	24	11	780	750
Madhya Pradesh	298	290	867	906	96	100	1261	1296
Gujarat	113	97	281	231	53	40	447	368
Maharashtra	141	139	591	582	136	101	868	822
Andhra Pradesh	204	181	351	306	48	27	603	514
Kerala	117	114	37	33	0	2	154	149
India	7701	7229	9969	9178	1161	982	18831	17381

Source: based on NFHS-3

#### Objective 1A. Linkages between size of the landholding and sex ratio in selected states:

Table 3 demonstrates the sex ratio of child population in aged 0-6 years by size of landholding in rural areas of selected states. At all India level, the CSR of all rural population is 108 and for all rural landless population is 104. CSR is 107 for households with less than one acre land, which increases to 128 for households with ten and above acres of land. This is a clear evidence of a strong positive association between size of landholding and child sex ratios of population. In Gujarat (which has shown the highest increase in sex ratio during 1991 census to 2001 census), the state level sex ratio of all rural child population aged 0-6 years is 111 which has declined to 93 among landless households. A comparison among the landholding households shows CSR to be 117 for households with less than one-acre of land which dramatically increases to 149 in households with more than ten acres of land. This indicates that the skewed landholdings in the context of 'patriarchal creed' are contributing to the increase in child sex ratio in this state. South Indian states such as Andhra Pradesh and Kerala show the huge difference in CSR. In Andhra Pradesh, CSR of all rural population is 111 and for landless rural population are 109. In contrast to this, among the landholding households, CSR is 122 for households with less than one-acre and increases to 170 among households with ten and above acres of land. This distinction is due to skewed landholdings, which enhances strong patriarchal culture. The communities like Reddy, Kamma, and Rao are not only dominant landholding castes but also strong advocators of patriarchy (Sarvate 1998; kancha llaya 1998).

Table 3. Sex ratio of child population aged 0-6 years by size of landholding in Selected States/India, Rural; 2005-06

	CSR of all	CSR of landless	Size of the landholding(in acres)						
India/state	rural population	rural population	0.1 - 1	1.1 - 10	10.1 and above	Child sex ratio of rural landholding population			
Andhra Pradesh	111	109	122	115	170	120			
Bihar	110	113	101	123	162	110			
Gujarat	111	93	117	128	149	127			
Haryana	123	104	119	143	128	135			
Kerala	105	104	104	103	-	102			
Madhya Pradesh	98	94	106	98	90	99			
Maharashtra	108	109	110	98	142	105			
Orissa	109	115	96	111	207	105			
Punjab	131	119	125	139	128	135			
Rajasthan	114	114	103	112	148	115			
Uttar Pradesh	111	109	109	114	117	111			
West Bengal	103	100	105	99	**	103			
India	108	104	107	110	128	110			

Note: (\*\*) Very less frequency (-) no frequency

Source: based on NFHS-3 (2005-06)

On the other hand, Kerala entirely has a different socio-economic system. The sex ratio of rural child population in Kerala aged 0-6 years is 105 and among the landless, CSR is 104. However, among landholding households, CSR is 104 in households with less than one-acre of landholding and decreases to 103 among households with medium landholding. In Kerala, land is evenly distributed with highest landholding size is only 13 acres (NFHS-3; 2005-06). In this state, women were historically involved in land rights movements as some of the upper castes (Nayers) of Kerala are matriarchal communities (Harris 2007). Kerala is the first state to implement the laws of land rights to the women along with comprehensive land reforms. Here women are engaged in homestead agriculture and in some communities women even own the land (Agrawal 1994). The scenario of Kerala demonstrates the evidence for second part of hypothesis that the sex ratio decreases with increase in landholding.

West Bengal and Madhya Pradesh have suggested similar evidence for the second part of the hypothesis as in Kerala. However, they are varying in terms of reasons. In Madhya Pradesh at the state level rural CSR for all households is 98 and for landless households 94. By contrast, among landholding households CSR increases slightly to 106 in households with less than one-acre of land and decreases to 90 in households with ten acres (table 2). It is because of high proportion of schedule tribe population, who traditionally are not strong followers of patriarchy (Harris; 2007). The sex discrimination is comparatively less in tribal communities. In West

Bengal, CSR is 103 among all rural child population aged 0-6 years and 100 among the landless households. However, among the landholding households, CSR is 105 in households with less than one-acre and decreases to 99 in household with less than ten acres of land (table 2). The main reason for this scenario in West Bengal is uniform landholdings, as in Kerala

The high CSR in Punjab and Haryana provides ample evidence to the first part of hypothesis. In Punjab, the sex ratio of all rural child population aged 0-6 years is 131 and 119 among landless households. In addition to this, among the landholding households, the CSR is 125 in households with less than one-acre of land and increases to 128 among the households with ten and more acres. Similarly, in Haryana, sex ratio of all rural child population aged 0-6 years is 123 and is 104 among landless households. By comparison, among the land-holding households, the CSR is 119 among households with less than one-acre of land and increases to 128 among households with ten and more acres. Orissa is another important state to which our attention is necessary. The CSR for rural population in aged 0-6 years is 109 in contrast to 115 in landless households. However, among the landholding households, CSR is 96 in household with less than one acre of landholding and it dramatically increases up to 207 among the household with ten and more acres of landholding. The overall relationship between CSR and size of landholding shows strong association between them. The traditionally strong patriarchic and skewed landholding states like Punjab, Haryana, and including others states like Gujarat, Andhra Pradesh, Rajasthan, Bihar, Orissa and India as whole shows the evidence to support first part of hypothesis. In contrast, Kerala, West Bengal and Madhya Pradesh show evidence for second part of hypothesis.

Tables 4 exemplify the relationship between sex ratio at birth for last birth by landholding. The result shows more evidences to strengthen the "landholding patriarchy hypotheses". There is greater increase of sex ratio at birth for last births towards upper landholding households. All the twelve states provide evidences for first hypothesis. Even in Kerala and Madhya Pradesh, the situation is same. Earlier studies established that much of female discrimination takes place at last births and last two births and the possible reasons would be son preference and sex selective abortions at last birth. The sex of the last birth is crucial because it decides the stopping behavior of the couples. Earlier studies show that in substantial number of cases if the last birth is male, couples limit their family size (Shelley Clark; 2000).

Table 4. Sex Ratio at Birth of Last Births by Size of Landholding and Selected States/India, Rural; 2005-06

India/state	sex ratio at birth			Size of	the landholding	(in acres)
	of last births in all rural population	Landless rural population	0.1 - 1	1.1 - 10	10.1 & above	sex ratio at birth of last births in rural landholding households
Andhra Pradesh	126	111	137	149	191	147
Bihar	127	117	129	147	125	136
Gujarat	157	128	159	169	287	177
Haryana	193	184	190	221	179	208
Kerala	105	104	104	125	-	109
Madhya Pradesh	129	117	122	136	152	134
Maharashtra	152	148	132	159	210	158
Orissa	138	135	128	145	162	137
Punjab	197	176	204	237	221	228
Rajasthan	140	127	128	144	177	145
Uttar Pradesh	125	121	122	129	177	127
West Bengal	119	118	121	119	150*	121
India	131	124	128	143	171	138

Source: based on NFHS-3 Note: (\*) less frequency, (-) no frequency

Table 5 presents a similar pattern of sex ratio as in the case of last births. There is heavy increase of sex ratio at birth of last two births towards upper landholding households. All the twelve states provide evidences for first hypothesis. However unlike last births where Kerala and Madhya Pradesh which followed all other states, here only Kerala is following the other states and Madhya Pradesh is still showing the evidence for second part of the hypothesis.

Table 5. Sex Ratio at Birth of Last Two Births by Size of Landholding in Selected States/India, Rural; 2005-06

India/state	sex ratio at birth	Land less		Size of the	landholding	g(in acres)
	of last two births in all rural population	rural population	0.1 - 1	1.1 - 10	10.1 & above	sex ratio at birth of last births in rural landholding households
Andhra Pradesh	123	113	137	132	171	136
Bihar	123	118	124	125	151	126
Gujarat	132	120	124	148	188	146
Haryana	155	155	142	165	169	159
Kerala	105	110	104	125	-	109
Madhya Pradesh	125	120	122	128	127	127
Maharashtra	135	132	131	137	163	138
Orissa	128	126	128	126	119	126
Punjab	157	145	199	167	176	174
Rajasthan	133	124	123	135	158	135
Uttar Pradesh	120	115	116	129	125	122
West Bengal	119	112	121	119	150*	121
India	124	118	122	131	144	128

Source: Based on NFHS -3; Note: (\*) less frequency, (-) no frequency

# Objective 1B. Linkages between size of the landholding and sex ratio in different social groups:

Table 6 presents the rural CSR of child population aged 0-6 years by background characteristics in India. It show that within the caste groups, CSR varies with varying landholding size. The results provide evidence for the second part of hypothesis since sex ratio is decreasing with increasing landholding among the Schedule Tribes. However, sex ratio in schedule caste is comparatively less skewed. In Other Backward Castes and Other Caste, these ratios are much skewed. Similarly, among different religious groups as expected in cultural context of India, among the Sikhs and Hindus, these ratios are greatly skewed and the CSR increases with increasing size of landholding. While in other religions this is comparatively less skewed. Interestingly even in educational categories, CSR varies with varying landholding size. In contrast to earlier hypothesis (education has inverse relationship with sex ratio) it shows that CSR in mothers with no education is less male skewed than mothers with higher education among households who possess ten and above acres. Similarly, discrimination of female child is varying with varying landholding size within same wealth quintiles. Within richest wealth quintile among households with less than one acre of land CSR is 121 and increases to 131 among households with 10 and above acres. This provides enough evidence for the fact that in the same socio-economic groups the sex ratio varies with size of landholding.

Table 6. Sex ratio of child population aged 0-6 by size of land holding and background characteristics; rural India, 2005-06

Back ground		CSR of	Size	of the house	hold land holding (	Acres)
characteristics		0-6 years of all rural population	0.1 - 1	1.1 - 10	10.1 and above	Total
	SC	107	114	108	115	112
Caste/tribe	ST	101	99	103	99	102
	OBC	108	108	108	121	108
	None of the above	110	103	116	129	112
	Hindu	107	107	110	124	110
Religion	Muslim	106	106	107	109	107
•	Christian	102	102	101	94	101
	Sikh	126	124	138	127	133
	No Education	105	103	109	121	107
Mother's	Primary	109	117	103	133	110
Education	Secondary	108	99	110	118	107
	Higher	111	105	107	134	109
	Poorest	105	108	106	124	107
Wealth index	Poorer	103	106	105	92	105
	Middle	107	104	109	117	107
	Richer	109	103	113	126	111
	Richest	119	121	117	131	120

Source: based on NFHS-3 (2005-06)

Table 7 shows sex ratio of last births by background characteristic in rural India. Similar to that of CSR, the results of SRB at last births also shows that, within the caste groups and wealth quintiles. The sex ratio at last births varies with varying landholding size; other castes (other than SC, ST, OBCs) with higher landholding sizes are showing more female discrimination compared to SC, ST, and OBCs. Among households with ten and above landholding size, richer and richest are showing more female discrimination as compared to poorer and poorest. Similarly, with in the same religious groups the SRB at last births dramatically vary with varying landholding size. This is skewed more in the Sikhs and Hindus while it is comparatively less in other religions. Interestingly, among higher educated people also sex ratio at last births varies with varying landholding size. These evident shows that compared to other background characteristics land is a more influential factor responsible for sex preference, sex selective abortion, and differential stopping behavior relating to building strategies.

Table 7. Sex Ratio at Birth of Last Births Population by Size of Landholding and Background Characteristics; Rural India, 2005-06

Back ground	Types of background	SRB of	Size of	f the housel	old land holdin	g (Acres)
Characteristics	characteristics	last	0.1 - 1	1.1 - 10	10.1 and	Total
		births			above	
Caste/tribe	SC	130	134	130	129	132
	ST	117	114	118	137	118
	OBC	133	134	144	150	140
	None of the above	147	136	170	189	159
Religion	Hindu	136	137	146	158	143
	Muslim	112	106	121	233	114
	Christian	114	106	112	130	111
	Sikh	210	185	258	269	245
Mother's Education	No Education	129	125	141	162	135
	Primary	136	147	137	180	143
	Secondary	137	131	150	157	143
	Higher	133	132	143	139	139
Wealth index	Poorest	116	119	120	175	120
	Poorer	129	128	140	131	134
	Middle	133	131	138	136	135
	Richer	146	140	161	188	157
	Richest	152	162	164	172	165

Source: based on NFHS-3

# Objective 2. The linkages between landholding and women' work participation, decision making, freedom of movement and resulted sex ratio trends in India and selected states

As the economic system changed, the patriarchal norms also shifted from land oriented activities to other forms of production units. **Shramashkti report** (1988) highlighted the role of capitalism using cheap labour and exploited female labour for industrial and economic growth. The advent of the capitalism and its interrelationship with patriarchal domination resulted in the intensification of the household sexual division of labour, and creation of the marginalization of women in waged work (MARG, 2003). Indian societal norms are also shifting from classical patriarchy to capitalist patriarchy and it is leading to increasing gender division of labour and trends of skewed child sex ratio. In the context of capitalistic patriarchy, stalling female work force participation is used to explain the skewed sex ratios trends in rural India.

Table 8 Female work participation rate, in India during 1997-78 to 2004-05

Years	Rural	Urban
1977-78	33.1	15.6
1983	34.0	15.1
1987-88	32.3	15.2
1993-94	32.8	15.5
1999-2000	29.9	13.9
2004-05	32.7	16.6

Source: NSSO, employment and unemployment situation India, March 2006

To illustrate this situation in Indian context, the reducing female working force participation is considered as a proxy, which is an important indicator of woman's status and decision-making power in household and society. Further these two are crucial for balanced sex ratio. However, these are reducing in spite of increasing female education and job market. Table 8 shows that female work participation rate during 1977-78 to 2004-05 has not changed significantly, particularly after 1991 (period when we adopted New Economic Policy). The rate declined from 32.8 percent in 1993-94 to 29.9 percent in 1999-2000. The definition of work (which is formulated under capitalistic set up) neglected completely the domestic and maternal work of women. The physical location of production shifted away from the household and capital formation give no provision for childbearing or rearing, which was being regarded as undesired cost. The institution of family in capitalist society trivialized the women's domestic work as not being a "real work" and low paid jobs, they are employed in the low status and low paid jobs. In addition, this is making tremendous impact on sex preferences in child bearing process and household family building strategies and in these societies, there is a preference for sons due to

their social and economic importance for family. Thus, sex ratios are greatly skewed in these societies.

Table 9: Results of Logistic Regression (Odds Ratios) selected women status determinants Rural India, NFHS-3 (2005-06

Size of the landholding (in acres)	Women earning more than husband	Women working outside the family & self employed	Women taking self decision on own health care	Women taking decision on how to spend money	Women have freedom to movement outside the home
	Exp(β)	Exp(β)	Exp(β)	Exp(β)	Exp (β)
0.1 to 2.5® 2.51 to highest	.692***	.776***	.933**	.722***	.857***

*Level of significance*: \*p < 0.1 \*\*p < 0.05 \*\*\*p < 0.01.

Note 1: variables like women's education, women's caste, religion, and state are used as common control variables in all the four models (1-5)

Sex ratio is largely predicted by women's freedom to work outside the home, earnings, self-decision making on crucial aspects like health, desire for children and freedom to move outside. From multivariate analysis (Table 9) it is evident that these are largely predicted by the landholding size of household which is crucial for its patriarchal controls in rural India. Thus, the larger the landholding lesser the women's work participation outside the home, earnings, decision making power and freedom to move outside the home. This is exemplifying that the increasing size of landholding is decreasing the status of women. It is also evident that landlord's families (capitalist families) give less freedom and status to women than their counter parts, Thus, patriarchal controls and sex ratio are very much skewed in these families.

Table 10. Sex Ratio at Birth (SRB) During 2004-06 by Size of Landholding and Selected States/India, Rural; 2005-06

India/state	SRB for all			Size of the	e landholding(in acr	res)
	rural	Landless	0.1 - 1	1.1 - 10	10.1 and above	Child sex ratio
	births	rural				Of rural
		population				landholding
						population
Andhra Pradesh	114	105	120	155	164	143
Bihar	115	112	109	120	333*	115
Gujarat	109	91	129	96	263	113
Haryana	114	108	135	133	120	132
Kerala	112	102	139	225	-	149
Madhya Pradesh	106	94	108	113	100	111
Maharashtra	106	110	120	92	173	105
Orissa	97	96	78	98	150	88
Punjab	124	109	167	193	92*	168
Rajasthan	116	131	102	107	221	117
Uttar Pradesh	109	108	103	116	128	109
West Bengal	102	107	96	97	-	96
India	108	105	106	109	148	110

Note: (\*) less frequency.

(-) no frequency

Table 11. Sex Ratio at Birth (SRB) During 2002-04 by Size of Landholding in Selected States/India, Rural: 2005-06

India/state	SRB for all			Size of the la	andholding(in acres	)
	rural births	Land less rural population	0.1 - 1	1.1 - 10	10.1 and above	Child sex ratio of rural landholding population
Andhra Pradesh	116	107	122	139	185	135
Bihar	113	110	108	119	183	114
Gujarat	107	106	104	118	141	116
Haryana	131	128	131	136	161	137
Kerala	110	107	125	143	-	126
Madhya Pradesh	98	96	105	97	92	99
Maharashtra	109	106	108	104	169	112
Orissa	112	110	112	115	106	113
Punjab	128	116	168	145	121	144
Rajasthan	112	105	103	110	168	115
Uttar Pradesh	107	104	103	115	112	108
West Bengal	103	102	106	94	100	102
India	108	106	106	111	132	110

Note: (-) no frequency Source based on NFHS-3

The estimated sex ratio at birth for two periods 2002-04 and 2004 -06 and comparative study of these sex ratios with reference to different states explains how patriarchy works differently in different economic conditions. The strengthening of patriarchy in terms of increasing male skewed sex ratio in states like Gujarat, Andhra Pradesh, Maharashtra, along with Punjab and Haryana from 2001-03 to 2004-06. This is an apparent indication that Indian classical patriarchy is coupled with the capitalist patriarchy. It could be due to their economic policies (in particular to capitalistic economic policies). Punjab, Haryana, Gujarat, and Maharashtra are four economically advanced states in India and in all the four states child sex ratios are very much skewed.

The classical patriarchic influence on sex ratio can be reduced by educating the people, but as far as capitalistic patriarchy is concerned, it depends on economic nature of the society. Here social relations are guided by economy. Thus, with increasing education and economy, the patriarchal system is also strengthening in India. The diffusion of patriarchal currents from rural to urban areas in Punjab and Haryana could be an apparent indication of strengthening of capitalistic patriarchy. In Punjab, urban child sex ratios are male skewed than their rural counter parts (census 2001). This shows that the economic value of male child is strengthening in urban

areas too, further they are using modern medical technology to identify sex of the child thus resulting in sex selective abortions.

#### VIII. Discussion and Conclusion:

This paper provides enough evidence for the fact that child sex ratio increases with increasing size of land holding. In case of sex ratio at birth for last births, it increases dramatically with increasing size of the land holding. The evidence from 'landholding- patriarchy hypothesis' also reveals that the existing gap between women's choice and family building strategies might be due to family compulsion on women to go for male descendents as against her choice to maintain land and other property in the future simply because women in high landholding families do not have much socio-economic freedom (Table 9). The evidence of recent trend in child sex ratio reveals that the classical patriarchy is turning into capitalist patriarchy in the present economic system.

The analysis demonstrates that there is an urgent need to re-establish gender line discussion around this hypothesis for possible solutions to remove the gender discrimination from Indian society. By re-establishing, we mean to bring this hypothesis to the center of gender related analysis. Given female oppression in terms of property (land) rights and inheritance laws, the solutions to end this oppression are "elimination of male dominance in land ownership and property inheritance", proper implementation of land rights laws, access to land ownership and management to women.

### IX. Policy implication

The policy implication of this analysis is that since classical patriarchy is turning in to capitalist patriarchy, women should enter more in public industry, and that those who are interested in change, should concentrate on organizing women in the workplace and deal with issues in "the intersection between women's experience as workers and their position in the family". In addition, the socialization of housework and childcare are important social programs which help to achieve this. The capitalistic force insisted definition of work should be changed. Certainly, these efforts should not be restricted to getting women into management or powerful political position, as liberal feminist might argue but should concentrate on working to develop the class-consciousness, power of working class women, and that of working class as a whole.

Unpaid household work in which millions of women are working should get justice in law and within the household.

This all can be possible by initiating a change in approach to gender line studies. Now the problem of female discrimination and female deficit is not only attributed to male oppression but along with men, economic and social values related to women are a part of it. Parents also need to teach their children not to support the patriarchy-associated institution like dowry, but also to reject all those unfavorable social traits from society. The need of the hour for the development of the women is the solidarity within the family under gender lines.

#### **References:**

Acharya, A. 2004. "Gender Preferences and India's Missing Girls; Evidences from Some Selected State of India" PPA, Boston, USA, April 1-103-2004.

Adams, B.N., and Sydie, R. A. 2002. *Classical Sociological Theory*, University of Alberta, in Edmonton.

Adams, B.N., and Sydie, R.A. 2001. *Contemporary Sociological Theory*, University of Alberta in Edmonton.

Agnihotri, S.B. 2000. Sex Ratio Patterns in the Indian Population: A Fresh Exploration, Sage Publication.

Agrawal, B. 1994. A Field Of Once Own; Gender and Land Rights, Cambridge University Press.

Agrawal, B. 1997. "Gender, Environment and Poverty Links; Regional Variations and Temporal Shifts in Rural India, 1971-91", *World Development*, Vol.25, No.1, Pp. 23-52

Altekar, A.S. 1962. The position of women in Hindu civilization, Delhi, Motilal Banarsidass.

Isabelle Atbane and Chrigtophe Z. Guilmoto. 2007. Watering the Neighbors Garden; the Growing Female Deficit in Asia, CIRED, Paris

Arnold, F., and Liu Z. 1986. "Sex Preference, Fertility and Family Planning in China". *Population and Development Review*, 12(2), Pp. 221-246.

Arokiasamy P. 2007. "Sex Ratio at Birth and Excess Female Child Mortality in India: Trends Differentials and Regional Patterns". CEPED-CICRD-INED Seminar on *Female Deficit in Asia: Trend and Perspective*, Singapore, Dec. 4, 2005.

Behrman J.R. 1998. *Intra-Household Allocation of Resources is there a Gender Bias?* In Too Young To Die Genes or Gender, Economic –Social Affairs, United Nations Publication Database, New York.

Boserup, E. 1989. "Population: The Status of Women and Rural Development", *Population and Development Review*, A Supplement to Vol. 15, 1989

Clark S. 2000. "Son Preference and Sex Composition of Children: Evidence from India", *Demography*, Vol. 37, No. 1, Pp 95-108

Dasgupta, M. 1987. "Selective Discrimination against Female Child in Rural Punjab", *Population and Development Review*, 13(1) 77-100

Das, V. 1976. 'Indian Women: Work, Power and Status', In B.R. Nanda (ed.), Indian Women: From Purdah to Modernity, New Delhi; Vikas Publication House.

Desai, A.R. 2005. Rural Sociology in India, fifth Education Popular Prakashan Publications.

Desai, S. 1994. *Gender Inequalities and Demographic Behavior; India*, the Population Council, New York

Durkheim, E. 1983. "The Division of Labor in Society" Noble Offset Printers, Inc..., New York

Dyson T., Moore M. 1983. "On Kinship Structure, Female Autonomy, Demographic Behavior", *Population and Development Review*, 9, Pp 35-60

Eisenstein and Zillah, 1984. *Capitalist Patriarchy and the Caste for Socialist Feminism*, New York, Monthly Review Press, (1979).

Engels, 1884. The Origin of the Family; Private Property and State, Research in the Line Human Progress of Savagery through Barbarism to Civilizasation, Resistance Marxist Library

Fortier, L. 1975 "Women, Sex and Patriarchy" *Family Planning Perspective*, Vol. 7 (Nov.-Dec 1975), Pp 278-281

George, M. 2008. "Religious Patriarchy and Subjugation Women in India", presented at *third* international conference on inter-displinary social sciences, Monash University Centre, Prato, Tuscany, Italy, July, 2008

Gosh, J. (2009). Never Done And Poorly Paid; Women Work In Globalizing India, Feminist Fine Print.

Harris, R. 2007. "India: Aryan Patriarchy and Dravidian Matriarchy" 'www .interworld./harris 32.html'

Hartmann, H. 1976. "Capitalism, Patriarch, Job Segregation by Sex" In *Women and Work Place*: *The Implications of Occupational Segregation*, Ed. Blaxal M. and Reagan B. Chicago: *University Of Chicago Press*, Pp. 137-169

Hensman, R. 2002. "Undermining Patriarchy, Empowering Women" *Economic and Political Weekly* April 6, 2002; (Book Review) 'Bangladeshi Women Workers and Labour Market Decisions- The Power to Choose' By Nail Kabeer; *Vistaar Publication*, New Delhi, 2001

Hirway, I., and Mahadevia, D. 1996. "Critique of Gender Development Indexes: Towards an Alternative" *Economic and Political Weekly*, Vol. 31. 43 (Oct. 26.1996) pp. WS87-WS96

Kandiyotid, 1998. "Bargaining With Patriarchy", *Gender and Society*, Vol. 2, Sept. 1998 Pp 274-290.

IIPS and Macro Internationals, 2005-06. National Family Health Survey-3, Ministry Of Health Family Welfare, Government of India, Mumbai, 2005-06

Jayaswal, K.P. 1930. Manu and Yajnavalkya: A Comparison and a Contrast: A Treatise on the Basic Hindu Law. Calcutta: Butterworth.

Kakar, S. 1981. The inner world. New Delhi: oxford university press

Kishore S. 1993. "May God Give Sons to All: Gender Differences in Child Mortality in India", *A American Sociological Review*, 58, Pp. 247 -265

Kulkarni, S. 1998. Gender Dimensions Of Relationship Between Population And Land Use In Kerala And Haryana, (A Report Prepare for the Tri Academy Project of Indian National Science Academy, United States National Academy And Chinese Academy of Sciences) IIPS, Mumbai.

Laila, V. 1998. "Hardness of Heart and Hardness of Life: A Brief History of Infanticide General Historical Evidence, the Society for Prevention of Infanticide, Amzone, USA.

Lerner, G. 1987. "Creation of Patriarchy", *Economic and Political Weekly*, Vol. 22, No.44, Oct.31, 1987, Pp.70-72.

Miller B. D. 1985. "Prenatal and Postnatal Sex Selection in India: The Patriarchal Context, Ethical Questions and Public Policy" *Working Paper 107, Women in International Development Publication Series*, Michigan State University, 1985.

MARG, 2003. "March of Marginalized: A Special Report on Marriage and Dowry" *MARG Magazine*, Mumbai.

Morgan L.H. 1964. Ancient Society, Cambridge, Belknap Press, JC21 M84 1964

Omvedt, G. 1975. "Caste, class and women's liberation in India" *Bulletin of Concerned Asian Scholars*, Vol. 7, 1975.

Omvedt, G. 1982 (ed.). "Land, Caste, and Politics in Indian States: Teaching Politics. Delhi University, University Of New Delhi.

Potts, M., and Campbell, M. (2008): "The Origins and Future of Patriarchy: The Biological Background of Gender Politics" *Journal of Family Planning and Reproductive Health Care*, 34(3): 171-174

Rao R. 2004. "Missing Girls of Punjab", Social Welfare, Vol.12, March; Pp 37-38

Roy B. 2005. "Women in India; Colonial and Post Colonial Period". Vol. 1 sage series

Sarvate, S. 2009. "Patriarchy and Landlordism" India Currents Publications, PNS

Sen, A. 2003. "Missing Women – Re-Visited" *Biomedical journal*; 327, 1297 – 1298, Dec. 2003

Singh, R. 2009. "Culture of Missing Girl; Anthropological Insights in Culture, Medical Technology and Medicine, Presented at National Seminar on Population and Development, Punjab

Shekar, T.V. 2005. "Vulnerable Daughters in Modernsing Society; from 'Son Preference' to Daughter Discrimination in Rural South India" XXV, IPC of IUSSP at France

Shiva, V. 1988. "Women, Ecology and Development", *Business and economics*, A Green International Star Publications.

Thapar, R. 1975. "Looking Back In History", In Devaki Jain (Ed.), *Indian Women*, New Delhi: Publication Division, Ministry Of Information and Broadcasting, Government of India

Thom-Slayter, B., and Rocheleau, D. 1995. *Gender, Environment and Development in Kenya*, a Grassroots Perspective, *afraf.oxfordjournals.org/cgi/content/citation/95/380/473* 

Upadhyaya, B.S. 1974. Women in Rig-Veda, Published From New Delhi

Visaria P.M. 1967. "Sex Ratio of Population of India and Pakistan and Regional Variations during 1901 -1961" in A. Bose (ed.). *Patterns of population change in India, Bombay,* Allied publishers.

Wadley, S. 1977. 'Women and Hindu Tradition', In D.Jacob and Susan Wadley (ed.), Women in India: Two Perspectives, New Delhi

# Appendix 1:

Table 12. Sex ratio at birth of last births by size of landholding and background characteristics, in selected states in rural India, 2005-06

	Back ground	Types of	SRB of last		Size	of the hou	sehold land hold	ling (Acres)
	characteristics	background	child	0.1	1.1	- 10	10.1 and	Total
		characteristics		- 1			above	
		SC	117	159			**	191
	Caste/tribe	ST	142	129			**	179
		OBC	127	120	1	49	200	140
		Non of the above	125	167	1	18	155	134
		Hindu	126	144	1	47	191	148
	Religion	Muslim	130	**	*	*	-	**
Andhra	C	Christian	116	120	1	44	-	129
Pradesh		Sikh	-	-		-	-	-
		No Education	131	140	1	67	215	158
	Mother's	Primary	127	141	1	15	**	126
	Education	Secondary	109	98	1	29	169	122
		Higher	118	**	*	*	**	**
		Poorest	127	119	2	25	**	171
	Wealth index	Poorer	122	95	1	57	**	128
		Middle	126	122	1	53	164*	142
		Richer	133	247	1	41	167	165
		Richest	113	**	8	34	267	159
		SC	106		80	**		88
	Coote/to:be		106 **		**	**	**	**
	Caste/tribe	ST			142	144	183*	144
		OBC	135				109	
		Non of the above	128		127 132	151 152	109 146	136 141
	<b>5.11.1</b>	Hindu	131				146 **	
Bihar	Religion	Muslim	108		115	114	***	109
Dillar		Christian	-		-	-	-	-
		Sikh	-		-	126	**	-
		No Education	120		123	126	**	125
	Mother's	Primary	134		112 184	133	**	127
	Education	Secondary	154		184 **	200	**	173 **
		Higher	**				ተ ተ	
		Poorest	121		153	103	=	138
	Wealth index	Poorer	122		114	156	=	127
		Middle	124		111	128	-	119
		Richer	155		165	184	-	166
		Richest	153		**	144	175*	159

Table 12 Continued.....

	Back ground	Types of	SRB of	Size of the household land holding (Acres)			
	characteristics	background characteristics	last child	0.1 - 1	1.1 - 10	10.1 and above	Total
Gujarat		SC	136	**	138	**	192
	Caste/tribe	ST	143	161	109	**	131
		OBC	148	143	178	233*	171
		Non of the above	202	119	223	338	219
		Hindu	156	167	169	240	176
	Religion	Muslim	159	**	147	**	163
	8	Christian	**	**	**	**	**
		Sikh	**	**	**	**	**
		No Education	150	142	159	275	162
	Mother's	Primary	149	**	105	**	151
	Education	Secondary	176	160	247	277	230
		Higher	167	**	**	**	170
		Poorest	143	144	145	**	146
	Wealth index	Poorer	132	195	146	**	166
		Middle	157	167	178	325*	183
		Richer	158	148	160	233*	165
		Richest	211	100*	225	314	230
West Bengal	_	SC	139	159	154	**	157
	Caste/tribe	ST	103	74	100	**	80
		OBC	113	88	187	**	126
		Non of the above	110	107	111	**	109
		Hindu	122	129	114	**	124
	Religion	Muslim	113	107	137	**	116
	8	Christian	83*	-	-	-	-
		Sikh	-	-	-	-	-
		No Education	109	118	144	**	122
	Mother's	Primary	141	134	133	**	136
	Education	Secondary	120	116	105	**	110
		Higher	**	**	**	-	**
		Poorest	118	122	143	**	124
	Wealth index	Poorer	118	125	112	**	122
		Middle	112	121	143	**	129
		Richer	111	75	113	**	97
		Richest	62	**	**	**	141

Note: (\*\*) very less frequency (\*) less frequency (-) no frequency

Table 13: Selected women status determinants by landholding Rural India, NFHS-3 (2005-06)

states/India	Size of the landholding (in acres)	Women earning more than husband (In %)	Women working outside the family & self employed (In %)	Women taking self decision on own health care (In %)	Women taking decision on how to spend money (In %)	Women have freedom to movement outside the home (In %)
Andhra	0.1 to 2.5	12.0	44.6	17.7	12.7	10.5
Pradesh	2.51 & above	15.4	29.2	14.6	9.0	10.1
Bihar	0.1 to 2.5	20.7	24.9	23.3	9.7	9.5
	2.51 & above	30.9*	15.3	15.3	5.2	5.6
Gujarat	0.1 to 2.5	28.0	26.9	29.0	6.3	6.2
	2.51 & above	32.8	22.4	29.7	3.6	7.5
Haryana	0.1 to 2.5	-	47.8	40.4	4.6	8.9
	2.51 & above	-	27.2	40.8	4.4	6.8
Kerala	0.1 to 2.5	-	89.9	32.2	8.7	13.9
	2.51 & above	-	58.3	20.5	9.1	-
Madhya	0.1 to 2.5	15.8	45.9	17.4	3.3	3.8
Pradesh	2.51 & above	10.5	26.0	19.3	3.6	5.7
Maharashtra	0.1 to 2.5	23.7	40.0	29.8	4.0	10.6
	2.51 & above	28.3	29.1	32.0	2.2	13.5
Orissa	0.1 to 2.5	15	59.6	40.9	6.4	4.9
	2.51 & above	21.6	42.6	28.3	2.9	1.1*
Karnataka	0.1 to 2.5	31.3	63.2	18.5	12.4	16.2
	2.51 & above	20.8	42.3	13.1	7.1	9.7
Rajasthan	0.1 to 2.5	21.2	52.9	24.1	5.2	8.0
	2.51 & above	14.5	38.2	23.8	4.0	6.6
Uttar	0.1 to 2.5	21.4	39.1	26.9	6.1	6.4
Pradesh	2.51 & above	13.6	28.3	19.1	2.6	3.0
west	0.1 to 2.5	12.0	64.7	32.7	5.1	13.9
Bengal	2.51 & above	18.6	31.1	33.1	3.8	8.6
India	0.1 to 2.5	9.6	71.4	25.2	7.4	9.4
	2.51 & above	8.9	64.3	22.9	4.5	7.6

Source based on NFHS-3

Appendix 2: