



LUND UNIVERSITY

Family Structure and Declining Child Sex Ratios in Rural India

Hatti, Neelambar; Larsen, Mattias; Gooch, Pernille

2005

[Link to publication](#)

Citation for published version (APA):

Hatti, N., Larsen, M., & Gooch, P. (2005). *Family Structure and Declining Child Sex Ratios in Rural India*. (Lund Papers in Economic History; No. 99). Department of Economic History, Lund University.

Total number of authors:

3

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Lund Papers in Economic History



No. 99, 2005

Population Economics

Uncertainty and Discrimination

Family Structure and Declining Child Sex Ratios in Rural India

Mattias Larsen, Pernille Gooch
Neelambar Hatti

Lund Papers in Economic History
ISSN 1101-346X
ISRN LUSADG-SAEH-P--05/99--SE+17

© The author(s), 2005
Printed by KFS, Lund, Sweden, 2005

Orders of printed single back issues (no. 1-65)
Department of Economic History, Lund University
Postal address: P.O. Box 7083, S-220 07 Lund, Sweden
Telephone: +46 46 2227475
Telefax: +46 46 131585

Full-text electronic issues (no. 60, 61, 66--)
www.ekh.lu.se

Lund Papers in Economic History

2002

78. Tommy Bengtsson & Martin Dribe, Fertility Response to Short-term Economic Stress: Deliberate Control or Reduced Fecundability? */Population Economics/*
79. Martin Dribe, Dealing with Economic Stress Through Migration: Lessons from Nineteenth Century Rural Sweden. */Population Economics/*
80. Martin Dribe & Christer Lundh, People on the Move: Determinants of Servant Migration in Nineteenth Century Sweden. */Population Economics/*
81. Martin Dribe & Maria Stanfors, Leaving Home in Post-War Sweden: A Micro-level Analysis of the Determinants of Leaving the Parental Home in Three Birth Cohorts. */Population Economics/*
82. Tommy Bengtsson & Martin Dribe, New Evidence on the Standard of Living in Sweden during the 18th and 19th Centuries: Long-term Development of the Demographic Response to Short-term Economic Stress among Landless in Western Scania. */Population Economics/*
83. Tommy Bengtsson & Kirk Scott, Immigrant Consumption of Sickness Benefits in Sweden, 1981 – 1991. */Population Economics/*

2003

84. Christer Lundh, Life Cycle Servants in Nineteenth Century Sweden – Norms and Practice. */Population Economics/*
85. Christer Lundh, Regional Variations in Age at First Marriage in Sweden, 1870 – 1900. */Population Economics/*
86. Martin Dribe, Childbearing History and Mortality in Later Life: Comparing Men and Women in Southern Sweden, 1766–1895 */Population Economics/*
87. Tobias Karlsson, Tidiga svenska vinstdelningssystem. Med särskilt avseende på Höganäs stenkolsbolag 1889–1902 och Kropps aktiebolag 1889–1894. */General Issues/*
88. Christer Lundh, Swedish Marriages. Customs, Legislation and Demography in the Eighteenth and Nineteenth Centuries. */Population Economics/*
89. Christer Lundh, Utvärdering av en kohort metod att beräkna andelen ogifta efter ålder i Sverige före 1870. */Population Economics/*
90. Christer Lundh, En beräkning av andelen ogifta efter ålder och giftermålsåldern i Sveriges län år 1860. */Population Economics/*
91. Christer Lundh, Den regionala befolkningsstatistiken i Tabellverket – en databeskrivning. */Population Economics/*
92. Eva Klang, System, Sympati och Arbetsdelning. En studie av Adam Smiths teorier om människan och samhället. */General Issues/*

2004

93. Neelambar Hatti, T.V.Sekher & Mattias Larsen, Lives at Risk: Declining Child Sex Ratios in India. */Population Economics/*
94. Gunnar Andersson & Kirk Scott, Labour-Market Attachment and Entry into Parenthood: The Experience of Immigrant Women in Sweden. */Population Economics/*
95. Martin Klinthäll, Return Migration at the End of Working Life: Immigrants Leaving Sweden in the Period 1979-1996. */Population Economics/*
96. Jan-U. Sandal, Sosialt Entreprenørskap */General Issues/*

2005

97. Tony Johansson, Långa vågor av tillväxt. En doktrinhistorisk studie */General Issues/*
98. Göran Ahlström & Benny Carlson, What Did Iver Olsen Tell Harry White? Sweden at the End of World War II from the “Olsen Angle” */General Issues/*
99. Mattias Larsen, Pernille Gooch, Neelambar Hatti, Uncertainty and Discrimination, Family Structure and Declining Child Sex Ratios in Rural India */Population Economics/*

Lund Papers in Economic History are published by the Department of Economic History, Lund University, Sweden. This series replaces the former series under the title *Meddelande från ekonomisk-historiska institutionen, Lunds universitet*. The change of name reflects the orientation of the series towards an international readership. The series is multilingual, but the majority of the working papers appear in English.

Lund Papers in Economic History include papers in the following topic areas:

General Issues

Development Economics

Education and the Labour Market

Population Economics

Lund Papers in Economic History are published as occasion arises, not at fixed intervals. Printed issues are distributed to libraries. From 1999 and onwards, full-text electronic issues are also available on www.ekh.lu.se. Those who would be interested in receiving information by email on new issues of **Lund Papers in Economic History** are requested to send an email message to Lund.Papers@ekh.lu.se.



LUND
UNIVERSITY

Uncertainty and Discrimination

Family Structure and Declining Child Sex Ratios in Rural India¹

Mattias Larsen, Pernille Gooch and Neelambar Hatti

Introduction

In some parts of the world, gender inequality is reflected in unusually high mortality rates of women and female children and a consequent preponderance of men in the total population (Sen, 2005). In an article in 1990, Amartya Sen noted the alarming fact that the sex ratio for female children in China, India and South Korea was actually deteriorating while the overall sex ratio for females in those countries had marginally improved. Given the low ratio of 0.94 women to men in South Asia, West Asia and China indicating a deficit of 6 percent, he surmised that since in countries where women and men receive similar care the ratio is about 1.05, the real deficit is about 11 percent of their women. These numbers tell quietly “a terrible story of inequality and neglect leading to excess mortality of women” (Sen, 1990). In India, the Census of 2001 has clearly brought to light the widening gap in the ratio of girls to boys, confirming a trend that has been in place since 1901. This is most pronounced in the youngest age group, 0-6, indicating the scale of injustice as well as the long-term social and economic consequences implied.

India is thus a country where the natural biological sex ratio of slightly more females than males in the population is reversed, particularly in the youngest age group. Although there has been a heightened consciousness of the problem, census figures show that the sex ratio of the age group 0-6 has declined at a disturbing pace since

¹ This paper is part of a series within the ongoing project, “Lives at Risk: Discrimination of female children in modern India”, financed by the Swedish Research Council. We are grateful to Minnamane Ramachandra Bhat, Karnataka, Laxmi Nodiyal, Uttaranchal, and Dr. Suresh Sharma, Institute of Economic Growth, New Delhi, for their invaluable assistance in the field. We thank our colleague Dr T.V. Sekher, Institute for Social & Economic Change, Bangalore, for his invaluable contribution.

1981² while the overall sex ratio has risen slightly. The child sex ratios have continued to decline despite improvements in general welfare and female status and point to deeply rooted structures of gender inequality. Alongside the ongoing process of modernisation and smaller families, it appears that a substantial number of younger couples fear bringing up daughters and deliberately choose not to.

The Census results also show marked declines in areas and social groups that earlier showed more balanced sex ratios. This indicates that discrimination against daughters has spread to new regions and from higher social strata to lower, suggesting a necessity to analyse the structural characteristics of the problem. In order to understand the economic, social and cultural realities behind the disturbing census figures comparative case studies from different parts of India are needed. Such areas where declining child sex ratios are a relatively recent phenomenon, demonstrating the spread of the phenomenon, are of special interest. In this paper we try to approach the problem from a wider and more holistic perspective in order to capture the transient quality of the structure in which girls are disfavoured and put at risk.

This article builds upon the recognition that the declining child sex ratios are a *result of an ongoing process of societal change*. Looking at areas both in the north and in the south which have shown significant decline in the child sex ratios between 1991 and 2001, the article draws on preliminary results from recently conducted field studies in rural areas of Karnataka in the South and of Uttaranchal in the North. Uttaranchal has, just as its neighbour Himachal Pradesh, shown an alarming decline in the child sex ratio from 948 in 1991 to 906 in 2001. Of special interest are tentative results of case studies from Siddapur Taluk³, Uttara Kannada District, in the Western Ghats of Karnataka and from Pithoragarh Tehsil, Pithoragarh District, in the eastern part of Uttaranchal. For both cases the outstanding demographic features are *a very low child sex ratio and a high proportion of joint families*. Two additional cases positioned at the opposite ends of the spectrum of high respectively low child sex ratios are used for comparison. Our sample villages in Puraula Tehsil, Uttarkashi District, in the northwest of

²The child sex ratio (CSR) decreased from 945 to 927. Census of India measures the sex ratio as number of females per 1000 males as opposed to the standard international norm of number of males per 1000 females.

In all fairness, it should be mentioned here that it was Visaria who first pointed out the sex ratio decline. See P. Visaria, *The Sex Ratio of the Population of India*, Monograph 10, Census of India, New Delhi, 1971.

³Taluk and Tehsil, are different terms used in different regions for the same thing, namely, the major revenue, administrative and planning unit below the district.

Uttaranchal and from Siddapur Taluk, Uttara Kannada District, exhibit high proportions of joint families together with high child sex ratios⁴.

To begin with, we need to consider the overall process of societal change, making up the context in which the decision-making behind the discrimination of daughters takes place. At the centre of the factors concerning the problem of daughter discrimination stands the family. The problem of “missing girls” can be ascribed to social, economic and cultural factors, which together create incentives for son preference and disincentives for raising daughters. However, it is within the family that the decision-making takes place⁵. Hence, it is of importance to analyse the *relationships between these factors with a focus on the family*. In order to understand why the lives of female children are at risk and why there is an increasing discrimination against girls in India, it is particularly important to *consider the intra-household allocation of resources*. We will argue that parents, as a reaction to the uncertainty that those very changes produce, ‘fall back’ on traditional norms regarding gender and domestic roles. This makes the bargaining situation and the criteria for the allocation of resources highly adversarial for girls, creating a structure in which there is little space for daughters. While the functions of the family in India are changing in relation to social and economic developments perceptions regarding needs or contributions appear to a high degree to be defined by norms that are more institutionalised in a joint family. (Pernau, 2003) Intra-household relations are related to development and changes in society, which shape and change the social structures and norms, which condition the intra-household bargaining. Changes such as rising levels of education, development of a wage economy, and in living arrangements are examples of such structural aspects that directly affect the institution of the family (Thornton & Fricke, 1987).

Modernisation, uncertainty and bargaining space within the household

India is in a transitional phase between the traditional and modern India, where old norms and expectations clash with modern ideas; in other words, India is experiencing a process of transformation with

⁴ We assume that some basic cultural differences between northern and southern India are reflected in demographic behaviour (Dyson and Moore, 1983), which is why a north-south comparison is of interest.

⁵ “The family is an institution that simultaneously envelops and unfolds the ideal and normative on one hand and actual behaviour on the other. It works as a conduit, and sanctions and provides the potential for continuity as well as change in structures of kinship, marriage and reorganization of living arrangements in accordance with the times” (Patel, 2005:31).

considerable changes in its social and economic structures. With its relatively sustained, high rate of growth during recent years, rapidly expanding private and service sectors, rising demand for well-educated professionals and a growing middle class, India is undergoing far-reaching changes. The Green Revolution has contributed to large productivity gains, there has been a spread of cash economy, improvements in communications and transport; the media has grown in importance and there has been an increase of contract-based relationships replacing previous personalised patron-client ones. These changes have either directly or indirectly increased the value attached to the acquisition of basic levels of information and knowledge (Kabeer, 2000). It is against this background of a traditional society in transition, a situation of fluidity, the problem of daughter discrimination needs to be conceptualised.

As a point of departure, we suggest that the parents' basic obligation is to make decisions concerning the future of their children as the children are not able to do so themselves. However, we also have to recognise that in the Indian context, where no institutional alternative to the family as a source of social insurance has emerged, parental decisions are likely to be powerfully motivated by their concerns about their own security in old age and the best ways to assure it (McNicoll & Cain, 1989, Kabeer, 2000)⁶. Two aspects of family in India stand out in stark contrast to western patterns of family organisation. These two, the securing of old age support through children, and the arranged marriage are also the two most important factors, which tie the interests and the decision-making of one generation to the next. The existence of such an understanding and commitment between parents and children, commonly called an *inter-generational contract* (Croll, 2000, Kabeer, 2000, 1996, Greenhalgh, 1985, Collard, 2000), is one of the factors which appears to have become threatened through the overall social and economic changes. While economic changes may have left child to parent flows intact, they have altered the flow of resources from parent to child. This suggests how *socioeconomic changes may have put a strain on the conditions for an inter-generational contract*, thus making the disincentives against raising daughters even stronger. In this context it is possible to talk of a '*parental dilemma*', in the sense that the parents

⁶ In fact, the right of parents without any means of their own to be supported by their children is recognised in section 125 (1) (d) of the Code of Criminal Procedure 1973, and in section 20 (3) of the Hindu Adoption and Maintenance Act, 1956 (Bhat & Dhruvarajan, 2001).

have to make a decision regarding the gender composition of the family⁷.

Another important aspect to keep in mind is the “life cycle element” (Caldwell, 1978:563), which has particular importance in a joint or extended family setting with *closely connected interests of different generations of family members*. If one manages to tolerate a presently oppressive situation it can yield rewards later as sons become fathers and daughters-in-law become mothers-in-law. Naturally, this element is intimately linked with the interests of younger family members or future generations. Family members who have invested in this factor, i.e. who have subscribed to the social norms of the joint family, have opposing interests with young family members and even with their own children. With smaller preferred family sizes a particularly unfortunate gendered consequence of this is how it expresses itself in a woman’s bargaining position within the household increasing with the birth of a son (Kandiyoti, 1985, Dyson & Moore, 1983, Agarwal, 1994, 1997, Kabeer, 1996). Even though women can gain considerable power in the household in their old age, this depends on having sons who support their mother’s voice at the expense of their own wives (Das Gupta et al, forthcoming).

Parents are compelled to include other interests than their children’s, not the least the parents’ own, in their decisions⁸. Once we have recognised that parents’ obligations are to optimise these *intergenerational interests*, the obvious question that arises is *why daughters come to be excluded from the results of these deliberations*. To analyse this, the concepts we will necessarily work with need to be clarified.

Modernisation can be understood as a process of transformation with an increased dependence on the market mechanisms. From a rural perspective, this implies understanding modernisation as a process of greater inclusion and integration of the village economy in the larger transformational direction of society. Important sources of structural change in India are increased penetration and, therefore, dependence on the market mechanism and government intervention particularly through land reform and technology in agriculture. Such a “Great Transformation” (Polanyi, 2001[1944]) is a process of ‘disembedding’ of the economy from social relations resulting in greater *complexity*. The resulting uncertainty for actors generates a desire for a re-introduction of

⁷ In crass terms, this implies a decision whether to have only sons and invest in their future because having a daughter would mean an investment with no return.

⁸ This appears to be directly related to the joint household family structure (McNicoll & Cain, 1989).

social devices to reduce the uncertainty faced (Polanyi, 2001[1944], Beckert, 1996)⁹. It is a transformation away from pre-modern society in which economic relations are distinguished by a minimal need for trust (Giddens, 1990). Giddens sees four ways in which to organise the integration of action in pre-modern society, which are disembedded from the local community in the process of modernisation (Kaspersen, 2000). Kinship, narrow geographical context, religion and tradition all structure interaction through their historicity, which lends them rigidity. As they are based on particularistic bonds they are ‘taken for granted’ and are not questioned.

Increased division of labour itself leads to higher complexity¹⁰. The process of modernisation ‘disembeds’ social and economic exchange from traditional forms of trust as they prevent the spread of division of labour from which novel cooperation and exchange relations emerge. The increased potential for socio-economic mobility and the uncertainty, which it entails, also increases the need to plan family size and gender composition more deliberately (Das Gupta, 1997). Cooperation and exchange become possible without having to rely on traditional mechanisms (Giddens, 1990). However, when the structuring influences of kinship, tradition, and religious cosmologies on actions are disembedded, the basis for cooperative relations is replaced by a situation in which their necessary stabilisation can only be achieved through the active inter-subjective communication of actors. Trust is built up gradually through the process of exchange itself (Curtis, 1986). The trust achieved through such communicative processes of reproduction is thus distinguished from the traditional forms of trust by their *contingency*. The increasing contingency in expectations of what others will do gives rise to *uncertainty* and a growing need to shape stable contexts of trust (Beckert, 2002). Thus, the direction of our analysis should be toward the reflexive interplay of parents’ *intentional rationality* (Beckert, 1996, 2002) and the ‘social devices’¹¹ they use to

⁹ Polanyi’s (2001[1944]) assertion of an inherent “countermovement” necessary to create stability after movement toward a laissez-faire economy has found resonance also in analysis of family development in Degler (1980), who argued that the twentieth century American family was created an exact opposite of the market economy’s concept of human relations. For Polanyi, the important point is that both processes are *politically* engineered and that the ‘disembedding’ is a necessarily abortive process.

¹⁰ Ester Boserup (1970 [1989]:5) writes in her seminal work that: “[e]conomic and social development unavoidably entails the disintegration of the division of labour among the two sexes traditionally established in the village. With modernisation of agriculture and migration to towns, a new sex pattern of productive work must emerge, for better or for worse”.

¹¹ Beckert describes ‘social devices’ as “encompass[ing] all forms of rules, social norms, conventions, institutions, social structures, and power relations” (1996:820).

confront the uncertainty of the situation in which decisions have to be made regarding the future of their children¹².

The discussion thus leads to a focus on the relationship between change and the structures used to confront it. The most basic, fundamental, tension in society is between the changing nature of the social world and the “frozen structures” or *institutions*, we need to be able to function socially, to interact, in the highly complex, continually changing, and thus uncertain world we live in¹³. Institutions and social structures can be understood to exist for actors to be able to cope with the complexity of causal relations in the social world. This complexity can be seen as arising from the unintended consequences of our actions (Giddens, 1984). Structure and action can therefore be seen to be related in how actors, in their actions, produce and reproduce the structures they experience as conditions of action without having the ability to control intentionally their concrete content (Giddens, 1984). Our perceptions of ourselves and of our interests as well as of our relations to others are conditioned by the institutional context of which we along with others are part; they are vital elements of our socialisation. The complexity of the social world due to unintended consequences prevents the anticipation of outcomes; the resulting uncertainty complicates decision-making when actors have insufficient structure to base their decisions on. Simultaneously, institutions are the outcomes of individuals’ need, or demand, for order and coherence in the face of change and uncertainty. They create reciprocal expectations which limit the choice set of actors, and thereby reduce uncertainty. Institutions and conventions emerge both as responses and as definitions of uncertainty (Storper & Salais, 1997). Institutions are representations of the basic understanding of the changing world around us. That understanding is fundamentally embedded in the “shared habits of thought and behaviour” i.e. cultural and religious beliefs of society (Hodgson, 2003, Harriss, 2003). However, institutions are not static; instead they are manifestations of peoples’ ongoing legitimisations of their own actions and of the institutions, and hence the reproduction of them. Institutions are thus changing even though their function is to provide constancy. An institution is, after all, by definition *constant during a period of time*.

¹² As Beckert points out: “[i]f we want to understand how decisions are made by actors deliberately oriented toward their utility, but who cannot know the optimizing alternatives ex ante, then the complexity-reducing structurings are a central subject for study” (2002:286).

¹³ This argument presupposes a tension in society but it should be pointed out that this tension is not to be understood as a “state of nature” or as tension between people. Rather, it is a tension between change and the devices with which people confront it, and is therefore not to be understood in a deterministic sense as something, which is inherent to, and unalterable in human relations.

Structures provide ‘fixity’, in the form of ‘social devices’, but there is a continuum of ‘fixity’ resulting from these devices just as there are absolute and relative values. It is thus not enough with a ‘functionalist’ understanding of institutions since they can legitimise inequalities and discrimination. Institutions are also the media through which power relations are reproduced (Goehler, 2000) and this quality is central in understanding institutional change or rigidity (Harriss, 2003).

Situations where actors cannot anticipate outcomes of decisions and therefore also not assign probabilities to the outcome are situations characterised by *uncertainty* (Beckert, 1996, Dequech, 2001, 2003, Harriss, 2003). There is thus an apparent link between uncertainty and the degree of complexity and change of the surrounding social context and the way decisions are made. Uncertainty in this sense concerns the problems actors have in assigning means to ends. But the goal ambiguity and the uncertainty stemming from not knowing the ends does not mean that parents do not make efforts to optimise outcomes with their choice of means. The central obligation of parenthood is, after all, for parents to make decisions for their children as they themselves, the children, may not be able to do so for themselves. The Indian situation with arranged marriages places particularly great responsibilities on parents. It is a question of optimising in terms of the situational structure and therefore also a question of rationality. The fact that the child sex ratios are low exemplifies how parents optimise the utilisation of means at hand¹⁴. When parents undertake a collective enterprise such as having and rearing children they make plans for something far in the future and for that they need to establish a basis for trust not only in one another, but also in the wider family circle (Curtis, 1986)¹⁵. Therefore, the intergenerational utility includes reproducing the social structure or institutions of the family.

Nevertheless, it is inappropriate to think of rationality in terms of conventional use in economic theory where “rational does not refer either to means or to ends, but rather to the relating of means to ends” (Polanyi et al, 1957:33)¹⁶. Instead, the uncertainty of the situation in this

¹⁴ One very good example of how the choice of means is done in a disturbing, yet optimising way is the extent and speed at which sex determination tests and subsequent abortions have gained popularity.

¹⁵ A possible tool for understanding the rationality behind parent’s decisions is the concept of social capital (Coleman, 1990, Putnam, 1993, Astone et al, 1999).

¹⁶ A comment summarising the problems with this type of conceptualisation of rationality is offered by Hays (1994:62), who asserts that: “The allegedly “rational” actor maximizing gain through constant single-minded calculation of efficiency and potential advantage appears to me, as she did to Parsons (1968) and Weber (1958), not as an agent at all, but as someone entirely controlled by an external structure of opportunities and constraints, caught in a meaningless (socially structured) iron cage”.

case relates to both ends and means as parents have increasing difficulties in formulating the ends since their children may have, in many ways, completely different ideas about how they want to live their lives. It is therefore a question of *intentional rationality* (Beckert, 1996, 2002) in which structural rigidities take on an important role. It is in this context that institutions and social structures are central as they play the double role of both constituting the context and of enabling actors to make decisions based on that situational context, i.e. being both constraining and enabling (Giddens, 1984, Sewell, 1992, Hays, 1994).

A very useful way of conceptualising the interconnections of structure and agency in the micro foundations of the institution of the family is in terms of cooperative and conflicting aspects of intra-household relationships. Such a conceptualisation focuses on the nexus of sociological and economic theories as it incorporates congruent (sociological) and conflicting (economic) interests (Swedberg, 2003). These are shaped and influenced quite differently depending upon the endogenous characteristics of the family and the exogenous material conditions. A family is unlikely to self-organise without institutionalised patterns of purposive parental actions and interactions, much like Polanyi's (2001 [1944]) market does not self-organise in a socially disembedded way (Purkayastha, 2003).

Serious conflicts might be involved in decisions regarding household arrangements, concerning who does what and who gets which benefits, but the nature of the family organisation form requires that these conflicts be shaped within the general frame of cooperation, in which conflicts are treated as deviant behaviour (Sen, 1987). A family should thus be seen not only as a space of harmony, but also of power relations (Pernau 2003: 10) where some member's interests are set aside for other's in order for the household to persist over time. Incorporating the immediate institutional context, the institutional arrangement of the household, deepens the analysis more directly. Using a bargaining, and negotiation, model for household analysis enables us to incorporate questions of power and ideology in realization of the fact that the outcome is not simply a result of access to resources or other economic factors. Within households the bargaining power of individual members is shaped by cultural, economic and political factors in the surrounding society (Moore 1994: 87). The household should thus be considered as part of the processes of social, economic and political changes that encompass them and which play important roles in cultural constructions of gender and power within the family.

Amartya Sen's Gender and cooperative conflict model (1987) builds on the concept and model of "bargaining problems", as first

developed by Nash (1950)¹⁷. However, Nash's model focused exclusively on individual interests and assumed that the actors, upon which it focused, had clear perceptions of their individual interests¹⁸. Sen's model extends the bargaining problem by adding a structural dimension. Typically, household economic models have, in their, often, exclusive focus on individual interests, failed to recognise the structural aspects of social relations and the different conditions facing men and women have escaped the analysis. Sen argues that an exclusive focus on individual interests "misses crucial aspects of the nature of gender divisions inside and outside the family" (Sen, 1987:131). Factors that may determine bargaining power, especially qualitative ones such as social norms and perceptions, need to be considered (Agarwal, 1997). Nevertheless, the "bargaining problem"-model has an advantage over other models for understanding households, precisely because it allows for a capturing of both the "extensive conflicts" and the "pervasive cooperation" in household arrangements (Sen, 1987), which in turn is crucial when analysing intra-household allocation of resources. It "keeps sight of both structure and agency" (Seiz, 1995:616).

The bargaining approach can be briefly outlined as follows. Household members will cooperate insofar as cooperative arrangements make them better off than non-cooperation. The bargaining problem first arises when more than one possible cooperative solution exists and when each of these solutions are better for both parties than non-cooperation. (Sen, 1987) There are many solutions of cooperation that are better than non-cooperation, but they are not, of course, equally good for both parties. The bargaining problem first arises when more than one possible cooperative solution exists and when each of these solutions are better for both parties than the breakdown position. Among the possible cooperative outcomes, some are more favourable to each party than others – that is, one person's gain is another person's loss - hence the underlying conflict between those cooperating. The resulting outcome will depend upon the relative bargaining powers of the household members. "It is this mixture of cooperation and conflicting aspects in the bargaining problem that makes the analysis of that problem potentially valuable in understanding household arrangements, which also involve a mixture of this kind" (Sen, 1987:132f). While using the bargaining

¹⁷ Nash's (1950) model of "bargaining problems" later became central in Game Theory and for "The Prisoner's Dilemma" (see Axelrod, 1984).

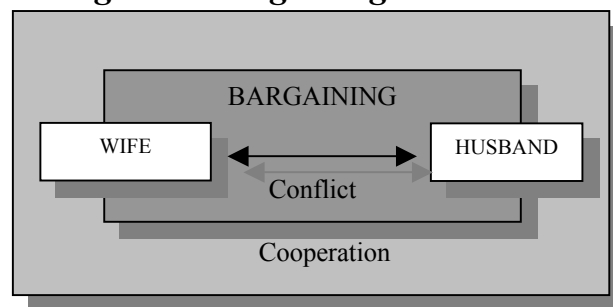
¹⁸ Furthermore, Nash's assumptions were highly, if not extremely, idealized. In clarifying the assumptions Nash writes: "In general terms we idealize the bargaining problem by assuming that the two individuals are highly rational, that each can accurately compare his desires for various things, that they are equal in bargaining skill, and that each has full knowledge of the tastes and preferences of the other" (Nash, 1950:155).

problem approach to intra-household dynamics provides an excellent framework for an analysis of the bargaining situation, it says little about the complex, mainly qualitative, factors that determine the actual bargaining powers and thus needs to be extended to facilitate that.

The bargaining approach to intra-household dynamics provides an excellent framework for an analysis of the *bargaining space*. The space open for bargaining and negotiation between household members cannot be purely defined on the basis of individual assets, though, but must also take into consideration ‘socially and historically specific views about the rights, responsibilities and needs of particular individuals.’ (Moore 1994:87)

The institutional set up of social norms and rules built on active participation in cooperation and based on the obvious benefits from cooperation, is also the context within which everyday conflicts of interests are played out. It is through this structuring, normative, aspect that interaction becomes biased. It is, in other words, in the *coexistence of congruent and conflicting interests that inequality exists*. In fact, there is a coexistence of congruent and conflicting elements even in the choice between different cooperative solutions. Recognising this fact is central in understanding the reproduction of inequality. This is so because, “the value system that leads to implicitly cooperative behaviour within a group may well be directed toward a particularly unequal solution in the choice between different cooperative outcomes”. (Sen, 1989:66) An unequal solution may be a superior option to fully atomistic and individualistic behaviours for all parties. But still, one group may systematically benefit less from cooperation than another. This is precisely the case for intra-family inequality and gender bias.

Figure 1. Bargaining Situation.



Source: Goehler (2000), (modified).

Acknowledgement of differences in perceptions of individual interests and of legitimacy of existing household arrangements is necessary to understand the existence of inequalities. Sen argues that there is an advantage in distinguishing between objective aspects of a

person's interests and that person's perceptions of self-interest. For example, it might lie in the self-interest of a man to marry off his daughter with a large dowry although it "objectively" drains the household of essential economic assets. "The choice among cooperative solutions may be distinctly unfavourable to a group – women, for example – in terms of objective criteria of functional achievements, without there being any perceived sense of 'exploitation', given the nature of perceptions of self-interest and conceptions of what is legitimate and what is not". (Sen, 1989:68) In particular, three necessary departures from the standard model of bargaining problems result from this. (Sen, 1987): (1) Well-being levels at the breakdown position. (2) Perceived interests. (3) Perceived contributions.

Firstly, how do differences in breakdown position influence the respective party's bargaining powers? If a woman's fate is to be disowned from her community in case of a divorce, where such a thing as a divorce is at all thinkable, then the severity of the situation she would find herself in, social exclusion, strongly weakens her ability to secure a favourable 'collusive' outcome. The "breakdown position" is of direct relevance to the choice of collusive outcome. It affects the respective bargaining powers of the two people since they relate the option of a "breakdown" to an option of cooperation. Secondly, perceptions of interests may cause a person to get a less favourable collusive solution if he or she attaches less value to personal well being than to the well being of others in the household. Thirdly, perceptions regarding who contributes what and how much, and the corresponding legitimacy to a bigger share of the fruits of cooperation influences the collusive solution to be more favourable to the person perceived to contribute more. This reflects a bias against reproductive work, favouring productive work. Women's possible participation in outside income generation or even to some extent in agricultural production influence their relative shares and improve their breakdown position.

Sen suggests an analysis of questions of legitimacy through an extension of his own "entitlement approach". (Sen, 1981) However, the "entitlement approach" is essentially a legal concept and as such it needs to be extended to be able to deal with the allocation of resources *within the household*. (Sen, 1987) The extensions of the bargaining framework deal primarily with issues of *legitimacy* regarding entitlement in a situation (intra-household relations) where such entitlement is not validated on the basis of private ownership. Intra-household distribution is basically socially determined and mediated by non-market factors. This is why it is essential to direct attention to issues of legitimacy. The concept of "extended entitlements" makes it possible to link the intra-

household allocation of resources and the process of decision-making within the household with questions of legitimacy. Since legitimacy is linked to the prevailing institutional setting, such a framework can help understand how household arrangements may be structured unequally, and how that structuring actually takes place. Since the family is the most basic and fundamental form of organisation and structuring of social life, it constitutes the most immediate and relevant institutional arrangement to focus upon.

Case Studies¹⁹

1. Karnataka

Situated on a tableland where the Western and Eastern Ghat ranges converge into the Nilgiri range, the South Indian state of Karnataka has a population of about 53 million. The total literacy rate is 66.6%, male literacy being 76.1% and female literacy 56.9%. The rural literacy is 70.4% for males and 48.0 for females. The overall sex ratio is 965 while the rural sex ratio is slightly higher at 977. Karnataka is commonly divided into four regions according to their physical characteristics, namely Coastal, Malnad, Mairan plains and Southern Mairan. Each region also has its own distinct social, economic and cultural characteristics.

Uttara Kannada District and Siddapur Taluk are situated in the North-western Malnad part of the state. It is characterised by ecological features typical of the Western Ghats' range. The deciduous forests and the elevation give it a relatively mild climate and access to natural

¹⁹ Empirical evidence used in this paper consists of data collected in interviews, in focus group discussions (FGDs) and in participant observations. It needs to be emphasized that this paper is preliminary and only a small part of the information gathered through FGDs has been utilised. FGDs have been conducted in three talukas in Karnataka, two in Uttaranchal and two talukas in Himachal Pradesh as well as in one taluk in Tamilnadu. This information has been complemented by village level and taluk level data also collected during fieldwork.

The outcome of daughter discrimination is, in fact, not difficult to see quantitatively. It is, for example, possible to get a clear cut picture of the ratio between sexes from attendance registers of how many girls and how many boys attend, or not attend, the local kindergartens. Likewise it is possible to trace the inequalities in sex ratios to geographical area, to social groups and to economic groups. However, if one's intention is to analyse the underlying reasons for this anomaly, it is necessary to shift focus from the outcome, the ratio, to the social process, which results in skewed sex ratios. The factors behind the dynamic are highly relative in nature and to a large degree the outcome of the subjective interpretations made by the actors involved. Thus, the decision-making process, which leads to discrimination of girls, has to be understood in terms of the social context. That social context is conditioned by relationships of power between its actors, the norms under which they act and the social structure to which they contribute and act within, all of which is of a qualitative nature.

irrigation from the many rivers that flow in the valleys. The rural literacy rate is 81.6 for males and 63.5 for females. The distinct physical features of the area have shaped the villages, which tend to be small and scattered; it also makes communications difficult and in the more remote villages communications are still sparse. Traditionally, a majority of the people derive their livelihood from the cultivation of paddy and areca²⁰. The areca palm trees are grown in gardens or plantations, normally situated down in the valleys and are mostly inter-cropped with spices such as cardamom, pepper and to an increasing extent also with vanilla, together with coffee and various fruit trees. The case study was conducted on the plantation economy side in the border area between plantation and paddy economy.

The district, as well as the area of study, is characterised by two types of cultivation and its distinct economies²¹. (Joshi, 1997) Changes in structure have been fundamental in the paddy economy, whereas the plantation economy has remained largely unchanged (Pani, 1997, Joshi, 1997). The most notable changes came with the Karnataka Land Reforms (Amendment) Act of 1974, an important feature of which was the abolition of tenancy by conferring ownership on the erstwhile tenant. (Joshi, 1997) This affected the paddy economy with its very high incidence of tenancy and high farm rents. In the plantation economy, where a labour shortage posed a major problem, where tenancy was rare and where the land rent was low, the agrarian structure has remained relatively intact. Today, farm wages for women in this area are the highest in the state while wages for men are the third highest (Directorate of Economics and Statistics, Karnataka, 2004). The subsequent differences in institutional structure are evident in the fact that the family structure of the paddy economy area is generally nuclear, whereas the joint family form is dominant in the plantation economy area.

Instead of structural change, the plantation area has experienced modernisation from increased availability of education facilities and from the diffusion of modern 'values' through TV. Perhaps equally important has been the improvements in transport and communications. In other words, the area has become modernised in the sense of *access* to certain aspects of modern life. It is a relatively well-off area as it enjoys

²⁰ The Areca nut, or betel nut, is the main ingredient in the stimulant *paan*, widely popular in South Asia and parts of Southeast Asia.

²¹ Collins (1925) divided the area of study into two distinct tracts. A rice tract covering an area of 83.7 sq. m., with 45 villages and a population density of 155 per sq. m., and a garden/plantation tract of 248.2 sq. m. with as many as 157 villages and a density of population of only 77 per square mile. (as cited in Joshi, 1997)

fertile soils, natural irrigation and relatively lucrative cash-crop agriculture.

Siddapur taluk as a whole, where the study areas are located, has one of the lowest child sex ratios in the state. As per the 2001 census the general sex ratio in the district is 970 and for the taluk it is 973. The child sex ratio (0-6 years) of the taluk declined to 896, from 927 in 1991. This is a significant decline with many implications. While the first study area has an equal number of boys and girls, the second study area is characterised by having a *very low child sex ratio* (CSR), as low as 788/1000²² in 2002. Both, however, have a *high proportion of joint households*²³, about 71% as compared to the all Karnataka figure of 44%. (NFHS-2, Karnataka, 2001).

The overall, rather dramatic decline in CSR between 2000 and 2003²⁴ correlates well with the very poor rains in the same period²⁵. One respondent explained the situation like this: “The rain and the crop was average during the last three years. In 2001 there was very little rain, last summer there was a shortage of water for drinking. Under normal conditions, one acre will give maximum 15 and minimum 10 bags of paddy. In 2001 we got only 5 bags per acre”. Rearing children is a heavy financial burden and the potential role of children as an insurance against risk does not hold in this area (Cain, 1981, Jeffrey & Jeffrey, 1997). Apparently decisions concerning childbearing have become increasingly conditioned by economic factors. Indeed, the preliminary findings of our study substantiate that childbearing is closely linked to economic reasoning where many children are considered a financial

²² This figure is based on data from the Child Development Project Office (CDPO), Anganwadi attendance records for Siddapur Taluk, Uttara Kannada District. One of the duties of the kindergarten teacher is to keep records of all children below 7 years in her area. These “attendance records”, as they are called, even include children who do not actually attend. This information is collected by visiting households to find out why the child is not attending kindergarten; this facilitates following up households suspected of neglect of children.

²³ As per 1981 census categorisation (see Annexure-1), 21 per cent of the families are considered as joint in rural India. The NFHS (1992-93) reports the proportion of joint families at a higher level, 27 per cent. In rural Karnataka, the reported levels of joint families are 18 per cent as per census and 25 per cent as per NFHS. Over the years, it has been observed that the joint family is slowly giving way to nuclear families even in rural areas of India and the socio- economic characteristic of the head of the family has a definite role to play in the growth of nuclear families in India (Niranjan *et, al*, 1998).

²⁴ The CSR for the Taluk declined from 939 to 922 while the CSR for the plantation tract area declined from 888 to 796 and the CSR for the rice tract declined the from 1051 to 952 (these data are taken from the Child Development Project Office (CDPO), Anganwadi Attendance records in which the taluk is divided into five circles).

²⁵ Rainfall was classified as deficient during the period 2001-2003, actual rainfall being 38%, 34% and 51% *less than normal* respectively. (Directorate of Economics and Statistics, Karnataka, 2004)

burden²⁶. But it is important to remember that such a change in reasoning may not affect the way parents legitimise their son preference, but when such a preference is strong it would indeed have an effect in terms of lower CSR. This in turn is reflected in comments like; “The ideal family is of two sons and one daughter. For us it will be difficult in the future since we already have two daughters”. Differences in agrarian system appear to influence the child sex ratio. Problems of poor rains hit the paddy cultivators harder as they have no reserves, which the first comment above clearly illustrates.

Practically in all respects the first study area is less developed. It was quite isolated until very recently and even today it only has limited communications to other areas. Although there have been considerable changes in agriculture after the tenancy reform, making it possible for people to cultivate their own land and subsequently earn more, there is still a big difference in income level when compared with the second study area. The low level of education is reflected in how the young people of the first area do not look for possibilities outside their village. One respondent put it like this: “In our village most people have their fathers land and they find it sufficient. They feel that if they work there it is enough. This is the kind of attitude we have here”. Their situation gives very little confidence to try to live a different life and their *mobility* is considerably lower than the one of young people of the second study area. The dilemma they face is that they feel: “Even if we go to school we will just fall back into agriculture, so because of that many people don’t see the point of going to school”. This situation should be seen in contrast to the one in our second study area where the young use the opportunities and mobility given to them through education and look for different ways to live their lives than their parents do.

The mean age at marriage for women in the first study area is below 18 years at 17.5 and it is still so that, as one woman explained; “To some extent and in some cases, education has been cut off since marriage has been fixed”. However, this type of attitude seems to be changing; “Girls have more courage to question the age at which their parents want them to marry now”, as explained by the women in the focus group discussion (FGD). Changes are taking place and women are gradually getting more say about their own life and their mobility is

²⁶ Particularly having daughters can create problems because of the still prevailing practice of giving dowry. This practice has many adverse consequences. These include the often, substantial expenses borne by the families of brides, which may be resulting in female foeticide and infanticide (Das Gupta, 1987; Das Gupta and Bhat, 1998).

increasing. However, there is a long way to go and the villagers constantly return to how they feel backward, subordinate and cut off.

The second study area, with very low CSR, on the other hand, has had *more access to modern aspects of life*. Not only has fertility gone down with smaller family sizes, there has also been a rise in education level where at least a degree is the minimum the better off families provide for their children. The rise in education has led to an *increased mobility* among the young. The young generation also marries considerably later. An effect of this development was explained in the male FGD in the second study area: “Now there are equal opportunities for boys and girls particularly when it comes to education. With regards to education for girls, it is now becoming so that the girls themselves are not ready to marry a boy who lives in a village. They want to have a good groom who lives in town and has a good steady income”.

Both study areas share a son preference expressed in such remarks as: “According to tradition one son and one daughter is the ideal. With one daughter we need a son. A son is needed for heading the household or for agriculture work. With only daughters the land will go to the daughter’s husband’s side”, or “The ideal family is one son and one daughter. The son continues the bloodline and is old-age support. The daughter is important to expand the social network”. However, while *not* one respondent in the second study area talked about attaining the preferred gender composition of their families through the traditional way of repeated births until a son is born, this is still the method parents’ use in the first study area. This was expressed in statements like: “A son is necessary to take care of us in old age and also to perform ceremonies when we have passed away. First we had three daughters and then we finally had a son. Now everybody shows more affection to him”.

In the second study area this practice has given way to modern methods of determining the gender composition of the family. This was illustrated in comments like the one given by one woman in the second study area: “I needed at least one son. He will stay close to me and take care of me. I first had one daughter, and then I wanted to have at least one son. If the second had been a daughter I would not have gone through with the birth. The daughters move out when they marry”. Most likely she had undergone a sex-determination test and as indicated by the statement was ready to abort the foetus had it been a girl. That foeticide is a widespread practice was expressed in remarks such as: “A doctor from [*a nearby town*] does the SDTs. For a higher price he brings patients to the town. He also performs abortions”. Or in statements such as: “If somebody has a boy they don’t try to have more children, people will only try to have one more child if the first child is a daughter and

only to get a son. People want to have male children. Therefore, regardless of the fact that it is against the law the female foetus will be aborted". Thus, *there has been a shift from son preference to active daughter discrimination* made possible by modern methods in the second study area but not in the first. When people reason as they do in the first study area; "With two children I will stop, even if it is two daughters", it indicates how a similar shift has not taken place in the first area.

While both areas have a strong son preference in common, that preference has been increased by the changes brought along by modern 'values', particularly in an increased mobility for the young, in the second but not in the first study area. At the same time there has been a change toward actively discriminating against girls, whether unborn or born, facilitated by modern techniques. This change appears to be what has contributed to the decline in child sex ratio.

These two patterns of change towards modernisation could be explained in terms of 'push' and 'pull' factors. In the first study area, agriculture has undergone such changes through tenancy reforms, what we consider a 'push' factor, that the economic reality for the rice cultivating families has been altered. At the same time, the families continue to use the traditional method of repeated births in order to achieve the desired gender composition. On the other hand, in the second area, the increased availability of opportunities outside agriculture, what we would call 'pull', has created strong incentives for investment in education. This in turn, has meant a diffusion of modern values and greater socio-economic mobility, which has led to a shift from the traditional method of achieving desired gender composition towards a method facilitated by modern techniques.

2. Uttarakhand

In 2000, after many years of agitation the central part of the Indian Himalayas, formerly known as the U.P Hills, severed its bands with Uttar Pradesh and was constituted as Uttarakhand, the 27th state of the Indian Republic. Women and environmental movements were an important part of the history leading up to the creation of the new state, the most famous of those being the Chipko movement. This indicates that sustainable use of the environment as well as better conditions for women are central issues for a majority of the people of the state.

Uttarakhand is situated northwest of Uttar Pradesh, India's most populous state. It borders Tibet, Nepal, Himachal Pradesh, and the UP plains districts. The State can be divided into three distinct geographical

regions, the High-mountain region, the Mid-mountain region and the Terai-region. The economy of the state is predominantly agrarian and the rural scenario is still dominated by small-scale utilization of available environmental resources where women (and girls) do most of the work. This is complemented by a 'money order economy' due to large-scale migration of younger men to the plains for jobs in the armed forces, government or in the private sector.

Farooquee and Rawat (1997) lay down some of the main constraints to rural development in the hills such as physical isolation, poor infrastructure, high cost of transportation, absence of market, limited production possibilities, and absence of irrigation facilities. They further state that the environmental fragility of the hills set limits for intensive production systems. On the positive side are factors such as diversified activities, specialised and skilled handicraft, and maximum utilization of available resources (Farooquee & Rawat, 1997). The backbone of economical activity in the hills has traditionally been small-scale agricultural ventures depending mainly on local input and production for subsistence rather than for the market. This scenario is now changing with, on one hand, commercialisation of agriculture and, on the other, diversification of occupations where agriculture loses its importance to salaried employment outside the village. The development in the state appears to affect women – and especially the girl child – negatively. While the overall sex ratio in Uttarakhand rose from 936 to 964 between 1991 and 2001 the CSR fell from 948 to 906.

For Uttarakhand comparisons have been made between two areas that both have high proportions of joint families but which are positioned at opposite ends of the spectrum of high respectively low child sex ratios. At one end we find Pithoragarh Tehsil (Pithoragarh District), which has the lowest sex ratio in Uttarakhand in the 0-6 years range with an average of 855 girls to 1000 boys.²⁷ Pithoragarh District, which was carved out of Almora District in 1960, stretches from the Middle to the High Mountains and it borders Nepal to the East and China (Tibet) to the North.

Pithoragarh Tehsil is situated in the Mid-hills in the southern part of the district. With a rural CSR of 867 and an urban CSR of only 819, it demonstrates the general trend; found in the last census, that one consequence of economic growth, education, and access to modern medical facilities may very well be fewer girls in the population. Although our cases are fetched from villages, the tehsil is dominated by its only town Pithoragarh which in spite of its history as hill station,

²⁷ Laxar Tehsil in Haridwar District also has a CSR of 855 but as Laxar is situated in the plains we have chosen Pithoragarh in order to compare two tehsils both situated in the hills.

today is a modern town with good infrastructure including easy access to medical facilities. Pithoragarh Tehsil resembles Siddapur Taluk in so far as it has *a very low child sex ratio and a high proportion of joint families*. With greater exposure to 'modern' lifestyles new values have been accepted leading to *lower fertility and smaller family size*. One reason for this is new opportunities for employment in salaried occupations especially for males. Many men from the hills join the army. This is particularly so for Pithoragarh where it is estimated that about half of the households have a male member in the army or an elder man receiving an army pension. This influx of cash from outside is contributing to a marginalisation of agriculture based on female labour and mainly for subsistence. Just as in the cases from Karnataka also in Pithoragarh a preference for sons was expressed during interviews. This was articulated in statements from women such as: "We must have at least one boy" or "We cannot afford more than one daughter due to high marriage expenses", but they also said: "Our in-laws are the biggest problem, they are the ones who want the boys most". While all those interviewed denied that they themselves used ultrasound in order to abort female foetuses, which is illegal, they all knew that the method existed and said that they were sure that many families in the area made use of it. This was not difficult either as Pithoragarh, with all its medical facilities was within easy reach from the villages of our study.

Puraula Tehsil in Uttarkashi District, used for comparison, stands at the opposite end of the child sex ratio with an equal number of girls and boys (1000/1000), the highest ratio at tehsil level in the state. The two tehsils also stand in contrast when it comes to female literacy, in this case with Pithoragarh at top with a female literacy rate of 72.5 (male literacy 94.5) and Puraula at the bottom with 38.5, only about half of that of male literacy which is 73.7. This further demonstrates that development in the form of education and shortening of the gender gap in literacy does not automatically lead to more equal conditions for women and girls in terms of sex ratios. Uttarkashi is situated in the Western part of Uttaranchal, bordering Himachal Pradesh to the West and China (Tibet) to the North. Puraula Tehsil, which is exclusively rural, constitutes the North-western part of the district. Contrary to Pithoragarh tehsil, Puraula has *a high proportion of joint families together with a high child sex ratio*. This goes with a more 'traditional' lifestyle together with continued dependence on agricultural production based on female labour both for subsistence and for the market as well as a *higher fertility and bigger families*. Mori Block, from which the case study used here is fetched, is the most remote part of the tehsil and considered one of the most marginalized parts of Uttaranchal. Here

people report that dowry is a new phenomenon evolved only during the last decade. Earlier the groom's family had to give money to the bride's family. In discussions women said that a girl who was badly treated in her in-laws house could return to her native home and her parents would remarry her somewhere else. But they also said that this practice was declining, as somebody "who was educated would surely not marry such a girl".

In this remote part of the state new opportunities for salaried employment are few. Young men do migrate to jobs in the plains but these are mainly low paid menial jobs. Their sisters also might take jobs as maids in the towns in the lowlands of the state. Modernisation is here expressed as an increasing dependence on market powers *within agriculture*. Crops produced for the markets in the plains below are replacing traditional crops produced to sustain the household but it is still women doing most of the farm work. What has changed is that the men have taken over the responsibility for marketing the produce, which gives them control over the family economy.

Just as in Karnataka, our study from Uttaranchal also indicates that differences in agrarian production appear to influence the child sex ratio. In both cases from Uttaranchal we have high proportions of joint families together with agricultural systems dominated by household female labour²⁸, the difference being that in Puraula farming is still essential for the economic survival of the household while in Pithoragarh its importance is declining, being substituted by incomes from salaried employment for men. The fact that women's contribution to the household is no longer considered important was bluntly expressed by a male respondent from a rural household with two sons and no daughters: "We cannot afford girls because girls are not productive". In Pithoragarh, the bargaining power of women seems to have decreased as a consequence of growth in new job opportunities for men simultaneously as women are left behind in agriculture, which has a declining importance for the household economy. Increasing remittances of money from outside also seem to have inflated demands for dowry, resulting in very high costs for marrying off daughters. New values as regards family size and the rise in marriage expenses for daughters together with low bargaining power for women result in smaller families and a decline in the number of female children. In Puraula, the productive work of women is still essential for the economic survival of

²⁸ The general situation where north India is characterised by low female agricultural labour participation being supply constrained, and the South Indian situation characterised by female farming and participation (Harris-White, 2001) is in our cases reversed. In the study areas in Karnataka, participation of women in agricultural work is less intensive than in the study areas from Uttaranchal where they are the backbone of agriculture.

the household. Women have also been allowed to divorce and remarry. This gives them a higher bargaining power, which in combination with high fertility and relatively low costs for the marriage of a daughter is reflected in a higher child sex ratio.

Differences in child sex ratios and modernisation

Our case studies show links between areas with low CSR and between areas with high CSR and these are *not* dependent upon region. Instead, similar features are common to high CSR areas in our North Indian as well as in our South Indian cases. These features illustrate the linkages between ‘pull’ modernisation, joint family structure and low child sex ratios.

The areas with high CSR in Karnataka and in Uttaranchal are relatively isolated areas where the level of education is lower. In these areas there has been a transformation of agricultural economic conditions, a structural change, from *within*. In Karnataka, it has mainly been a combination of population pressure and land reform, which has changed the agrarian structure and the conditions for agricultural production while in Uttaranchal it has been a change from subsistence cultivation to cultivation for the market.

In the areas where the child sex ratios are low and the literacy level relatively high, this has not been the case. Instead, the low CSR areas have experienced changes in economy from a diversification of occupations with increased possibilities for employment *outside* agriculture. Here, people are convinced that there are gains to be made, at least economic, by educating the younger generation. This change toward emphasis on education has altered the intergenerational relationships.

Our cases illustrate how ‘*push*’ modernisation first changes the economic and then the social conditions, as in the form of commercialisation of agriculture with changing crop patterns or from land reforms. When structural change occurs through ‘push’ factors, where the economic changes are mainly related to livelihood insecurity and rather associated with downward economic mobility as in our high CSR cases, it appears to lead to a more penetrating and broad institutional change. As ‘push’ factors emerge from necessary changes in livelihoods, be they government induced in the form of land reforms or as necessary reactions to climatic changes in the form of different agricultural strategies with different crops, they affect the economic basis of the *whole family* regardless of generation.

Contrarily, in the study areas with low CSR in both Uttaranchal and Karnataka change has instead been induced through what can be

described as 'pull' factors. The increased *access* to certain aspects of modern life such as possibilities for higher education, as opposed to structural change, has meant employment opportunities outside agriculture; for example, in the expanding private and service sector. Education has become important for economic reasons as people are convinced that it gives economic benefits, something of which there are many examples. However, no one is certain of these gains especially not in the case of each individual. In a joint family the already greater generational gap has become even greater with increasing importance of education. With increased access to education the younger generation is much better equipped to face change. This is particularly important in joint families since it is dependent upon greater unity between generations. In a joint family, members are dependent upon a common value system.

Education brings *increased social and economic mobility for the individual* as illustrated by the low CSR cases. When 'pull' factors such as wider economic opportunities and modern communication cause young people to migrate, it affects individual family members first and changes the family through those individuals. Individual incomes give rise to income differentials within the family. Perhaps the most well substantiated consequence of this change is a decline in the extent to which family elders can influence and control younger family members (Goode, 1963, Thornton & Fricke, 1987, Mason, 1992). This is also an important contributing factor in the subsequent division of joint families into nuclear families. Individual incomes pose a challenge to the existing criteria on which the allocation of resources is based. In other words, the changes are induced through the younger generation. It tends not to be driven by economic necessity, as exemplified by our low CSR cases, and the older generation is only indirectly, albeit profoundly, affected by these changes. This has the effect of altering the economic functions of the joint family structure as the preconditions for the economic advantages through a collective undertaking of a joint family are transformed, eventually causing *tensions between generations*. In such a context, uncertainty comes to characterise the relationship between generations.

The difference between high and low CSR areas are not only in the level and form of modernisation but perhaps more importantly in the degree of uncertainty caused by it. The centrality of uncertainty to this problem becomes obvious in light of the generational dimension. While the better-educated and mobile younger generation, employed outside agriculture, is causing formation of new institutional settings, the older generation has to remain in the old institutional settings. The less

educated, traditionally, agriculturally and geographically bound older generation is less equipped to absorb/accept the changes. It is against this background of greater uncertainty that parents are compelled to fulfil their obligations as regards the future of their children. The parents find their way of facing this uncertainty by falling back on traditional norms regarding domestic roles, which contradicts the younger generation's modern understanding of domestic roles. The anticipated increase in the bargaining power of the younger generation of women comes to be perceived as a threat to the future of the older generation.

The discrimination against daughters appears to emerge in the transition from one generation to the next. In this transition it is the parents, representing one set of norms, who are obliged to make decisions about the future of their children, who will come to represent a different set of norms. This causes a situation of considerable uncertainty in which the parents inter-subjectively shape the situational structure to base their decisions upon. The greater the gap between generations, the greater the uncertainty and the greater the risk that the situational structure informing the decisions is characterised by traditional values. The transition poses a serious contradiction between the roles of girls and of older people in the traditional and in the modern context. It is in this 'falling-back' on traditional norms that daughters become excluded.

The young generation's needs are in many regards contrary to the traditional values that their parents still try to uphold. Increasing access to various aspects of 'modern' life has imputed new values in the form of lower fertility and smaller family sizes, higher education and mobility and higher mean ages at marriage. These factors have been the main components in the process of ongoing social change in India and have contributed to the declining trend in CSR (Rele & Alam, 1993, Caldwell et al, 1982, Hatti & Ohlsson, 1984, 1985²⁹). They have played an important role in the low CSR study areas but are yet to make their way into social fabric of the study areas with high CSR. Indeed, this finding substantiates what earlier studies have concluded; that increase in socio-economic development, and welfare contributes to continuing, and often more pronounced, son preference (Das Gupta, 1987, Clark, 2000). Not only has it become more costly to raise children as education has become more important (Croll, 2000, Caldwell, 1982), but parents now feel vulnerable to the increased mobility of their children (Croll, 2000). In one of the FGDs in the first study area the men explained that: "education has not given a better understanding of other people.

²⁹ Sirsi Taluk borders Siddapur Taluk and the two are very similar in social composition and agrarian system.

Everybody wants to have his/her own way. They want to have a job for their own personal sake”. This is in conflict with the more collective ideals of older generation connected to the joint family structure, which necessarily emphasises the values of sharing responsibilities with others.

Family structure, bargaining space and uncertainty

The traditional form of family structure in all of our study areas is the joint family with brothers and their respective wives and their children as well as old parents living together³⁰. Family members share property, residence and kitchen. (Ramu, 1988, Jeffrey & Jeffrey, 1997, Bhat & Dhruvarajan, 2001) Family matters are handled jointly and the household head, the oldest male member, has the final authority and responsibility³¹. A joint family draws on the *economic advantages* of a collective undertaking. The benefits are in the form of cost efficiency from a collective ownership and use of necessities. As pointed out in one of the FGDs we conducted in Karnataka: “Financially, a joint family tends to save much more. Not just in money, but also in time and chores”. Beside the economic benefits a perhaps equally important characteristic of the joint family is the *support system* it offers. “In a joint family there is more support. There is cost efficiency and a unity which can not manifest in a nuclear family”.

The nuclear family structure has different benefits. It may lack a support system but instead it offers *greater personal freedoms* for the individual family member. As evident from the discussions in Karnataka³²; “there is more freedom financially for a woman in a nuclear family as she has greater choice. She does not have to defer to an elder”. Living in a nuclear family also entails a *greater exposure* to things in everyday life, which can lead to more knowledge and, thus, awareness. “Mobility brings us more knowledge and it makes it possible

³⁰ This form of family structure is also termed collateral extended family to distinguish it from the lineally extended family which does not include married brothers and their families (Census of India see Annexure 1). The joint family is a characteristic of traditional India (Patel, 2005). A nuclear family, on the other hand, is composed of the husband, wife and their unmarried children. For the sake of brevity and of argument we have chosen to use idealised conceptions of joint and nuclear family structures. It is the difference in degree of organisational complexity, “generation depth” and structuring necessary, which we consider the central difference. We are aware that there are many variations of family structure and in degrees of jointness because “The Hindu joint family has always been changing/.../The changes that are taking place during the last fifty years are such that the very jointness of the joint family is believed to have been shaken” (Desai, 1955:97).

³¹ In a joint family, the freedom of the individual member is subject to the interest of the group and the concept of duty is central. (Cormack, 1953)

³² There were a bigger proportion of nuclear families in our study areas from Karnataka than in the cases from Uttaranchal.

for us to bring about changes. If we live in the home we won't be able to understand much and we won't be able to change things". With a lower degree of division of labour and with fewer hands available, each member needs to be aware of, and know, more aspects of household life. The clear difference between joint and nuclear families in this regard was expressed thus; "In some households, husbands are handing over some responsibilities to their wives such as keeping account of labour, so women have a general awareness of the family's financial matters. However, this is only the case in nuclear families, not in joint families". Among the households in our samples both in Karnataka and in Uttaranchal it was, for example, the responsibility of the men to go to the market and buy food. In some of the nuclear families women had taken over that responsibility as their men were occupied with other work. This was precisely the reason why they regularly left the village, something women in joint households did not.

As regards social relations, the joint family is a more complex organisation form, and as such requires a higher degree of structuring³³. The success of the joint family depends upon the participation and interdependence of all members. (Ramu, 1988) More rules need to be in place for relationships and exchanges between people to function well. Norms guiding social action are to a higher degree translated into defining norms and are more *institutionalised*. The nuclear family may leave social norms less defining. *The family structure conditions the degree of structuring necessary*. However, this is not to say that the joint family form is simply more constraining. To use the terminology of Giddens (1984), structures are both enabling and constraining. Although the respondents talked about how the joint household is constraining regarding individual freedom, the greater structuring of the joint household is indeed enabling in the sense of the "unity" and "support" it gives. Thus, there is also a greater distance and difference between the traditional norms and the new norms regarding social relations in a joint family than in a nuclear family.

The strengths of the joint household family, its support system and collective undertakings, rest on a stronger structuring. This, in turn acts as a constraint in the sense that it, to a large degree, puts limits on what can be bargained about. It is, to take a concrete example, impossible in a joint household to bargain over an individual's personal right to a piece of the household property. To claim a piece of the land jointly owned by

³³ Part of the complexity can be ascribed to the multiple functions inherent in the joint family structure. Among other things, the joint family provides care for the sick and afflicted and support for the unemployed and the aged. As Kapadia (1958:266) put it; "The care and maintenance of dependants is a moral obligation/.../and is backed by the forces of social prestige and opprobrium".

the household would mean jeopardising the very survival of joint family as an institution.

A direct result of 'pull' modernisation appears to be that such norms change from being tacit to becoming directly confrontational. When younger generation family members start earning individual incomes, these tacit criteria of intra-household resource allocation are confronted and the existing consensus comes to be questioned, whether intentionally or not. Greater mobility of the younger generation is also a source of greater uncertainty in the relationship between generations and in the situational structure upon which parents base their decision-making. The existing expectational structure upon which decisions are based becomes dislocated and the conditions for exchange between family members are affected. Consequently, parents' intentional rationality is also affected. The reaction to the increased contingency in the expectational structure, i.e. uncertainty, is a falling back and hence a substantiation of the constitutive social norms of the joint family structure. This 'reactionary' response entails a validation of already existing 'social devices' and therefore a limiting of the bargaining space. Indeed, the nuclear family also puts up limitations, but relatively less so than the joint family. *The family structure conditions the bargaining situation*, not just by limiting what can be bargained about, but also through the intertwined interests of the family members. The outcomes of the bargaining between one conjugal pair may very well have an influence on the situation of other members of the joint household; other members indeed express those concerns and interfere. Indeed, it is these intertwined interests so characteristic of the joint family structure that make structuring norms and avoiding uncertainties important. In terms of breakdown positions, a woman's breakdown position is, theoretically, better in a nuclear family than in a joint family. Because of the size of the joint family, its cost of an individual member not cooperating would be small, whereas the cost would be much greater for a nuclear family. On the other hand, as indicated by figure 1, *in a nuclear family there is a greater space for bargaining*, whereas the cooperative frame of a joint household can impinge on this space precisely through the intertwined interests of the household members. The importance of this aspect also becomes heightened when the ends of parent's decision-making become uncertain. This aspect contributes to a limiting of the bargaining space, affecting women's participation in decision-making process.

This is so because *women's participation in decision-making affects their relative bargaining powers*. While discussing expenses for marriage, one woman explained that: "I don't know about expenses. Issues related to marriage expenses are men's responsibility. Women

normally don't question the decisions". In a joint family where one elder might be the sole person controlling the resources it is less likely for women to be actively involved in decisions. In one of the male group discussions the men stated that: "very few women ask for financial explanations. For them even to reason about such things, they don't have adequate knowledge to understand, we just tell them what is happening". If one never participates in decision-making, how can one then have knowledge about the underlying economic requirements of the family? In nuclear families women tend to be more part of decision making and as discussed earlier, this was one of the benefits of the nuclear family, which was articulated. One example of the differences between joint and nuclear families was expressed as; "men do not ask women's opinions about matters of the family. Decision making power is in the hands of the husband or the head of the family. In a few families, in divided (nuclear) families, men are taking advice from or involve women in decision making related to major family issues". Not participating in or being kept from decision making takes away the ability to influence that decision and also limits bargaining power in other decisions. Greater participation also means more space for bargaining. Participation in one area of decision-making strengthens the bargaining position in other areas. When women participate more in the decision making process, chances that such an iterative effect will be positive are greater.

The access to a large social support system, which is one of the main benefits of the joint family, also affects bargaining power. This is so particularly in extraordinary situations concerning behaviour, which is not accepted by the community, such as drinking or gambling. In such extraordinary situations, women in nuclear families might face more difficulties and may perhaps be forced to support the family themselves. The inherent control mechanisms of the joint family may also prevent such behaviour in a way that a nuclear family cannot. Another such situation is one of economic crisis, where the social support system may be a last lifeline. (Agarwal, 1997) In general, *the support system of the joint family will strengthen the bargaining power of the person who follows the prevailing norms*. As one woman responded in discussing the situation of daughters'; "It is easy when they follow the norms of society". In this sense the joint family's cooperative, normative framework, gets reproduced and reinforced. However, it will thus also make it more difficult for women as patriarchal structures make the situation consistently unfavourable for women. It thus becomes clear how that same normative framework impinges on the space for conflicts in a joint family.

A well-documented example of the connection between son preference and bargaining position is the fact that a woman's bargaining position within the household increases with the birth of a son. (Kandiyoti, 1985, Dyson & Moore, 1983, Agarwal, 1994, 1997, Kabeer, 1996) This would be more so in a nuclear family where one birth influences the family's situation more than in a joint family, and this, in turn, induces a stronger inclination toward son preference. In a joint family, on the other hand, the social (and cultural) pressure to have a son would be greater as a birth affects more people. This provides reasons for son preference in both cases. It also illustrates the underlying differences in reasoning, as well as legitimisation of son preference.

The relationship between actual contributions to the household and perceptions of contribution is more complex in a joint family than in a nuclear family. The contribution of each individual becomes more evident in a nuclear household because of fewer people and resulting lower division of labour. The contributions are more valued along the actual 'objective' contributions. In a joint family individual contributions are less clear; they are more likely to be valued and perceived 'subjectively' and on the prevailing gendered norms regarding who contributes what. How needs and contributions are perceived become more institutionalised and the allocation of resources is more defined by institutionalised norms. *There is thus a link between the greater structuring needed in a joint family, as discussed above, and how the resources are allocated within the household.* This also offers an explanation as to how 'pull' modernisation and individual incomes produce greater uncertainty in joint families. The change it provokes, from tacit to explicit norms, introduces new contingencies in the relationships between family members and in the criteria for allocation of resources. Comments such as; "women only work in the kitchen anyway, why do they need education?" or "daughters are not productive" are directly connected to limited perceptions of the true contributions women make to the household. Social norms influence the individual's perceptions of needs as well as of contributions. In a joint household, collective values are important and collective action is also respected and revered to a greater extent than in a nuclear family. Correspondingly, the perceptions of individual interest are also lower in a joint household. As social norms tend to influence individual's perceptions in this way, "perceptions impinge on social norms but are not the same as social norms. For instance, norms might define on what principles family food is shared – say, contributions and/or needs, but the translation of these norms into allocations would depend not just on actual, but *perceived* contributions and needs". (Agarwal, 1997:17.

Italics added) Family structure conditions the way in which the individual's perceptions are influenced by social norms, and vice versa and, thus the *translation of norms into allocation*. A shared sense of legitimacy and perceptions related to it can influence the allocation process in terms of who is entitled to what³⁴. The greater bargaining space found in the nuclear family provides a larger flexibility in the translation of norms into allocation. Accordingly, the limiting of the bargaining space as a reaction to uncertainty in the expectational structure reduces that flexibility in a joint family undergoing 'pull' modernisation. *The family structure affects the bargaining power* as well as the position of women in the household and how a strong son preference is *legitimised*, thus resulting in daughter discrimination.

As mentioned earlier, the relationships between generations are different in a joint and a nuclear household. In a joint household the older generations have greater influence on the younger generations. While discussing the trend of fragmentation of joint households, a member of one FGD commented that; "if one person is in control of the money the youngsters will face more problems". When he was asked about financial matters such as whether they had taken any loans, one of the respondents replied; "I don't know. The head of this household does not live here". Even though he lived with his two brothers - aged 45 and 35 respectively - he did not have any knowledge of basic financial matters because his father, the household head, still handled such matters. In nuclear families children become financially independent sooner and the older generation has less influence in important decisions such as education. One reason why the older generation might try to keep control is to avoid a splitting up of the family. Another respondent explained that; "sons will quarrel after attaining majority and they will go for dividing the family or the land". The grandfather may often be the one who has the final word in the decision whether or not a daughter shall be given more education. And for women, the greater financial freedom found in a nuclear family is also related to less intervention from older generations, as exemplified in the above already cited quote; "there is more freedom financially for a woman in a nuclear family as she has greater choice"; more importantly, it is so because "*she does not have to defer to an elder*". As Jeffrey and Jeffrey point out, a conjugal pair "...rarely make fertility decisions in isolation from social groups which specify what 'respectable' families are like, and create a kind of social or collective rationality. In other words what is economically rational can be culturally very specific" (1997:79). However, the degree

³⁴ This is also how Sen (1987) conceptualises *extended entitlements*, i.e. normatively determined entitlements.

to which this is true differs between joint and nuclear families. This is clearly indicated by the responses we got when discussing the ideal family. In only 9 % of the nuclear households was the preferred ideal family said to be important for other family members than the parents. On the other hand, in 44% of the joint families the ideal family was important also to other members than the parents, such as paternal or maternal grandparents.³⁵ As one woman explained; “while giving birth to my child I had to listen to my mother-in-law. We had to obey her or father-in-law regarding child rearing, family size and daughter –son composition of the family. In those days at least two sons and one daughter was required. My wish was one son and one daughter”. This close connection between generations makes the joint family less conducive to change and contributes to greater uncertainty (McNicoll & Cain, 1989).

Preliminary conclusions

Our results so far indicate that ‘pull’ modernisation has led to a greater gap between generations, which has meant an even greater uncertainty for parents; it has weakened the very fabric of the joint family as an institution. During social change, when consensus of rules is low, the opportunities for exploitation are much greater (McCall, 1966). The joint family structure appears to condition the bargaining situation adversely for women. Its higher degree of structuring impinges on the bargaining space and imposes patriarchal norms on the bargaining situation through the intertwined interests of the family members. Due to the greater complexity of the joint family and the higher structuring needed, perceptions regarding needs or contributions as well as the allocation of resources, are to a higher degree defined by norms that are more institutionalised. In comparison with a nuclear family, where the greater bargaining space provides a larger flexibility in the translation of norms into allocation, the restricted bargaining space of the joint family reduces the criteria for allocation of resources to be more ‘subjective’, or rather, to a higher degree determined by institutionalised norms. Unfortunately, the uncertainty introduced through ‘pull’ modernisation appears to result in even less flexibility in the translation of norms into allocation in the joint family structure. The allocation of resources within the household constitutes one of the main factors upon which son preference and daughter discrimination is legitimised and the structure of the family conditions that legitimisation through its influence on

³⁵ There was also a marked difference between joint families in different villages. We might expect that this would reflect differences in economic standing.

perceptions. A direct example of the intertwined interests of members of a joint family is the closer relationships between generations. This imposes considerations of older generation family member's preferences, the most obvious of which is that of linking secure old age support with future generations of the family and, hence, a preference for sons.

The discrimination of daughters emerges in the transition from one generation to the next. In this transition, it is the parents, representing one set of norms, who are required to make decisions about the future of their children, representatives of different values. This generates a situation characterised by uncertainty in which parents inter-subjectively shape the situational structure on which they base their decisions. This effect is enhanced in a joint family structure since a larger gap between generations and greater uncertainty would imply a greater likelihood that the situational structure informing the decisions is characterised by traditional norms³⁶.

Increasing access to various aspects of 'modern' life has imputed new values in the form of lower fertility and smaller family sizes, higher education and mobility and higher mean ages at marriage (Rele & Alam, 1993; Caldwell et al, 1982; Hatti & Ohlsson, 1984, 1985³⁷). However, it appears that the joint family structure and its lesser space for bargaining have a negative impact on the bargaining power of women, an impact that is enhanced when uncertainty is introduced. The incorporation of these new values in a traditional family structure seems to take place under the cooperative, normative, framework of that family structure. As a consequence, the already low bargaining power and low position of women declines further and the consequent undesirability of girls increases as opposed to being challenged by the new values. We have proposed an explanation of this in terms of the uncertainty it creates for parent's decision-making to which parents react by 'falling-back' on traditional norms. Low bargaining power for women in combination with the new values and an overall improvement in welfare seem to further restrict the space for daughters in a family. At the same time as women's bargaining power has remained low, the decision making process appears to have become more intricate with more complex preferences. Our preliminary results suggest that this development creates a negative process in which women's low bargaining power and

³⁶ It should be emphasised that it is not simply a falling-back, but an inter-subjective process, which nonetheless becomes informed by traditional values regarding girl's place in a modern setting of which little understanding is available.

³⁷ Sirsi Taluk borders Siddapur Taluk and the two are very similar in social composition as well as in agrarian system.

the increased complexity of parents' preferences feed off each other, resulting in a continuous decline in the child sex ratio.

The “complexity reducing structurings” cause daughters to be left out not only by limiting the bargaining space but also by impinging upon the bargaining situation. This appears to have the absurd effect that as norms on the positive benefits of more education and thus prospects of higher socioeconomic mobility for women grow in importance, girls' place within a traditional family structure becomes threatened as they get caught between the intergenerational interests, constitutive of the joint family structure, and the modern norms (of new production modes). This is illustrated by how the combination of ‘pull’ modernisation and joint family structure i.e. is related to our case study areas with low CSR. While ‘push’ modernisation changes the material conditions of the household in a way that influences all family members, the pull-modernisation leaves existing power structures intact only to be challenged by the young generation. When uncertainty through ‘pull’ modernisation leads to a falling-back on social devices and hence to a limiting of the bargaining space, it appears to affect women's bargaining power negatively. Uncertainty becomes particularly detrimental for the situation of women and girls in a joint family structure, as its intertwined interests of different family members impinge on the bargaining space. It is in this situation, this *‘parental dilemma’* of decision-making and bargaining concerning intergenerational interests that the interests of women and girls are excluded and daughters lose out.

Annexure.1

Classification of Families- Census 1981

Type of family	Definition
Single Member	A respondent who is alone.
Nuclear	This type of family includes a pair i.e., head and spouse with or without unmarried children.
Broken Nuclear	Head without spouse but with unmarried children
Supplemented Nuclear	It includes three types of families. (a) Supplemented Nuclear: Head and spouse with or without unmarried children but with other relations who are not currently having spouses (b) Broken Extended Nuclear: Head without spouse but with other relation of whom only one is having spouse. (c) Supplemented broken Nuclear: Head without spouse with or without unmarried children but with other unmarried/ separated/ divorced/ widowed relation.
Joint Family	it includes both lineally extended and collaterally extended families (a) Lineally extended family: Head and spouse with married son(s)/ daughter(s) and their spouses and parents with or without other not currently married relation (s) (OR) Head without spouse but with at least two married son(s) daughter(s) and their spouses and/or parents with or without other not currently married relations. (b) Collaterally extended family: Head and spouse with married brother(s) / sister (s) and their spouses with or without other relation(s) [including married relation(s)] (OR) Head without spouse but with at least two married brother/sisters and their spouses with or without other relations.

Source: Chekravorty, C. and A. K. Singh., 1991, Household Structure in India, Census of India 1991, Occasional Paper No.1, Office of the Registrar General of India, New Delhi.

Bibliography

Agarwal, Bina.

A Field of One's Own: Gender and Land Rights in South Asia, Oxford University Press, Delhi. 1994.

“Bargaining” and Gender Relations: Within and Beyond the Household, FCND Discussion Paper No. 27, International Food Policy Research Institute, 1997

Ahmad, I.

Between the Ideal and the Real: Gender Relations within the Indian Joint Family. In M.Pernau, I Ahmad, and H. Reifeld. (eds.) *Family and Gender: Changing Values in Germany and India*, New Delhi: Sage, 2003.

Astone, Nan, Marie and Nathanson, Constance, A., Schoen, Robert., Kim, Young, J.

“Family Demography, Social Theory, and Investment in Social Capital”, *Population and Development Review*, Vol. 25 No. 1, March 1999.

Axelrod, Robert.

The Evolution of Cooperation., New York, Basic Books, 1984.

Bhat, Anitha Kumar & Dhruvarajan, Raj.

“Ageing in India: drifting intergenerational relations, challenges and options”. *Ageing and Society*, Vol. 21, pp. 621-640, 2001.

Beckert, Jens.

“What is Sociological about Economic Sociology? Uncertainty and the Embeddedness of Economic Action”, *Theory and Society*, Vol. 25, No.6 (Dec. 1996), 803-840.

“Economic Sociology and Embeddedness: How Shall We Conceptualize Economic Action?” *Journal of Economic Issue*, Vol. 37, No.3, (Sep., 2003).

Boserup, Ester

Woman's Role in Economic Development, London, Earthscan, [1970], 1989

Cain, Mead.

“Risk and Insurance: Perspectives on Fertility and Agrarian Change in India and Bangladesh”, *Population and Development Review*, Vol. 7, No. 3, 435-474, 1981

Caldwell, John, C. Reddy, P.H. Caldwell, Pat.

“The Causes of Demographic Change in Rural South India: A Micro Approach”, *Population and Development Review*, Vol. 8, No. 4 (Dec., 1982), pp. 689-727.

Caldwell, John, C.

“A Theory of Fertility: From High Plateau to Destabilization”, *Population and Development Review*, Vol. 4, No. 4 (Dec., 1978), pp. 553-577.

Chekravorty, C. and Singh, A. K.

“Household Structure in India”, *Occasional Paper No.1*, Office of the Registrar General of India, New Delhi, Census of India 1991.

Child Development Project Office (CDPO)

Anganwadi Attendance Records, Siddapur Taluk, 1996-2003.

Clark, Allice.

“Social Demography and Excess Female Mortality in India; New Directions”. *Economic & Political Weekly*, Vol. 22; 17, Review of Women Studies, April 25, 1987

Clark, Shelley.

“Son Preference and Sex Composition of Children: Evidence from India”, *Demography*, Vol. 37, No. 1 (Feb. 2000), pp. 95-108.

Coleman, James S.

“Foundations of Social Theory”, Cambridge, Harvard University Press, 1990.

Collard, David.

“Generational Transfers and The Generational Bargain”, *Journal of International Development*, Vol. 12 (4), pp. 453-462, 2000

- Cormack, Margaret.
The Hindu Woman, Greenwood Press, Connecticut, 1953.
- Croll, Elisabeth.
Endangered Daughters; Discrimination and Development in Asia, Cambridge, CUP, 2000.
- Curtis, Richard F.
 "Household and Family in Theory on Inequality", *American Sociological Review*, Vol.51, No.2, April 1986, pp. 168-183.
- Das Gupta, Monica.
 "Selective discrimination against female children in rural Punjab, India", *Population and Development Review*, Vol. 13, No. 1, March 1987, pp. 77-100.
-
- Liberté, Egalité, Fraternité: Exploring the Role of Governance in Fertility Decline, *Harvard Working Paper Series*, No. 97.06, 1997.
- Degler, Karl N.
At Odds: Women and the Family in America from the revolution to the present. New York. Oxford University Press. 1980.
- Dequech, David.
 "Bounded Rationality, Institutions, and Uncertainty", *Journal of Economic Issues*, Vol. 35. No. 4, December 2001.
-
- "Uncertainty and Economic Sociology: A Preliminary Discussion", *American Journal of Economics and Sociology*, Vol. 62, No. 3 (July, 2003).
- Desai, I.P.
 "Joint Family: An Analysis", *Sociological Bulletin*, Vol. 4, No. 2, pp. 97-117, 1955.
- Dyson, Tim, Moore, Mick.
 "On kinship structure, female autonomy and demographic behaviour in India". *Population and Development Review*, Vol. 9, No. 1. 1983.
- Farooquee, Nehal A. and Rawat, D.S.
Development Dilemma, Indian Scenario and Rural Himalaya: A Central Himalayan Perspective, Indus, New Delhi, 1997.
- Government of Karnataka.
Directorate of Economics and Statistics, www.des.kar.nic.in, 2004-06-20.
- Giddens, Anthony.
The Constitution of Society: Outline of the Theory of Structuration, Cambridge, Polity Press, 1984.
-
- The Consequences of Modernity*, CUP, 1990.
- Goehler, Gerhard
 "Constitution and Use of Power", in Henri Goverde, Philip G Cerny, Mark Haugaard and Howard Lentner (eds.), *Power in Contemporary Politics; Theories, Practices, Globalizations*, Sage Publications, 2000.
- Greenhalgh, Susan.
 "Sexual Stratification: The Other Side of "Growth with Equity" in East Asia", *Population and Development Review*, Vol. 11, No.2, June 1985, pp. 265-314.
- Goode, William J.
World Revolution and Family Patterns, New York, Free Press. 1963.
- Goverde, Henri, Cerny, Philip G., Haugaard, Mark, Lentner, Howard (eds),
Power in Contemporary Politics; Theories, Practices, Globalisations, Sage Publications, London, 2000.
- Harriss, John.

- “Institutions, Politics and Culture: A Polanyian Perspective on Economic Change”, *International Review of Sociology – Revue Internationale de Sociologie*, Vol. 13, No. 2, 2003.
- Harriss-White, Barbara.
Development and Productive Deprivation: Male Patriarchal relations in Business Families and their Implications for Women in S. India, *QEH Working Paper Series – QEHWPS65*, February, 2001.
- Hatti, Neelambar, and Ohlsson, Rolf.
“Age At Marriage: A Quantitative Study of Sirsi Taluk, 1960-1979”, *Demography India*, Vol.13 (1), 1984.
-
- “Impact of Education on Age at Marriage in India, 1960-1979”, *Demography India*, Vol. 14 (2), 1985.
- Hays, Sharon.
“Structure and Agency and the Sticky Problem of Culture”. *Sociological Theory*, Vol. 12, No. 1, March 1994, 57-72.
- Hodgson, Geoffrey, M.
“The hidden persuaders: institutions and individuals in economic theory”, *Cambridge Journal of Economics*, Vol. 27, 159-175, 2003.
- International Institute for Population Sciences (IIPS) and ORC Macro.
National Family Health Survey (NFHS-2), India, 1998-99: Karnataka. Mumbai: IIPS. 2001.
- Jeffrey, Roger, Jeffrey, Patricia.
Population, Gender and Politics; Demographic change in rural north India, Cambridge University Press, 1997.
- Joshi, G.V.
“Implementation of Tenancy Reforms: The case of Uttara Kannada District”, in Abdul Aziz and Sudhir Krishna. (Eds), *Land Reforms in India, Karnataka, Promises Kept and Missed*, Sage, New Delhi, 1997.
- Kabeer, Naila.
“Gender, Demographic Transition and the Economics of the Family: Population policy for a human-centred development”, *Occasional Paper 7*, 1996, UNRISD. 1996.
-
- “Inter-Generational Contracts, Demographic Transitions and the ‘Quantity-Quality’ Trade-off: Parents, Children and Investing in the Future”, *Journal of International Development*, Vol. 12 (4), pp. 463-482. 2000.
- Kandiyoti, Deniz.
Women in Rural Production Systems; Problems and Policies. UNESCO, Paris. 1985.
- Kapadia, K. M.
Marriage and Family in India, Bombay, OUP, 1958.
- Kaspersen, Lars Bo.
“Anthony Giddens” in Andersen, Heine and Kaspersen, Lars Bo, (ed.), *Classical and Modern Social Theory*, Oxford, Blackwell, 2000.
- Das Gupta, M and Bhat P.N.M.
“Intensified gender bias in India: A consequence of fertility decline”, in Krishnaraj, M, Sudarshan, R.M and Shariff, A (eds.). *Gender, Population and Development*, New Delhi, OUP, 1998.
- Mason, Karen Oppenheim.
“Family Change and Support of the elderly in Asia: What do we know?” *Asia-Pacific Population Journal*, Vol. 7, No. 3 (1992), 13-32.
- McCall, Michael, M.
“Courtship as Social Exchange: Some Historical Comparisons” in Farber, B. (ed.) *Kinship and family organization*. New York: Wiley, 1966

- McNicoll, Geoffrey & Cain, Mead.
 “Institutional Effects on Rural Economic and Demographic Change”, *Population and Development Review*, Vol. 15, Supplement: *Rural Development and Population: Institutions and Policy*, pp. 3-42. 1989
- Moore, Henrietta, L.
 A passion for difference: essays in anthropology and gender, CUP, 1994.
- Nash, John. F.
 “The bargaining problem”, *Econometrica*, 18, 1950.
- Niranjan, S. S. Surender and G. Rama Rao.
 “Family structure in India; Evidence from NFHS”, *Demography India*, Vol. 27, No.2, pp. 287-300, 1998.
- North, Douglass, C.
 “Institutions”, *Journal of Economic Perspectives*, Vol 5, pp. 97-112, Winter 1991.
- Pani, Narendar.
 Towards Decentralized Agrarian Reform: Lessons from Karnataka’s 1974 experience, in Abdul Aziz and Sudhir Krishna (eds.), *Land Reforms in India. Karnataka, Promises Kept and Missed*, 1997.
- Pant, D. C.
 Women in Dryland Agriculture of U.P. Himalayan Region, in *The Economy of Uttaranchal*, Anamika. 2000.
- Patel, Tulsi, (ed.)
The Family in India: Structure and Practice, Sage, New Delhi, 2005.
- Pernau, Margrit.
 “Family: a gendering and gendered space”, in M. Pernau, I Ahmad, and H. Reifeld. (eds.), *Family and Gender: Changing Values in Germany and India*. New Delhi: Sage. 2003
- Polanyi, Karl.
The Great Transformation: The Political and Economic Origins of Our Time, Boston, Beacon Press, [1944] 2001.
-
- “The Economy as Instituted Process”, 1957, in Granovetter, Mark, S. and Swedberg, Richard, *The Sociology of Economic Life*, Boulder, Westview Press, 2001.
- Putnam, Robert P.
Making Democracy Work. Princeton. Princeton University Press, 1993.
- Ramu, G. N.
Family Structure and Fertility. Emerging Patterns in an Indian City. Sage Publications, 1988.
- Rao, M.S.A.
 “Occupational Diversification and Joint Household Organisation”, *Contributions to Indian Sociology*. (New Series) No. II, December 1968.
- Registrar General and Census Commissioner
Census of India, Karnataka, Government of India, New Delhi, 2001
- Rele, J.R. & Alam, Iqbal.
 “Fertility Transition in Asia; The statistical evidence”, in Leete, Richard & Alam, Iqbal *The Revolution in Asian Fertility*. Oxford. 1993.
- Seiz, Janet.
 “Bargaining Models, Feminism, and Institutionalism”. *Journal of Economic Issues*, Vol 29 (2), June 1995.
- Sen, Amartya.
 “More than a 100 Million Women are Missing”, *New York Review of Books*, 20 December 1990, pp. 61-66 .
-
- Poverty and Famines; An essay on entitlements and deprivations*. Oxford. 1981.

Commodities and Capabilities, Amsterdam. 1985.

“Gender and cooperative conflicts”, 1987, in Tinker, Irene (Ed), 1990, *Persistent Inequalities: Women and world development*, Oxford University Press.

“Cooperation, Inequality, and the Family”, *Population and Development Review*, Vol. 15, Supplement: *Rural Development and Population: Institutions and Policy* (1989), pp. 61-76.

The Argumentative Indian; Writings on Indian History, Culture and Identity, Allen Lane (Penguin Books), London, 2005.

Sewell, Jr, William, H.

“A Theory of Structure: Duality, Agency and Transformation”, *American Journal of Sociology* Vol. 98, No. 1, July 1992, pp. 1-29.

Storper, Michael & Salais, Robert

Worlds of Production: The Action Framework of the Economy. Cambridge: Harvard University Press. 1997

Swedberg, Richard.

Principles of Economic Sociology, Princeton University Press. 2003.

Thornton, Arland & Fricke, Thomas. E.

“Social Change and the Family: Comparative perspectives from the West, China and South Asia”, *Sociological Forum*, Vol. 2, No. 4, Special Issue: Demography as an inter-discipline (Autumn, 1987), pp. 746-779. 1987.

P. Visaria, P.

The Sex Ratio of the Population of India, Monograph 10, Census of India, New Delhi, 1971.