ONE OR TWO SONS: Class, Gender and Fertility in North India

Andrew Lyon

Ph.D.

University of Edinburgh

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I hereby declare that this thesis has been composed by myself and that the work is my own, unless otherwise stated. None of it has been submitted for any other degree or professional qualification.

Andrew Lyon
ABSTRACT

Using intensive fieldwork methods, this thesis examines the value of children in two villages in Bijnor District in Uttar Pradesh, North India, within the context of the 'economics of fertility'. Bijnor was chosen to allow for comparison between Hindus and Muslims.

The research upon which its conclusions are based was conducted during the agricultural year July 1982 - June 1983. A sample of thirty-seven men, whose wives were currently pregnant or had delivered in the year before fieldwork began, were chosen for study. The men were asked, using a semi-structured questionnaire, about the work and income of their household throughout the year. Data were also collected on landholding and land transfers, using official records and accounts from villagers, for the whole village in addition to the sample. In addition the men were asked for their views on fertility and family planning and fertility in relation to their own family size and composition. This data was compared to similar data collected by the Social Organisation of Childbearing Project on similar topics from the men's wives during the same time period.

It was found, using sample data that children perform very little labour for their households, except among some of the poorest. Richer households stay in joint production for longer and therefore are able to benefit more from the labour of sons in the long run than poorer households. The prevailing work patterns and system of marriage and residence suggest that there are no economic grounds for wanting daughters. Consequently sons are preferred.

However, only three sample men, all among the richest in the village, foresaw no limit to the number of sons from whom they would benefit. Among the rest, the benefits of having children - especially sons - must be balanced against the costs of bringing them up - especially daughters.

Village level census data and maternity histories collected from all women suggest that while fertility remains high, mortality has been declining for at least twenty years, villagers face the prospect, perhaps for the first time of having 'too many' children. For women, who would by and large choose to have fewer children than their menfolk, the support of their husbands in the decision to contracept is crucial, since it is difficult for them to take autonomous action.
## Table of Contents

<table>
<thead>
<tr>
<th>List of Tables</th>
<th>i – iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1: Introduction Method in the Madness</td>
<td>1 – 17</td>
</tr>
<tr>
<td>Chapter 2: The Setting</td>
<td>18 – 40</td>
</tr>
<tr>
<td>Chapter 3: Landholding</td>
<td>41 – 61</td>
</tr>
<tr>
<td>Chapter 4: The Insurance Value of Children</td>
<td>62 – 82</td>
</tr>
<tr>
<td>Chapter 5: The Agricultural Cycle I</td>
<td>83 – 113</td>
</tr>
<tr>
<td>Chapter 6: The Agricultural Cycle II</td>
<td>114 – 135</td>
</tr>
<tr>
<td>Chapter 7: The Structure of Kinship and Marriage</td>
<td>136 – 158</td>
</tr>
<tr>
<td>Chapter 8: Women’s Work</td>
<td>159 – 184</td>
</tr>
<tr>
<td>Chapter 9: Men and Fertility</td>
<td>185 – 210</td>
</tr>
<tr>
<td>Chapter 10: Women and Fertility</td>
<td>211 – 229</td>
</tr>
<tr>
<td>Chapter 11: Conclusion</td>
<td>230 – 240</td>
</tr>
<tr>
<td>Glossary</td>
<td>241 – 245</td>
</tr>
<tr>
<td>Bibliography</td>
<td>246 – 265</td>
</tr>
</tbody>
</table>
List of Tables

Chapter 1

Table No.  Title  Page
1 Selected Characteristics of Sample Men  10
2 Number of Children Everborn by Religion  11

Chapter 2

1 Comparison of Decennial Population Variables, Bijnor District  22
2 Population of Bijnor District by Age and Sex (%), 1981  23
3 Religious Composition of Bijnor District (%), 1931, 1971, 1981  24
4 Population by Caste: Dharmanagri  25
5 Population by Caste: Jhakri  27
6.1 Population by Age and Sex: Jhakri  28
6.2 Population by Age and Sex: Dharmanagri  28
7 Irrigated Area in Acres by Source, Tehsil Bijnor  34
8 Ownership of Electric & Diesel Engines in Dharmanagri & Jhakri  35
9 Area under Major Crops, Bijnor Tehsil, Selected Years  36
10 Cropping Patterns in Dharmanagri and Jhakri  39
11 Ownership of Animals in Dharmanagri  39

Chapter 3

1 Landholding in Acres by Caste, Dharmanagri  46
2 Landholding in Acres by Caste, Jhakri  47
3 Landholding in Acres by Class, Dharmanagri  52
4 Landholding in Acres by Class, Jhakri  53
5 Mean Number of Children by Class and Religion  58
6 Mean Number of Children Everborn by Age of Mother & Class  59

Chapter 4

1 Loans from the Sugarcane Co-operative Society, 1982-83  69
2 Nos & Areas of Sales and Purchases of Land 1958-1982 by Current Ownership, Dharmanagri  74
3 Nos & Areas of Sales and Purchases of Land 1958-1982 by Current Ownership, Jhakri  79
<table>
<thead>
<tr>
<th>Chapter 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
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<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>
Chapter 9

1 Overall Pattern of Fertility Desires by Current Live Children and Mean Live Children 186
2 Mean Number of Children by Class & Desire for More Children 190
3 Pattern of Fertility Desires by Live Children & Religion 194
4 Infant & Child Mortality as a Percentage of All Live Births by Sex of Children, Class and Desire for More Children 196
5 Infant and Child Mortality as a Percentage of All Live Births by Religion, Sex and Desire for More Children 198
6 Mean Births, Infant and Child Mortality by Religion 199

Chapter 10

1 Total & Mean Number of Children by Desire for More Children 215
2 Nos. of Sample Men and Women by Desire for More Children 216
3 Nos. of Men & Women by Desire for More Children & Religion 216
4 Extent of Agreement, Husbands & Wives on Fertility Desires 217
5 Numbers of Children Where Both Partners Want More Children 218
6 Numbers of Children Where Wife wants More and Husband Not 220
7 Numbers of Children Where Neither Partner Wants More Children 221
8 Numbers of Children Where Husband Wants More and Wife Not 224

Chapter 11

1 Contraceptive Behaviour, All Fertile Women in Dharmnagri and Jhakri, September 1986 239
Chapter 1:
Introduction: Method in the Madness

The main focus of interest in this thesis is how we might best understand the extent of economic rationality in human fertility among a small number of men and women in two North Indian villages.

The Chicago economists of the "New Home Economics" school would have us believe that we can understand fertility decision making by use of the classical economic theory of consumer behaviour. One of the earliest versions of this form of the economic theory of fertility decision making is that expounded by Gary Becker (1960). He argues that the determinants of fertility at the household level are best understood if children are treated 'as if' they were consumer durables goods. This treatment is justified according to Becker because:

"For most parents, children are a source of psychic income or satisfaction, and in economist's terminology, would be considered a consumption good" (1960: p210)

By treating children in this way, Becker re-characterises fertility motivation as a demand for children, which can be analysed by the economic theory of consumer behaviour, in which the explanatory variables are: tastes; income; costs and uncertainty. Fertility decisions are affected by the household's preference for children compared with other goods. Becker admits that differences in fertility may be due to non-economic variables by suggesting that tastes for children may be affected by background factors, but these do not enter into his analysis explicitly. The major explanatory variable in Becker's analysis is income. With any given level of income, the household attempts to maximise the satisfaction it obtains from children and other goods. Becker argues that since consumption in general rises with income, and since children are not an inferior good, for which demand is relatively constant in the face of rising incomes, one would expect consumption of children to rise with income. This hypothesis presents Becker with two problems. Firstly, if there is a positive relation between income and fertility, the rich would have more children than the poor in any society at any point in time. Secondly, increases in the general level of income through time, as development occurs, would cause fertility to rise. Neither of these propositions is empirically founded (Farooq and Simmons: 1985).

To deal with these problems while maintaining his theory intact, Becker makes an analytical distinction between the number of children demanded and the
quality of each. He suggests that richer households invest more in a given or lesser number of children, increasing the quality of each child. This substitution of quality for quantity is made possible by the knowledge and practice of effective contraception. Becker argues that knowledge of contraception is unequally distributed. Richer households know more about contraception than poorer ones and by putting this knowledge into practice are able to have fewer children each of greater quality. If only the poor were equally well endowed with this knowledge, they too would have fewer children and Becker's theoretically positive relationship between income and fertility would become the empirically observed relationship.

Economists subsequently contributing to the debate surrounding Becker's work have tended to modify, rather than refute, the original theory, to take into account factors which they think important: the opportunity cost of time (Mincer: 1963; Becker: 1965); the appropriate measure of income (Easterlin 1975); and the role of uncertainty (T.P. Schultz: 1974, T.W. Schultz: 1974). Social scientists from other disciplines have contributed to the growth industry by doubting the validity of viewing children as consumer durable goods at all. This literature is succinctly summarised by Namboodiri (1972) and Farooq and Simmons (1985).

Criticisms of the "New Home Economics Approach"

In spite of the very substantial controversy surrounding the 'New Home Economics' approach to fertility, the central tenets of the approach remain the same. The central theme of this work is that fertility decisions can be understood in terms of the household's search for the optimum number of children in the face of economic constraints and will vary as the appropriate price and income factors vary. Several criticisms which ultimately undermine its value as the sole explanation of fertility decision making can be levelled at the economic theory of fertility.

Concepts

At a theoretical level some of the concepts used are more than a little difficult to handle. I have already alluded to some of the difficulties which some authors have raised regarding the idea of children as consumer durables, see for example Blake (1972). In addition to this, some of the concepts are difficult to operationalise. For example, the household indifference map, central to the theory of consumer behaviour is difficult to use in empirical situations as it requires respondents to know which combinations of children
and other goods they view as somehow being equal, inferior or superior to all other combinations. In fact for this reason, some economists have explicitly excluded the indifference map from their analyses, arguing that households bring preferences, tastes etc to the decision making forum and that we, therefore, need not know how these arise (T.P. Scultz: 1969; 1976; 1978). If however, we are making any attempt to understand how fertility fits into patterns of development, we must know what linkages exist between changes in economy and society and fertility decisions, and not merely pick up such changes in price and income effects.

Demand Oriented

As outlined above, the economic theory is a theory of the demand for children. In less developed countries like India, supply factors also have great importance. Households may want to have a certain number of children, but this may not be possible. For example, if parents aim for a number of surviving children, then child mortality which may by and large be outwith the control of households will have an effect on fertility. (McNicoll: 1980; Cain: 1981).

Some authors have suggested that the value of children is, in developing societies like India, not only to be seen in terms of 'psychic income or satisfaction'. Many authors have pointed out that where children have an economic role to play, either by working for their household (Mamdani: 1972; Rozenweig and Evenson: 1977) or providing security for aged parents where alternative forms of social security are lacking (Cain: 1981), that motives for having children may include the economic contribution which children may make to the household economy.

Applicability to Developing Countries

Becker's original model of fertility decision making was applied to Indianapolis in the USA, and many of the concepts and explanatory variables which have been introduced into the analysis were really intended for use in developed countries: where per capita incomes are high, schooling for children compulsory, with particular patterns of marriage and sexual relations, with particular patterns of income generation, where child mortality is low, life expectancy at birth high and modern contraception freely available. Oppong (1985) and Farooq and Simmons (1985) are at pains to point out that these conditions do not obtain in less developed countries and that we must realise this difference when we analyse fertility patterns.
there. For example a universal feature of the economic theory is that the costs of children should include the opportunity costs of the time of the child rearer, usually the mother, calculated either as income foregone, or the cost of childminding or nursery services.

In many Third World villages, including the present study villages, the major portion of women's work is not performed in the market for wages, but in and around the household for consumption. Furthermore, this work is often performed in conjunction with rather than at the expense of childcare. As often as not, it is older siblings who look after their younger brothers and sisters and not the child's mother. In these circumstances, the opportunity cost of childrearing may be either negligible, very difficult to calculate or an inappropriate indicator of the cost of childbearing to both women and households.

Focused on Micro Factors at the Expense of Macro Factors

In an early contribution, Leibenstein (1957) attempted to link micro and macro explanations by asking how development and change affects the value of children and their parents' perceptions of this value. In the course of his explanation he suggests that there may only be a limited rationality to explain by recourse to economic factors. He suggests that there is in any society a culturally acceptable minimum number of children which parents must endeavour to attain as quickly as possible. Only after this minimum number of children has been born is the addition of each 'marginal child' amenable to economic analysis.

Leibenstein's contribution is important in that it introduces variables which are not economic into the analysis of fertility. He suggests that fertility decisions cannot be explained by the economist alone. Cultural and social factors all affect the 'natural' fertility of a population. Thus seasonal migration, the age at marriage, length of breastfeeding, morbidity and mortality all affect the frequency of intercourse and hence the possibility of conception quite apart from decisions to have more children. Neither are parents blank sheets of paper when they come to the fertility decision. Decisions will be affected by the cultural and social conditions within which decision makers finds themselves.

An Alternative Approach

It is, then, necessary to analyse fertility decisions within the context of
the economy and society in which they occur. I am not here suggesting that we follow the well trodden route first explored by Malthus in the nineteenth century. Rather I am suggesting that we start to tread the middle ground between micro explanations of fertility on the one hand and macro explanations on the other. The first examines relationships at the smallest units of aggregation while the latter examines only gross relationships across the whole of a society.

As an example, how does the local economy affect household decision making within communities? How are these various entities linked to the larger society and economy? McNicoll (1980) suggests that we look at the groups which bind people together and differentiate them – class, caste, ethnicity, gender and household structure for example. The focus of study requires not to be the household – out of context; or the whole of society – devoid of people; but the ways in which the immediate environment and structures surrounding decision makers impinge upon and affect their decisions. In this more holistic form of analysis the household becomes one of many social institutions important to the analysis of fertility rather than the only one. An early example of this approach is Mamdani (1972). Mamdani’s book is a response to the findings of and approach to fertility of the Khanna Study (Wyon and Gordon: 1971). The Khanna Study is a good example of birth control projects sponsored by U.S. agencies through to the early 1970’s. The approach may be described as Neo-Malthusian, with a theoretical approach to fertility behaviour very similar to that adopted by Becker (1960). The basic ‘population problem’ was construed to be one of the lack of modern effective contraception. One had only to provide this and the peasants of North India would take to birth control like a duck to water. There were thought to be no other obstacles to fertility decline. Mamdani came to very different conclusion. He suggested that the economic and social changes which had taken place there meant that it was in the villagers’ interests to have large numbers of children. Their unwilling refusal to accept the contraceptives offered to them by the Khanna Study workers was not irrational, but rather represented an outcome based on a proper appraisal of their needs by the villagers themselves. Mamdani argued that new employment opportunities had been created by the "Green Revolution" and in these changed circumstances, children had an economic contribution to make to their households.

Mamdani’s idea is an appealing one. But it is too simplistic to say that all children are a net asset to all parents always. For example, several studies have suggested a relationship between landholding and fertility, (Meuller: 1976; Cain: 1985), while others reviewed by Nugent (1985) have suggested that
Some children may have a role in providing old age security for their parents in the absence of other sources of institutional security. Cain (1980) and McNicoll (1978) have suggested that children may act as insurance against risk, providing income and food in times of natural disaster.

These works raise several questions for the study of fertility: for which households are children an asset? Under what circumstances are children assets? What are the links between the environment of risk and fertility and how has this changed over the years? What sorts of work do particular children of particular ages perform for particular households and what is such activity worth? Are children a net asset or liability for different households?

Another criticism which may be levelled at both Mamdani and the 'New home Economics' is that neither makes any attempt to distinguish between the value of sons and the value of daughters. If Mamdani's peasants are rational then there must be some explanation of why the sex ratio in the Punjab, where he conducted his study consistently has one of the most adverse sex ratios for females of any state in India (Kynch and Sen: 1983). An adverse sex ratio for females is a widely reported feature of North Indian Society, yet Mamdani does not mention it, let alone try to explain it. We cannot assume that boys and girls are equally 'demanded' by parents. This raises the issue of gendered inequalities in society and how these affect fertility.

Sex blindness is also apparent in Mamdani and the 'New Home Economics' in their treatment of the household. Whitehead (1981) suggests that social scientists the world over are mesmerised by the very existence of the household. She points out that the existence of the household does not allow us to assume that its operation, function and content will be the same in every society. Rather such features of the household, especially the relationships which it embodies and the distribution of power among its members, requires to be the subject of study, not assumption. We must endeavour to understand hegemony, rather than replicate its logic.

Writers in a feminist tradition (eg Beneria: 1982; Whitehead: 1981; Young et al: 1981) have suggested that in order to understand the position of women in society, we must look at the way in which women are embedded in society by the structures of kinship and marriage and how this relates to the sexual division of labour. Specifically, how much autonomy and power do women gain from prevailing arrangements and how does this affect control over resources. What effect does this have in turn on women's ability to determine their own
fertility?

This is not to be confused with the classical economic view on the relation of women to fertility (Becker: 1960; Mincer: 1963; Becker: 1965; Farooq and Simmons: 1985). Writers in the classical economic tradition, including the 'New Home Economists' consider the basic decision-making unit to be the household. I am suggesting here that, following Seccombe (1974), relations between household members are implicit or explicit relations of exchange. This social relation cannot be assumed away and needs to be the subject of investigation.

To sum up, then, my own view is that the classical economic view of fertility decision making is too narrow in its remit for the reasons I have outlined above. Mamdani was a red herring for those of us who wanted to lay to rest the spectre of Malthus which had been set stalking the plains of Northern India in the 1960's and 70's with reports of famine and predictions of overpopulation to come. His was an interesting thesis, but too simplistic to be accepted wholeheartedly.

Subsequent studies and theoretical developments have suggested that an adequate study of fertility must distinguish between the value of different children of different genders to different households with different relationships to economic resources. In addition it must examine the dynamics of the relationship between the household and the wider economic and social structure of which it forms a part. Furthermore it must deconstruct the household and investigate whether its different members - the old and the young, men and women, hierarchically structured by age and gender have different fertility aims and how these are put into practice. These are the issues which I address in the remainder of this thesis.

The Study Setting

The research on fertility which forms the basis of the present study was conducted in two adjacent villages in the Bijnor District of Western Uttar Pradesh. One village, Dhamnaighri, has an entirely Hindu population, while the other, Jhakri, has an entirely Muslim population. The research was funded by and ESRC studentship linked to The Social Organisation of Childbearing Project, (SOCP) conducted at the same time, in the same villages by a team headed by Roger and Patricia Jeffery.

Bijnor District is demographically interesting. It was chosen by the SOCP
because it has a highest proportion of rural Muslims, about 34%, of any District in Uttar Pradesh, providing the opportunity for systematic study of ethnic differences. The study villages themselves were chosen a little less systematically. We were given an introduction to a local landowner by a relative of his in Delhi. Any anxiety which we may have had about the types of bias this might introduce to our work faded as fieldwork proceeded. The period chosen for study was a year. This would allow for the observation and recording of various patterns of work and associated activity through the whole of an agricultural cycle. Working through the cycle of seasons in village India is essential if one wants to know what goes on there. The seasonal cycle of life, work, illness, birth, death and marriage vary markedly with the seasons. The study design was set up to capture the differences.

The Study Itself

The Sample: One major advantage of being a member of a research team was that I was able to collaborate with Roger and Patricia in choosing a sample. The SOCP had two research strategies. The first was to be a sample survey of recently delivered and currently pregnant women from 11 randomly selected villages in the district. These women would be interviewed once mostly about their most recent pregnancy. The major strategy, however, was an intensive study of a systematic sample of recently delivered or currently pregnant women from Dharmnagri and Jhakri, our base villages. This sample of women was to be followed closely for a year and participate in intensive systematic conversations about their natal and affinal households, their maternity histories, workloads and most recent pregnancy.

As the holder of a linked studentship, I was uncertain about how close the link could be. My doubts were not about whether it would be valid to proceed in this way from the point of view of the information we would obtain by such collaboration, but rather whether such a study would be considered independent enough for a PhD thesis. In the end I decided that access to relevant information on women overrode all other considerations and chose my sample to be the husbands of the women in Patricia’s sample of recently delivered and currently pregnant women from Dharmnagri and Jhakri.

These men are not representative of the village men as a whole, precisely because their wives were having or had recently delivered children. In the extreme, it could be argued that all other villagers at risk of pregnancy were effectively contracepting. Such a logical possibility was not the case as our village census showed. However the representativeness of the sample
was something I was aware of at the time it was drawn and due care was taken
to make it as representative as possible in the following way.

A census of both villages was taken and from this we drew up a sampling frame
of currently pregnant or recently delivered women. From this we drew our
sample of husbands and wives to be representative of the major caste, class
and religious configurations of the two villages. We also took into account
household structure. In essence this meant following the economic activities
of groups of brothers where they were all joint in production, even if only
one of them had recently delivered. Though it would have been possible to
abstract from such production groups the share of the brother we had
selected, I was sure that we would gain greater insights in household
strutures, economic relationships etc. by studying groups of co-producing
brothers together. Care was also taken to ensure that the sample was evenly
spread across the childbearing years in terms of parity. The characteristics
of the sample are shown in Table 1 below.
### Table 1:

Selected Characteristics of Sample Men: Religion & Caste

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<td>HARIJAN</td>
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#### HINDUS

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#### MUSLIMS

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Source: Village Census, 1982

**Note 1:** I followed three fewer households than the SOCP for reasons of time.

**Note 2:** The landholding categories here are developed more fully in Chapter 3. In the meantime, it is sufficient for the purpose here to know that group I are most landed and group V landless.

**Note 3:** Comprising Chamars and Jatabs.
Table 2 summarises the childbearing experience of sample women.

Table 2:

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<th>Religion &amp; Caste</th>
<th>Total Live M F A</th>
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<tr>
<td>Telis</td>
<td>8 4 12</td>
<td>6 3 9</td>
<td>14 7 21</td>
<td>2 1 3</td>
</tr>
<tr>
<td>Total</td>
<td>18 36 21 57</td>
<td>13 16 29</td>
<td>49 37 86</td>
<td>2 1.2 3.2</td>
</tr>
<tr>
<td>WHOLE SAMPLE</td>
<td>37 62 57 119</td>
<td>16 23 39</td>
<td>78 80 158</td>
<td>1.7 1.5 3.2</td>
</tr>
</tbody>
</table>

Source: Key Informants Maternity Histories 1982-83.

Any particular choice of sample will mean that several groups of people cannot be the subject of systematic study. These omissions are important. Perhaps the most obvious groups are those couples outside the childbearing ages, those practising effective contraception and those who had not had a child in the previous year for some proximate reason relevant to the study, for example undernourishment leading to amenorrhoea for the women among poorer households.

Another group missing from systematic study are single-person households and female-headed households. The latter is particularly important as these are among the poorest households in India. In the study villages, however, these households are few and where appropriate I have included less systematic data for these groups than those used for the sample. In the absence of any major proximate reason for infertility, the justification for choosing a sample of recent proven fertility is that if any group have a pro-natalist economic
It could be argued that this was an opportunity lost. I could have, like Hershman (1981) in the Punjab, established contact with these women. My contact with the women though was always predicated on my behaviour and contact with their menfolk. I felt that if I had tried to be more intimate with the women, I would have offended local norms and jeopardised valuable relationships. In most cases, my relationships with the women were too fragile and conditional to allow for much more than pleasant conversations and polite greetings. Had I been on my own, I would have been left with a conundrum: how to get to grips with women’s lives without being able to speak to them in any depth. One of the many advantages of being part of a mixed gender research team was that I was able to share the rich data about women which Patricia was collecting.
Many authors (Beneria: 1982; Seccombe: 1974; Caldwell: 1980, 1983; Cain 1979; 1984; Dyson and Moore: 1983) have argued that in order to understand the relationship between women and fertility it is necessary not only to understand their immediate childbearing histories, but also women's position within the household and how this relates to the structure of kinship and marriage, the division of labour and the distribution of the gains from labour.

The data which Patricia collected from the sample women for the SOCP addresses itself to precisely these issues. Accordingly the data I use from the SOCP relates to the structure of households within which women perform both production and reproduction. I also use information collected from the women in their maternity histories as well as women's views on their own fertility. All of this information was collected from each sample woman by research assistants working for the SOCP, or by Patricia herself, in a series of semi-structured conversations over the fieldwork period. This data used in conjunction with conversations with their husbands (my sample) gives some leverage to discussion of possible differences between men and women in relation to fertility.

The Method Itself

The method of study chosen might well be called 'the cafeteria method'. By this I mean I used a combination of different methods for different types of information gathering: Observation, Semi-structured Interviews and the collection and use of official records.

Observation: This is perhaps an obvious choice of method. I decided that to study such complicated relationships in any meaningful sense required intensive fieldwork. Partly this also reflects my own cultural style. My own upbringing and work experience in the West of Scotland, for better or worse, have meant that friendly banter and building relationships is something which I am good at and enjoy immensely. I also felt that a survey in India after the state of Emergency in 1976, when some local people were forcibly sterilised, would lead to an identikit set of responses from respondents based on what they thought I wanted to hear. Outsiders rarely go to villages and when they do it often means trouble. Recent work in Nepal suggests that the non-sampling error in survey techniques is very large indeed for the subcontinent (Stone and Campbell: 1984). The issue of fertility needed to be dealt with sensitively in an atmosphere of trust if it was to be worthwhile. Living in the village and observing seemed a good way to achieve this. To
obtain worthwhile information on the value of children I knew that people had to know me well enough to tell me what they thought and not what they thought I wanted to hear. In addition as Hershman (1981) points out, it is difficult for people to lie consistently throughout a whole year. Spending time with people is a good way, perhaps the only way of getting to know the interstices of their lives. In view of the cultural and social milieu of fertility ‘hanging around’ was also an important part of my method.

In addition, there is also a new approach emerging which combines the best of both the macro and micro approaches to the study of fertility (Caldwell: 1982; 1984; IUSPP: 1984). The attraction of this approach is that it pays attention to and takes seriously both the immediate environment and the context in which it is set.

Semi-structured interviews: Agricultural work patterns in the village are complex enough to drive any anthropologist trying to understand them under his or her string bed with a bottle of the local 'hooch'. The work of each household varies according to the resources they have and the season of the year. In order to keep track of the economic activities of 37 households systematically by observation alone is simply not possible. Accordingly I collected information from sample men about the major economic activities of household members throughout the year by semi-structured questionnaire.

In order to minimise errors of omission, I asked these questions as soon as possible after the completion of each major agricultural operation. In all I asked these questions of each informant four times at different stages of the agricultural year. Each time the session concentrated on the work completed since the last round of questions.

The schedules covered all inputs and their costs, the time taken to perform each operation, by whom it was completed and the social relations involved in the labour. Basically this information falls into three broad time periods for each of the major crops in the agricultural cycle. These time periods are:

1. Preparation and Planting
2. Cultivation
3. Harvesting

Information on Non-agricultural labour performed by household members was
also collected for the same time periods, as well as information about animals owned by sample households. In addition, the non-agricultural workloads of women were included via information collected by the SOCP.

This method of data collection worked well in combination with observation. For example, I 'helped' as many people as I could in their agricultural operations. Apart from enjoying this it meant that I could observe and record in my fieldnotes how the operation was performed, who was there working etc. This helped in turn to obtain more accurate information at the semi-structured interview sessions. Lapses of memory are probably less frequent among fieldworkers in this regard than among farmers. The former have the luxury of being exclusively interested in who did what for whom, for how much and how, while the latter are more interested in getting the work done.

In addition to semi-structured interviews on work patterns and the part which children played in them, I also wanted to collect information on the possible value of children as insurance against risky environments. Cain (1980) suggests that a reasonable indicator of the environment of risk is the "distress sale" of land. In short this may be taken to mean sales of land to meet consumption. Accordingly I collected data from two quite different sources on landholding and transfer. The first source is interviews with sample men on their present landholding and how this has changed over the past twenty five years. The second is the official record of landholding held in the Tehsil Office in Bijnor town.

Interviews on Landholding with sample men: In these interviews I asked sample men what their current holding of land was, where this land was situated and whether they rented or sharecropped any land, either in or out. I also found out how this holding had changed over the past twenty five years by asking men about losses and gains of land since 1957. I also asked the same questions of some landless men in both villages, lest the downward mobility of that group had been severe. In addition I asked them about current and past indebtedness.

Official Records: However, 25 years is a long time over which to remember transfers of land. Accordingly I also collected information on the sales and purchases of land by men in the study villages, from the Official Records. These records are kept at the local Tehsil office. They are an invaluable, though sometimes difficult to use set of records. I was able to use them as memory joggers for sample men, by taking them along to interviews on transfers of land. In addition I also used the official records as a rough
guide to current holding patterns. The sugar cane society also provided me with a record of amounts of cane sold to the crushing mill by local farmers and the extent of their indebtedness there.

Fertility

In addition to generating data with which to assess the benefits of children directly, I also interviewed sample men on their views regarding their own fertility as well as fertility in general. In these interviews I covered a wide range of topics: ideal family size, the desire for additional children, preferences for sons or daughters, Government propaganda on fertility, health service delivery, contraceptive practice and intentions as well as decision making between husband and wife.

This information if collected on its own by a survey say, would not be very elucidating. However, by the time I collected it, I had been in the village living with my sample for eighteen months all in. I knew a great deal about their households, their hopes, aspirations and their economic lives. In this context, the information on fertility is highly valuable. It gives a great deal of insight into what men of different classes, ethnic and religious groups with different age and sex compositions of children think of fertility and its limitation. While great care must be taken in the interpretation of this data, I am sure that it is of high quality - both valid and reliable. It reflects the many hours spent working, travelling and sitting with these men before the conversations ever took place.

The Structure of the Thesis

In order to examine these various aspects of fertility in the study village, the rest of my thesis takes the following format.

Chapter 2 takes us into the study villages themselves by describing some of their key features and setting them in their historical, social and economic context. As well as outlining these features of village life, the chapter also gives a thumbnail sketch of their environmental and geographical locations. There is also a brief description of the village populations and how these have changed over the years.

Chapter 3 presents an analysis of landholding in Dharmmagri and Jhakri. The chapter delineates the differences in landholding among the major groups in the village - classes, religions, castes and genders. In the light of recent
studies, (e.g. Cain: 1985), the chapter also takes a look at the relationship between landholding and fertility and defines the household structure typology which is used in subsequent chapters.

Chapter 4 examines the argument made by Cain (1980) and McNicoll (1980), that children have an "insurance value" in risky environments which is analytically separate from any value which they may have as labour to their parents. Transfers over a thirty year period are examined for both villages. Data is presented from interviews with sample men to examine the nature of the local environment with respect to risk before drawing some conclusions as to the insurance value of children among the sample.

Chapters 5 and 6 examine work throughout the agricultural cycle. Using the data from the semi-structured interviews, chapter 5 deals with the labour process of each of the three major crops in the agricultural cycle. These are rice, wheat and sugar cane. The returns to sample households are presented for each crop and summarised for the whole of the agricultural year under study. This yearly summary takes account of any work performed outside the three major crops so that it more adequately represents net income over the year. Chapter 6 deals more explicitly with the contribution of children to the labour process. Here the number of hours and approximate value of child labour is imputed, to draw a conclusion about the value of children as workers to their households.

Chapters 7 and 8 deal with the structure of kinship and marriage and the sexual division of labour. The starting point for analysis here is that both household structure and the sexual division of labour are not natural but socially constructed phenomena. The composition of the household as well as the norms which hold it together are embedded in the structure of kinship and marriage are examined in chapter 7 through an examination of post-marriage residence patterns. This in turn sets the scene for the sexual division of labour which is examined in chapter 8. These chapters examine the effect which the operation and existence of these two features of the local social system have upon fertility, especially upon the ability of women to determine their own fertility.

The final two chapters examine and compare the views of men and women on fertility. Chapter 9 is based on the conversations, outlined above which I had with sample men about fertility. Chapter 10 is in addition partly based on data collected by the SOCP and looks at the views of women on their own fertility and compares these with those of their husbands.
Chapter 2: The Setting

In this chapter, I set the study villages firmly in their context, by describing the key features of the environment in which they are situated. Although this environment may be described by reference to location, climate, cropping patterns and so forth, it should always be borne in mind that these features have developed out of centuries of interaction between humankind and nature. It is important therefore not only to describe what these features look like today and what their relationships to each other are, but also how they have changed. History is not as immediately striking as the Indian countryside and its people, but it must be considered if we are to understand the present more than superficially.

Bijnor has provided no heroes for the annals of Indian history; nor does it have the princely past of Rajasthan or the Punjab. The story of Bijnor district and its people is one of what George Orwell might have called "catastrophic gradualism." It is forged from the struggle for survival and moderate prosperity and a life which is just a little more comfortable.

Location

Bijnor, in which the study villages of Dharmagiri and Jhakri are located is a district of almost 100,000 kms², about 160kms north east of Delhi. It is in the west of India’s largest state, Uttar Pradesh, which is swathed across north India from the Punjab in the west right across the Indo-Gangetic plain to Bihar in the east. The district’s location is shown in Map 1. The district is further divided into four administrative sub areas, called Tehsils, each centred around its own market town. The study villages are in the most westerly tehsil of Bijnor. As Map 2 shows, the district hugs the eastern bank of the Ganges for the first 50kms. of its plains life as it thunders out of the Himalayas at the pilgrimage town of Haridwar due north. The study villages themselves lie about eight kms. from the district’s administrative headquarters of Bijnor, a town of some 50,000 inhabitants.

Until 1983, the journey from the villages to Bijnor town was about 8kms by metalled road. Then a new road cutting the distance to 5kms was opened. There are regular bus services from Bijnor town to all major points, and many less major points in the district as well as to Delhi. There are no bus links between the villages and Bijnor. The journey can, though, be made by tonga or cart, bicycle or foot, with the chance of a cheap ride on a passing lorry. During the study period, there was substantial through traffic to the
Map 1, showing the position of Bijnor District in Western Uttar Pradesh. The inset shows its position in India.
Map 2, showing the position of the study villages in Bijnor District.
construction site of the Madya Ganga Barrage. Villagers could often be seen clinging tenaciously to the sideboards of trucks on which they had managed to negotiate a lift - either to Bijnor, or on a site-seeing trip to the barrage.

The Barrage across the Ganges is a major irrigation construction spanning the river by a dam, doubling as bridge. Phase one of building was completed during fieldwork. Phase one involved the construction of dam and bridge, plus irrigation networks to the west bank of the river, into Muzaffanagar district and roads into Bijnor district. The second phase which involves irrigation in Bijnor and roads in Muzaffanagar has not yet commenced.

The construction of the barrage will play and important part in opening up the two districts to each other. It will for example, shorten the journey time from Delhi from six or seven hours to three or four. But perhaps more importantly, some people look to the new road link across the river to Muzaffanagar to open up trade and business opportunities where there were few before, or to increase the number of wedding trans-actions across the river.

The People

According to the 1981 census, 86% of the population of District Bijnor live in villages of less a thousand people. The 1981 census puts the district population at 1,925,637. Of these, 525,891 live in Bijnor Tehsil. In the Tehsil, about 74%, 388,782 inhabitants, live in rural areas. The villages of Dharmnagri and Jhakri then are in this respect in the mainstream of the Bijnori population - rural dwellers living in villages of less than 1,000 inhabitants. A thirty year comparison of some District population indicators is given below.
### Table: 1
Comparison of Decennial Population Variables, Bijnor District:
1961-1981

<table>
<thead>
<tr>
<th></th>
<th>1961</th>
<th>1971</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population</strong></td>
<td>1,190,987</td>
<td>1,490,185</td>
<td>1,925,637</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>634,468</td>
<td>804,264</td>
<td>1,033,432</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>556,519</td>
<td>685,891</td>
<td>892,205</td>
</tr>
<tr>
<td><strong>Decennial Increase(%)</strong></td>
<td>21.1</td>
<td>25.1</td>
<td>29.2</td>
</tr>
<tr>
<td><strong>Sex Ratio</strong></td>
<td>877</td>
<td>853</td>
<td>863</td>
</tr>
</tbody>
</table>

*(females per 1000 males)*

Source: Census of India.

In common with most other areas in India (Cassen 1978) Bijnor has experienced substantial population growth since the 1921 enumeration. Before that date, the population fluctuated somewhat between enumerations. In the District Gazeteer, frequent references are made to the effects of epidemics. After 1931, the pattern is clearly one of uninterrupted growth, which implies natural increase in the absence of migration, of which there has been little.

The table also shows clearly that the sex ratio (expressed as females per thousand males) has been less than unity for at least twenty years and may be declining. A sex ratio of less than one has been a long standing feature of Bijnor’s population. The district was designated a "blood red area" - the most extreme adverse category during the the British administration’s campaign, which began around 1875, to stamp out the practice of female infanticide in the North West Provinces and Oudh (now Uttar Pradesh). This has been documented elsewhere, notably by Miller (1983). However, although the Indian Census is a marvellous institution, it, like any other conglomeration of social facts should not be taken at face value. There is some evidence (Jeffery and Jeffery: 1984) to suggest that at least some of the discrepancy between the sexes in Bijnor District can be explained by errors of enumeration. For more recent times, the same argument has been made about the 1981 census of India (Mari-Bhat et al 1984). Even allowing for errors of enumeration, however, the size and increasing discrepancy between the numbers of males and females in Bijnor warrants some explanation. I will return to this subject in later chapters when discussing the structure of kinship and marriage and fertility.
In general then, the demographic profile of the district in which the base villages are located are what one would expect for North India in the light of other studies (eg. Dyson and Moore 1983b) - an adverse sex for females and rates of population growth in excess of 2% per annum. Such growth rates over a substantial period of time have resulted in a substantial proportion of the population being aged under 15 years old, as table 2 shows, with the attendant implications for future growth.

Table 2
Population of Bijnor District by Age and Sex (%): 1981

<table>
<thead>
<tr>
<th>Agegroup</th>
<th>Females</th>
<th>Males</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>20.4</td>
<td>24</td>
<td>44.4</td>
</tr>
<tr>
<td>15-59</td>
<td>22.8</td>
<td>25.9</td>
<td>48.7</td>
</tr>
<tr>
<td>60+</td>
<td>2.4</td>
<td>4.0</td>
<td>6.9</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>54</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Census of India.

The richness of Bijnor’s population history is enhanced by its large Muslim minority. The district has the largest proportion of rural Muslims of any District in India. One of the reasons Bijnor was chosen as a study location was to allow comparison between Muslim and Hindu populations in the same locale.

Furthermore, the proportion of Muslims in the district population is roughly similar in the 1931 1971 and 1981 censuses as table 3 shows. It is therefore reasonable to suppose that that there was no mass upheaval and migration of the Muslim population around the time when Pakistan was created as a Muslim State at Independence in 1947. The presence of a high proportion of Sunni Muslims in the district population is then a stable feature of local life both past and present. As one would expect though, the bulk of the population is Hindu.
Table 3

Religious Composition of Bijnor District (%): 1931, 1971 and 1981

% of Total Population

<table>
<thead>
<tr>
<th>Religion</th>
<th>1931</th>
<th>1971</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>61</td>
<td>62</td>
<td>60</td>
</tr>
<tr>
<td>Muslim</td>
<td>34</td>
<td>37</td>
<td>39</td>
</tr>
<tr>
<td>Others(^1)</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: 1, Others include Sikhs and Christians.

Source: Census of India.

These district patterns are reflected in the population of the study villages. Dharmnagri, and entirely Hindu village has 691 inhabitants, while Jhakri has 365. These figures represent 64% and 36% of the study population respectively. The range of castes is less than in the district as a whole.
<table>
<thead>
<tr>
<th>Caste</th>
<th>No. of Households</th>
<th>No. of People</th>
<th>Mean Size of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brahmin (Priests)</td>
<td>4</td>
<td>13</td>
<td>3.3</td>
</tr>
<tr>
<td>Rajput/Jat (warriors/farmers)</td>
<td>10</td>
<td>62</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>MIDDLE TO LOW</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sahni (vegetable growers)</td>
<td>40</td>
<td>234</td>
<td>5.8</td>
</tr>
<tr>
<td>Dhimar (water carriers)</td>
<td>11</td>
<td>71</td>
<td>5.4</td>
</tr>
<tr>
<td>Other Clean</td>
<td>13</td>
<td>36</td>
<td>2.8 1</td>
</tr>
<tr>
<td><strong>UNTACTHACLE (HARIJANS)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chamar</td>
<td>31</td>
<td>180</td>
<td>5.8</td>
</tr>
<tr>
<td>Jatab</td>
<td>11</td>
<td>60</td>
<td>5.4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>21</td>
<td>5.2 2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>124</td>
<td>677</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Note 1: Other clean includes Patnagar and Gurkha. Kumar Satiya Viras household consisting of four adults is excluded from the table.

2: Includes Dhobi and Balmiki

The bulk of Dharmagri's population is, then, made up of middle to low clean castes. The Harijan group are Gandhi's "children of God", untouchables in the Hindu caste system, made unclean by the nature of their traditional occupations. As I shall argue below, caste differences are not great, and for most of my discussion I shall group the clean cultivating castes - Rajputs, Jats, Sahnis and Dhimars - in one category, and the Harijans - mainly Chamars and Jatabs - in another and discuss them collectively.

The traditional occupations of these castes have little significance in
determining occupation followed in Dharmagri. Nor were they economically important in the past. With the exception of two Brahmins, responsible for the village temple, almost the whole population has, for as long as anyone can remember, earned their living from the land, either as owner-cultivators, or as labourers.

Some signs of caste specialism do linger on though, through the patronage of the local landlord. The only professional gardener in the village - working for the latter, is a Sahni. While the only Dhobis (washers of clothes) in the village, earn their living from washing his clothes. One man listed "seasonal ice cream seller" as his secondary occupation while another two men earn their living from a village store and from the post office, though the latter is also a substantial owner of land. There is also a small shawl weaving factory in the village, but those employed in it are from outside the village. A few men had seasonal jobs generated by the construction of the barrage. Apart from these few exceptions, the rest of the population earn their living from farming, either by cultivating their own fields, or working on the fields of others.

Neither is the work of women greatly affected by caste. High-caste and rich women, as widely reported in other studies (e.g. Saradamoni: 1983) do not work in the fields. Lower caste poorer women tend only to work in the fields outside the childbearing years. Differences in the work which women do are as much affected by the life cycle, demographic factors and class as they are by caste. I will take a closer look at these when discussing women's work.

The men in the Gurkha households earn their living by working for Raja Juala Parsad's son, Kumar Satiya Vira, who is resident in the village. There are also a large number of Bengali families living in a separate village nearby. They came to Bijnor as refugees after the troubles in East Bengal in 1959 and were settled on land taken from Raja Juala Parsad under the Abolition of Zamindari Act passed in 1952, as well as on land made cultivable by his eldest son, a senior civil servant responsible for refugee resettlement, who made a special effort to follow government policy in this regard. Some Bengali women have married into the village in bride-price marriages to poor men, who cannot afford conventional marriages. By and large, however, the Bengalis have a separate social and economic life and they do not feature in this thesis.

Jhakri, the Muslim village, has a longer settlement history and this perhaps
partly explains the more straightforward nature of its caste system.

<table>
<thead>
<tr>
<th>Caste</th>
<th>No. of Households</th>
<th>No of People</th>
<th>Mean Size of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheikh (priests)</td>
<td>46</td>
<td>271</td>
<td>5.9</td>
</tr>
<tr>
<td>Julaha (weavers)</td>
<td>7</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>Teli (oilpressers)</td>
<td>6</td>
<td>42</td>
<td>7</td>
</tr>
<tr>
<td>Dhobi (washers)</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Faquirs (beggars)</td>
<td>2</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>63</strong></td>
<td><strong>365</strong></td>
<td><strong>5.8</strong></td>
</tr>
</tbody>
</table>

Note 1: The table goes from Highest to lowest caste, and gives traditional caste occupations in brackets.

Source: Village Census 1982

Jhakri is more heavily populated by higher castes than Dharmnagri, with Sheikhs accounting for 74% of the population. According to accounts by village men about the past, there seems also to have been more general adherence to the pattern of caste occupations among the lower castes than in Dharmnagri. At the time of study, however, all of the adult men in the village were involved in agriculture or the making of raw sugar. One man also had a seasonal job as a clerk in Bijnor. No one followed a traditional caste occupation.

As the tables below show, the populations are roughly similar to each other in terms of their age structures. In both villages, about 48% of the population is aged less than fifteen years of age.
Table 6
Population by age and Sex

<table>
<thead>
<tr>
<th></th>
<th>0&lt;1</th>
<th>1&lt;5</th>
<th>5&lt;9</th>
<th>9&lt;15</th>
<th>15&lt;45</th>
<th>45+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female</strong></td>
<td>10</td>
<td>35</td>
<td>21</td>
<td>18</td>
<td>68</td>
<td>18</td>
<td>170</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>5</td>
<td>33</td>
<td>23</td>
<td>30</td>
<td>70</td>
<td>34</td>
<td>195</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>68</td>
<td>44</td>
<td>48</td>
<td>138</td>
<td>52</td>
<td>365</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>0&lt;1</th>
<th>1&lt;5</th>
<th>5&lt;9</th>
<th>9&lt;15</th>
<th>15&lt;45</th>
<th>45+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female</strong></td>
<td>13</td>
<td>49</td>
<td>41</td>
<td>45</td>
<td>130</td>
<td>54</td>
<td>332</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>17</td>
<td>42</td>
<td>63</td>
<td>52</td>
<td>124</td>
<td>47</td>
<td>345</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>91</td>
<td>104</td>
<td>97</td>
<td>254</td>
<td>101</td>
<td>677</td>
</tr>
</tbody>
</table>

Source: Village Census 1982.

Table six shows that both villages have an adverse sex ratio for females (expressed as females per thousand males), in keeping with the general North Indian pattern (Sen and Kynch: 1983). On the basis of this census data, Dharmnagri has a better sex ratio (962) than Jhakri (872). However, these data are too crude to be of use in a detailed analysis of the sex ratio. This is a question to which I return, using more sensitive maternity history data when considering fertility in more detail. In the meantime it is sufficient to note that in keeping with the general North Indian pattern, both villages have an adverse sex ratio for females.

The Study Villages

The villages themselves are about 500 yards apart, separated from each other by a narrow path through the fields. In the monsoon, villagers prefer to walk the long way round on the metalled road, especially after dark, to lessen the possibility of meeting a snake on the way. This doubles the length of the journey.

In both villages the houses are predominantly of mud construction, with thatched roofs (katcha), with a few notable exceptions. Mud houses tend to be simple one-or-two roomed constructions with each room seldom being more than 10' by 12' in floor plan by 6' to 8' at the apex of the roof. Once built, the walls of these houses need a minimum amount of maintenance. They are
resmeared with white mud periodically, or perhaps for a special occasion like a wedding or a birth. The roofs, which are made from boos grass from the alluvial marshes, have an effective life of about three years or so, after which they much be changed if the roof is to remain watertight. The thatch, is collected, dried and tightly bound and layered onto a cane framework hinged along its length into two equal parts. This frame is then heaved across a heavy bamboo pole slung from one gable apex to the other. This is heavy work, but acheived in great spirit amidst laughing and joking.

Houses have not always been of mud construction. Older people in both villages can remember when houses were made of latticed wood covered over with rushies. This was before the low lying soils were completely cleared for cultivation. The change over to mud came as less and less of these materials were available as swamp was converted to agricultural land. The older houses represented a severe fire hazard and one or two of the older men remembered a time in the 1940’s, when the whole of Dharmnagri was razed to the ground after a fire started in a high wind.

With mud houses the risk of such devastating fire is lessened. It is further lessened by the increased number of pucca or brick built houses. Pucca houses are easily distinguished into two broad categories and these are symbolic of the changing fortunes of the two villages. Pucca houses are a lesser proportion of the total housing in Dharmnagri than Jhakri, but tend to be both more elaborate in their construction and more established than their Jhakri counterparts. The pucca houses in Dharmnagri belong to the long established wealthy, whereas in Jhakri, they tend to be a sign of recently acquired wealth.

In addition to dwelling houses, Dharmnagri also has two schools, two shops, a co-operative store, a sub post office and a dispensary. The shops - small huts on wooden legs - act as meeting places for village men and passers by as well as supplying basic provisions like eggs, tea, soap, potatoes, spices and tobacco. The owner of one shop also serves as the village sub- postmaster from a similar hut by the village temple.

The sub post office is dwarfed by the large and grand village temple. The temple was built by Raja Juala Parsad on the lines of the Birla Mandir in Delhi. There is a full time priest and the temple provides the focus of attention for singing and prayers by the children of clean caste families. This activity increased in popularity after the temple was provided with a
public address system in 1983. The temple comes into its own around the
major Hindu festivals of Janamasthi, Dusshera, Holi, and Shivaratri, when it
is more widely used by villagers rehearsing and performing plays of stories
from the Ramayana and Bhagavad Gita.

The co-operative store is a government institution, which supplies villagers
with sugar and parafin at ration prices, when these commodities are
available. Villagers also buy seed for planting there, if none are available
elsewhere.

The dispensary is in a substantial compound with quarters for a Doctor and
ancillary staff. During the fieldwork period however the doctor chose to
reside in Bijnor, primarily because he could run a private practice there.
The dispensary, consequently was open for consultation for only about four
hours a day. Outside these hours, villagers could consult the pharmacist
privately and often preferred to do so, maintaining that the medicines
received during regular hours though cheap, were ineffective, or unavailable.
During the fieldwork period, I lived, with Roger and Patricia Jefferey, and
their children, in the disused operating theatre attached to the dispensary.

The only institutional building in Jhakri is the Mosque. This is used more
consistently for day to day prayers than is the temple in Dharmagri. The
faithful are called to prayer five times a day - via the mosque’s own public
address system. At any one Azan, there are about twenty to thirty men from
the village to be found praying there - during the day at any rate and
depending on season. The mosque has a full time maulvi whose upkeep comes
from land held by the mosque and sharecropped by villagers.

The mosque has a lesser part to play in festivals than the temple in
Dharmagri. At both the Id celebrations, the village men prefer to go to
Bijnor and worship at one of the large mosques there, where gatherings of
hundreds at each mosque are not uncommon. Ramzan and Moharam, the other two
major Muslim festivals, are either a personal feature of religious life - the
fast, or at Moharam, taken into the streets and celebrated there in a dance
parody of the battles of Muslim martyrs. The public face of these
celebrations is a male one. Women are not allowed in the mosque and if at
all, pray and fast at home.

Despite the presence of two primary schools in Dharmagri, literacy rates are
not high. About half of adult males attended the school at some time, while
only about 10% of girls did. Muslims girls do not attend school, but learn
to read Koran Sharif at a specially convened class in Jhakri.

The lay out of the two villages show some interesting differences. In some cases, clean caste and Harijan houses share the same street. Clean castes and Harijans are to be seen sharing a hooka (hubble-bubble pipe) or a bhaitak (men's sitting room), especially if there is some work to be arranged, or perhaps playing cards together. Norms governing the consumption of food (Harriss: 1982) seem to be more strictly observed among Hindus. Clean and Harijan castes are never seen eating together and neither do they share hand pumps for drinking water, though one or two Sahnis claimed that they did eat at the houses of Harijans whom they considered to be their friends.

Jhakri, partly because it is smaller and encompasses fewer castes, has a more close-knit feel to it. But the pattern of building reflects a lesser separation among the castes than the Hindu village. Dharmnagri shows the tendency, reported in other studies (Beteille:1965; Miller:1975), for building and settlement to follow caste lines. To suggest, however, there is strict adherence to caste principles in settlement would be misleading.

In Jhakri the only road in the village is around its perimeter. The houses are all built in a central cluster, with access by arches and passageways from one house to another. Caste is not a strong organising feature in Jhakri, at least not overtly so. The houses of caste groups do tend to be clustered together but not seperated from the clusters of other castes by roads as in Dharmnagri. At weddings and other celebrations, castes in Jhakri share the same food/eat together.

So much for internal restrictions in each village, what about relations between Hindus and Muslims in Dharmnagri and Jhakri? The most suitable way to sum them up is probably as a relationship of public tolerance and private disdain. The inhabitants of the two villages do not cross each other’s paths more than is absolutely necessary. They tend to conduct business with each other in neutral places. They will for example, buy and sell sugar cane from each other, but will not share in each others festivals or celebrations. What is religiously special to one group is anathema to the other. Hindus revere the cow, Muslims eat it. Muslims do not eat pork, Hindus relish it. Alcohol is taboo to Muslims, Hindus distill and drink it.

None of these differences exhibited itself in any overt animosity or violence
during the fieldwork period. The verandah of our quarters became a meeting place for Hindus and Muslims alike. When representatives of both groups were present, the relative merits of each religion would be discussed openly, but not too profoundly, lest animosity be aroused or feelings hurt. It is worth noting that there were no communal riots in Bijnor District during our stay, even though they were reported in nearby Districts.

Climate and Agriculture

A key environmental feature of the villages, which must be mentioned at this stage, is soil type. Dharmnagri and Jhakri farmers effectively farm two types of soil. The first is known locally as khader. This is low lying land alluvial soil closer to the river. It is heavy clay and does not drain readily. The second type is known as bangar. This land is lighter in texture than the khader and because of this - and its elevated position, it drains readily.

Most of the rainfall in the Ganges plain comes during the South East Monsoon, which lasts from about mid-June to mid-September. Rainfall per annum has been remarkably constant over the past 50 years or so. The district has not been shorter of rain than comparable districts in western plains Utaar Pradesh. In fact the 1951 census records Bijnor District as having a fifty year average annual rainfall of 10,833mms. (standard deviation 12.25) (Census of India: 1951, vol xv, part ix, p339). This places Bijnor District about middle rank in precipitations by district for Uttar Pradesh, with only the hill districts having higher average rainfalls per annum. The monsoon gives way to drier cooler weather and it is not unusual to have a day or two of mist around December. From March onwards, the temperature climbs steadily. In the year previous to study, there was a heavy hail storm just as the wheat was ripening and the standing crop was damaged. The timing of precipitation is important, not only the yearly volume.

The 1908 District Gazeteer comments that the District’s proximity to the hills make it a little cooler than those further south in U.P. in both summer and winter. In the early part of this century, British officials commented that conditions of agriculture in the District were not good. The major explanation for this was the absence of any widespread reliable irrigation. A few schemes had been suggested for the building of a canal irrigation system in the tehsil, but Nevill the District Magistrate in 1908, suggests that: "The history of canal irrigation in the district is one of ambitious schemes and modest acheivements" (1908:p53). Some canals were built in Bijnor
district in the 19th century, but these were in the south and east of the district. In the west, where the study villages are located, there was very little permanent irrigation at all. Descriptive accounts suggest that there was no important source of reliable irrigation in the Tehsil, and H.E. Bates, author of a rent and rebate report written in 1931, explains the poverty of the cultivators there as a result of this lack. In 1931, irrigation was confined to vegetable plots and only 1.5% of the cultivated area in the Tehsil was irrigated. Bates was in no doubt that the farmers in Bijnor Tehsil were, under existing economic and social conditions, dependent on adequate timely rainfall for any prosperity at all, viz:

"The cultivators as a whole are extremely poor and live in wretched unsanitary conditions. This is mainly due to combination of high rents and variable harvests. The outturn is always uncertain in this Tehsil [Bijnor] because there is no means of irrigation and crops depend entirely on rainfall" (1931:p13).

Bates also highlights the frustration of farmers living in a Tehsil which has different soil types so near the Ganges, but in the absence of canal works, only being able to irrigate land which needed less and not more water.

"Outturn depends entirely upon rainfall ...... there is no chance of irrigation, except near the Ganges khader. This latter is damaged by ample rainfall, while the remainder [the bangar] demands it. Most of that [soil] is light and westerly winds soon damage standing crops which begin to shrivel at once even after fair rains" (1931:p18).

This led Bates to the conclusion that: "If the rains are feeble, there is no return at all except in the khader area. A cultivator in Bijnor must be a born optimist" (1931:p18). By the time of the present study, this situation had changed dramatically, as Table 7 shows.
Table: 7
Irrigated Area in Acres, by Source Tehsil Bijnor, Selected Years

<table>
<thead>
<tr>
<th>Source</th>
<th>Y</th>
<th>E</th>
<th>A</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1931</td>
<td>1971</td>
<td>1981</td>
<td></td>
</tr>
<tr>
<td>Canal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Masonry Wells</td>
<td>4,333</td>
<td>1,160</td>
<td>6,890</td>
<td></td>
</tr>
<tr>
<td>Tubewell</td>
<td>-</td>
<td>28,422</td>
<td>148,720</td>
<td></td>
</tr>
<tr>
<td>Electric Tubewell</td>
<td>-</td>
<td>69,928</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>353</td>
<td>7,062</td>
<td></td>
</tr>
</tbody>
</table>

**Total** | 4,333 | 99,863 | 162,672 |

**Source:**
1931, Rent and Rates Report, Tehsil Bijnor;
1981, Bijnor Statistical Diary.

**Note 1:** Separate figures for diesel and electric tubewells not available in 1981.

This pattern of the growth of irrigation is confirmed by verbal accounts from villagers and by the numbers of wells and pumping sets they now own.

Table 8:
Ownership of Electric and Diesel Engines in Dharmnagri and Jhakri
1982

<table>
<thead>
<tr>
<th></th>
<th>Dharmnagri</th>
<th>Jhakri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Diesel</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

**Source:** Village Census 1982

This picture is complicated by those owning engines but no wells and vice versa. In 1982, however, all land on the bangar owned by villagers is now irrigable while about half of the khader land is so endowed.
Although villagers describe the weather by reference to four seasons, agricultural statistics divide the year into two. This classification into Kharif (Spring/Summer) crops and Rabi (Monsoon/Winter) crops has for a long time been somewhat mismatched with the complexity of cropping patterns in the village. The classification fits well with the major staples of wheat (Rabi) and rice (Kharif) but sugar cane, the major cash crop, has a growing cycle of ten months with ratoured crops being cut between eight months and a year after this first harvest. Within each season, a number of fodder and fuel crops are also grown, but in order to provide a succinct description of changes in cropping, I shall concentrate only on the major crops.

Unfortunately, the data sources on which this discussion are based are far from perfect. Furthermore, these shortcomings are of an unknown quantity and therefore it is difficult to compensate adequately for them. It seems though that Bijnor is by no means alone in having inaccurate cropping and acreage statistics for the early part of this century.

Dewey (1978) criticised Blyn’s attempt (1966) to construct trend statistics for the early part of this century from official records in Bihar and West Bengal, suggesting that a number of features in the way the statistics were collected make them unreliable for this purpose. There was, for example, no incentive on the part of any government official responsible to collect accurate figures. He quotes contemporary statements from District Magistrates and a number of independent sources after 1943 to support his argument which in its turn has been criticised, notably by Charlesworth (1982) for being too negative.

Here, however, I am not trying to delineate trends, merely to sketch major changes, and as the figures below show, these shifts are too large to be explained entirely by the inadequate collection of data. Dewey’s conclusion is supported by my earlier attempts to be more detailed. I found fluctuations around base years and statistics which were inconsistent with themselves for single years; in one case, the arithmetic in a published table was wrong!

I have resolved these issues in a number of ways which minimise the effect of shortcomings in the statistics. I chose 1902 as a starting date as the statistics were affected by a number of unusual years before that, and totally collapsed due to census operation in 1901. To compensate for the
unreliability of the figures, I have used five year averages around 1902 and 1927-1931.

Table 9:

**Acres under Major Crops, in Bijnor Tehsil, Selected Years**
(Percentages of Total Cropped Area for Each Season in Brackets)

<table>
<thead>
<tr>
<th></th>
<th>RABI</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 Year 1902-06</td>
<td>5 Year 1927-31</td>
<td>SEASON 1979/80</td>
</tr>
<tr>
<td>Wheat</td>
<td>27,061 (29)</td>
<td>31,621 (40)</td>
<td>98,050 (95)</td>
</tr>
<tr>
<td>Gram</td>
<td>9,948 (11)</td>
<td>6,166 (7)</td>
<td>- ( - )</td>
</tr>
<tr>
<td>Barley</td>
<td>52,919 (57)</td>
<td>42,520 (52)</td>
<td>1,483 (1)</td>
</tr>
<tr>
<td>Oils</td>
<td>1,928 (2)</td>
<td>569 (0.7)</td>
<td>632 (0.5)</td>
</tr>
<tr>
<td>Masur</td>
<td>496 (1)</td>
<td>315 (0.3)</td>
<td>3,730 (3.5)</td>
</tr>
</tbody>
</table>

|       | Total Rabi     | 92,352 (100) | 81,191 (100) | 103,895 (100) |

<table>
<thead>
<tr>
<th></th>
<th>Kharif</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>25,103 (22)</td>
<td>18,006 (20)</td>
<td>37,300 (26)</td>
</tr>
<tr>
<td>Bajra &amp; Arhar</td>
<td>45,248 (39)</td>
<td>14,082 (15)</td>
<td>3,453 (2)</td>
</tr>
<tr>
<td>Maize</td>
<td>2,425 (2)</td>
<td>1,218 (1)</td>
<td>470 (0.3)</td>
</tr>
<tr>
<td>Dals</td>
<td>17,686 (15)</td>
<td>28,609 (32)</td>
<td>2,237 (1.7)</td>
</tr>
<tr>
<td>Cotton</td>
<td>6,603 (6)</td>
<td>4,936 (5)</td>
<td>- ( - )</td>
</tr>
<tr>
<td>Sugar Cane</td>
<td>18,968 (16)</td>
<td>24,692 (27)</td>
<td>102,455 (70)</td>
</tr>
</tbody>
</table>

|       | Total Kharif   | 116,033 (100) | 91,543 (100) | 145,915 (100) |

|       | Total Cropped Area | 208,385 | 172,734 | 249,810 |


The major shifts in cropping pattern since the early part of the century are clear. Rougher Barley has given way to wheat which has more than trebled in
area, while chick peas (gram) have ceased to be important at all. The area under oil crops has declined. Since oilseeds are not a major cash crop in the tehsil, the decline probably reflects a constant demand, improved strains of seed and better extraction rates now than earlier.

The area under rice has increased dramatically since the beginning of the century. The increase in area alone - almost 50% - underestimates the extent of change. The 1902 figures consist of rough varieties of rice while the 1979 figure consists mostly of improved and transplanted varieties. Cotton has ceased to have any importance as a cash crop. While the net acreage of all other kharif crops has declined, sugar cane has increased its sown area by more than five fold to 102,455 acres since the beginning of the century. These patterns are well reflected in the study villages. Older men in the villages remember growing a greater variety of less fertile crops, which include all of the above. The variety of crops has reduced more recently and the major crops are now wheat, rice and sugar cane.

The cropping intensity in the villages has also increased. Before the introduction of water lifting technology the land could support only one crop a year, and the main agricultural activities were intensive soil preparation and praying for rain. All farmers in the village now operate a double cropping pattern involving wheat and rice. The turn around between these crops is short, perhaps a month, but not so intense as those further south in Moradabad (Bliss and Stern:1982).

Wheat, according to the Handbook of Indian Agriculture (1982) should be planted out before the end of December otherwise yields are adversely affected. By and large, this recommendation is followed by farmers in both villages. Organic manure, a valued commodity, will be ploughed in before wheat planting, but only if the land is to be planted with sugarcane after the wheat harvest. The land will be ploughed and watered as many times as funds and pressing needs for other work allow before the wheat is planted. However, it would be wrong to think that wheat planting is the only obsession at this time of the year, for November is also the month when the local sugar cane society opens its gates for the purchase of sugar cane for crushing at the mill in Bijnor.

The cane harvesting season begins after a long lean spell when there has been relatively little money around; farmers are understandably keen to cut their cane and reap some of the benefits of the ten months work they have put into
it. Some farmers, if they had a desperate need of cash, will already have sold some of their crop to the colhus (local cane crushers) to make gur (raw sugar) used either for final consumption, or as the intermediate stage in the production of boora - country sugar, much prized for its fineness and sweetness. The beginning of the sugar cane cutting season is a time of great excitement. Those who are to operate colhus clean and repair them and overhaul the diesel engines which will be used to run the crushers when the electricity supply, which runs for only eight hours a day, is not available. Groups of men operating as partners on different crushers will meet to discuss prices with each other and hire labour to stoke the fires. Informally there is a great deal of competition among them to begin crushing first.

November through to May is a very busy period with wheat planting and harvest and sugar cane operations all taking place during that period. The other major crop in the cycle, rice has two separate methods of cultivation, depending on whether it is planted on khader or bangar soils.

In khader soil, rice is planted behind the plough in June. On the bangar, rice is first cultivated in small tightly-planted nurseries, before being plucked and transplanted out into flooded fields in July. These different cultivation methods as well as being related to soil types are dependent on the varieties of rice chosen. On the bangar, new, High Yielding Varieties, requiring timely irrigation to be successful are chosen. In the khader, which drains less well, the required control of water is not possible. Farmers growing rice in the khader then grow older varieties of rice which are more tolerant of the conditions there, to ensure uniformity of yield in the long run. The foregoing represents the briefest possible sketch of the agricultural cycle and I shall discuss each of the crops involved in more detail in specific chapters on each. In the meantime the table below summarises the pattern of work throughout the year.
Table 10:
Cropping Pattern Dharmnagri and Jhakri

<table>
<thead>
<tr>
<th>SEASON</th>
<th>RABI</th>
<th>Kharif - Kharif --</th>
<th>RABI</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONTH</td>
<td>J F M A M J J A S O N D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CROP</th>
<th>PREP. PLANTING</th>
<th>HARVEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>RICE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHEAT</td>
<td>HARVEST</td>
<td>PLANTING</td>
</tr>
<tr>
<td>SUGAR CANE</td>
<td>HARVEST--HARVEST--</td>
<td>PLANTING--</td>
</tr>
</tbody>
</table>

Source: Agricultural Questionnaires 1982-3.

In addition to the work outlined above, a great deal of work is also associated with the upkeep of animals. Details from the village census show that almost every household in Dharmnagri keeps animals.

Table 11:
Ownership of Animals in Dharmnagri

<table>
<thead>
<tr>
<th>Type of Animal</th>
<th>Landed households</th>
<th>Landless households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cows</td>
<td>66</td>
<td>24</td>
</tr>
<tr>
<td>Calves</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>Bullocks</td>
<td>89</td>
<td>14</td>
</tr>
<tr>
<td>Calves</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Milk Buffaloes</td>
<td>37</td>
<td>9</td>
</tr>
<tr>
<td>Calves</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Draft Buffaloes</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Calves</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Goats</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Households with no animals = 10.


Systematic information of this type is not available for Jhakri. This is because the census of households collected there extended only to persons and...
not to livestock. It was collected from a small number of people who did not know how many animals each household kept. My impression is that the pattern is much the same, with perhaps more goats being kept for meat. The pattern of ownership of animals is examined in more detail for the key informants in chapter 7.

As one might expect, the landed keep more draft animals than the landless, though they also have more milk animals. Unlike North Arcott (Harriss: 1982), the landless in Dharmagri and Bijnor do not earn a living by keeping draft animals and hiring out their ploughing services. With the exception of three draft buffaloes, the draft animals held by the landless are a function of milk production rather than ploughing.

Patterns of animal husbandry in the village are complex. People looked after their animals as best they could, depending on the purpose for which they were kept, the resources available for their upkeep and the season. For example animals kept for producing milk for sale are often better fed than those kept for domestic milk production, while draft animals are fed grain and oil cake if they are set to the plough, and if their owners can afford it.

Conclusion

This setting chapter has provided the briefest of outlines of the study villages. It tries to describe a complex location, where for example tractors are in evidence but most ploughing is still done with animals, where people put the resources which they own together in ways which deny and bewilder the imagination and catch unawares the student who might expect one set of resources to go with another. This is not the case. In the chapters which follow I explore some of this myriad variation, with particular reference to the role of children. I will begin in the next chapter by looking at what is perhaps one of the most bewildering features of the village, the structure of landholding.
Chapter 3: Landholding

This chapter has three main purposes. The first is to describe the structure of landholding in the study villages. Land is the most important productive resource in these two villages and has a significant effect on standards of living and the ability to generate income and wealth.

The second purpose is to make particular reference to women's relationships to land and other productive property. In the study villages women tend not to own land in their own right. The significance of this is not to be overlooked as it tells us a great deal about the position of women and their relations with men. The important questions to be answered here are what kinds of property do women hold, how does this differ in nature from that which men hold, and what are the consequences of this?

Thirdly, possible relationships between landholding and fertility in the study villages are examined in the light of the debate about whether this relationship is positive or negative. Before turning to the first of these objectives, I will outline the sources of data on which the arguments are based and highlight some of the problems encountered in their use.

Sources of Data

The two main sources of data on landholding used in this chapter are the official land records held by the Tehsildar’s office in Bijnor and accounts from villagers themselves about the amount of land they held.

Official Records.

The official record of land ownership in Bijnor, as elsewhere in Uttar Pradesh, consists of two sets of volumes. The first set, the Khatoni is a record of current ownership from a specified date, usually the date of the last settlement or consolidation. A typical entry of ownership consists of the owner's name, his father's name, the plot number and area of the plot owned and the year in which ownership commenced or the date of the last settlement, whichever is the later.

The second set of volumes is the Rotation Dakhilkar Register. This is a record of land sales and purchases. A typical entry includes the names and father's names of those involved in the transfer, the plot number and area
of each plot involved and the price of the land transferred and the date of transfer. Mainly Khatoni records will be used in this chapter. The Motation Dakhilkar Register will be used more in the next chapter when transfers of land are considered.

The Khatoni is an impressive document, but in the process of using it to calculate landholding figures for the base villages I encountered some difficulties. These difficulties are greater than accounts by other scholars, would have led me to expect from a set of records which are not much different from theirs (Beteille: 1965; Bliss & Stern: 1982; Kessinger: 1974).

The first problem is that landholding records are held by revenue village of ownership, not village of residence. The landholdings of one owner are not held in a single ledger entry by name and address, but are held in the ledger which relates to the village where the land is. To have a complete record of landholding by the residents of the study villages, it was necessary to examine the Khatonis of surrounding villages as well as the study villages themselves. To do this I spoke to and examined the records of all patwaris, the officials responsible for village land records, at the Tehsil office. In all I examined the records of about sixteen villages. Residents in the study villages hold land in six of these. I am certain that the landholdings of the villagers in Dharmangri and Jhakri have been exhaustively covered by this approach with two important exceptions.

The first is the village of Chandpuri which adjoins Dharmangri on the upland Bangar soil and can therefore now be regarded as prime agricultural land. Unfortunately for me, this village was going through the process of chakbandi - land consolidation - during the study period. Consequently, the records were not at the Tehsil but at the Chakbandi office, to which access could not be negotiated. To compensate for this omission (which affects only a few residents of Dharmangri) I have included figures for landholding there by asking the villagers concerned about their landholding in Chandpuri. The effect on the structure of landholding will be small, since all owners of land in Chandpuri are already in the top category of ownership before their Chandpuri holdings are included.

The second omission relates to the existence of the Bareilly Co-operative Society. I was told by a patwari that this was a way in which some of the wealthier owners of land in Dharmangri had managed to avoid the land ceiling after the abolition of Zamindari in 1952. Once again an estimate of the
amount of such land was obtained by speaking to those concerned. The effect on the structure of landholding is minimal as these owners are also already in the wealthiest category. If anything, then my figures underestimate the concentration of land in the top category.

Much of the land held by Dharmanagri residents is not in the village of residence at all but in adjacent, or sometimes more distant villages. Jhakri residents did not own land outside the revenue village. Conversely, and following on this, it should be obvious that not all of the land in the study villages was owned by the residents who are the subject of this study. Other holders are primarily farmers from neighbouring or close by villages.

In order to use the data in the sources described above several assumptions must be made. The first is that only those whose names are in the record book hold, operate or have control over any land. On the face of it this seems like a reasonable assumption. However if structures of landholding were based simply on these categories, several important features of landholding in the villages would be overlooked. Quite apart from cases where the books are not up to date with current ownership of land, for example where a father has died but legal ownership has not passed over to his sons, the patterns of land operation are not completely covered by this type of categorisation.

For example, in several families in both villages the father though still alive, has chosen to hand over effective control of family land to his sons. One man, Kishin Singh, is recorded in the Khatoni as holding 13 bighas of land. He himself operates none of this. His three sons operate equal shares and each gives him an equal share of the produce from wheat and rice crops and a cash sum, Rs1000 each year. In this case, then, land is not operated as a single unit, but as three units each based around a single cooking hearth. Each of these hearths supports varying numbers of people. Decisions on how to operate the land vary according to the needs of three separate units, each with different numbers of people, not the needs of one extended unit. In cases like these the records overestimate the operational concentration of land.

In addition, the records themselves give no idea of how individual holders came to hold the land which they do. Some idea of how current patterns emerged is possible by examination of the Motation Dakhilkar Register. By combining this with the Khatoni, and a bit of adding and subtracting, and using information gathered from more informal fieldwork in the village, it becomes clear that that some sons do in fact manage to buy land before their inheritance. One cannot assume, therefore, that a holder’s name appears on
the books only after he has inherited. This leads to several confusions between what I knew about landholding from living in the village and what the records told me about it.

For example Sukhan Singh an elderly Chamar had three sons, and held some 25 bighas of land (one bigha is approximately one-fifth of an acre). While he was still alive two of his three sons managed to buy small plots of land, less than a bigha each. These holdings are recorded separately from that of the father in the Khatoni. The sons, however, lived and worked jointly with their father and their standard of living and expectations of land ownership were determined by this, ie being in a family which owned 25 bighas of largely prime bangar land. If we relied on the records alone, two of the sons would be recorded as owners of less than a bigha, and are therefore among the poorest households, while the father is registered as an owner of 25 bighas and appears among the wealthiest. During the fieldwork period Sukhan Singh died but the land had still not been transferred to the names of the three sons by the time I left some six months later.

If my account of the structure of landholding is based on records alone I also have the opposite problem. What was I to do if more than one man was recorded as having a share in a single plot or several pieces of land. Once again the records say nothing about the relationships between the people who hold jointly except where they are brothers. In this case they will be listed as a, b and c sons of d. But even then, as in all cases, it tells me nothing about how the land is operated. Is the joint holding in name only or does it have operational significance? Only after discussions with landholders themselves does the relationship between the records and the operational patterns make sense. One half-bigha plot in Jhakri, for example, is listed as having eight joint owners. I knew from my field work that these were three sets of first cousins. I asked one of them, Said Uddin, about it. He told me that this plot was the one by a colhu which has a tubewell on it. The well had been sunk jointly by their three fathers when they operated the land together in the previous generation. It is still held jointly as none of the men involved is prepared to give up his right to the water which it and the machinery there provides. Hardly surprisingly the particular significance of this small plot is not recorded anywhere on the official records.

Said Uddin also taught me that there might be no lasting connection between or among men who bought land together. He is an only son and has received his father's land intact. He has also bought land pre-inheritance. Over the past ten years or so he has been the most prolific buyer of land in either study
village. The records told me that he had been buying land with men with whom he had no ostensible connection. When I asked him about this he said he was not fussy about who he bought land with. He said that if a plot came which he thought worth buying but did not have the money, he would enter into partnership with someone who also wanted to buy but did not have enough money. The plot would then be split between them. He said he would buy land in partnership with me if I had enough money!

This was also a lesson in not reading into transactions relationships which did not exist. Said Uddin had also bought land with his FYBS's but these were on the same basis as those he had bought with unrelated men. They were simply an expedient to raise enough money to buy the plot which was then shared according to contribution. The connection lasted for the transfer only, although the records show that the the men hold jointly in all cases. The complexities of relationships surrounding land need to be borne in mind in the account which follows.

Caste and Landholding in Dharmnagri and Jhakri

Of the various ways in which a distribution of landholding can be constructed for the study villages, caste is probably the easiest. Table 1 shows the distribution of landholding by caste in Dharmnagri.
Table 1:
Landholding in acres by Caste
Dharmagri

(percentages of totals in brackets)

<table>
<thead>
<tr>
<th>CASTE</th>
<th>LAND HELD (acres)</th>
<th>% OF TOTAL LAND</th>
<th>NO OF HOUSEHOLDS</th>
<th>NO OF PEOPLE PER HOUSEHOLD</th>
<th>LAND PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahmin</td>
<td>1</td>
<td>0.3</td>
<td>4 (3)</td>
<td>0.25</td>
<td>13 (2) 0.07</td>
</tr>
<tr>
<td>Rajput/Jat/</td>
<td>62</td>
<td>22</td>
<td>11 (9)</td>
<td>5.6</td>
<td>62 (9) 1.00</td>
</tr>
<tr>
<td>Patnagar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sahni</td>
<td>105</td>
<td>38</td>
<td>40 (33)</td>
<td>2.6</td>
<td>234 (35) 0.44</td>
</tr>
<tr>
<td>Dhimar</td>
<td>24</td>
<td>8.3</td>
<td>11 (9)</td>
<td>2.18</td>
<td>71 (10) 0.33</td>
</tr>
<tr>
<td>Other Clean²</td>
<td>8</td>
<td>3</td>
<td>10 (8)</td>
<td>0.8</td>
<td>36 (5) 0.20</td>
</tr>
<tr>
<td>Chamar</td>
<td>56</td>
<td>20</td>
<td>31 (25)</td>
<td>1.74</td>
<td>180 (27) 0.30</td>
</tr>
<tr>
<td>Jatab</td>
<td>18</td>
<td>6</td>
<td>11 (9)</td>
<td>1.51</td>
<td>60 (10) 0.31</td>
</tr>
<tr>
<td>Other Harijan³</td>
<td>1</td>
<td>0.3</td>
<td>5 (4)</td>
<td>0.2</td>
<td>21 (3) 0.04</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>275</strong></td>
<td><strong>100</strong></td>
<td><strong>123 (100)</strong></td>
<td><strong>2.24</strong></td>
<td><strong>681 (100) 0.40</strong></td>
</tr>
</tbody>
</table>

Notes: 1 Excludes Kumar Satiya Vira
2 Includes Ghurka, Barhi & Bishnoi.
3 Includes Dhobi & Balmiki.


This table shows that no caste, with the possible exception of the small number of Brahmins, is wildly disadvantaged in relation to land holding. The Sahnis, for example comprise about 33% of total households in the village and about 35% of the total population and hold about 38% of the land. Other clean castes are the most disadvantaged as a group, reflecting their historical position as service households in the village. They do not fare so badly in terms of their per capita holding. The most advantaged group are the Jats and Rajputs having twice their proportionate household share of land. This reflects the proportion of landless households from each caste. Of the 21 landless households in Dharmagri, 12 are Jatab and Chamar and rest low clean caste households, except one Brahmin household which is also landless.
The position in Jhakri, shown in Table 2, is different, with a greater concentration of land in the higher caste group.

Table 2:
Landholding in Acres by Caste
Jhakri

(percentages in brackets)

<table>
<thead>
<tr>
<th>CASTE</th>
<th>LAND HELD (acres)</th>
<th>% OF TOTAL LAND</th>
<th>NO OF HOUSE-HOLDS</th>
<th>NO OF PEOPLE PER HOUSEHLD.</th>
<th>NO OF LAND PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheikh</td>
<td>150</td>
<td>(92)</td>
<td>46 (73)</td>
<td>3.26</td>
<td>271 (74)</td>
</tr>
<tr>
<td>Julaha</td>
<td>11</td>
<td>(7)</td>
<td>6 (10)</td>
<td>1.83</td>
<td>42 (11.5)</td>
</tr>
<tr>
<td>Teli</td>
<td>2</td>
<td>(1)</td>
<td>7 (11)</td>
<td>0.28</td>
<td>42 (11.5)</td>
</tr>
<tr>
<td>Dhobi</td>
<td>0</td>
<td>(0)</td>
<td>2 (3)</td>
<td>0</td>
<td>4 (1)</td>
</tr>
<tr>
<td>Faquir</td>
<td>0</td>
<td>(0)</td>
<td>2 (3)</td>
<td>0</td>
<td>6 (2)</td>
</tr>
<tr>
<td>Totals</td>
<td>163</td>
<td>(100)</td>
<td>63 (100)</td>
<td>2.58</td>
<td>365 (100)</td>
</tr>
</tbody>
</table>


Almost all land in Jhakri is concentrated among the Sheikhs. They comprise 73% of village households containing 74% of the population, holding 92% of the land. The average holding per household and per capita is similar for both Dharmmagri and Jhakri. However, Table 2 hides the fact that over one third of Jhakri households are landless and that the largest single landless caste group is Sheikh. Of the 22 landless households in Jhakri, 8 are Sheikh, 3 Julaha, 7 Teli, 2 Dhobi and 2 Faquir.

Class in Dharmmagri and Jhakri

As I have already suggested in Chapter 2, most people in the study villages are dependent, in one way or another, upon agriculture for their livelihood I intend therefore to use landownership as the major indicator of class in Dharmmagri and Jhakri. There are no rich households in either village without land. However, people do not fall easily into class categories - they must be pushed. Accordingly any classification is bound to raise problems. The task in hand is not to produce the ideal classification, but rather a grouping which adequately and reasonably represents the relative groupings of the
people under study. In this study, the major problems may be split into four groups - the unit of account, non-agricultural income, demographic variation among units of account and the interpretation of data sources. I will deal with each of these problems and their resolution before presenting class data for the study villages.

The Unit of Account

Since the standard of living of village inhabitants is affected by the resources of the household to which they belong, it is reasonable to base the structure of class upon the household. I do not wish to be read here as saying that all members of the household benefit equally from its resources. Indeed, there is a substantial body of evidence indicating just the opposite. Chen et al (1981) and Kynch and Sen (1983), for example, argue that access to household resources is based upon age and sex, with a positive bias towards adult males. I myself shall argue a similar point below. Here I am more simply arguing that the occupants of more landed households will generally be materially better off than those in less landed households.

It would be misleading to suggest that all households are homogenous. We must not think that the mere existence of the household in any way suggests this. The structure of the household in the base villages varies with respect to generation, production and consumption all gathered around groups of equally inheriting affinal kin. Households in the village therefore vary from consisting of two or more generations of affinal kinsmen, their wives and children, all engaged in joint production and consumption at its most complex to a straightforward nuclear family or perhaps single person at its most simple. I have already made some reference to the extent of this variation in Chapter 2 and will return to it in some detail subsequently. I do not plan to refer to it in any depth here, but it should be borne in mind that the household is not a homogenous unit.

Non-Agricultural Income.

There are some households in the study villages whose class position is not closely related to landholding. In Dharmnagri, this may be because the household head has a permanent job. This applies to the sub-postmaster and the large landowner's permanent farm manager. Alternatively a few households derive income from human capital invested in the skills of its members. This applies to the village carpenter, who also owns land, and the mechanic, who does not. Three men in Dharmnagri also own small shops selling small
comestibles. However the amount of capital invested in these and the return to them is small. One shopkeeper is a member of a landowning household and is therefore not difficult to place. The other two are categorised landless. In Jhakri, there is only one household where non agricultural income is earned, by a man who has a seasonal job as a clerk in the sugar cane society in Bijnor. He is also a substantial landowner and is therefore easily placed.

In addition to these adjustments, there are also anomalies in land operation to be taken into account. For example one female-headed household owns about 2.5 acres of land, but because of the proscription on women ploughing she cannot operate any of this herself. She leases it out to a jat household and consequently earns about half of what she would were she able to operate it herself.

This example raises the more general issue of sharecropping. While it is true that those who sharecrop or rent land in enjoy a higher standard of living than they otherwise could, such arrangements are generally short lived and the amounts of land involved small. In addition, most of the land available for rent is the very poorest of the low lying khader. It is sandy soil, prone to flooding about an hour's bullock cart ride from the village. Clearly such rental does not bestow the same security as ownership of an equivalent area. It does not therefore figure in the class structure which follows.

Demographic Variation Among Households.

It is possible for some households that the hiring out of labour power is more closely connected to the structure and composition of their particular household than to its class position. This is evident in the types of work which various men perform. Men and sometimes women from poorer households tend to work as casual labour on the land of others while men from richer households tend to work in household enterprises using household capital. Examples of this are the renting of orchards for sale of fruit or operating colhus. The major exception to this was work on the barrage which was undertaken by Hindu men from all types of households. It was recognised by all, however, that such seasonal and temporary work was unlikely to affect the class position of households in the long run.

The Class Structure of Dharmnagri and Jhakri

In constructing a hierarchy of class for the study villages I have used one main guiding principle. This principle is the way in which the household uses
its labour power in relation to its resources. The social relationships which these uses of labour power give rise to has been at the centre of a long and sometimes fruitless debate on the mode of production in Indian agriculture (Thorner: 1982). This debate is not the centre of attention here. Rather I simply want to structure households in Dharmanagri and Jhakri according to whether the extent of their landholding means that they are households which hire labour in or hire labour out at current levels of technology and cropping intensity. I have chosen not to use individual holdings as the basis for classification, for two reasons. Firstly, using de facto landholding as an indicator does not give a reasonable idea of who benefits from the working of this land. For example, if a household head has two married sons and they all work the land jointly, it is reasonable to argue that the material standard of living of the sons is enhanced by the fact that they have entitlements to the produce of their father’s land. If the structure of landholding took account only of the father’s de facto holding, the sons would be classed as landless, a situation which does not accurately reflect their class position.

Secondly, if there is a relationship between landholding and fertility, one could reasonably argue that this will be based on the land a man expects to inherit rather than his current holding. It is my contention that the position of a landless labourer whose household has no land, and therefore can expect to inherit no productive property, is different from that of a man who currently holds no title to land but farms jointly with his father who owns 20 acres. To account for these differences, I have used household landholdings in the classification which follows. This at least has the merit of taking into account what heads of household can expect to inherit in the future.

Bearing in mind the above caveats, if households are structured in this way, it leads to five categories each of which is outlined below. Kumar Satiya Vira’s household’s has a category of its own. This reflects the unique character of the household in the village and its importance to the village economy. His household owns and controls land extensively and he hires a substantial amount of permanent labour. In addition, the household has extensive industrial and political interests at a national level.

Category I: Consists only of one household, that of Kumar Satiya Vira. His household and class position is quantitatively and qualitatively different from the rest of the village and so is treated separately. His household owns and controls in excess of 250 acres and has industrial and political networks at
a national level.

Category II: Consists of households which hire labour in to do almost all of their major agricultural operations. Men in these households see themselves more as farm managers than farmers. In local parlance, these households are engaged in kheti - farming. These households have enough land to ensure both that they are comfortably off and that their household heads seldom have to work the land themselves. In addition they may have household resources which they are able to hire out to others, including threshing machines or cane crushers, for example.

Category III: This consists of households in which the agriculture work is mostly performed by adult household men. They may occasionally hire labour in to perform weeding and harvesting operations. Normally these men do not hire themselves out as casual labourers. Where they do work away from their own land, it tends to be in tasks which are funded by a considerable amount of family capital. Such tasks include the sub-contracting of fruit orchards or the operation of a sub-contracted cane crusher. In local parlance, these households are engaged in khudkast - farming for oneself.

Category IV: This consists of households in which the men, in addition to working their own land must also hire themselves out to work for others whenever possible. These households do not have enough land to maintain an adequate standard of living without performing additional wage labour. These people will describe their primary occupation as farming and add that their secondary occupation is mazdoori - casual wage labour.

Category V: This consists mostly of households which own no land at all. It also includes six households which own operationally insignificant amounts of land. The members of these households must sell their labour power to others in order to survive. They have no other means by which to earn their livelihood. These people describe themselves as rozdari - daily wage labourers or mazdoors. Some of the households in this category are servants in the Vira household, while others may be able to obtain seasonal work on the cane crushers. Such households form a small proportion of the total in this category, about 10%. These five categories are used in tables 3 and 4 presented below.
Table 3:
Landownership in Acres by Class
Dharmnagri.

(percentages of totals in brackets\(^1\))

<table>
<thead>
<tr>
<th>CLASS</th>
<th>LAND HELD (acres)</th>
<th>NO OF HOUSE-HOLDS</th>
<th>LAND PER PEOPLE HOUHLD.</th>
<th>LAND PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>250 (46)</td>
<td>1 (0.8)</td>
<td>250</td>
<td>4 (0.8) 62.50</td>
</tr>
<tr>
<td>II</td>
<td>98 (36)</td>
<td>7 (6)</td>
<td>14</td>
<td>62 (9) 1.6</td>
</tr>
<tr>
<td>III</td>
<td>133 (48)</td>
<td>45 (36)</td>
<td>3.1</td>
<td>270 (40) 0.49</td>
</tr>
<tr>
<td>IV</td>
<td>44 (16)</td>
<td>37 (30)</td>
<td>1.24</td>
<td>185 (23.2) 0.23</td>
</tr>
<tr>
<td>V</td>
<td>0 (0)</td>
<td>34 (28)</td>
<td>0</td>
<td>160 (28) 0</td>
</tr>
<tr>
<td>Totals</td>
<td>275 (100)</td>
<td>123 (100)</td>
<td>2.24</td>
<td>677 (100) 0.40</td>
</tr>
</tbody>
</table>

Ex Satiya Vira

Note 1 Percentages for the Classes II - V exclude class I.

Source: Khatoni Land Register, Tehsil Office Bijnor, 1983.

Table 3 shows a marked difference from that for the caste distribution of landownership in Dharmnagri. The distribution shows a marked concentration of land among the higher classes at the expense of the the lower. In Dharmnagri 84% of land is held by just 42% of households accounting for 40% of the population. Over a quarter of households in the village are landless. Those in class III account for 36% of households and have about 48% of of land. Classes IV & V fare less well. Together they comprise over half the households and population in the Dharmnagri but hold only 16% of its land. This pattern is slightly less accentuated than in Jhakri as Table 4 shows.
Table 4:
Landownership in Acres by Class, Jhakri
(percentages of totals in brackets)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>LAND HELD (acres)</th>
<th>NO OF HOUSE-HELDS</th>
<th>LAND PER HOUSEHOLD</th>
<th>NO OF PEOPLE</th>
<th>LAND PER CAPITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II</td>
<td>23 (14)</td>
<td>3 (4)</td>
<td>7.8</td>
<td>18 (4)</td>
<td>1.3</td>
</tr>
<tr>
<td>III</td>
<td>125 (77)</td>
<td>30 (48)</td>
<td>4.2</td>
<td>189 (52)</td>
<td>0.66</td>
</tr>
<tr>
<td>IV</td>
<td>15 (9)</td>
<td>8 (13)</td>
<td>1.9</td>
<td>45 (12)</td>
<td>0.33</td>
</tr>
<tr>
<td>V</td>
<td>0 (0)</td>
<td>22 (35)</td>
<td>0</td>
<td>113 (31)</td>
<td>0.0</td>
</tr>
<tr>
<td>Totals</td>
<td>163 (100)</td>
<td>63 (100)</td>
<td>2.59</td>
<td>365 (100)</td>
<td>0.45</td>
</tr>
</tbody>
</table>


Classes IV & V account for 48% of households in Jhakri and about 43% of the population and yet hold only 9% of the land. Each of the classes in Jhakri owns, on average, about twice as much land per capita as that immediately below in the ranking, a more regular pattern than that for Dharmnagri, though it is not clear why this is the case. As with Dharmnagri, the largest single group are those in class III.

Women and Landholding: of Land and Jewellery, The Sexual Division of Property.

One striking feature of the Khatoni is the all-but-complete absence of women from its pages. In all, only six women from the study villages are registered in the Khatoni. What light can these isolated instances of landholding by women shed on the position of women in the study villages? How do they fit in with the general proposition than women in North India do not own land or other productive resources? (Sharma: 1980).
The first point to note is that five of these six women listed as holders of land are widows and their landholding stems from the fact of their husband’s death. Among them, they are registered as holders 40 bighas of land. The sixth woman’s recorded holding is, I discovered on speaking to her husbandan attempt to avoid the land ceiling. This woman had been registered as an owner by her husband to ensure they would retain the excess land. For her it has no operational significance. It is farmed by her husband, and she colludes with him in retaining the land for their family. Of the remaining five, four have remarried since having their husband’s land transferred to them. The land is operated by their new partner as if it was his.

None of the women then had inherited land from her father, hardly surprising in a system of patrilineal descent. Furthermore, two of the women are not recorded as outright owners of land, but as the guardian’s for their underage sons. Each of these sons will become the ’rightful owner’ when he reaches the age of majority. Both of these women have remarried, and their new partners operate the land jointly with their sons. Remarriage would seem to be an effective strategy for retaining land on the part of these women. Jumri for example managed to keep her husband’s 11 bighas of land intact from his death in 1971. Chotiya, wife of Ram Rekha had a little more trouble, since she had to repay debts which her husband had incurred while still alive. She sold about 3 bighas to do this and has not sold any land since.

Of the remaining three widows, one owns an operationally significant area of land and has entered into sharecropping arrangements. Significantly, perhaps, this woman is a Harijan outside the childbearing age group so she is unlikely to remarry.

A general conclusion which may be drawn here is that none of these women were able under the existing sexual division of labour - a subject to which we shall return - to operate the land on their own. In the extreme, this means that in order to survive, women may have to sell land. This is more likely when a woman is widowed while her children are still young. This general conclusion is similar to that drawn by Cain (1981) using Bangladeshi data. Though the circumstances for women in the study villages would seem more convivial than those in Bangladesh, it should be noted that women managed to retain land not by working it, butremarrying someone else who could. Where this is not possible, the consequences are dire indeed.

One Muslim woman, Ramzani, for example lost her husband after a protracted
illness in 1972. This household owned 10 bighas of bangar land. Ramzani also had six young children - four daughters and two sons, who at the time of her husband’s death were too young to take responsibility for the farm work. In addition she was also left with debts of about Rs400 incurred from her husband’s illness and an outstanding fertiliser loan. Over the next eight years, Ramzani was forced to sell the household’s entire landholding to pay for both consumption needs and the marriages of her children. She was unable to farm the land herself and local farmers who had refused to sharecrop with her were queuing up to buy the land.

Women in the study villages do not, then, inherit productive property like land. They are only likely to find themselves with title to land if they are widowed. In this event, they are unlikely to be able to retain land unless they remarry or enter into another union with someone who can work the land.

It has been argued by Goody (1973) that it is useful to see dowry as a form of pre-mortem inheritance. This is true only in a limited sense. It draws our attention to the fact that dowry is a substantial outlay on the part of peasant producers. Sharma (1980), suggests that for both areas which she studied, dowry was roughly the equivalent of a year’s income for most people. The notable exceptions to this were the poor who seemed to favour some form of bride price marriage.

Changes in the general level of dowry are discussed in the chapter on kinship and marriage. What I want to argue here though, is that dowry given to daughters at the time of their marriage is a very different kind of inheritance from that which sons receive when they are given land or productive property. The main characteristic of dowry is that it is not productive property. Women cannot earn an independent living from the household goods, clothes and jewellery which accompany them to their sasural at the time of marriage. (Sharma: 1980)

The goods of which dowry consists are assimilated into her husband’s household and she has relatively little control over them. They do not provide her with the means to earn a living, nor can she sell them to raise money should she need it for any reason. Dowry is given with her, but it does not belong to her. The use she obtains from it and the extent to which she has control over it are more under the control of her affines than herself. Even jewellery, which to western observers might seem like the most personal of property, can be taken from her. Several men in my sample said that pawning their wife’s jewellery was one way of raising a loan. Most said they
would not hesitate to do so and several already had. It not unusual either for the jewellery of a daughter-in-law to be used in part payment for the marriage of a daughter.

A woman arrives then at her sasural, with a set of non-productive property, in the form of dowry. She cannot earn a living from it. This property is more under the control of her affines than herself. She has no source of income independent of her affines, she is dependent on them for her food shelter and well-being. She cannot expect to inherit land as a matter of course. Even if she has no brothers, her father's land is more likely to pass to her husband and their offspring than to herself. Neither has she any control over the land and assets which her husband owns. If she marries a landless man, she is dependent on her husband's income. The management and control of productive property are firmly in the hands of men.

This has been the briefest of excursions into the relationship gender to property. The Sexual Division of Property outlined above is only a part of what Young et al (1981: pxii) refer to as the 'relations of everyday life'. To understand it more completely, we must look at the structure of relationships within which it is embedded. The subject will be taken up again and extended when I consider the structure of kinship and marriage and the sexual division of labour in later chapters.

Of Land and Fertility

In this final section on landholding, the relationship between landholding and fertility is examined in the light of the debate about whether this association is positive or negative.

A positive association is claimed between the two variables by adherent's to Becker's (1960) 'New Home Economics' theory that the relationship between income and fertility is a positive one. More recently however, Arnold et al (1975), and Bulatao and Lee (1985) have argued, in reviews of the literature that there is a strikingly consistent relationship between landholding and fertility. Some spice has been added to the pot by Schutjer and Stokes (1982), who argue, using Egyptian data, that size of operational holdings (land owned plus land rented in minus land rented out) varies positively with fertility while land ownership varies negatively with fertility.

Great care is required in the interpretation of these data most importantly.
because they assume that observed differences in fertility are the outcome of calculating, rational, purposive maximising behaviour. In short, the outcome of deliberate fertility control. This in turn carries its own assumptions. For example, if Schutjer and Stokes are to be given any credence, a market for land rental must exist and be sufficiently flexible to allow adjustments with fertility to take place.

In the study villages, land rental and sharecropping arrangements tend to be affected by short term factors which are unrelated to fertility in any measurable way. For example a farmer is more likely to sharecrop land to another better placed to make use of the land than he is, by renting an isolated plot to a farmer whose land is contiguous with it to save him the long journey to farm such a small area. He may sharecrop his land to someone who owns a tubewell, or other material resources which will ensure a better yield from the land than he himself could obtain in the absence of these. These arrangements may also vary seasonally. A farmer may have no resources with which to farm a plot of land for one crop and will share it out for three months, but take it back into sole cultivation during the months when he has more resources with which to farm himself.

It has also been suggested by Cain (1985), that to explain the positive relationship between landholding and fertility as intentional and purposive may be spurious. Drawing on the work of McNicoll (1980) and Bongaarts (1978), he suggests that the observed relationship may not require an explanation at the level of purpose at all. He suggests that the relationship between the two variables is best explained by reference to proximate variables; behaviour which has no intentional purpose to affect fertility, but does so none the less. In the absence of systematic differences in contraceptive practice such variables affecting fertility would include: frequency of intercourse; abortion; miscarriage; and infecundability.

What light can data from the study villages throw on this issue? The class categories developed above are combined with a second source of data, the maternity history. These histories were collected by research assistants from all ever-married women in the two study villages during the course of fieldwork and include details of all births. This allows us to look at the relationship between socio-economic variables and fertility, all live and still births. Let us first of all look at the relationship between religion and fertility, before going on to look at that between class and fertility.
Table 5:

Mean Number of Children
Everborn to Ever-married Women
By Class Position of Household and Religion
(NUMBER OF WOMEN IN BRACKETS)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>RELIGIOUS GROUP</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Muslim</td>
<td>Hindu</td>
<td>Harijan</td>
<td>Total</td>
</tr>
<tr>
<td>I&amp;II</td>
<td>5.89 (9)</td>
<td>5.31 (16)</td>
<td>-</td>
<td>5.52 (25)</td>
</tr>
<tr>
<td>III</td>
<td>5.60 (43)</td>
<td>4.92 (36)</td>
<td>6.59 (17)</td>
<td>5.52 (96)</td>
</tr>
<tr>
<td>IV</td>
<td>6.37 (8)</td>
<td>5.22 (27)</td>
<td>4.10 (20)</td>
<td>4.98 (55)</td>
</tr>
<tr>
<td>V</td>
<td>4.00 (27)</td>
<td>4.15 (20)</td>
<td>5.42 (12)</td>
<td>4.34 (59)</td>
</tr>
<tr>
<td></td>
<td>5.21 (87)</td>
<td>4.91 (99)</td>
<td>5.28 (49)</td>
<td>5.10 (235)</td>
</tr>
</tbody>
</table>

Source: Maternity Histories, 1985

Average fertility for women in the study villages is 5.10. The table shows, however, that there is very little difference in fertility across religious group. The Hindus have slightly lower fertility than the other two groups, but the standard deviations - in the region of about 3 for all three religious groups are too high to allow for the analysis of such small apparent differences. There are larger differences in fertility by class. The most landed, when compared to the landless, have on average about just over one child more overall (5.52 compared with 4.34). Within religious groups this difference remains about the same for Hindus and Harijans, but is somewhat larger for Muslims.
Table six looks at patterns of fertility by age and class.

Table 6:
Mean Number of Children Everborn
by Age of Ever-Married Women
and Class Position of Household
(NUMBER OF WOMEN IN BRACKETS)

<table>
<thead>
<tr>
<th>AGEGROUP</th>
<th>15-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I&amp;II</td>
<td>1.17 (6)</td>
<td>4.25 (4)</td>
<td>7.22 (9)</td>
<td>8.17 (6)</td>
<td>5.52 (25)</td>
</tr>
<tr>
<td>III</td>
<td>1.44 (18)</td>
<td>4.38 (29)</td>
<td>6.62 (21)</td>
<td>8.50 (28)</td>
<td>5.52 (96)</td>
</tr>
<tr>
<td>IV</td>
<td>1.18 (11)</td>
<td>3.83 (18)</td>
<td>5.83 (6)</td>
<td>7.85 (20)</td>
<td>4.98 (55)</td>
</tr>
<tr>
<td>V</td>
<td>1.27 (15)</td>
<td>3.13 (15)</td>
<td>5.62 (8)</td>
<td>6.90 (21)</td>
<td>4.34 (59)</td>
</tr>
<tr>
<td>Total</td>
<td>1.30 (50)</td>
<td>3.94 (66)</td>
<td>6.45 (44)</td>
<td>7.85 (75)</td>
<td>5.10 (235)</td>
</tr>
</tbody>
</table>


Admittedly, the numbers in this table are small from a demographic point of view, however, the strongest relationship which emerges is a positive one between the amount of land owned and fertility. In short, land owners have about one more child at what may be regarded as completed fertility, age 45+, than the landless. The relationship does not, however, appear to be a continuous one. In all age groups, except the first, women in landed households have higher fertility than women in landless households. The higher fertility in the 15-24 agegroup for landless women is most likely explained by a lower age at marriage. Although I do not have reliable data on the age at marriage, this view is supported by the rest of the table. Women in the landless group are overtaken by the others in the 25-34 agegroup. However, one must also admit the possibility of secular changes which may be affecting the landed first, or indeed, explanations which appertain to individual households in each group. We shall return to this in a later chapter when discussing fertility behaviour.

In the meantime, can we explain this difference in observed fertility by
reference to deliberate control? When we arrived in the study villages, only ten women in the reproductive age-group were recorded as "protected" from pregnancy by either sterilisation or IUD, other modern methods of contraception were from the accounts of village women even less used. The explanation of these class differences in fertility will be taken up in later chapters on fertility when sample men explain the rationale behind their family size. In the meantime, we should bear in mind that there is a positive relationship between class and fertility to be explained.

Conclusions.

In summary, this chapter delineated the structure of landholding in the study villages. The structure of landholding is not as straightforward as one might expect from even a systematic handling of official land records. Landholding is too important an indicator of social position to be handled in a haphazard-way.

In this chapter I have argued that it is more useful to use information from various sources, official records, conversations and semi-structured questionnaire to arrive at a more complete understanding of the structure of landholding and its meaning.

This is of course only a partial view of landholding. The absence of substantial, frequent and rightful ownership of land by women is also a social indicator of great significance. The lack of property by which to earn an independent source of living severely limits the freedom of choice which women as social actors have. This absence of right to productive property along with patrilineal descent and virilocal residence after marriage sets the structural framework within which women and men live and work. I am not suggesting here that the men and women who are the subject of this study merely act out the imperatives of the social structure of which they form a part. They are not entirely the objects of the social structure within which they live. The content of their lives rather than its form also depends on other factors, such as the structure of their haveli, the number and sex composition of their children, stage in the life cycle, caste, religion etc, all of which affect the patterns of work and life in their own ways. This shall be the subject of the next chapter. These are examined in more detail in the chapters on kinship and marriage and the sexual division of labour.

The final section in this chapter examined the nature of the relationship
between landholding and fertility. It was suggested that a positive relationship existed between landholding and fertility, but that this could not be explained with reference to deliberate fertility control. No attempt was made to explain why this difference exists.

In this chapter, we have been taking a look at a static picture of the structure of landholding as it is in the study villages today. In the next chapter I want to look at sales and purchases of land with particular reference to what they can tell us about how stable the economic and social environment of the study villages is and how well children act as a kind of insurance policy against emergencies which might otherwise result in the sale of land.
Chapter 4: The Insurance Value of Children

In this chapter I wish to examine the idea, raised by Mead Cain (1981), that children have an insurance value which is at least analytically separate from any value which they may have as labourers, or as providers of support for parents in their old age.

In writing of the insurance value of children, authors have tended to concentrate on this latter aspect of security - that which children provide for parents in their old age. The logic underlying these arguments is that in the absence of institutional forms of old age security, such as pension schemes, children may be an important source of provision for parents in their old age. The usual method of analysis is inferential cross-sectional data on pensions and fertility levels. Using these methods of analysis, Leibenstein (1957; 1977) suggests that the old-age security motive is an important determinant of fertility, while Lindert (1980) argues that it is not. Vlassof and Vlassof (1980) using village level data suggest that it is not children, but economic resources which provide security in old age. Nugent (1985) suggests that two important questions need to be asked when considering the value of children as a source of old age security for parents. Firstly, under what conditions would one expect such a motive to be important; and secondly, do these conditions prevail in the area under study. In Dharmnagri and Jhakri, there are no institutional sources of security to which parents may turn in their old age. The need for children in this respect is more accurately construed as a need for sons. Depending on a daughter in old age offends local norms. It is only considered as a last resort. Furthermore, it is only a plausible strategy for those with enough land to attract a daughter's husband into the unattractive role of ghar-jemai (husband who lives in the home of his wife's parents), which should be avoided if at all possible.

"Boys look after their parents when they are old but people without sons would have to work till they drop. They will always be in difficulty. Besides, boys keep their father's name going and as soon as they are old enough they will do fieldwork. Girls don't do fieldwork, and if they were to it is never for their parents. they don't earn money for their fathers. When a girl goes away to her own house who will look after the parents if there is no son? You can bring in a ghar-jemai but this is not the same as your own line. Instead of saying it was your son, people would comment that it was your son-in-law who was doing the work." (Liaqat, class III)
Sons should provide support for parents in their old age in Dharmnagri and Jhakri, though sons cannot be guaranteed to live up to expectations. Landowning parents can ensure compliance from their sons by refusing to allot land to them until the parents die. Parents also have pressure on their side to maintain their sons' sense of duty. But poor peasants and the landless have least hold over their sons for they have few or no resources with which to hold their interest. Vikram, a landless man, did not think that support in old age from sons would be substantial for people like him, he only expected that his son would carry his name forward to the next generation:

"sons eat from their father's hand until they marry, then they go alagh (form a separate hearth)"

(Vikram, class V)

To sum up, it is expected in Dharmnagri and Jhakri that sons will support parents in their old age. For wealthy parents, this support will be material. For the poor, material support is less certain. For them the benefits are more psychological, such as the perpetuation of name.

The Environment of Risk and Fertility

Cain's perspective on the insurance value of children is worthy of separate consideration because it concentrates on a different aspect of the security which children may provide against social and 'natural' risk in the short term. Cain made a comparative study of two areas prone to natural disasters. Char Gopalpur, the study village in Bangladesh, is in a flood-prone area, while the three villages chosen for study in Maharashtra are in a drought prone area. Cain's main interest is in the consequences of the interaction of natural disaster and the forms of social security which those affected have recourse to in times of natural disaster and at other times. He argues that the environment of risk in Bangladesh is much higher than in Maharashtra, because of the absence of institutional sources of insurance. In Maharashtra, during the 1973-74 drought, a great many people were able to find work in an imaginative set of public relief works and/or obtain credit at reasonable rates of interest. Maharashtra, despite its tendency to drought, has one of the lowest fertility rates in India. In Cain's view, this is because relief schemes operate and children do not have such a crucial part to play in riding out the lean times of drought.

In Bangladesh, by contrast, no such schemes exist. This leads Cain to the conclusion that in times of social stress induced by natural disaster, children have a much higher value in Bangladesh than Maharashtra. They can
be called in to bolster family income and this contribution is of much greater importance because institutional forms of relief are non-existent. Cain concludes this is a major incentive to high fertility. He argues that, in environments such as Char Gopalpur, where risk is high and institutional forms of relief or insurance do not operate, unconstrained fertility may be justified.

In addition, Cain argues that social life in Bangladesh is more risky in normal circumstances than in Maharashtra. Infrastructure in the form of metalled roads and other communications networks are notable by their absence. There is no ready accessible police force for the residents of Char Gopalpur to call upon to maintain law and order. This provides an added impetus to high fertility where strength in numbers and physical prowess are the best, or perhaps even the only way to ensure that rights over property and land are maintained.

The villages in my study present a conundrum in this respect. The area is not prone to natural disaster. Chapter 2 showed that general conditions have improved since the turn of the century, and more particularly since the exclusion of the seasonal intrusion of the Ganges onto khader land by the building of a retaining wall in the 1960's. Neither an examination of local records, or verbal accounts from villagers reveal any life-threatening natural disasters for at least fifty years. Yet the fertility rate in Bijnor continues to be one of the highest in India. We have already seen that annual growth rates in the district are in excess of two per cent per annum. The last chapter revealed that women in the base villages have a mean number of about five children.

How can this be explained in the light of Cain's conclusions? Cain's data sources are strong. The Bangladeshi data consist of the land holding histories of 114 heads of household including a record of their sales and purchases and the reasons for the latter. This is primary data generated by Cain and his research team. The Maharashtrian data is part of the long run data set generated by the Indian Council for Research in the Semi-Arid Tropics (I.C.R.I.S.A.T). In order to examine the risk insurance thesis, I draw on similar data sources for Dharmnagri and Jhakri. Firstly I examine some general characteristics of the village which one might associate with risk. Secondly an examination of the local land transfer records is presented and finally I analyse the landholding histories of the key informants and a few extra landless households. The aim of these investigations is to determine whether there is any link in Dharmnagri and Jhakri between the
level of fertility and the environment of risk.

The examination follows Cain's method closely. The specific aim is to discern whether the history of sales and purchases give any clue to the environment of risk. Are there any distress sales of land - where land has been sold to finance consumption rather than direct investment in production? If so, what do such sales tell us about the relationship between children and the environment of risk.

Risk Characteristics of the Villages

The villages are next to the Ganges and some of the older villagers in Dharmanagri can remember when the river used to flood right across the low lying khader area, sometimes as far as the temple steps during heavy monsoon rains. Some farmers used to lose some standing sugar cane in this way, but also said that the deposit of silt left on the fields as a result of the flooding meant a bumper crop and enriched soil in the years when it did not flood. The cycle of cultivation, before the introduction of new technology also meant that there were no other major crops in the fields when the river flooded.

The problem of flooding was minimised about 1965 when a retaining dyke (band) was built to keep the Ganges out of the agricultural khader area. This was a large undertaking and the twenty mile long dyke has meant that there has been no major flooding in the villages since it was built.

During 1982-83, the monsoon rains were moderately heavy and some farmers from Dharmanagri did complain that the rain had washed away their rice crop. These complaints, however relate to land in the distant revenue village of Ranjitpur, a sandy bank, right next to the river and outside the dyke. This land is rented by Dharmanagri villagers at a nominal rent of Rs18 a year from the government. For those farming it, this land is not their only source of income or returns. It is land planted in addition to their own land which is situated inside the dyke, and therefore safe from flooding. The outlay on the rented land is small in relation to the possible returns. This makes the risk of losing the crop by flooding one worth running, especially when its output is not crucial to family food supply. The role of this land is to supplement family income, not to provide subsistence.

Agriculture in the study villages has improved beyond recognition since the 1930's. With the exception of rice grown on the khader, all of the crops sown
in the study villages are the new HYV’s associated with the green revolution. This has improved returns and with the development of assured water supplies has placed agricultural returns on a fairly stable footing.

Social Risk: The Development of Infrastructure

In discussing social risk Cain argues that the levels of infrastructure are very different in Bangladesh and Maharashtra. Char Gopalpur was not well served by roads or other communications networks. In the absence of any readily accessible police force, this makes it an isolated place in terms of law and order.

In Maharashtra communications were better and Cain identifies the availability of a police force as a factor reducing risk. Dharmagari and Jhakri are easily accessible to the District Police Headquarters in Bijnor, but risk here is reduced more by the lack of police contact than by their presence. A police presence may represent a source of risk as well as one of insurance. In Bijnor the police or government officials are not expected to handle cases in a disinterested manner. Those most able and willing to bribe the police to the greatest extent are most likely to be the winners in any dispute. Bribes are an endemic feature of any interaction between villagers and government officials - great and small. For example, it is not unusual for villagers to have to pay Rs2 to a chaprassy (a bearer) on arrival at some government official’s office to go and tell the office bearer on the other side of a curtain that there is someone waiting to see him outside.

At the other end of the scale, a local police inspector is rumoured to have asked a fee of Rs10,000 to file a case, for insurance purposes, of deliberate fire setting as malicious damage by thieves. Aphocryphal stories abound and all villagers will spontaneously lament the passing of the British Raj. The law was just and fair; now if you have enough money to pay in bribes you can murder someone and get away with it. The point is then that a readily obtainable police presence and a well developed set of government institutions do not necessarily reduce risk uniformly for all.

This situation is made more complex by the presence in the village of Kumar Satiya Vira. This man and his family have important political and industrial connections and he is the main arbiter of law and order in the villages and their surroundings. The extent of his power should not be underestimated. When the police inspector was called to Kumar Satiya Vira’s house to explain his behaviour in the above case, Kumar sahib kicked the chair from underneath
him and literally threw the eminent man out of the house by the seat of his pants and the scruff of his neck with a warning to go easy on the bribery.

There is also some evidence to suggest that bribery is less in Dharmagri and Jhakri because of Kumar Satiya Vira's presence. A village kamdar (village level extension worker) responsible for the administration of loans was called to a quickly convened panchayat (village council) meeting at the house, where he was told to cut down on the level of bribe he was taking to accept loan applications from Harijan s. In one case, he had asked for a bribe of Rs2,000 to accept and process an application for a buffalo and cart. He was told that the going rate in Dharmagri for such cases was to be Rs400 from then on otherwise he would lose his job. One man said that he kept to this stipulation, but continued to charge higher rates outside Dharmagri and Jhakri where Kumar Satiya Vira's influence was not so strong or his interest likely to be so aroused.

The benefit of Kumar Sahib's presence is dual edged though. Villagers in Dharmangri and Jhakri could turn to him to be arbiter in disputes, without expensive recourse to the due process of the law, which would inevitably involve expensive bribes. They could rely upon him to ensure that the demands of officials were kept to a reasonable level. They could even indulge in particular forms of lawbreaking themselves - for example the illicit distilling of alcohol safe in the knowledge that there were not too many policemen around to catch them on Kumar Sahib's patch. The disadvantages for village residents are that they must take care not to invoke Kumar Sahib's wrath. In such a situation they would be powerless. Having such a large and powerful family in their village also means that there is less land to go around than there might otherwise be.

Other Aspects of Infrastructure Lessening Risk:

Sources of Credit

Developments in agriculture have, by increasing yields, and intensifying cropping patterns ensured adequate yields from year to year. These developments have mostly come through the auspices of the green revolution. Improved varieties of seed require larger inputs of variable resources than their predecessors did in the form of chemical fertilisers and water. In Dharmagri and Jhakri most of these developments have been financed by an increased amount of agricultural and other forms of credit. Access to credit, however, is easier for the higher social classes, who also pay lower rates of
interest.

a) Banks

For those with land, the land bank in Bijnor, a government financed operation will provide loans for capital expenditure with land as co-lateral. One Dharmanagri farmer, Chet Ram, with just over 20 bighas of land was able to raise such a loan for the purchase a diesel pumpset and an artesian boring to provide irrigation for his khader holding. He borrowed Rs10,000 at an annual interest rate of 14% to be repaid over a period of ten years. He estimated that the amount of bribe he had to pay out of this was about Rs250, or less than 5% of the whole loan. Data from key informants shows the extent of borrowing from this source for productive investment.

b) The Cane Society

Farmers with enough land to grow sugar cane have access to working capital, mainly used for nitrogenous fertiliser, through their membership of the local sugar cane society. A farmer may borrow up to ten percent of the value of the cane which he is expected to supply to the sugar cane mill during the current season. The amount he borrows is then recorded and deducted from the first payments which he is due to have from the sugar cane society. Rates of interest vary according to the length of time for which the money is borrowed. If repaid within six months, the loan is free. Thereafter, the rate of interest is 22% until the end of the season, rising to more punitive rates if the loan remains unpaid. Strictly speaking the loans are for sugar cane cultivation only, but farmers readily admit that they use fertiliser purchased with such loans for all their crops. The cane society manager is fully aware of this, but maintains that he cannot prove this or effectively police fertiliser use. The cane society ledgers show that about 90% of all loans are repaid within the season, with a low number of defaulters. So far as I was able to find out, there are no schemes by which a farmer may bribe officials to avoid paying interest, probably because of the nature of the scheme.

Farmers do have a number of ways in which they may prolong the life of a loan if they so wish. A favoured way of extending the life of a loan is for two or more brothers or agnatic kinsmen operating together to take a loan for fertiliser from the sugar cane society in the name of one brother. They then bribe the kamdar to arrange their supply so that the other brother supplies all the cane due in his name first, with the brother in whose name the loan
has been taken supplying his cane towards the end of the season. The effect of this is that it releases money to purchase necessary household items before the onset of winter at the beginning of the cane season, which comes after the lean agricultural months of the monsoon. If handled adroitly, such a scheme also avoids the necessity of paying interest on the loan. In principle all members of the cane society are treated equally. However as the table below shows, the allocation of loans from the Sugar Cane society, clearly favour the larger farmers. This is by virtue of the commercial way in which the money is allocated.

Table 1:
Loans taken from the Sugar Cane Society by Dharmnagri and Jhakri Growers 1982-83 season, by landholding

<table>
<thead>
<tr>
<th></th>
<th>JHAKRI</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASS</td>
<td></td>
<td>0-500</td>
<td>501-1000</td>
<td>1001-2000</td>
<td>2001-4000</td>
</tr>
<tr>
<td>II &amp; III</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>IV</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>DHARMNAGRI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II &amp; III</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>IV</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Sugarcane Co-operative Society, Bijnor, Loans Register 1982-83 season.

This pattern reflects findings in other parts of India, with richer farmers able to obtain more funds than smaller. However it should be noted too that small farmers have a considerable number of loans from the cane society reflecting the ease with which money can be borrowed from that source. The number of loans in Jhakri is proportionately higher than one might expect given the relative sizes of the two populations. More importantly, loans are
available roughly in proportion to landholding so that small farmers are not excluded from this source. Nor are they paying higher rates of interest than their richer counterparts.

c) Kin

So far we have been talking about sources of funds which only landed people can obtain. How easy and cheap is it for landless people to obtain money in Dharmnagri and Jhakri? The land and loans questionnaire, suggests that landed and landless alike can borrow small amounts of money for consumption, up to perhaps Rs100 without too much difficulty, mostly from kinsmen.

However, it is mistaken to think that relatives are always a risk free source of money. As Caldwell et al (1982) note for South India, in times of stress, your relatives are likely to be in the same boat as you and therefore unable to lend money. One or two cases from Dharmnagri suggest that borrowing from relatives is not risk free. Who is more likely to know more about your finances than your brother or perhaps an in-migrant sister’s husband? In Dharmnagri, brothers are notoriously untrustworthy in financial matters. There is one case of a man losing land to his sister’s husband after borrowing money. Rohtash borrowed Rs1900 to pay for the emergency treatment which his wife received at the birth of their second child. His sister’s husband resident in Dharmnagri at the time was working at the barrage. With such a steady income he was able to lend Rohtash the money he required. To obtain the money, Rohtash agreed to hand over all the produce of his 5 bighas of khader land to his sister’s husband by way of interest payments, until he could repay the capital. Without the produce from his fields, he was unable to pay back any of the capital and two years later he had sold his entire bangar holding of 1.75 bighas to repay the loan and was left with only his khader land.

d) Moneylenders

The major source of funds for those unable to borrow from institutional sources is the baniya (cloth merchant/moneylender). The riskiness of this source of funds is well illustrated by the steady increase in the landholding of Dariya Lal, a Bijnori cloth merchant, who was the major lender of funds at the time of fieldwork. According to one reliable source in the village, the year under study had been a relatively good one, and few people had to borrow money from Dariya Lal. In less prosperous years, substantial proportions of the village borrowed money from him and at one time or another
almost everyone had borrowed money from him.

Rates of interest on money borrowed from Dariya Lal are high, 5% compound per month. Not surprisingly, villagers sometimes find it difficult to repay such loans and Dariya Lal is now a substantial landowner in Dharmnagri and Jhakri, as the local land records testify. He now holds about 4 acres of land, all of which he has purchased from farmers he previously gave loans to. The extent of this kind of indebtedness is greater among small landholders, owning ten bighas or less, and within that group, it is greater among Muslims than Hindus. Among the landless, there is a greater tendency for caste support among the Muslims than the Hindus. All of the landless Muslims I spoke to said that they had a system among relatives for providing for major expenditures like weddings. The system simply required that when a relative was having a child married each of the others would contribute to the wedding to the extent possible. In return each of the relatives so funded would provide equivalent resources in like fashion.

e) Risk and Access to Assured Water Supplies

The conditions of agriculture have dramatically improved since the introduction of HYV's especially since the introduction of tubewells to the villages. It is of course the case that not everyone in the villages who has land owns a tubewell. Tubewells are an extremely expensive investment. The cost of installing an electric well and house is around Rs15,000 and a diesel engine and boring will cost around Rs8,000. Not all peasants can afford this outlay and the attendant interest. There is a scheme whereby small farmers (ie holding 24 bighas or less) can borrow money from the Government bank at discounted rates, but very few farmers availed themselves of this service, even though almost every landowner in the village would qualify. They either maintained that they could not afford it or that the bribe they would have to give the extension worker to process their application would be too expensive.

But those who do not own a well or pumpset can and do buy water from those who do. There is a thriving market in water in the study villages. Those who wish to buy water approach the owner of pumping gear from which the water can be directed to their own fields by way of water channels. The usual arrangement is the hire of pumping gear for a set number of hours arranged beforehand with the owner. The equipment is operated by the owner with the hirer in attendance - partly to make sure they receive the amount of water they have paid for and partly to attend the maintenance of the nullahs (water
channels) feeding his field. These latter are katcha (made of mud) and may sunder, causing expensive leakage. The water also needs to be directed to the right places at the right time and it is usually the responsibility of the hirer to cut new channels and close off old ones when and where required.

Water is not a cheap commodity. From an electric set, where the running costs are cheaper, water costs around Rs7-8 per hour depending on the season. Farmers estimate an average flow of two hours per bigha for any crop in the absence of appreciable rainfall. Water from a diesel set is more expensive - about Rs10 per hour, to cover the cost of diesel and the cost of carting the engine to the well head. In relation to risk however, it is really questions of timing and control over the water supply which need to be taken into account. In Dharmagri and Jhakri, control does not seem to be as stringent as that reported by Harriss for Tamil Nadu (1982a), where the costs of buying in water were about one third of the harvest, if it could be bought at all. Owners of wells and pumping sets, always water their own fields first and can do so by virtue of their ownership of the machinery. In times of heavy demand for water - around planting times, during the dry summer months others - must wait for their water until owners of wells have irrigated their own fields. This can lead to delayed planting or curtailment in the growth of standing crops if rains are poor, with a subsequent effect on yields. There is also some indication that those with tubewells are in a good position to sharecrop land from those whose land can be irrigated from their wells. This does not happen on the basis of irrigation only, but when other resources are scarce, the land is likely to be sharecropped out to those who can irrigate it.

This of course affects the returns which those who lack their own water supplies have from their fields, but there are positive aspects also. The sharecropping rates under these arrangements are the same as for any other. The crop is shared fifty-fifty with the owner of the well paying for all the water and the cost of other inputs being shared. For the landowner sharing out, returns may not be that much less than if he were to farm the land himself without the inputs he would not be able to buy himself in such circumstances.

Water then is not available to everyone equally in Dharmagri and Jhakri. Those who own wells and pumpssets have ready access to water while those who do not are dependent on the former for its supply. In the study year, no one was refused water if they could pay for it. But owners of wells and pumpssets cannot be forced to sell water and this creates a form of dependence. Conversely, however, it should be remembered that selling water
provides a tidy income for those with wells. In addition, as with other major capital assets in the villages, there is a political dimension to water. Owners can and do strengthen their networks by supplying services when required.

Land Transfers as Indicators of Risk.

Cain’s main indicator of risk is the volatility of the land market, specifically what he calls distress sales of land. These he defines as sales which are not for productive ends. Distress sales may follow a death or be used to finance direct or conspicuous consumption, such as weddings. From the land history data collected from heads of household Cain is able to use the extent of social mobility - both positive and negative - to define Char Gopalpur as a more risky environment than Maharashtra.

How do Dharmnagri and Jhakri compare with these mobility profiles? In examining this question I will use two sources of data. The first, the local land transfer records, describe the transfers of land made by the entire population of both villages since 1958. Secondly, I carried out more detailed discussions with key informants about landholding, land transfers and debt relationships.

a) Land Records

Working with local records in North India is a painstaking business and it is not a task to be recommended to anyone in a hurry. After gaining access to the records, I examined the current holdings position of all owners of land in Dharmnagri and Jhakri. Next I made an examination the Rotation Dakhilkar Register. This is a record of all sales and purchases by revenue village. The name of the seller and buyer, the date and the price paid is also recorded. By adding and subtracting all sales and purchases I was able to calculate where each farmer started and finished in terms of class categories and the extent to which he had bought or sold land. One point worth mentioning is that the official land records are recorded in pucca bighas, of which there are 1.66 in an acre. These have been converted to katcha bighas at the rate of 3 katcha bighas to the pucca bigha, which gives roughly 5 katcha bighas to the acre. The pattern of transfers yielded by the combination of the above data is shown in the table below. The table uses the class categories developed in the previous chapter, which it will be remembered refer to household landholdings. Inheritance is incorporated by only recording land which is transferred out of or into a lineage by a market transaction is
included as a sale or a purchase of land.

Another problem which I had to resolve was the introduction of time into the analysis. This became difficult to deal with especially when more than one generation of landholders in any household was involved. Inheritance does not pose a problem since one simply counts backwards from the present to the past, excluding all transfers of land which do not involve a market transaction. In short inheritances do not count as a land transfer. In the later tables below where I am dealing with shifts in class categories among the sample, inheritances are once again excluded, but shifts in class from the previous generation would have been included if there had been any. There were not.

Table 2

| Numbers and Areas of Sales and Purchases of Land 1958-82, by Current Class of Ownership - Dharmnagri |
|--------------------------------------------------|--------------------------------------------------|
| **SALES**                                        | **PURCHASES**                                    |
| **CLASS**                                        | **Number** (%)                                  | **Area** (%)                                  | **Number** (%) | **Area** (%) |
| in 1982                                          | Bighas                                          | Bighas                                        |
| II                                               | 38 (30)                                         | 177 (31)                                     | 11 (23)        | 144 (37)     |
| III                                              | 32 (26)                                         | 117 (21)                                     | 17 (36)        | 87 (23)      |
| IV                                               | 51 (41)                                         | 237 (42)                                     | 19 (41)        | 156 (40)     |
| V                                                 | 4 (3)                                           | 6 (6)                                        | -              | -            |
| **Total**                                        | 125 (100)                                       | 567 (100)                                    | 47 (100)       | 387 (100)    |

Source: Motation Dakhilkar Register, tehsil Office, Bijnor, 1983.

Since 1958, there has been a net outflow of land from Dharmnagri of about 180 bighas or about 10.6% of landholdings in 1958. Over half of the land which has been sold has been made over to the government under two compulsory purchase schemes. The first of these was for the building of the retaining wall for the Ganges and the second for the building of the Middle Ganges Barrage.

The government also granted villagers about 200 bighas most of which was reallocated from the Viras after the abolition of Zamindari. Overall then,
the government has proved to be relatively neutral in terms of landholding for
the bulk of the population if one simply constructs a balance sheet. What it
gave to villagers in the early 1970’s, it took back in the late 1970’s.
Farmers were officially paid Rs8500 for each 15 bighas which the government
bought, but villagers maintained that about one third of this sum went in
various bribes to the officials who processed the transactions.

Leaving aside these government transactions, there are very few cases where
land sales or purchases have been substantial enough to cause any one farmer
to move group from his 1958 position, though it can be seen from the table
above that four of the smallest landholders lost their holdings entirely.

Those currently in the smallest landholding category have been the most
prolific sellers and buyers of land. Neither of the larger two groups show a
great deal of difference in the overall amount of land held. On average,
though, each holder in these two groups lost about 2.5 bighas. Smaller
landholders lost on average just over half a bigha each.

The position in Jhakri is easier to work out, because it is uncomplicated by
grants from and compulsory purchases by the government.

Table 3
Numbers and Areas of Sales and Purchases of Land, 1958-1982
By Current Ownership Category: Jhakri

<table>
<thead>
<tr>
<th>CLASS</th>
<th>Sales Number (%)</th>
<th>Area Bighas (%)</th>
<th>Purchases Number (%)</th>
<th>Area Bighas (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>in 1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>13 (31)</td>
<td>99 (36)</td>
<td>16 (35)</td>
<td>54 (42)</td>
</tr>
<tr>
<td>III</td>
<td>6 (14)</td>
<td>39 (14)</td>
<td>25 (54)</td>
<td>54 (42)</td>
</tr>
<tr>
<td>IV</td>
<td>20 (48)</td>
<td>108 (39)</td>
<td>5 (11)</td>
<td>21 (16)</td>
</tr>
<tr>
<td>V</td>
<td>3 (7)</td>
<td>30 (11)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 42 (100) 276 (100) 46 (100) 129 (100)

Source: Motation Dakhilkar Register, Tehsil Office, Bijnor, 1983.

On the whole, Jhakri farmers have lost proportionately more land than their
Dharmnagri counterparts, about 14.7% of 1958 ownership. One hundred and forty seven bighas have left village ownership, an average net loss of about 4 bighas per farmer. Large farmers have an average loss of about 4.5 bighas and middle farmers a small gain of about one bigha each. Farmers currently in the small holder category have loss about seven bighas each.

Interpretation of these figures is difficult. The Motation Dakhilkar gives no indication of why farmers sold land, only that they did. Like Dharmnagri though, there have been relatively few cases of downward or upward mobility. Four owners changed category in Jhakri from 1958-82. Three of these owners are key informants and their histories will be considered in more depth below. The fourth was a large landowner with about 27 bighas in 1958. He is widely known in the village to have sold land for conspicuous consumption and now holds only 12 bighas.

From village level records, then, it is clear that the land holding structure of the villages is much more stable than that of Char Gopalur. Since the records say nothing about why people sold land, they tell us very little about the environment of risk.

b) Key Informants Land Transfers

For this information, I now turn to the land survey which I conducted among key informants in 1983. By the time I asked these men in systematic detail about their land, I had known them for a year and a half. The information presented here is of very good quality in that it was internally consistent, repeated in a variety of settings and confirmed by others. I asked each key informant to tell me about the structure of his current holding and how that had changed since 1958, the year of consolidation in Jhakri and Dharmnagri Bangar.

Some key informants whose forebears are dead are too young to remember that far back, so where necessary, the survey results are fleshed out by reference to the land records. In some cases, young men were interviewed in the company of older village men who were able to remember what the young man’s family’s landholding had been, and where necessary, this valuable information has been included. The major shortcoming of this information, is that the landless who are not key informants but included in the land survey are not a random sample of the landless in the two villages. This might mean that their histories are not representative of the landless more generally.
In the khader area, there has been no land consolidation, and jogging the memories of informants there was a little more difficult. Where possible I was able to go forearmed with the relevant details from the land records as a skeleton around which to construct the more detailed account. In these ways, the omissions from the survey data are minimal. All those interviewed gave details of land which they had inherited and that which they had gained and lost. Where land had been purchased, sold or otherwise lost, informants were asked to provide details of the circumstances and reasons for the transaction.

In order to make the material comparable to Cain’s 1981 data, I treat all sales of land for other than directly productive investment as distress sales and therefore a measure of the environment of risk in the two villages. In total, the data collected from this group on land transfers amounts to 30% of land sold and 44% of land purchased in Dharmnagri; and 48% of land sold and 47% of land purchased in Jhakri. Table 4 below shows the results from the Dharmnagri sample. The class categories used are those developed in the last chapter.

Table 4

Dharmnagri Key Informants:
Land Transfers 1958–82

<table>
<thead>
<tr>
<th>Compulsory Government Purchase</th>
<th>SALES</th>
<th>PURCHASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Government Purchase</td>
<td>Con sump</td>
<td>Ill-ness</td>
</tr>
<tr>
<td>II 32 -</td>
<td>10</td>
<td>42 (25)</td>
</tr>
<tr>
<td>III 33 3</td>
<td>-</td>
<td>36 (21)</td>
</tr>
<tr>
<td>IV 51 -</td>
<td>-</td>
<td>51 (30)</td>
</tr>
<tr>
<td>V 39 -</td>
<td>-</td>
<td>39 (23)</td>
</tr>
<tr>
<td>Total 155</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Land and Loans Questionnaire, 1983.

By far the greatest number of transactions and area transferred for this group involved the government. Ninety-two percent of all sales were to the government by compulsory purchase, all of which was land bought by the
government for the construction of the barrage across the Ganges. This was land which had previously been given to villagers by the government, redistributed under ceiling legislation. Not surprisingly then a large amount of the area gained by the villagers also came from the government. One farmer lost 10 bighas in a single sale due to illness. At the time of his illness, his children young and were unable to give any support and he was forced to sell the land in order to meet his medical bills. Another farmer sold three bighas of land to finance his fourth marriage.

The only group in this part of the sample able to buy any land at all were the large landowners. One farmer, Chet Ram, a young man with only one very young son, owns about 30 bighas of land. He bought sixteen of these after a long court case, fought with his father’s younger brother who claimed title to the land, though he was no longer resident in the village. Chet Ram was eventually given title to the land, but had to pay his FYB Rs10,000 as a purchase price. Another buyer Ishwar, had bought 5 bighas of land at a knockdown price from a Bengali farmer who had taken a loan from him and was unable to repay.

The landless were given a brief glimpse of ownership by the government, before being returned to their former position. In short, apart from Government transactions, there have been very few transfers of land indeed among the key informants.

The extent of movement from the 1958 position among the Dharmnagri sample is shown in the Matrix below. This matrix is similar to that constructed by Cain (1981). The diagonal lines from top left to bottom right includes those villagers whose 1982 class position is the same as it was in 1958. Those to the right of the diagonal have experienced upward mobility by this measure while those to the left have experienced downward mobility. The numbers in the table are the numbers of farmers in each category Once again, inheritance is not included in the table, that is if a man divides his land between his sons, and these sons are in the sample, they do not move down in the hierarchy because of this, even if their individual holdings warrant it. The justification for this is that here I am trying to measure risk through sales and purchases in times of distress, rather than the effect of population of successive generations of holders within a single lineage. I shall take this latter subject up later when discussing fertility rationales with sample men.
Table 5:
Dharmagri Key Informants:
Movement from 1958 Class Position by 1982

<table>
<thead>
<tr>
<th>1958 CLASS POSITION</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>II</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>R</td>
<td>III</td>
<td>-</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>R</td>
<td>IV</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>P</td>
<td>V</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Motatiion Dakhilkar Register, Tehsil Office, Bijnor, 1983

The table indicates no mobility at all in the Dharmagri sample over the period. The landholding movements of the Jhakri sample are a little more vigorous over the period than the immobile Dharmagri pattern, though as the table shows, all transfers except two were conducted by those with most land.

Table 6

Land Transfers among the Jhakri Sample 1958-1982
(percentages of totals in brackets)

<table>
<thead>
<tr>
<th>SALES</th>
<th>PURCHASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>to cheated</td>
<td>con prod</td>
</tr>
<tr>
<td>govt.</td>
<td>sump</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>II</td>
<td>2</td>
</tr>
<tr>
<td>III</td>
<td>-</td>
</tr>
<tr>
<td>IV</td>
<td>-</td>
</tr>
<tr>
<td>V</td>
<td>-</td>
</tr>
</tbody>
</table>

TOTAL 2 9 49 72 132(100) 56 4 60

The pattern in Jhakri is largely a reflection of the introduction of "Green
“Revolution” technology, especially among class II and III farmers. Of 102 bighas lost by this group, 72, were sold in order to take advantage of the changed conditions after new varieties of seed and water lifting technology became available for bangar farmers. Of these 72 bighas, 30 were khader land. The proceeds of these sales were used to buy 56 bighas of bangar land bought by this group. The remaining 42 bighas were sold to finance the installation of three electric tubewells. Conversations with villagers during the course of interview would also indicate that sales in Jhakri have been more for productive re-investment than for consumption. This view is borne out by reading between the lines of the rotation dakhilkar register, where it is obvious that the volume of transfers, as well the value of land picks up dramatically from the mid 1960’s onwards, precisely at the time when the new agricultural technology was being introduced.

Why not take credit, one might legitimately ask? The following case offers an explanation. Akhtar Ali and his three brothers explained to me that they used to hold land in the low lying khader area as well as bangar land close to the village. As the new technology became available, they explained, it became clear to them that the khader, farther from the village and not as responsive to the combination of new seed water and fertiliser as their bangar land, was not worth continuing to farm. They decided to sell some of the khader land and buy a tubewell and electric pumpset with the proceeds and buy bangar land with any remaining cash. Later the brothers decided they would like to buy a second tubewell. They had no bangar land left to sell and took a loan from the land bank in Bijnor to finance the purchase of this second well.

Two sales merit special attention from a risk point of view. Firstly, Shakir, was the owner of 30 bighas of bangar land until the marriage of his eldest son. Before the wedding, his bullocks and draft buffalo died. To pay for the wedding and to replace the animals, he sold 15 bighas of land. This should alert us to the costs of children, particularly at that stage in the life cycle when substantial amounts of resources must be spent on their marriages.

The remaining case highlights one common feature linking Dharmagri and Jhakri to Char Gopalur – the fragile security of women. The thirty bighas shown to be sold by now landless households in Jhakri was in fact sold by one household. In 1972 the male head of household died. He was survived by a wife, Jamani, four daughters and two sons. All of the children were unmarried. As already shown in the chapter on landholding, it is difficult
for women to manage land on their own, given the proscriptions on their right to plough. Jamani’s sons were too young to work the land and consequently she was unable to make a reasonable living from it. In order to marry her children in these circumstances she sold her land off in six successive parcels to finance the marriage of her children. The two sons remaining in the village are among the poorest households there now. A mobility matrix, similar to that constructed for the Dharmnagri sample, shows these movements clearly.

Table 7:
Jhakri Key Informants:
Movements from 1958 Class Position by 1982

<table>
<thead>
<tr>
<th>1958 CLASS POSITION</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>C CURRENT</td>
<td>II</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R CURRENT</td>
<td>III</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>T CURRENT</td>
<td>IV</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>S CURRENT</td>
<td>V</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
</tbody>
</table>

Three of the four villagers in the sample who started as landless in 1958 remained so throughout the period. They had been unaffected by the distribution of land by the government. When I questioned them on this, most said that they had not been interested in trying to gain title to ceiling land. They considered the land to be too poor and too far away to be of any use to them. They had preferred to pursue other forms of making a living, for example sub-contracting a colhu, selling milk or sharecropping, though they all agreed with hindsight that the compulsory repurchase of the land to build the barrage could have given them a net profit of about Rs5,000.

The matrix also shows that one landless man had managed to buy his way into the small landholder category. Suleiman is the son of a large farmer, but his father has disinherited him on his remarriage. Suleiman’s most lucrative activity is smuggling trees, and he was able to buy a small parcel of land with the proceeds. The household which dropped from highest to lowest category is that of Ramzani, discussed in chapter 3, highlighting the risks
of widowhood for women in the study villages.

Using Cain's indicators then, the villages in the present study seem to have a benign environment of risk, with relatively little upward or downward mobility in terms of landholding. The villages have a well developed infrastructure, assured water supplies and fairly wide availability of credit. Much has been done to contain the Ganges and there have been no floods in the past twenty years or so. The land market is relatively static in the study villages when compared to Bangladesh, with no widespread movements in class positions among the key informants.

In spite of this, fertility in Dhammagri and Jhakri is higher than one might expect if the risk thesis is valid. Average completed family size is around five children, higher than Maharashtra, which has low fertility and is the basis of Cain's argument. Cain maintains however that where the labour value of children is high, then their value in the risk equation may well be outweighed by their labour value. Is this the case in Dhammagri and Jhakri? Leaving aside the question of the riskiness of childbearing itself for women, the following two chapters examine the economic contribution of children to the families of which they are part.
Chapter 5: The Agricultural Cycle I

INTRODUCTION

The object of this chapter and the next taken together is to shed light on the economic contribution of children to the household. If as claimed by Mamdani (1972) all children are a net asset to all households all the time we could reasonably expect the contribution of even fairly young children to the agricultural process to be large. There should be little difference between the value of sons and daughters if Mamdani’s claims are valid. If children are a source of old age security to their parents, (Leibenstein: 1957, 1977) we could reasonably expect sons and daughters to be working jointly with their parents, contributing to household income well into their adult years.

This chapter describes the agricultural cycle: crops and cropping patterns; seed types; agricultural techniques and the decisions associated with the cycle of work throughout the year. The purpose is to set the contribution of child labour in context before analysing it more fully in the next chapter.

The arrangements made and organisation involved in the agricultural cycle are sometimes bewilderingly complex so what follows is inevitably a simplified version of what occurs. I will draw out the more salient features of the process to clarify differences in cultivation methods in the khader and the bangar, and choice of seed. An estimate of cash returns for each crop is then presented for the sample households, before summarising the year as a whole taking into account class differences. The labour process of landless labouring families in the sample, are dealt with at the end of the chapter, where the incomes of the whole sample are summarised for the whole year.

Sources of Data and the Calculation of Labour Use and Returns to Major Crops

The data presented in the rest of this chapter are those collected from the sample during the agricultural year beginning in June 1982, with preparation for that year’s rice crop. Using a semi-structured questionnaire, I asked all sample farmers about their inputs of labour, water and fertiliser in growing and harvesting the three major crops rice, wheat and sugarcane. Estimates of net yield were also made, based on the number of sacks of rice and wheat obtained after threshing and husking and attributing a value to the pooral (rice stalks), and boosa (wheat straw). In all calculations, wheat and rice
are valued at the government procurement price of Rs152 obtainable at the time of harvest. Seed, which is used at the rate of about 5kgs per bigha is also calculated at this cost.

Attaching a market value to the crops has the virtue of reducing all returns to a standard measure so that returns can be reasonably compared. John Harriss (1982a) has pointed out that this method underestimates the value of the crop for larger farmers with storage facilities, who can hold their crop until later in the year when the price rises due to scarcity. However, rice in the district where Harriss conducted his study was the main cash crop, and it has already been pointed out above, neither wheat nor rice has that status in Bijnor. Very little rice or wheat was sold at all, and therefore it is reasonable to use the procurement price as a proxy for its value to growers.

It could be argued that the same is not true for landless families in the sample who have to buy their requirements on the market rather than grow them. I did not collect the market prices of wheat and rice throughout the year. This problem is mitigated somewhat by the fact that the landless households in the sample were paid in rice for the harvesting work which they performed for others. Such stocks, though they lasted for some time, seldom lasted throughout the whole year and so it should be borne in mind that the figures presented for landless labourers may underestimate their costs a little.

The Cost of Chemical Fertiliser

Where chemical fertilisers were used their cost were calculated at the price paid by each grower in the market place. The recorded amount used is each farmer's own estimate of use at each round of the questionnaire.

The Cost of Water

Where water is given from the farmer's own tubewell, the calculation is somewhat more complex than when the water was bought from another since the cost of the upkeep of the well and depreciation has to be taken into account and apportioned to each of the three major crops over the agricultural year. The costs are worked out in the following way. For both electric and diesel operated engines, a depreciation allowance is calculated to cover maintenance and replacement costs. Assuming a fifteen year operating life, this allowance is set at Rs50 per month, or Rs600 for the year under study. In addition, for
electric wells, the flat rate standing charge of Rs180 per month is included in the cost. This makes the running costs of an electric engine Rs2760 per year. For diesel engines, the cost of fuel is calculated at Rs4 per hour of use, based on estimates of consumption given by farmers themselves.

Initially, I decided to apportion the annual cost of water pumping equipment evenly across the year so that for instance, sugarcane, a ten month crop would have born 5/6ths of the total water costs across the year for electric engines. But, since rice uses proportionately more water than wheat or cane, I decided to more accurately reflect its cost by making it bear 3/16 of the annual fixed cost of running water pumping equipment, with wheat taking 1/8th and cane 11/16ths. These costs are outlined in the table below.

Table 1:
Fixed Annual Water Costs For Wheat Rice and Sugar Cane 1982-83 by Type of Engine

<table>
<thead>
<tr>
<th>Crop</th>
<th>Type of Engine</th>
<th>Electric</th>
<th>Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>Electric</td>
<td>517.5</td>
<td>112.5</td>
</tr>
<tr>
<td></td>
<td>Diesel</td>
<td>112.5</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>Electric</td>
<td>345</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Diesel</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Sugarcane</td>
<td>Electric</td>
<td>1897.5</td>
<td>412.5</td>
</tr>
<tr>
<td></td>
<td>Diesel</td>
<td>412.5</td>
<td></td>
</tr>
<tr>
<td>Total Fixed</td>
<td>Electric</td>
<td>2760</td>
<td>600</td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83.

These fixed costs are deducted from the respective income of pumping set owners for each crop. In addition, where water is pumped from a diesel set, Rs4 for each hour of pumped water is deducted to cover the cost of fuel.

There is also a ready market for the sale of irrigation in the study villages. Owners of tubewells and pumpsets simply hire the machinery to pump water and direct this to the fields of the purchaser. Where water was purchased by those without their own tubewell, the cost calculated is simply the sum of the amounts paid at each watering through the growing cycle. Where the sellers of such water are also in the sample, this shows up as income for them. The cost of water varies. From electric sets, the cost is Rs7 per hour.
From a diesel set the cost varies between Rs8 and Rs10 per hour depending on the availability of fuel, the distance the engine has to be carted and so on.

The Cost of Labour

The cost of hired labour is included simply as the sums paid to labourers when the transaction is a cash one. For harvesting where the payment is invariably in kind rather than cash, the hours of hired labour are calculated and the weight paid to the labourers subtracted from the total yield before calculating net returns.

Where family labour is used, it is imputed at no cost. Its value therefore shows up as an increased net yield. This could be construed as a deviation from the standard economic practice of computing its value as its opportunity cost. I feel justified in attributing family labour at no cost for two reasons. The first is that in my conversations with men, it was clear that whenever family members could hire their labour power out they did. When they worked on the family farm the opportunity cost of their labour was indeed zero. It could of course be argued that in the absence of family labour, labour would have to be hired in and that family labour should therefore be computed at this cost. It is my contention here that this form of calculation neither mirrors the way in which farmers think of family labour, nor the way in which labour is used in the study villages.

Secondly, the main purpose of the calculations made here is to highlight the contribution of family labour itself. Imputing its cost at zero, means that its contribution to household income ought to become more salient. Households with larger numbers of children, for example, if Mamdani is correct, ought to have lesser use of hired labour per unit of output than households with fewer children. To impute household labour at no cost gives Mamdani's thesis a better fighting chance.

In addition to working out the cost of labour, I also collected information on the amount, in labour days, of labour used. This allows me to make a calculation of the relative amounts of family and hired labour used by production units of different size and sex composition. The value of this, in the context of the argument surrounding the value of children is that it allows us to see how much of a contribution children make to the productive process.
The Special Place of Sugarcane

While I also collected this information for sugar cane, its position as the major cash crop for the people in my sample means that I was also able to use several written sources of information from the formal market sector in addition to my own enquiries in the villages themselves.

Analysis of the growing cycle is somewhat more complex than that of wheat or rice. Cane grows in a ten month cycle and therefore I asked key informants at various times throughout the year about cane cultivation and sales. These questions were asked at the same time as those about wheat and rice. The results, analysed below, are therefore based on four observations evenly spaced throughout the growing season to keep errors of recall to a minimum.

The analysis of its disposal also represents something of an analytical problem, partly because the cutting season lasts for about 200 days, giving rise to the same recall problem as for the reporting of its growing. Where growers are members of the Sugar Cane Co-operative Society, they could usually remember more accurately when they had supplied cane. I could check this memory against Cane Society records. Here the discrepancies are small and known. Where discrepancies arise, the Cane Society figure for supply to the Begawala centre is used. This figure most accurately reflects a grower's gross cash returns from the Co-op. I spent about three months at the Sugar Cane Society in the ledgers section collecting the necessary information relating to supply, payment and loans for each of the growers in the base villages.

Care must however still be exercised, because farmers who found it difficult to meet their basic quota sometimes allowed other growers to supply on their passes so that their basic quota and therefore income in the following year would not be cut. It also needs to be borne in mind that some farmers had the number of passes to which they were entitled in the season under study cut for oversupplying on each pass early in the season. The first of these problems was overcome by ensuring that none of the farmers in the sample had given anyone a pass to supply cane. The second problem was overcome by checking the actual weight of cane supplied over the whole season rather than multiplying the number of passes by the allowed weight per pass or simply accepting the basic quota as the supply weight.

However, no sample farmer supplied the whole of his output to the Sugar Cane
Society, and an estimate of the amount of cane supplied to the colhus was collected from each of the farmers at least twice during the cutting season. Sometimes this estimate could be checked against the rough and ready supply books which the colhu operators kept. Where this was not possible, the figures used are the oral estimates given by the farmer.

Cane Society records also allow some idea of fertiliser use. Members of the society were allowed to borrow variable inputs from the Society, and most members did. The extent of their borrowings are recorded in their ledger entries and subtracted from their passes when these are presented for payment. Members are allowed to borrow up to 10 per cent of the value of their basic quota with interest accruing after six months at the rate of 18 percent in the season under study.

Most members organised themselves efficiently to borrow from the Society. One group of four brothers who farmed jointly, but held separate memberships to the Society told me that they borrowed all their requirements in the name of one brother, whose passes they did not present for payment until the end of the season, having bribed the village cane worker to place all his supply there. The advantage of this was that the loans for fertiliser were not deducted from the first passes of the season. These were presented after the lean months of the monsoon and used to buy clothes and other family requirements before the onset of winter. I have not included the cost of bribes in income calculations.

However some care is again required here in the interpretation of Society loan figures. Officially, the loans are exclusively for sugar cane cultivation. But farmers told me, and officials admitted, that loans ostensibly for sugar cane production were widely used for other crops. Farmers time the borrowing well so that it is impossible to tell which crop the fertiliser is being used on. For this reason, it is not possible to assume that all fertiliser borrowed from the society goes onto the cane crop.

Furthermore, both Cane Society members and those who were not members used the bazaar as a source of fertiliser. It would be mistaken to assume that fertiliser loan statistics from the cane Society provide an accurate indication of the fertiliser which actually finds its way onto the growing cane. The fertiliser use figures used in this section are therefore, like those for wheat and rice, based on the oral estimates of farmers, collected by semi-formal interview at the same time as information on labour use.
The rest of this chapter is divided into three main sections, each of which deals with one of the major crops rice, wheat and sugarcane respectively. Each main section is further subdivided into sections which deal with cultivation methods for each crop, the factors governing the choice of seed types and the area under each crop. The final part of each section looks at the returns to each of the crops. A final fourth section looks at income for the whole year among the sample.

**Rice Cultivation Methods**

Of the two major subsistence crops rice is the more complex to deal with. There are two different ways in which it is grown, according to whether it is grown in upland bangar soils where there is a more assured water supply or in the khader where the availability of water is determined by and large by rainfall. The cultivation methods of each of these areas are dealt with below.

**The Khader**

Farmers growing rice in the khader tend to plant their rice behind the plough onto unirrigated soil. A furrow is opened up by the plough and then the seed are dropped by a second man into the furrow, via a funnel to a tube which deposits the seed right at the back of the plough share. This technique is adopted because the rice is planted in early June when the weather is at its hottest and the seed need to retain as much soil moisture as they can. By dropping the seed immediately behind the share, they have a chance to bed themselves at the bottom of the furrow before any disturbed soil has a chance to trickle back into it.

The seeds are covered over by the plough on the next round of the field and the furrow created left empty with seed again being planted in the third furrow. When the whole field has been planted the soil is flattened by a bullock drawn log and the seed left to germinate. The crop may be weeded once or twice if required, before harvesting in late September, making it a crop of about 120 days.

**The Bangar**

On the upland bangar soil, all of the rice cropped was transplanted, rather than planted behind the plough. Transplanting is a more intensive process in
terms of both labour and other inputs at all stages than planting.

The seed must first of all be grown in a nursery. The nursery is prepared and planted at the beginning of June, around the time when khader farmers are out planting their rice. The nursery, usually a plot of about ten square yards, is first of all flooded with water and then the soil reduced to a slurry by agitation with a stick or spade. The seeds, which are sometimes soaked beforehand, are broadcast onto the water and stirred, to encourage them to sink, so as not to be gobbled up by wading herons or cranes. The young plants are given frequent short waterings and small doses of nitrogenous fertilisers until they are ready for transplanting.

Transplanting usually takes place around the onset of the monsoon: a cause for anxiety among those who do not own their own tubewell. In the season under study, this was around the third week of June - about three weeks after khader farmers had planted their rice behind the plough. Transplanting rice is one of the most exciting and picturesque of agricultural operations. Imagine water flooded fields, tubewells in full flow, the vivid green of the young seedlings waiting to be transplanted under the sullen grey monsoon sky. Herons wade through the peopled fields, stabbing at grubs and insects disturbed by the bullocks straining at their yoke slurrying the topsoil with water. But transplanting is also the most backbreaking of tasks which must be accomplished quickly and smoothly to be successful.

A day or two before rice is due to be transplanted into a field, water is pumped in via a tubewell. When the soil has a covering of water on it, the soil is reduced to silt by continuously driving a bullock pulled wooden log over the field. The young seedlings are plucked from the nursery and transplanted into the flooded field by large groups of workers. These workers are more often than not hired, rather than family labour, since family labour is usually taken up by performing these other tasks associated with preparation of the main fields for transplanting.

Having successfully transplanted their rice, farmers prefer if they can to keep the field well covered with water partly to feed the plants but also to keep the field as weed free as possible. This is relatively easier for those who own tubewells than those who do not. Those who can afford it will use urea as a fertiliser two or three times while the crop is growing, before the crop is harvested. Harvesting of upland bangar rice took place in November during the season under study, making it a crop of about 150 days.
On both the khader and the bangar, larger farmers tend to use hired labour, paid in kind, for harvesting. The rate for this work is between 6 and 8 bundles per hundred cut, depending on the availability of labour, the timing of the harvest and the density of the standing crop. After cutting, the labourers thresh the rice by hand, sometimes assisted by family labour if this is available. Smaller farmers tend to use more family labour to accomplish the same tasks.

Choice of seed

These different methods of cultivation on the khader and bangar are associated with different types of seed.

The Khader

In the khader, most farmers who grew rice planted unimproved varieties of rice behind the plough, rather than transplant new varieties. They were clear about their reasons for doing so and maintained that rice yields were more consistent with older varieties in the khader than with improved varieties (whether these were transplanted or planted behind the plough). The khader has less assured water supplies than the bangar, and farmers maintained that under these conditions older varieties gave more consistent returns than newer ones. This finding is consistent with that of other researchers (Lipton: 1979; Griffin: 1978). By far the most popular seed types on the khader were Lal Mati and Lambia Farm. In the analysis of returns, later in this chapter, it is shown that unimproved varieties in the khader did give the best returns.

The Bangar

On the bangar, where farmers have more ready access to water and can more easily afford fertiliser, the conditions are better suited to the improved varieties developed since the "green revolution". Not everyone farming on the bangar has a well. Indeed several such farmers were, at the beginning of the 82 season, worried about the expense of watering their fields prior to transplanting if the rains failed or came later than the optimum time for transplanting. Water, at Rs7 to Rs10 per hour pumped, is an expensive commodity for those who do not own their own tubewell. But under all normal circumstances, the knowledge that it will be available from someone close by with a well, and so watered will give a yield of about 750kgs per acre over the older varieties encourages the use of improved varieties by all those
farming on the bangar.

The importance of assured water supplies in the choice to grow improved varieties of rice is highlighted by the fact that some farmers at least knew about the existence of finer varieties long before they chose to grow them. Among the Sheikhs in Jhakri, there is a long history of marriage contracts across the Ganges into the district of Muzaffanagar, with women and men from the villages of Soojru and Gaunri. Gaunri stands on the banks of the Upper Ganges Canal and farmers there, with assured water supplies since the late nineteenth century have grown improved varieties for as long as anyone can remember. One man, Sahadat, with marriage connections in Gaunri said he recalled talking to his in laws there in the 1950's about the improved varieties of rice they were growing. He himself decided against trying to grow them at that time, because their success depended upon assured water supplies which were lacking in Jhakri. It was not until the first tubewells were sunk by Jhakri farmers in the early 1970's that they began to grow new varieties of rice.

The most popular variety in the season under study was "saket 4" which was introduced to the area by the agricultural extension office in 1981. Interestingly, some of the younger farmers in the sample had difficulty naming this new variety and referred to the variety they had transplanted as "that one which is going around just now". That this was "saket 4" was confirmed by consultation with other farmers.

It would be wrong to leave the impression that the choice of rice seed is entirely determined by technical factors of production. Some farmers say they grow a particular kind of rice not for its yield, but for its flavour. This is particularly true of Hansaraj. Hansaraj is a fine flavoured rice, which is as close to Basmati rice as local farmers can grow in the plains. It has a very low yield, about a third of an "improved variety" yet three or four farmers insisted on growing it so that they would have a stock of fine flavoured rice for special occasions throughout the year such as festivals and weddings. This should alert us to the fact that for sample farmers, rice is a subsistence crop grown not for the market, but for their for their own consumption. The area given over to rice was not decided directly by price in the season under study, but on the production unit's perceived need for rice, the land available to them to grow it and the expected minimum yield.
Returns to Rice

Table 2, below, gives an idea of the overall position regarding rice in the period under study.

Table 2:
Area Under Rice by Village and Soil Type

<table>
<thead>
<tr>
<th>Village &amp; Soil Type</th>
<th>Bighas under Rice</th>
<th>Gross Value</th>
<th>Net Value /Bigha</th>
<th>Net Value /Bigha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dharmagri Bangar</td>
<td>50.75</td>
<td>19,092</td>
<td>376</td>
<td>11,200</td>
</tr>
<tr>
<td>Khader</td>
<td>86.00</td>
<td>8,090</td>
<td>94</td>
<td>5,091</td>
</tr>
<tr>
<td>Jhakri Bangar</td>
<td>114</td>
<td>57,353</td>
<td>503</td>
<td>43,776</td>
</tr>
</tbody>
</table>

TOTAL 250.75 84,535 337 60,087 240

Source: Key informants, 1982 Kharif Season.

Table 2 shows that bangar farmers made a substantially greater surplus than khader farmers. Given the absence of assured water supplies in the khader and the subsequent use of unimproved varieties, the difference is to be expected. Perhaps more surprising is the difference between returns to bangar growers in Jhakri in Dharmagri. This is explained by the fact that almost all of the growers in Dharmagri were small farmers with isolated small plots of land on the bangar. Five of the seven plots under rice in Dharmagri Bangar had an average size of 3.5 bighas under rice, while 15 of their 19 counterparts in Jhakri had an average plot size of double this. That yields in Jhakri tend to be higher than in Dharmagri probably reflects easier access to water, and better draining soil less liable to flooding. Most of the rice growers in the Jhakri sample owned their own well while in Dharmagri only one grower did.

Returns in the Khader

The overall position represented in table two, as one might expect, obscures
differences between growers in different areas. Table 3 shows the differences in yields among farmers growing improved and unimproved varieties in the khader.

**Table 3:**

<table>
<thead>
<tr>
<th>Improved Varieties</th>
<th>Village</th>
<th>Bighas</th>
<th>Net Yield</th>
<th>Yield/Bigha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saket 4</td>
<td>Dharmagri</td>
<td>9.75</td>
<td>331</td>
<td>34</td>
</tr>
<tr>
<td>Jaya Parsad</td>
<td>&quot;</td>
<td>15</td>
<td>-294</td>
<td>-19.6</td>
</tr>
<tr>
<td>Bugdi</td>
<td>&quot;</td>
<td>2</td>
<td>284</td>
<td>142</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unimproved Varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lal Mati/</td>
</tr>
<tr>
<td>Lambia Farm</td>
</tr>
<tr>
<td>Hansaraj</td>
</tr>
</tbody>
</table>

| TOTAL                | 88.75    | 6732   | 75.85     |

Source: Key Informants 1982 Kharif Season.

Although the numbers in each group are small they serve to make the point that farmers who planted older varieties made more consistent returns. This confirms the view expressed by khader farmers that older varieties give better returns when water supplies and drainage are less assured. This is highlighted by the returns to the improved variety "saket 4" in the khader, which when taken as an average are somewhat misleading. Of the two khader farmers in the sample planting "saket 4", one made a loss, harvesting none of the rice which he planted. He said that he had tried this as an experiment and would not be planting it again on that particular plot of land which was low lying and clayey, and therefore flooded easily and drained badly. He had also planted 15 bighas of Lambia Farm and Lal Mati mixed, two traditional varieties, which from table 3 can be seen as the most profitable varieties on the khader in the 1982 season. The loss of an acre of "saket 4", though important, was not crucial to the provision of rice for that production unit.

The other grower of "saket 4" in the khader was Mahipal who had not, he said, intended to grow rice at all. He was growing vegetables for sale and
consumption on the two bighas on which he later transplanted rice. He told me on numerous occassions that he intended to sell the vegetables and then buy his Household's rice requirement from those with a surplus in the village. The vegetables were however washed out by the monsoon before he was able to harvest them. He ploughed in the rotting vegetable matter and transplanted rice very quickly, making the best of the situation the rains had left him. His returns to "saket 4" were good. I think this is because his land is not typical of the majority in the khader. Of all the land owned by villagers in the khader, his is among the highest and therefore among the best draining. Drainage is also helped by its being lighter in texture than the lower lying land farther into the khader.

If the rice he transplanted was threatened by too much rain he could simply cut holes in the retaining walls on the field and the water would run away. If he chose carefully he could run the water into a sugarcane field which no one would be too worried about. Mahipal's field was also fairly near to a ground water pool and he also knew that he could, in the event of insufficient rain, hire the services of a water trolley from the village and pump ground water up from the pool and direct it to his field by digging a channel from the pool to his field. In these ways the risk of growing new varieties of rice were somewhat less for Mahipal than they were for other people and this is reflected in the value of his yield, which was Rs225 per bigha. It is also worth pointing out that this was also increased by the use of family rather than hired labour. One other farmer, Mangal, tried to grow a new variety, Jaya Parsad, in the khader. I suspect that Mangal transplanted Jaya in an attempt to obtain the absolute maximum possible for their effort in adverse circumstances. Most of the land they planted up with rice was sharecropped; in addition to which they operated a tractor; for which a substantial serkara (5% compound per month) loan was outstanding. In order to provide his family with enough rice to eat and keep up the repayments on the loan they had to try for an absolute maximum return and therefore take risks which in other circumstances he would not have contemplated. His venture failed because the rain was too heavy for the young rice seedlings to survive in the heavy khader soil which he farmed.

Returns in the the Bangar

Comparison of rupee yields per bigha on the upland irrigated soil shows how much more lucrative rice farming was there in the 1982 rice season when compared with the khader; on the bangar, mostly improved varieties of rice are sown, and - because the land is better drained and watered - no-one lost
an entire crop. In short, rice growing is less risky on the bangar than the khader. This is reflected in table 4.

Table 4:
Rupee per Bigha Yields of Rice on the Bangar by Variety

<table>
<thead>
<tr>
<th>Improved Varieties</th>
<th>Village</th>
<th>Bighas</th>
<th>Net Yield</th>
<th>Net Yield/Bigha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saket 4</td>
<td>Dn</td>
<td>17.75</td>
<td>2231</td>
<td>126</td>
</tr>
<tr>
<td>Saket 4</td>
<td>Jh</td>
<td>107.50</td>
<td>41868</td>
<td>389</td>
</tr>
<tr>
<td>Bugdi</td>
<td>Jh</td>
<td>2</td>
<td>1072</td>
<td>536</td>
</tr>
<tr>
<td>Jaya Parsad</td>
<td>Dn</td>
<td>18</td>
<td>4183</td>
<td>232</td>
</tr>
<tr>
<td>IR24</td>
<td>Dn</td>
<td>15</td>
<td>4806</td>
<td>320</td>
</tr>
<tr>
<td><strong>Unimproved Varieties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hansaraj</td>
<td>Jh</td>
<td>4.5</td>
<td>836</td>
<td>186</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>164.75</td>
<td>54996</td>
<td>334</td>
</tr>
</tbody>
</table>

Legend: Villages: Dn = Dharmnagri  
Jh = Jhakri

Source: Key Informants 1982 Kharif Season.

A comparison of the returns in the two areas indicates that the bangar is easily more profitable on average than the khader, with all growers on the former showing a healthy surplus. The least successful growers on the bangar were small farmers growing "saket 4". These farmers did not own tubewells and could neither afford to buy the amount of water they would have wished, or to obtain what they did on time. The only other growers to show a return of less than Rs200/bigha were those growing Hansaraj. But, as mentioned above, Hansaraj was grown for its flavour, rather than its yielding properties. Most of the growers in Jhakri own their own wells and this is reflected in higher returns there. Only the farmer growing Jaya Parsad in Dharmnagri Bangar owned his own well, and I suspect, as he was a reluctant informant in the early stages of fieldwork, when material on rice was being collected, his estimate if anything underestimates his returns.

Those in Jhakri without wells complained during interview that water was not always easy to obtain, and was expensive. It is interesting to note that in the three cases where rice was sharecropped in Jhakri, the land was shared out by those with no wells to those whose wells could water the land they were sharing in. Qadir, one Jhakri farmer who sharecropped out his land to another, made it was clear that he had shared the land out as he did not
expect to have enough cash during the growing cycle to afford the necessary inputs of water and fertiliser. He said that he would not sharecrop the land out for the wheat season as this would be cultivated during the cane harvesting season and if he found himself short of the necessary inputs he would cut cane and sell it to pay for them.

Wheat

Wheat like rice has a daily part in the lives of the people who are the focus of this study. Some feeling of its importance can be realised from the fact the the word for bread, roti, is interchangable with the word for food. Indeed at the festival of Shivaratri among the Hindus the fast which some people keep is only considered to be broken when bread, which is considered real food, is eaten. Most of the wheat consumed in the village is eaten in the form of chapatis which are flat unleavened bread cooked on a bevelled griddle over a very smoky ooplay burning chula, finally being puffed up into a delicious ball of hot air in the flame of the fire itself.

Some wheat is sold, where it is surplus to requirements, but very few farmers grow any wheat with sale in mind. This was clearly borne out during the course of questioning on the wheat crop. All growers in the sample, when asked how much seed they had kept back for the next year’s planting all said enough to plant the area which would feed their family and a little bit extra, lest the seed should be bad or the crop weak. Wheat, like rice, is a subsistence crop.

Cultivation Methods

Unlike rice, there are no fundamental differences in the way which wheat is cultivated on the khader or the bangar. Consequently, this section is not sub-divided to take differences into account in the manner of the section on rice above.

Preparation for planting the wheat crop begins sometime in August and continues right through till December. The date by which preparation begins is influenced by the crop which wheat follows in the rotation. Where it follows rice, the preparation is likely to begin in September for farmers who are going to plant in the khader. By virtue of planting rice early, they will have harvested early, allowing for early wheat preparation. In rotations where wheat follows rice on the bangar then the likelihood is that the preparation will not begin until the middle or end of November.
Where wheat follows cane, the starting date for preparation is likely to be somewhere in November for both khader and bangar, as this is the earliest date by which ratoun cane will be cut. Preparation is likely to begin earliest when wheat is being planted on land which was previously under a short summer crop or a fallow, both of which would follow the cutting of a ratoun harvest of cane late in the previous season (April) or a fallow after the previous wheat crop.

In any case the preparation is likely to consist of a number of preparatory ploughings and perhaps some watering, where the field being prepared can be irrigated from a privately operated tubewell. The frequency of these ploughings is largely determined by the grower’s access to ploughing equipment and how late he starts his preparation. It will be shown later in this chapter that growers who have only recently started to operate land in their own right are unlikely to have a plough. In these cases, the cost of hiring a tractor for ploughing is limiting. These examples are all in Dharmnagri, but there were also two cases in Jhakri where landless men took small plots of wheat on a sharecropping arrangement.

Preparatory watering is only done once, and that exclusively by growers who own tubewells. The water is given just a few days before planting and then the soil then planked over to hold moisture in the soil to help the early germination of the wheat seed after planting.

Where the intention is to plant sugar cane after the wheat has been harvested, the preparatory ploughings may be interspersed with a dressing of manure (kuri ka khad). The manure is made by tipping household rubbish into a purpose dug kuri (pit) throughout the year. This is augmented by manure from household animals which is collected by household women and dumped there during the monsoon when it is too wet for the women to make ooplay (dung cakes for cooking) from manure.

Planting itself is done behind the plough without the use of seed drills. Those who can afford it will also use a mixture of Nitrogen, Phosphorous and Potassium called daya to assist in germination. The commonest reason given for the non-use of fertiliser was the lack of cash or the inability to raise sufficient credit to buy it.

Planting is the exclusive preserve of men. The preference is to use family labour to do the planting, but where this is not possible, either because
other men are doing other work, or there are not enough men to plant, a hired labourer or two will be used to assist in the planting but this is very rare. None of the farmers on the khader used irrigation at all during their growing cycle and there was very little weeding indeed. This is reflected in the figures for labour costs. As one might expect, larger farmers do spend more money on fertiliser, though this does not have the effect of substantially increasing their yields.

Harvesting takes place around April. Larger farmers tend to use mostly hired labour, which is paid in kind. The rate for this work during the 83 harvest period varied between 5 and 8 bundles per hundred cut, depending on the availability of labour and the lateness of the harvest and sometimes on the density of the standing crop with more being paid for sparser crops.

After cutting, the wheat is threshed mechanically, either by tractor or diesel driven engines. This is usually done on a percentage threshed basis with the hirer providing the labour. The percentage demanded, and given, in 83 was between 11 and 15 per cent depending on the availability of threshers. Needless to say those who owned threshers were the people who ended up with most grain in their stores in 1983 - either because they were large farmers and/or because they were able to hire their threshers out to other farmers and reap a percentage of the threshed grain.

Some farmers who own threshing equipment, also have to hire threshing equipment from others. This is because they do not own a diesel engine and there was not enough electricity to thresh their crop as quickly as they wanted to do it, since they also have an eye on coming preparation for the next crop to be planted, as well as wanting to thresh their crop before the weather breaks and ruins it.

Choice of Seed

The choice of which seed to plant does not seem to have any particular significance for most farmers in the way that it does for rice, this is because the new varieties of wheat seed are not so critically dependent on the volume and timing of water supplies as their rice counterparts. Nor does the new wheat seed require to be planted in an entirely different way as is the case with improved varieties of rice. In addition, wheat is grown over the winter when there is likely to be a more timely and beneficial supply of rain than in the monsoon.
All farmers in the sample grew either 1553 or RR21 which were the varieties currently on offer from the agricultural extension service. Some farmers grew both varieties, and there are some indications that there was a general trend towards 1553, mostly because the field life of RR21 was coming to an end.

Returns to Wheat

Yields on average for the whole sample would seem to be slightly above the average for wheat in north India of 12 - 13 quintals a hectare (I.C.A.R.: 1982). Table 5 gives the overall pattern of area and yields for wheat during the 1982-83 season.

Table 5:
Area Under Wheat by Village and Soil Type

<table>
<thead>
<tr>
<th>Village &amp; Soil type</th>
<th>Bighas under Wheat</th>
<th>Gross Value</th>
<th>Net Value /bigha</th>
<th>Net Value /Bigha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dharmagri Bangar</td>
<td>57.5</td>
<td>15,002</td>
<td>261</td>
<td>9,177</td>
</tr>
<tr>
<td>Khader</td>
<td>131.75</td>
<td>17,558</td>
<td>133</td>
<td>13,361</td>
</tr>
<tr>
<td>Jhakri Bangar</td>
<td>153.75</td>
<td>40,461</td>
<td>263</td>
<td>26,726</td>
</tr>
<tr>
<td>TOTAL</td>
<td>343</td>
<td>73,201</td>
<td>213</td>
<td>49,264</td>
</tr>
</tbody>
</table>

Source: Key Informants 1982 Rabi Season.

Perhaps the most striking feature of the above table is that as was the case with rice, the irrigated bangar lands show a much greater return to their owners than the non irrigated khader soils. Apart from the obvious reason that a controlled water supply has a great effect on turnout, the reasons for this difference are manifold. However very few growers considered the season under study to be a good one for wheat. This was largely because there had been heavy rainfall while last year’s harvest had been waiting outside to be threshed. The wheat had become wet, and the grains therefore provided poor seed. Those with the highest yields are growers who managed to find an alternative supply of seed; from wheat which had been cut and stored before it had been affected by the rain. These were often large farmers who were able to obtain seed from similarly placed relatives in other parts of...
the district not so badly affected in the previous season by rain.

The problem for growers in the khader land was not a shortage of water, but rather too much water at the wrong times. There was heavy rainfall during the early stages of the crop's growth and this had caused much of the standing young shoots to be washed away, especially on the sandy soil nearest the Ganges. The low average yield of farmers in the khader does not really reflect low yields across the board there, but rather reflects the riskiness of farming on the khader. To illustrate: the best yield in the khader was Rs 224 per bigha. This was gained by Udayan. His crop was not weeded; neither did it have very much fertiliser applied - 25kgs on 12 bighas in a single dressing. He maintained that the crop, which he thought poor enough, had escaped substantial rain damage.

The worst yield on the khader was a loss of Rs 27 per bigha sustained by Shankar who had spent substantially more on the cultivation of the crop. His cash losses would not have been so great though had he been at a later stage in the life cycle. He had only just inherited his land before the wheat season began and had no plough or team and had to resort to expensive hired tractor preparation of the soil and hired plough to plant. He also had a job and therefore was less able to pay his crop proper attention.

In addition it would seem that this difference between irrigated and non-irrigated land is not much affected by class. For example, the wealthiest khader farmers, have lesser net returns per bigha, around Rs92, than small farmers on the irrigated bangar, around Rs 200.

In general, farmers growing irrigated wheat had better returns than those growing without assured and controlled water supplies. Sample farmers growing wheat in both Dharmnagri and Jhakri Bangar had better returns than their khader counterparts.

Sugar Cane

"We people are very happy when planting sugarcane, it is our cash crop. Wheat and rice provide eating, but sugarcane provides money." (Mansur)

Sugar Cane as the major cash crop of the area under study, deserves a special analysis so that the place which it occupies in the lives of the sample may be more readily understood. As one might expect, the growing and disposal of the cane crop ties village people into a wider cash nexus and a set of
relationships over which they have relatively little control. Understanding something of the market for sugar cane is essential for understanding the main focus of these chapters, the pattern of labour use and the income which the crop produces. I will begin this analysis of sugarcane therefore with a brief description of this market.

Sugar Cane - a Dual Market

The point of departure for this description of the market for cane is that the market is composed of three analytically distinct sectors. Farmers may sell their cane to the local Sugar Cane Co-operative Society, or to one of the four colhus or crushers around the study villages, or to private khandasaris, which crush cane into sugar as a final product. However there are no khandasaris in close proximity to the study villages and in the 1982-83 season no grower supplied cane to khandasaris. When prices are high the journey to khandasaris in the town of Kiratpur (about 15 kilometres away) is well worth the effort, as prices can be as much as Rs15 a quintal (100kgs.) higher there than at the local crushers. In the season under study, then, all farmers supplied cane either to the government mill, via the Sugar Cane Co-operative Society or the local colhus. The analysis in this chapter will, therefore, be confined to these two buyers of cane and I will deal with each in turn.

The Sugar Cane Co-operative Society

The Government-owned unit of the Uttar Pradesh State Sugar Corporation is the largest single buyer of sugar cane in Bijnor District. The unit consists of a mill with a crushing capacity of some 1100 tonnes of cane a day. In a crushing season of 202 days in the 1981-82 season, the mill crushed about 820 tonnes of cane each working day. Before 1979, the mill was privately owned but had recurring problems in paying farmers for the cane they supplied and was eventually taken over by the government.

Farmers do not have direct access to the mill. To be able to supply cane there, they must take membership of the local Sugar Cane Co-operative Society. Membership of the society is obtained by purchasing Rs20 worth of shares. This entitles members to supply cane to the mill and to borrow variable inputs according to society rules. It is worth highlighting two points here. The first is that the advantage of supplying sugarcane to the mill in the 1982-83 season is that the price which the mill paid, fixed at
the beginning of the season, was always higher than that paid by the local crushers. The second is that members cannot usually supply all of their sugarcane to the mill. The right to supply is governed by society rules.

In the first year of membership, a farmer is allowed to supply the average weight of supply for his village of residence for the area he has under cane. After two years membership, a supply entitlement, the basic quota, is calculated as the moving average of the previous two years supply. It is this amount which the farmer is allowed to supply in any given season. Farmers may increase this amount by purchasing a bond for an extra amount which he wishes to supply. If he fails to meet the weight he has agreed to supply, the price paid for the bond is forfeited.

The mill's cane crushing season, which varies from year to year depending on demand and supply factors, is divided into supply fortnights. The entitlement of each member to supply cane in any fortnight is calculated so as to create an even flow of supply for each member over the whole crushing season, and to provide a steady supply of cane to the mill.

A set of dated passes is then made up allowing each member to supply particular weights during particular fortnights. To allow time for cutting, passes are then supplied to the farmer three or four days before the cane is required at the mill, by the village cane worker (gunna gram sevak), each of whom is responsible for about 1200 acres of cane. The catchment area for the mill in 1981-82, the season before fieldwork began, was about 51,000 acres. Dharmnagri and Jhakri farmers, because the villages are more than ten kilometres from the mill gate, are allowed to supply their cane to the Government weighing station at Begawala a village about a kilometre away. The farmer presents the cane and pass at the weighbridge. The full buggy is weighed, the cane unloaded, and then the empty buggy is weighed. The supply weight is then calculated as the difference between these two weights. The price paid by the mill for cane in the 82-83 season was Rs21.60 per 100kgs (quintal). From this a levy of 60 paise per quintal was deducted to cover transport from weighing station to the mill.

After weighing, the farmer has his pass authenticated and retains it. The mill pays for cane in arrears and the gunna gram sevak (village level cane worker also brings news of the dates for which the society is paying for cane supplied. Any member having a pass to be paid presents it at the society office in Bijnor for cash payment.
The price paid by the mill for sugar cane is fixed by the State Government at the beginning of each season. The price is based on that estimated by the Agricultural Prices Commission (A.P.C.) in Delhi as the one which will clear the market. But in 1982-83, the A.P.C. recommended that the price should be set at Rs14-15 per quintal. The difference is accounted for by the Uttar Pradesh State Government setting a higher price in the hope of currying political favours among the growers.

The Indian Government finds itself in an impossible situation in relation to sugar. Sugar is an immensely popular commodity in India. Walk through the streets of any busy town and you cannot go far without coming upon the stall of a sweet vendor piled high with perfect pyramids of barfi and ladu, laden with bowls of rasguley steeping in sugar syrup and heavy with the smell of frying jalebis. You cannot stay long in a village without being offered a plate of gur (raw sugar) to go with your heavily sweetened tea. Sweets have a symbolic part to play in India. Mouths have to be sweetened in economic, political and ritual life too. The government is therefore under pressure to provide sugar cheaply and at the same time provide a good price for sugar cane. Consequently, the market for sugar cane is an unstable one in which price fluctuations can be extreme.

The high price at which the mill has to buy cane caused severe cash flow problems over the years up to 1982-83. Some farmers claimed not to have been paid any money for the cane they supplied during the previous season. One man claimed to be owed somewhere in the region of Rs14,000 at the beginning of the 1982-83 season. Another farmer, Mansur remembered, with some affection, the period of the Janata government between 1977-79 when sugar cane farmers benefited from high prices. At a time when the mill was paying Rs13-26, per 100kgs, the colhus and khandsaris were paying up to Rs65.

"farmers walked around with their pockets so full of notes that they were falling out on the street behind him as he walked. The prices at the crushers were high and when the mill passes came we just stuck them in the thatch and forgot about them. Prices at the crushers in Kiratpur were Rs65 a quintal and here in the village they were as high as Rs50 a quintal. Now they are Rs8,10 or 12. Then we could build brick houses, now we are back to mud huts" (Mansur)

In the 1982-83 season, the mill crushed cane right through to May, but the society ledgers show that no payments were made for cane supplied after March by the time my fieldwork ended in July 1983.
The Village Sugar Cane Crushers.

The crushers or colhus are the second sector of the market for sugar cane. In the immediate vicinity of Dharmnagri and Jhakri there are four colhus each of which is located on the land of a farmer owning an electric well and engine house.

Colhus consist of three large bowls in line, each of which is about two feet across. The outer rims are level with the ground around. Underneath is a large fire-chamber which is fed through a hole in the wall from a pit at one end. At the other end of the chamber, there is a chimney, to draw the flames across and underneath the bowls. The sugar cane is crushed by a set of upright rollers set at right angles to the first bowl. The juice extracted by crushing is channeled into one of two reservoirs.

The juice is then run from the reservoir into the first bowl. As it comes to boiling point, it has the impurities skimmed from the top with a large slotted ladle. Thus cleaned, it is ladled into the second pan. The first pan is filled up from the reservoir and boiled. If the gur which the process produces is for sale in Bijnor, it will have chemicals added in the second pan to improve its appearance. It will also be clarified with tree bark. The boiling amber liquid is then ladled from the second into the third pan where it is reduced to a saucy consistency before being ladled onto a round concrete cooling tray and formed into balls of gur called gindaurey. Alternatively it may be formed into a single slab known as andarki and used for reprocessing into sugar.

The three bowls and all the crushing gear at all four colhus belong to the Block Development Office (B.D.O.) at Chandak, some 20 kilometres away. All four colhus were rented from the B.D.O. by the men whose land they stood on. In the 1982-83 season, the official rent for each colhu was Rs2,600. Each colhu was situated at the electric well house of the hirer. The upright crushing gear was attached to the electric motor by a drive belt and the cane crushed in this way.

However, none of the four owners who rented from the B.D.O. operated the colhus themselves. Each colhu was sublet to a group of partners (tikidars) who operated them for the whole crushing season. Each group of tikidars hired the machinery, colhu and electric pump for a flat rate of Rs5,600 from the owner of the well. The tikidars could then use the electric motor to drive the crushing gear (except when the owner needed the motor to pump water to
his fields. The electricity supply was not constant. In addition therefore, each group of tikidars jointly owned their own diesel engine which they used to drive the crushing gear when the electricity supply was cut.

Tikidars bought sugar cane from local farmers at a price which reflected the rate for gur in the market at Bijnor where they sold their product every Wednesday and Friday. As Mansur suggested this price had been very much higher in previous seasons than the price offered at the government owned mill in Bijnor. In the 1982-83 season, this was not the case. The price offered by the colhus never rose above Rs15 per quintal. For most of the season, the price was between eight and ten rupees per quintal. Members of the Sugar Cane Co-operative only supplied to the colhus that which they could not supply to the mill. Farmers who were not members of the Co-operative sold all their cane to the colhus.

Cultivation Methods

The cane which is cut in November is not that which is planted the previous Spring. To simplify this description I will describe a notional plot of land planted with cane in May 1981. This Cane will be cut at earliest in March 1982, a full ten months after it is planted. It is then known as nauluck. The roots will be left in the ground, a procedure known as ratouning. From these roots, a second crop will grow, the harvest of which will begin in November 1982, eight months after it has been ratoumed. The cane is then known as paidey. On the upland bangar soils, cane may stay in the ground for three or four years, while in the khader, the maximum time is three seasons. Otherwise there are no great differences between the two areas in the way in which the crop is cultivated.

Cultivation Methods

Cane planting itself is an intensive operation in terms of both labour and other inputs. All growers manage to overcome this - either by using children, or by a system of exchange of labour and other inputs- like ploughs and draught animals. Arrangements for the latter are straightforward enough, with a days labour of man or plough being exchanged for the same at a later date. Among the sample about 180 labour days were so exchanged during the planting of sugar cane in 1982-83.

Of all the agricultural operations performed during the year this seems to be
the one most consistently enjoyed by most people. Sugar cane produces wealth, and is only planted on any particular field about once every three or four years allowing for rotations and ratoum crops. It is as well then to make a festival of it. I was invited to plant cane more often than I was to 'help' with any other agricultural operation. I was being asked to take part in a celebration, and it was important to people that I attended. It was like being invited to a wedding, one did not refuse without offending someone.

Imagine the field on the day of planting. An air of resilient calm reigns, occasionally broken by peals of laughter or the shouts of plough drivers as they spur their teams on. All who participate are keen that it goes smoothly, each planter is aware that the skill with which the cane is planted will affect the yield of the crop for at least two years to come. Great care is taken to lay the cut cane - used as seed, and known as kenchi - end to end so as not to waste any space on the field. Sometimes the cane was planted behind two ploughs, the first wooden-shared plough opening up the furrow and a second steel-bladed plough deepening the same furrow. To ensure it was planted straight, the prepared cane seed was dropped into the furrow between two parallel pieces of wood (pattey) attached to the foot of the rear of the plough board. The first plough would turn over a blank furrow on the next round, and the whole process would begin again with cane being planted in every third furrow, until the whole plot was planted.

The planter was fed cane seed by someone, usually a boy, who loaded them into a basket from a man cutting full length canes into seed lengths in the middle of the field. Sometimes the cane was dipped in a mercury based solution to protect the young seed from borers while it was germinating. Except where farmers could not afford it, a mixture of Nitrogen, Phosphorous and Potassium, at the rate of about 5 kilos to the bigha, was sprinkled in on top of the planted seed to assist in germination, before the furrow was covered over.

This is not the only way to plant cane. On yet another occasion when there was only one plough, three furrows were opened up on the left hand side of the field and while the plough went to open another three furrows on the right hand side of the field, twenty of us - men and children - planted the left hand furrows which the plough then covered over while we planted the right hand side of the field. One man took overall responsibility for the pattern of planting, telling us which furrows to plant and which to leave blank.
After planting, the cultivation of sugarcane depends on whether one looks at newly planted first season cane (nauluck), or cane which has been ratouned and left to grow for a second or subsequent season (paidey). After planting nauluck is intensively dug for the first few months of growing, to loosen up the soil and prevent weeds taking hold. These diggings are interspersed by frequent waterings and applications of nitrogen on the bangar but not on the khader, where in the absence of assured water supplies, farmers use nitrogen much more sparingly. On average in the khader, about 10 kilos of nitrogen are applied from planting to harvest, on the bangar the dosage can be as high as 50kgs.

For both the khader and the bangar, paidey is much less intensively cultivated. After ratouning, the trash from the cut crop is either left on the field or burnt on the field, both activities are to prevent weeds from growing. In the khader, the ratoun crop is treated almost entirely as a gift crop, while on the bangar it may be weeded and fertilised but much less intensively than nauluck.

Nauluck is harvested from about 10 months to a year after it is planted, while paidey may be harvested from about eight months after ratouning. The beginning of the sugar cane harvest coincides with the preparation and planting of wheat. Because of this family labour tends to be preoccupied with wheat and consequently, a great deal of work is available cutting sugar cane. Most of this is not performed for cash however, but for the cut sugar cane’s foliage which is a valued source of winter fodder. Men and sometimes children cut cane for others and take foliage in payment. Wherever possible though, farmers prefer to cut their own cane, because the success of next year’s ratoun crop depends partly on the skill with which this year’s crop is cut.

When women cut cane, which is seldom, it is usually on their own family fields. At the beginning of the season, the foliage has the same value, weight for weight as the cane itself, though its value declines with the onset of spring as other sources of fodder become available. It is interesting to note that for Tamil Nadu, Harriss (1982a) suggests that sugar cane is not grown because it would replace fodder crops. This is not the case in Bijnor, where cane provides an important source of fodder.

Choice of Seed

All of the varieties of sugar cane grown in the villages have been introduced by the government backed agricultural extension service. However from the
available choice, farmers showed marked preferences for one variety or another depending on where their land was situated.

The Khader

In the low lying area there is a preference for the variety B.O. 70 over other types. Farmers explain that B.O.70 has a thicker bark than other varieties and is therefore more resistant to the rodents and wild animals which are more abundant in the wilder khader area. One or two farmers also suggested that because of the thickness of the bark, B.O. 70 weighed more heavily than other varieties for the same amount of work. This observation is corroborated by the government mill which announced that it would no longer accept B.O. 70 for crushing after the 1982-83 season as it weighed too heavily for the amount of juice it yielded. Of the other two varieties available, 1148 and 1158, khader farmers said they preferred 1158. The latter has a stouter bark than the former and under khader conditions they maintain that their animals prefer its leaves as fodder to those of 1148.

The Bangar

On the upland soil, sample farmers unanimously preferred to grow 1158. They maintained that with assured water supplies and some nitrogenous fertiliser, it grew more prolifically than either B.O.70 or 1148. Some growers maintained that 1148 was a better quality cane than 1158 but because of the thinness of its bark and other qualities, did not give them the weight they required. These farmers grew 1158 for the market but some 1148 for turning into sugar for their own use. However, some maintained that at the end of the day it did not matter too much about which cane you grew as long as you had it weighed quickly after cutting before it started to dry out and therefore weigh more lightly.

Returns to Sugar Cane Returns among the sample in the bangar are about the U.P. average of about 40 to 50 tonnes per hectare (I.C.A.R.: 1982, p988). Yields on the khader however as lower than this. Two forms of explanation are possible for this. Firstly, khader land is poorer and farmers are not able to farm commercially (the I.C.A.R. estimates based on commercial farming). Secondly, the khader has more paidey than naulak. While the latter gives higher yields it may not be straightforwardly more lucrative than the former because it requires greater care and more inputs. Farmers tend to treat their ratoun (paidey) as a gift crop and therefore do not farm it very intensively.
Consequently, khader farmers, with a greater proportion of their land under paidey, use less fertiliser. Neither were they likely to irrigate their cane, whereas all bangar growers did. This affects yields as is clearly illustrated in yields as table 6 shows.

Table 6:
Bighas Under Sugarcane by Village & Soil Type

<table>
<thead>
<tr>
<th>Village &amp; Soil Type</th>
<th>Bhigas</th>
<th>Gross Cane Yield</th>
<th>Net Yield/ Bigha</th>
<th>Total Gross Cane Yield/ Bigha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dharmnagri Bangar</td>
<td>100</td>
<td>46,535</td>
<td>465</td>
<td>39,510</td>
</tr>
<tr>
<td>Khader</td>
<td>180</td>
<td>55,300</td>
<td>307</td>
<td>38,381</td>
</tr>
<tr>
<td>Jhakri Bangar</td>
<td>286</td>
<td>155,229</td>
<td>543</td>
<td>131,981</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>566</td>
<td><strong>257,064</strong></td>
<td><strong>454</strong></td>
<td><strong>209,872</strong></td>
</tr>
</tbody>
</table>

Source: Key Informants: 1982-83 Sugarcane Season.

The pattern which emerges for sugarcane is one of better returns for farmers growing their crops on the irrigated soils of the bangar. However, all of this difference is not solely attributable to the more favourable growing conditions on the bangar. In fact much of the difference is attributable to the better access of the richer farmers to the Sugar Cane Co-operative Society. More particularly, the difference is to be explained by the greater number of passes per bigha which larger farmers were able to obtain under society rules of supply than their poorer counterparts. It should be remembered that in 1982-83, the year under study, the price which the society paid for the supply of cane was always greater than that paid by the local cane crushers. This difference in number of passes to supply cane per bigha is shown in table 7 below.
Table 7:
Rupee Yield per Bigha from the Sugarcane Crop by Number of Passes
to Supply Sugarcane to the Co-operative Society

<table>
<thead>
<tr>
<th>Number of Passes</th>
<th>Rupee Yield/ Bigha</th>
<th>Bighas of Cane per Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 20</td>
<td>515</td>
<td>0.82</td>
</tr>
<tr>
<td>11-20</td>
<td>352</td>
<td>1.5</td>
</tr>
<tr>
<td>1-10</td>
<td>197</td>
<td>3.9</td>
</tr>
<tr>
<td>None</td>
<td>123</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: Bijnor Sugarcane Co-operative Society, Cane Development Survey Register 1981-82.

The group with most passes in the table above is identical in its composition to the group holding more than 20 bighas of land with one notable exception, Mansur's household, which holds more than 20 bighas of land but only 14 passes to supply cane to the society. This shortfall is explainable in terms of the history of their supply and its effect on their basic quota. During the years when the price of cane was high at the local crushers, they let their supply to the mill drop right back. This affected their basic quota and they were still trying to pull back their supply to the society to its previous level. The cost of sticking the society's passes in the thatch during those years is a lower overall return when the price ratio between the society and the local crushers is reversed.

The Agricultural Year Summarised

Before presenting a summary of returns for the sample for the whole year two final features of the economic activity must be mentioned. The first of these is the range of crops which are either interplanted with the main crops or on small plots of land on their own. Into the first category falls mustard which is interplanted with wheat, the oil from which is used as a cooking medium and the cake fed to cattle. Other crops in this category are millet and maize both of which are interplanted with sugarcane and used as fodder crops. The value of these crops is calculated at the market value at the time of harvest. It is worth pointing out that I do not have a value for hemp which is planted on the edges of the sugarcane crop. The bark of this crop is used to make rope and the wood as cooking fuel.
Crops planted out on their own included in the other crops category of the table below include lentils and sweet potatoes. These crops too are valued at the market price at the time of their harvest. The estimates of returns on these crops I feel is not as valid as those for the major crops. This I think reflects the marginal nature to household income. This is reflected too in the value which they have in the overall income of the sample, accounting for less than 2% of total income over the whole year.

The other category of work included in the table below which has not yet been discussed is the work associated with cattle. Much of this work is done by women and this is a subject to which I shall return in subsequent chapters. In the meantime it needs to be more generally noted that animal husbandry forms a substantial part of the work and income of sample households and the range of husbanding methods is wide and varied.

Perhaps the most significant difference is that richer households tend to supplement the feed of their draught animals, particularly in ploughing seasons when the animals are called upon to perform many hours of ploughing per day. The animals of the rich have a more varied diet of green fodder too, since their owners often put small plots of land under clover or maize or provide summer feed. Green fodder for the animals in winter is less varied and consists mostly of sugar cane tops, supplemented by wheatstraw for bulk. Supplements when they are given, include barley, lentils, mustard cake and oil.

The animals of the poor tend not to experience such varied culinary delights. Their main fodder all year round is grass, cut from the open spaces of the khader. Some households have their animals grazed, for which they pay about 5kgs of grain per animal per month.

Providing fodder for animals is a labour intensive business. It must be cut, headloaded to the stall, chopped and put out for the animals to eat. This gives rise to some interesting divisions of labour to which I shall return in the next chapter. In the meantime, the costs of inputs are represented as far as possible in the table below at their market cost. Where milk is obtained in return, this too is valued at the market rate.

Taking all these factors into account, the table below summarises the income of the sample household over the whole year studied. The data is presented according to the class categories developed in chapter 3.
Table 8:
Summary of Annual Rupee Income from all Activities by Class

<table>
<thead>
<tr>
<th>Source of Income</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V1</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RICE</td>
<td>18,059</td>
<td>39,395</td>
<td>2,069</td>
<td>564</td>
<td>60,087</td>
</tr>
<tr>
<td>WHEAT</td>
<td>9,391</td>
<td>31,643</td>
<td>7,930</td>
<td>300</td>
<td>49,264</td>
</tr>
<tr>
<td>SUGARCANE</td>
<td>89,972</td>
<td>107,392</td>
<td>5,998</td>
<td>6,530</td>
<td>209,892</td>
</tr>
<tr>
<td>OTHER CROPS</td>
<td>2,350</td>
<td>5,400</td>
<td>360</td>
<td>-</td>
<td>8,110</td>
</tr>
<tr>
<td>CATTLE</td>
<td>6,400</td>
<td>14,900</td>
<td>5,400</td>
<td>8,100</td>
<td>34,800</td>
</tr>
<tr>
<td>LABOUR OUT</td>
<td>3,260</td>
<td>19,798</td>
<td>8,463</td>
<td>38,273</td>
<td>69,794</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>129,432</td>
<td>218,528</td>
<td>30,220</td>
<td>53,767</td>
</tr>
<tr>
<td>NO. OF BIGHAS</td>
<td>121</td>
<td>259</td>
<td>58</td>
<td>0</td>
<td>4383</td>
</tr>
<tr>
<td>NET INCOME PER BIGHA</td>
<td>1070</td>
<td>844</td>
<td>521</td>
<td>n/a</td>
<td>8632</td>
</tr>
</tbody>
</table>

Source: Key Informants Agricultural Questionnaires, 1982-83.

Notes: 1. Although class V informants are landless, two men had some crop income as they had sharecropping arrangements on small plots of land.  
2. This figure excludes the income of class V informants.  
3. Bighas used in this table are pucca bighas of which there are 1½ to 2 bigha to the bigha.

The table shows that richer informants have greater returns per bigha than their poorer counterparts over the whole year. Class II farmers make a fifth more per bigha than class III farmers and almost twice as much per bigha than class IV farmers.

At this stage however, we are not able to make direct comparisons between the landed and landless households. To do this these we must breathe further meaning into the income figures by analysing the number of people which it must support in the different classes. More importantly perhaps in terms of the main argument of the thesis, we must ask what contribution children make to the production of this income for the households to which they belong. It is to this subject which I turn in the next chapter.
INTRODUCTION

In this chapter I look more closely at patterns of labour use throughout the year among sample households. My main interest is in the contribution of children to family output. Firstly I outline some of the predictions made by the various strands of the economics of fertility literature predict in relation to children. Secondly I outline a household typology which will help in picking through the effects of household structure on labour use. Thirdly I examine patterns of labour use in each of the three major crops, before summarising labour use for the whole year. Finally I return to examine the literature in the light of this examination of labour use data.

Predictions from the Literature

As we have already seen in the introductory chapter, the literature on the economic value of children is wide and varied but in this chapter, I want to concentrate specifically on their contribution to production. The central guiding questions here are: under what circumstances, and in what ways and to what extent is the labour power of children of direct benefit to their parents? In this context what predictions would some of the major contributions to the debate lead us to make?

In this respect the "New Home Economics" approach is not very helpful. I have already pointed out that this theory was developed specifically in relation to the developed nations and the main role of children according to Becker is as a source of psychic income, as a consumption good. Mumdani (1972) suggests just the opposite. For his study village in the Punjab, all except the Brahmins could gain by adopting a high fertility strategy. The economic changes there he suggests mean that both sons and daughters make substantial contributions to family income from an early age, regardless of the class position of the household.

Others distinguish between children of different sexes and ages. Cain (1978), Nag et al (1981) and Leibenstein (1977) all suggest that the economic contribution of children increases as they grow older. It is fairly clear in these approaches that daughters are seen as consumers rather than producers. Leibenstein (1977), suggests for example, that sons in most developing countries become net producers by the time they are 12 and compensate for
their own and the consumption of one sister by the time they reach the age of 22.

Vlassof (1979) in his study of a rural area near Bombay suggests that low adult productivity and alternative sources of labour to children mean that for the villagers in his study, children make little or no economic contribution to the household until age 16. In these circumstances, parents are more aware of the costs rather than the benefits of children. Parents want their sons to be better educated and migrate to city jobs rather than stay at home, a risky strategy in the lack of assured employment. Vlassof's work then would suggest a small contribution by young children, increasing with age, but coming through wages from migratory labour rather than production for the family farm or casual agricultural labour.

A criticism of this type of cross sectional analysis, and an extension of Leibenstein's argument outlined above is that it ignores the long term. The greatest benefits from children are to be had when parents are too old to work for themselves and look to their children to provide support for them in their old age. Leibenstein (1957, 1975) suggests that in countries where institutionalised forms of social security are not well developed this is a major incentive for fertility. This argument is analytically distinct from that made by Cain (1981) and examined in Chapter 4. Lindert (1980) suggests that while this old age security argument is attractive, the empirical evidence to support it is extremely limited. Nugent (1985) in a review of the literature on the old age security motive for fertility suggests that the realisation of such support is not necessary for it provide a motive for fertility and concludes that further work is necessary before a verdict on this motive can be returned. He does suggest, though, that access to productive resources is an important factor in old age security. There is no direct test of this thesis in this chapter, though we shall return to it in Chapter 9. If, however, the data presented below show a substantial number of child labour hours in households where no adult labour is used then this might be indicative of the operation of old age security through children.

Before turning to an examination of the data, I should like to point out that running at a tangent to this main argument is the debate over the nature of the mode of production in Indian agriculture. This debate over the nature of development in India is a long standing one and tricky to negotiate. I do not intend a full blown analysis of it here, but it has some useful features which help to formulate thoughts on the long term nature of the effects of
fertility. The debate has its origins in Russia in the early twentieth century. Lenin argued on the basis of the Zemstvo statistics that differentiation of the peasantry, a necessary stage in the development of capitalism, was taking place. Others, led by Chayanov argued that the statistics did not show this at all, but exemplified cyclical movements consequent upon peasant inheritance. Chayanov argued that the cross-section data used were bound to show differentiation because at any one time peasant households would be at different stages in the life cycle associated with the operation and division of property. For Chayanov, the peasant household is at its poorest when its head has just inherited from the previous generation and has young children who are too small to contribute by their labour to the household product. They are consumers, rather than workers.

The debate in India, summarised by Thorner (1985), centres around these two positions. One group postulating the superiority of large scale units and the other suggesting that small scale farms are more productive. The policy implications of these two positions are quite different. The former group suggest that since there are returns to scale in farming, farms ought to be collectivised (Harriss: 1982a). The latter suggest (eg Lipton: 1974; 1977) that since an inverse relationship between farm size and productivity exists, both efficiency and social justice can be served by splitting up larger farms and redistributing land in smaller parcels. I shall by the end of this chapter also be in a position to make a comment on this debate.

Sources of Data

The data presented in this chapter are from the same source as that presented in the previous chapter. However, to take into account household life cycles, and their effect on the resources which households have at their disposal, it is necessary to develop categories which make sense of household organisation. I intend to develop four categories of family based on their jointness or separateness in consumption and production. These categories are not intended to be an exhaustive typology of all possible combinations that one could find in India or indeed Bijnor district if one looked hard enough. Rather they are intended as working definitions of types which will help facilitate the analysis of the the combined effects of class and family life cycle stage on a family’s ability to reproduce itself more or less adequately.
Type One: This structure consists of a single cooking hearth (chula) where two or more generations of consanguinal kin operate a system of joint consumption and production. It consists of a mother and/or father their married sons and their wives and their grandchildren. All food for these people will normally be cooked jointly. In local parlance they will form one cooking hearth. Production work will primarily be the shared responsibility of father and his married sons. The proceeds of production will not be divided into equal portions since joint consumption obviates the need for this. Care must be taken to distinguish this from households where surviving parents live with one or other of their sons after division among sons has taken place. For example Bhagwana, the Rajput household head has his father staying with him, while his brother has begun to operate his own household production separately. These households are not included in this category. Other households present more of a problem. For example Om Prakash, Pratap and Punni are three Dhimar brothers represents a case of partial division. Their mother is still alive and living with three sons who farm jointly but have separate consumption, the mother living in the chula of one of these three. They have another three brothers each of whom operates independently. None of these households is included in this category, which is exclusively for households in which no division in either consumption or production has taken place.

Type Two: consists of a group of chulas where there is separate consumption but joint production among two or more generations of consanguinal kin. Production work is carried out on the basis of equal work for equal shares. Each male participant will receive an equal share of the joint product which will then be stored separately and consumed separately by each of the individual chulas of which each man involved in the joint and shared production is usually head. Care must again be taken to distinguish between those households where the parental generation consumes separately and those where they do not. For example, Mangal a Sahni eats with Hariya, his eldest step-son in a joint chula, while other brothers, joint with the first in production ate in separate chulas, but worked together. All of these are included in this category. Similarly, Imam Uddin is separate in consumption from Bashir, his eldest son, but is joint with his younger unmarried sons. This is reflected in the way in which shares of produce are divided. Bashir receives only one quarter of what they produce jointly.

Type Three: This consists of clusters of chulas where there is separate consumption but joint production among two or more sets of consanguinal kin of a single generation. In practice this is exclusively sets of brothers.
This is similar in structure to type two with the absence of the parental generation.

Type four: These are households in which production and consumption of each chula in a consanguinial set is separate. This is possibly the earliest stage in the life cycle. A man has separated from his brothers or father but has not yet had any of his sons or daughters married as they are too young. The household consists then of himself his wife and their unmarried children. It is interesting to note that there are no single male households in either village. This is probably because, as others have noted (Cain 1981) that domestic work is probably too much for a man to handle on his own. Such a life would not be chosen and only entered into in the direst of circumstances.

This scheme is not as clear cut as it seems as there are cases in which smaller units in a larger haveli (a group of chulas of any type) follow one type while the overall economic configuration to which they belong is of another type. For example, father and son may eat at the same hearth but have their overall production relationship defined by the father’s relationship with his own brothers which may fall into type 3 say (joint production but separate consumption). For example, Maruf, has a type one relationship with his son Khalil in their own chula, but the overall situation of that chula is defined by Maruf’s relationship to his brothers which is joint production and separate consumption - a type 3 relationship. I will use this household typology towards the end of the chapter when discussing the effect of household composition on labour use and income.

Labour Use in Rice

The pattern of labour use is shown in table 1. The table is organised to show the time, in labour days, spent on the cultivation and processing of the rice crop. Cultivation includes any activity performed on the crop during the planting, growing and harvesting of rice.

Two points must be made in explanation. First, processing, as the table shows, largely the work of adult family women, is not merely a jargon word for cooking. In fact, time spent cooking food is not included in these figures at all and will be dealt with in the next chapter. Before it gets anywhere near the cooking pot, rice has to be cleaned and stored and it is
this work which is included in table 1.

For a few weeks before the harvest of rice (or wheat) women whose families are to harvest the crop will start to make repairs to their stores called kotis. These stores are katcha cupboards which the women build themselves. Mud is gathered from the drainage channels (nuddies) by the side of the road and the koti repaired. If a new one is to be built, the walls are built up a few inches at a time, lest the wet mud walls should fall in under their own weight.

Women are justly proud of their kotis. When complete they are covered in white mud and may have mirrors impressed into their walls, or figures (hoys) sculpted in relief, to ward off the evil eye. Having built the koti, the women clean the rice of chaff and debris and store it inside the koti. It is this work and ancillary tasks which are represented by the processing figures in table 1, presented overleaf.

Secondly, the definition of child in this table, and throughout the chapter is based on a biological definition rather than one of age alone. Thus a child is a person of any age, married or unmarried, living with their parents and engaged in joint production and/or consumption. This has the merit of allowing us to see the benefit of the labour of all children to parents, including those who are married but continue to contribute to joint production with their parental household. This solves the problem of what Cain (1982) calls myopia - the tendency to look at only short term benefits from unmarried children - induced by western concepts of childhood. Among the sample, some adult children continue to work jointly with their parents. This labour is recorded below as child labour, since parents are benefiting directly from the labour of their children.
Table 1:
Overall Pattern of Labour Use in Labour Days in Rice
by Village and Soil Type

<table>
<thead>
<tr>
<th>Village and Soil Type</th>
<th>DHARMNAGRI</th>
<th>JHAKRI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KHADER</td>
<td>BANGAR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Labour</th>
<th>CULTIVATION FAMILY</th>
<th>TOTAL BIGHA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult Male</td>
<td>206</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>528</td>
</tr>
<tr>
<td></td>
<td>Bigha</td>
<td>792</td>
</tr>
<tr>
<td></td>
<td>Adult Female</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Child Male</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>Child Female</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>HIRED</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>574</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>604</td>
</tr>
<tr>
<td></td>
<td>Child Female</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>HIRED</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Average per bigha</td>
<td>574</td>
</tr>
<tr>
<td></td>
<td>Total Days</td>
<td>604</td>
</tr>
<tr>
<td>PROCESSING</td>
<td>FAMILY</td>
<td>534</td>
</tr>
<tr>
<td>Adult Male</td>
<td></td>
<td>854</td>
</tr>
<tr>
<td>Adult Female</td>
<td></td>
<td>1423</td>
</tr>
<tr>
<td>Child Male</td>
<td></td>
<td>2811</td>
</tr>
<tr>
<td>Child Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIRED</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Key Informants 1982 Kharif Season

Looking first at overall labour use, the table shows that bangar farmers are the most intensive users of labour. This is because rice on the bangar is transplanted. Transplanting tends to be done by large squads of hired labour and this is reflected in the greater use of hired labour in that area over the khader.

Adult Male Family Labour is more intensively used in Jhakri than it is in either the khader or the bangar in Dharmnagri. There are two main reasons for
Firstly, comparing the two Bangars, the difference can largely be explained by the more extensive use of tractors on the bangar in Dhammagri than in Jhakri. All but 20 bighas of Dhammagri bangar land were given their preparatory ploughings by tractor. One grower ploughed his twenty bighas using his own tractor. The remaining 17.5 bighas of rice land in Dhammagri bangar ploughed by tractor belongs in equal parts to five brothers. These men had recently partitioned their land, and none of them owned a plough. All of their ploughing was therefore done by hiring. This has the effect of reducing the number of labour days used, but increasing the cost of each day.

In Jhakri by contrast, all of the preparatory ploughing was performed by adult male family labour. Ploughing in Jhakri is seen as work "for your own men" and does not seem to be so much affected by the life cycle in the same way as preparation in Dhammagri. In Dhammagri if you own no plough, or have not enough time to plough, you are more likely to hire the services of a plough and team and have it driven by its owner. Production units in Jhakri tended to have more adult members and be at a later stage in their life cycle and own their own ploughs.

Secondly most growers in Jhakri, and all of those growing more than five bighas of rice, have their own tubewells and a large proportion of adult male family labour can be explained by the time men spend tending the flow of water. Farmers with their own electric wells tend to use more water than those without. Water from an electric well is not metered and the charge for electricity is a flat rate of Rs180/month for a 7.5hp engine (all of those in the village.) Watering like ploughing is seen as a job for your own men and is only performed by male family labour.

Comparing the khader with the bangar, one might reasonably ask, given the labour intensity of transplanting operations, why the difference in labour use per bigha is not even greater than it is. The balance between labour use in the two areas is somewhat restored by the greater incidence of weeding operations in the khader, where the ground is not as well covered by water to prevent their growth.

A feature of the data requiring more fundamental explanation than the differences outlined above, are the uses of adult family female labour. In Dhammagri khader this seems to be quite substantial and in fact women are recorded as performing more labour days in the cultivation than in the processing of the finished crop. In fact if one adds together the women's cultivation work and their crop processing for the khader area, they are
recorded as performing more work on the rice crop than men.

Among the richest households, women are recorded as performing very little work in the fields. Two Rajput households grow rice on the bangar and they also have high status which they maintain in part by ensuring that their women do not work in the fields. This pattern of the reproduction of household status is outlined by Papanek (1979) and developed by Sharma (1986). The work of these Rajput women is performed in the confines of the household courtyard or ooplay patch. It should not be assumed that these women have a leisurely existence. More wealth means more assets, like cows which must be milked. This usually involves women in richer households performing tasks which their poorer counterparts may not have to perform. For example, tasks associated with having a greater number of milk animals includes milking, making ghee, feeding animals and sometimes fodder chopping.

The third wealthy production unit in Dharmnagri growing rice on the bangar is a Dhimar household. It uses little labour in the cultivation of its rice on the bangar. The number of labour days involved is so small partly because a hired tractor was used to perform preparatory operations and partly because their water is bought and therefore uses less family labour than irrigation water which comes from a family owned tubewell. The other households seem to be both quantitatively and qualitatively different from these two units in their use of labour. This can be best explained by their class position. They have limited access to resources like water or ploughs but have greater numbers of children. These human resources are used more extensively in rice than those in wealthy households.

The data also illustrate the point that choices in production are more complex than assumptions about "best production functions" so often used in economic analyses allow. The Rajput household mentioned above for example, has three adult male members yet uses fewer adult male family days per bigha than one of the poorer Dhimar households which has only one adult male member. This difference is largely explainable in class terms. The Rajput household owns a substantial amount of land, about a hundred bighas, operates a tractor, tubewells, and is the only unit in either village to employ any permanent labour.

Jag Ram the head of a Dhimar household, on the other hand owns and operates only a small amount of land. Their bangar holding is 1.75 bighas and all of this went under rice. They own no well and do not have a plough either. This unit is the most labour intensive of all bangar growers in the sample and
makes extensive use of its large number of children. Of the 50 or so days spent in their rice crop 22 were done by their own children. However, Jag Ram is also the most prolific hirer of child labour in the sample. They use their own children intensively but also hire children more intensively than anyone else in the sample too!

Children account for about 12% of all labour performed in the rice crop. Most of this is the labour of sons, with daughters accounting for just over 1%. Sons perform relatively little labour in the khader, 34 days, about 6% of the total there. Among bangar growers, their contribution is greater. In Dharmnagri, they contribute 137 days, about 16% of the total, while in Jhakri their contribution is 147 days, 10% of the total. In all three areas, their contribution is markedly less than that of hired labour which performed 44% of all work in the rice crop. As a first approximation, then it is reasonable to say that sons do perform some labour, but we shall examine this in more detail towards the end of this chapter after we have looked at the other major crops and sources of work.

Labour Use in Wheat

In this section I present a similar analysis to that for rice above for the other major staple crop, wheat. Table 2 presents the overall pattern of labour use for wheat among the sample.
Table 2:
Overall Pattern of Labour Use in Labour Days
in Wheat by Village and Soil Type

<table>
<thead>
<tr>
<th>Type and Use of Labour</th>
<th>Village and Soil Type</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
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<tr>
<td></td>
<td>DHARMNAGRI</td>
<td>KHADER</td>
<td>BANGAR</td>
<td>BANGAR</td>
<td>JHAKRI</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Days per bigha</td>
<td>Days per bigha</td>
<td>Days per bigha</td>
<td>Days per bigha</td>
<td>AVG TOTAL BIGHA</td>
</tr>
<tr>
<td>CULTIVATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAMILY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Male</td>
<td>273</td>
<td>100</td>
<td>175</td>
<td>352</td>
<td>2.3</td>
</tr>
<tr>
<td>Adult Female</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Child Male</td>
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<td>50</td>
<td>9</td>
<td>176</td>
<td>1.1</td>
</tr>
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<td>8</td>
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<td>1</td>
<td>7</td>
<td>20</td>
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<tr>
<td>HIRED</td>
<td>281</td>
<td>239</td>
<td>4.2</td>
<td>369</td>
<td>2.4</td>
</tr>
<tr>
<td>PROCESSING</td>
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<td></td>
<td></td>
<td></td>
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</tr>
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<td>FAMILY</td>
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<td></td>
<td></td>
</tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>26</td>
</tr>
<tr>
<td>Adult Female</td>
<td>35</td>
<td>12</td>
<td>0.2</td>
<td>51</td>
<td>0.3</td>
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<tr>
<td>Child Male</td>
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<td>-</td>
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</tr>
<tr>
<td>HIRED</td>
<td>NONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| TOTAL                  | 811                   | 406   | 7.1   | 982   | 6.4   |

Source: Key Informants 1982 Rabi Season.

As for rice, there is a greater use of family labour per bigha in Jhakri than Dharmnagri. Growers on Dharmnagri bangar use the greatest amount of labour per bigha 7.1, with most of this being hired labour. Khader growers use a substantially lesser amount of labour than either of the bangar areas. This difference is accountable in terms of the lesser use of labour because farmers in the khader neither irrigate nor use as much fertiliser as those on
the bangar. The differences between the two areas are substantially less than for rice. This is to be expected, since the cultivation methods for wheat are similar in both areas.

In terms of my main thesis, as for rice, hired labour plays a more major role than child labour. Hired labour accounts for 40% of total labour used in wheat, while that of children accounts for only 18%. However, 18% is a reasonable proportion and we shall return to examine this contribution towards the end of the chapter.

The data also suggest that daughters are following in their mother’s footsteps with most of their labour being spent in processing rather than cultivation. The division of labour cultivation and processing is also clear from the tables. As was the case for rice, almost all processing is done by adult women in the family.

In the case of wheat, though, less of the cultivation work is done by women. Only nine labour days were spent in the cultivation of wheat by adult women in the sample. This fits generally with the thesis surrounding men’s and women’s roles in plough and hoe agriculture (Goody: 1973; Boserup: 1980), wheat being a more plough-intensive crop than rice. However, a substantial amount of the labour hired to perform harvesting is female. These women do not however belong to the villages, nor did many women from the village perform harvesting operations for pay during the year under study.

**Labour Use In Sugar Cane**

Table 3 highlights the overall pattern of labour use in sugar cane among sample households.
Table 3:
Overall Pattern of Labour Use in Sugar Cane,
in Labour Days by Village and Soil Type

<table>
<thead>
<tr>
<th>Type and Use of Labour</th>
<th>Village and Soil Type</th>
<th>DHAIRMAGRI</th>
<th></th>
<th>JHAKRI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KHADER</td>
<td>BANGAR</td>
<td>BANGAR ONLY</td>
<td></td>
</tr>
<tr>
<td>CULTIVATION</td>
<td>Total Days per bigha</td>
<td>Average</td>
<td>Total Days per bigha</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>Days per bigha</td>
<td>Days per bigha</td>
<td>Days per bigha</td>
<td></td>
</tr>
<tr>
<td>FAMILY LABOUR</td>
<td></td>
<td></td>
<td></td>
<td>PER TOTAL BIGHA</td>
</tr>
<tr>
<td>Adult Male</td>
<td>764</td>
<td>4.2</td>
<td>43</td>
<td>0.4</td>
</tr>
<tr>
<td>Adult Female</td>
<td>184</td>
<td>1.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Child Male</td>
<td>294</td>
<td>1.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Child Female</td>
<td>81</td>
<td>0.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HIRED</td>
<td>899</td>
<td>5.0</td>
<td>435</td>
<td>4.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2222</td>
<td>12.3</td>
<td>478</td>
<td>4.7</td>
</tr>
</tbody>
</table>

PROCESSING: Note that, since the cane crop is sold in its raw state, no processing labour is countable.

Source: Key Informants 1982-83 Sugarcane Season.

The table shows that khader farming is more labour intensive than the bangar, lower returns notwithstanding. Only one sample household in Dharmanagri - the Rajputs - grew cane on the bangar and they own a tractor. This accounts for the relatively small amount of labour which they used. All of their preparation was done by tractor, and they used no child labour.

Comparing Dharmanagri khader with Jhakri bangar there do seem to be differences in the amount of child labour used. In the khader, the labour of children accounts for about 17% of total labour. Once again, most of this, about 13%, is performed by sons. On the bangar, children account for 35% of all labour days, 33% of which is performed by sons. Dharmanagri daughters and their mothers also perform more labour than their Jhakri counterparts. Jhakri women are not involved in the cultivation of sugar cane at all. Dharmanagri farmers use more hired labour than those in Jhakri. Over the whole sample, informants use about twice as much hired labour as they do the labour of
their children.

Still, in all, 1197 child labour days were invested in the sugar cane crop. While this may be regarded as a substantial amount, the distribution of working children through the sample bears some analysis. Of the total child labour days used by the sample in sugar cane, 981, about 82%, came from 8 households. These 8 households are all type 1 or type 2 households. That is they are households at the more joint end of the scale. Furthermore, all eight had landholding patterns which are characterised by the fact that the eldest male still holds the land in his own name and his sons farm it jointly. In short, these are grown children, sometimes with young children of their own, who still produce jointly with their parents, working what is usually land held in their father's name. I shall return to this aspect of child labour when class is introduced into the analysis.

The more general pattern is one where small amounts of child labour are used, but these are a very small proportion of total labour used. For example, four of the 8 households mentioned above are Dharmagri households. Among them they account for 75% of all child labour used by sample households in Dharmagri. In Jhakri, the four remaining households from the 8 above account for 86% of all child labour used by sample households in Jhakri.

Labour Use Over the Whole Year

There is one major aspect of economic activity which I have not considered yet; the amount of work, outside of the three major crops already covered, which members of sample households perform for some form of remuneration whether direct or indirect. The variety of work in which sample household members are involved is very wide indeed but can be roughly divided into four types. The first type is crops other than the major ones outlined above. These are included in the table below under other. They are a relatively small source of income. The second type is wage labour. In this category, informants are involved in many activities from casual day labour through to seasonal work in the building of the barrage.

The third type is much more lucrative and involves the ownership of some form of productive property which is rented, usually with the owner's attendant labour. Such activities include the hiring of a tractor for ploughing or threshing wheat for other villagers and the sale of water for irrigation from a tubewell. The fourth type of labour is that associated with animal
husbandry. These four types of work, as one would expect, given the basis of their definitions, divide the sample into its poorer and richer halves. The table below summarises the information contained in the tables above and also includes labour expended on these other tasks.

Table 4:
Overall Pattern of Labour Use, in Labour Days
by Labour Type and Task

<table>
<thead>
<tr>
<th>Labour Type</th>
<th>ADULT FAMILY</th>
<th>ADULT FEMALE</th>
<th>CHILD FAMILY</th>
<th>CHILD FEMALE</th>
<th>HIRED TOTAL</th>
<th>TOTAL LABOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK</td>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICE</td>
<td>792</td>
<td>433</td>
<td>312</td>
<td>36</td>
<td>1238</td>
<td>2811</td>
</tr>
<tr>
<td>WHEAT</td>
<td>751</td>
<td>107</td>
<td>375</td>
<td>77</td>
<td>889</td>
<td>2199</td>
</tr>
<tr>
<td>SUGAR CANE</td>
<td>1711</td>
<td>184</td>
<td>1069</td>
<td>128</td>
<td>1931</td>
<td>5023</td>
</tr>
<tr>
<td>OTHER CROPS</td>
<td>95</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95</td>
</tr>
<tr>
<td>CATTLE</td>
<td>1355</td>
<td>1375</td>
<td>131</td>
<td>95</td>
<td>-</td>
<td>2956</td>
</tr>
<tr>
<td>LABOUR OUT</td>
<td>1950</td>
<td>938</td>
<td>1282</td>
<td>730</td>
<td>-</td>
<td>4900</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6654</td>
<td>3037</td>
<td>3169</td>
<td>1066</td>
<td>4058</td>
<td>17984</td>
</tr>
</tbody>
</table>

% OF TOTAL LABOUR DAYS

Source: Key Informants 1982-83 Agricultural Cycle.

Over the whole year, then, the labour of children accounts for about a quarter of all labour performed by the sample. 18% of this is performed by sons and only 6% by daughters. The total for children is almost matched by that for hired labour.

Women perform 18% of all labour and make a very substantial contribution to animal husbandry. The table also suggests that women and children perform a substantial amount of wage labour. However almost all of this is accounted
for by the husbanding of animals whose milk is for sale. I have included them in the labour totals to highlight the fact that this milk is for sale and not for home consumption. It represents a major proportion of the income of two landless households in Jhakri, where the women and children are engaged full time in milk production. The two women Wasila and Zubeida, are responsible for the organisation of this production, while their husbands, Wajid and Zakir, are more involved in the running of a sugar cane crusher during the cane season and more casual day labour during the off season.

It should be remembered that children have been defined as offspring of any age contributing to family production. So far I have given no indication of the ages of these children. Are they young unmarried children, or sons who stay in their parents households after marriage? Are the contributions of children evenly or unevenly distributed across class categories? These questions and others are highlighted by the table below which examines the use of the various kinds of labour by class and household type.
### Table 5:
Labour Days per Capita per Year and Net Annual Income in Rupees by Class and Household Type

<table>
<thead>
<tr>
<th>Family Type</th>
<th>CLASS AND LABOUR TYPE</th>
<th>ADULT</th>
<th>ADULT</th>
<th>CHILD</th>
<th>CHILD</th>
<th>FAMILY</th>
<th>FAMILY</th>
<th>FAMILY</th>
<th>FAMILY</th>
<th>ALL</th>
<th>TOTAL</th>
<th>INCOME PER</th>
<th>TOTAL</th>
<th>Rupees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MALE</td>
<td>FEMALE</td>
<td>MALE</td>
<td>FEMALE</td>
<td>HIRED INCOME</td>
<td>CAPITA</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Days</td>
<td>Rupees</td>
<td>Days</td>
<td>Rupees</td>
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<td>Rupees</td>
<td>Days</td>
<td>Rupees</td>
<td>Days</td>
<td>Rupees</td>
<td>Days</td>
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<td>Days</td>
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<td>125</td>
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</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>15786</td>
<td>493</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83 Agricultural Cycle

The table bears out the argument made above in relation to adult sons remaining in joint production and consumption with their fathers. Type 1, the most extended type of household in the sample, becomes less prevalent as we move down through land ownership from richest to poorest. This relationship is also true for the whole structure of kinship in the study villages, by the time we reach the poorest in the sample, there all households are nuclear.
Comparing incomes per capita down through the table, we can also see that there is a rough positive association between class and income per capita. This relationship breaks down somewhat in class 3. The discontinuity can be explained by the fact the type three household in that group smuggled trees and wood as an occupation. Not surprisingly, this is more lucrative than farming, but I was unable to make an accurate assessment of the costs involved. The type two household in that category owns a tractor and is able to make a sizeable amount of money from its operation. The tractor and thresher owned by the family in part accounts for the degree of jointness which that household still participates in.

In no case does labour seem to be a limiting physical factor in production. The maximum number of days worked by any category in the table is 172 in the year. This is the average of women in the poorest households. Sons make the greatest contribution in the most joint households. In all of these households, the labour of sons is generally that of grown children who remain in joint production with their fathers after their own marriages.

These figures highlight the fact that the term children itself is not an absolute term. Most of the child labour hours taken up by these four Jhakri households are from grown men who still have not inherited land from their father. As Cain correctly points out (1979, 1983), we must take a long term view when defining children for the purpose of calculating their worth to their parents. Cain’s data (1977) indicate that young Bangladeshi men are doing a full days work for their parents by the time they are 18 years old. That 18 year old men in Dharmagiri and Jhakri do a full days work would also seem to be true. What seems to be different is that by and large they do the work for them selves and not for their parents. Joint work across the generations is a feature of local economic life which does not seem to last very far beyond adolescence unless the head of household can persuade his sons to stay, by holding on to the family property for as long as possible. All eight of the households mentioned above have this feature in common – a head of household with clear exclusive rights to the productive property by which the family earns its living.

The argument here then is the same as those made for for wheat and rice earlier and similar to that made by Cain (1982): young children do relatively little labour for their parents, it is only when they are nearly full grown that sons become economically useful to their parents. In most cases, they are out of the parental home a few years after that, except where title to
their share of family property may depend on their staying. In other words richer households benefit more from the labour of their sons than poorer ones since they can entice them to remain joint by the promise of inheritance. In landless households (class V) less systematic data would suggest that parents are as likely to be living apart from their sons as with them. In either case retirement for the parental generation in this category is unlikely. Where parents live in a separate chula from their sons the degree of support they are likely to receive is less than if they lived jointly.

Within class categories there seems to be no direct relationship between income and family type. The reason for this is the distribution of resources within these groups. For example the class II type 4 households are the Rajputs Bhagwana and Ashok. They have by far the greatest amount of land among the sample as well as a tractor, tubewells and two permanent labourers. They also have a substantial number of young children, yet they have the greatest per capita income. This is because of the resources which they own and highlights the fact that it is productive resources rather than children per se which determine a household’s ability to generate income. In terms of Chayanov’s categorisation we would expect this household to be not as well off as its other class II counterparts. This is not the case and would seem to suggest that differences in wealth are more important in differentiating between households than stage in the life cycle on its own. Further proof of this can be found in class V. All the households here are nuclear and the children in them under the age of thirteen years. Most of their labour is tending milk animals with the milk being for sale. In spite of the application of child labour, the income of this group is the lowest in the sample.

Conclusions

At the end of this chapter, what conclusions can be drawn in relation to the contribution of children as labour to the household? The data presented above suggest that Mamdani is wrong to suggest that sons and daughters contribute equally to household economy. Among sample households, daughters contribute little while the contribution of sons varies positively with class. It is of course possible that a difference in the economic environment between Bijnor and the Punjab could be the explanation for this. I feel however, that this is highly unlikely. Many of the changes which Mamdani outlines as responsible for the increase in the value of child labour in the Punjab also have taken place in Bijnor, but these have not led to a substantial economic contribution by daughters. Indeed, it is difficult to see how, in a system of
marriage which normally requires daughters to move out of their parental home on marriage could allow this.

Neither is Mamdani correct in suggesting that children contribute equally across all classes. The data presented above show that richer households use more child labour than poorer households. At least part of the explanation for this is that richer households remain more extended for longer periods to take advantage of household labour. The table below highlights this point. It shows the percentage contribution of children to total labour days according to how one defines children. The first definition is that used throughout this chapter - a biological and social definition - regardless of age. The second definition is based on age - children viewed as people less than eighteen years of age. The table refers only to sons. Since daughters are married and out of the parental household by age eighteen, this change in definition makes no difference to their percentage contribution.

Table 6:

Percentage Contribution of Sons to Total Labour Days by Definition of Son and Class

<table>
<thead>
<tr>
<th>Definition of Son of Son</th>
<th>Percentage of Labour Days by Sons of Son</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class II</td>
</tr>
<tr>
<td>Offspring of Any Age</td>
<td>26</td>
</tr>
<tr>
<td>Aged Less Than 18yrs.</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83 Agricultural Cycle.

The main point of the table is that most of the child labour in classes II and III is that performed by sons who are aged eighteen and over, adults who remain in joint production with their parents. There is no difference in the percentage contribution of sons in classes IV and V according to age. The sons in these households are all aged less than eighteen.

This I feel is an interesting conclusion in the light of those studies outlined at the beginning of the chapter suggesting that children were of benefit to their parents in the long run. The data here suggest that while
this is true for richer households, it may not be the case for the poorest households. The poorest households are those which benefit the most from child labour in the short run. For example Wajid, the landless Sheikh's children, make a substantial contribution through tending milk animals. Wajid expects that when his sons are married, they will set up house separately and work for themselves. This probably means that their contribution to their parental household will be minimal. It is not possible to say with any certainty whether they will provide some sort of security for Wajid in his old age, but their expected separate residence and economic interest, together with lack of resources, perhaps makes this less likely.

For the present at least it appears that richer parents can expect more long term support from their sons, while poorer parents seem to be benefiting from their children now. A reasonable proposition here would be to take up the middle ground between Leibenstein (1977), who suggests children are important forms of security and Vlassof and Vlassof (1980) who suggest that they are not and conclude that a combination of wealth and one or two sons would provide a fair measure of security for parents.

There is no evidence from the sample that education and/or migration with remittances is a strategy among sample households. None of the income or the labour described above is generated in this way. If permanent employment outside the village could be assured, this probably would be a more common strategy. One of the most well off men in Jhakri for example has a seasonal job in the cane society which he was able to gain by being literate when few around him were. Three young men from the villages are under taking commerce courses in Bijnor, but are unsure about the future. Jobs are very scarce indeed and only the most sanguine entreprenuer would follow this as a major strategy.

In relation to the mode of production debate, the data suggest that the inverse relationship between farm size and productivity does not exist among the sample. Those with the greatest access to land and productive resources are those with the greatest per capita incomes. We also saw in the previous chapter that, for single crops and across the year as a whole, larger farmers had the best returns per bigha. This is not of course a rigorous test of the Lipton's propostiton, but it does suggest that the argument relating small farm size with greater productivity does not apply here. Harriss (1982a) may be correct in advocating co-operative farming, enjoying economies of scale, with redistributive effects in consumption.
The data presented here give some indication of the work which children undertake. It tells us nothing about whether key informants decided to have children so that they could do this work. Fertility intentions and decision making occur within the household and in the next chapter I wish to describe and analyse the context within which the household is situated and of which it forms a part.
"The household is not a collectivity of mutually reciprocal interests."

(Whithead 1981, p110)

"Although the women's movement has focused attention on wife abuse, sexual dual standards, the invisibility of housework and the experience of financial dependency, the stress is still on the unit/the unity of the couple".

(Leonard and Delphy: 1984; p.xii)

In this chapter I take a closer look at the structure of kinship and marriage in the base villages. Understanding kinship and its implications for the people involved is essential to an understanding of the dynamics of fertility. The focus of attention shall be upon post-marriage residence patterns and their relationship to fertility.

I will firstly review some literature which allows a framework for the effect of kinship structures upon women and upon fertility to be understood. After indicating the main sources of data, I will outline how marriage and kinship structures affect men and women, through an examination of post-marital residence patterns, as a key to understanding the relative positions of men and women in the study villages. Finally, possible effects of these patterns on fertility are examined.

It ought to be made clear at this point, that this type of approach fundamentally undermines that of the "new home economics" school. The economic theory of fertility does not allow us to examine female autonomy very easily. This is because, for most purposes, the household, with a common budget and pooled resources is assumed to be the basic unit of analysis in which conflicts of interest do not manifest themselves. The economic theory takes no account of the structure of kinship and marriage or the wider economy and society in which the former are embedded and how this affects the relative power of individual members of household.

The impetus for the focus on female autonomy here comes from the work of feminist writers, who in their efforts to explain the position of women in society have concentrated on that of women in the household and how this is related to the wider economy and society (Barker and Allen: 1976, 1978; Young et al: 1981). Earlier works characterised by a socialist as well as a feminist approach tended to stress commonalities among women and gave a
central place to the understanding of conflicts of interest among men and women, particularly under capitalism and capitalist development (Millet: 1971; Oakley: 1972; Boserup: 1971). Key concepts at that early stage in the development of the argument about the position of women were the "public sphere": instrumental, wage earning and largely inhabited by men; and the "private sphere": caring, reproductive and largely inhabited by women. A key text, moving the conceptualisation of the role of women away from these mechanistic categories is Seccombe (1974), who argued that the household cannot be viewed as private and distinct from the public sphere because the contribution of women's reproductive work both affects and is affected by the wider economy.

This idea has been taken a stage further by Whitehead (1981). She argues that the household embodies social relations of exchange between its members. These social relations require to be the subject of investigation and not assumption as in classical economic theory. Whitehead summarises these relationships in her notion of 'the conjugal contract', defined as:

"the terms on which husbands and wives exchange goods, incomes and services including labour within the household"

(Whitehead: 1981; p88)

Around the the same time scholars of women's position realised that the socialist transformation of society did not necessarily of itself improve the position of women and began to analyse other factors, in addition to class, to help explain the position of women (Croll: 1981). These other factors cluster around women's roles as reproducers. Following Edholm, Harris and Young (1978), reproduction is not only understood to mean biological reproduction, but also the reproduction of the labour force and the social system of which such relations form a part. Thus while the term includes chilbearing, it also includes the many tasks associated with the raising of children into adults, capable of making a contribution to social, economic and cultural life.

The central idea that conflicts of interest between men and women are essential to an understanding of the gendered nature of society, while still accorded great importance has now given way to analysis of those aspects of social structure which divide women (Caplan and Bujra: 1978; Beneria: 1982; Whitehead: 1984). The emphasis has shifted from attempts to explain the position of women in general to explaining the position and experience of particular women. Class position still plays an important part in this analysis but other factors held to be equally important are the structure of
the household, age and personal biography.

Whitehead (1984), for example, has argued that because they are differently situated in relation to those variables which affect their life chances, "women cannot and do not form a homogenous group." (1984: p10). She argues that women who have direct access to economic resources and are surrounded by other women in similar positions to themselves have greater autonomy and vice versa.

A similar approach has recently been adopted with specific relation to fertility. Todaro and Fapohunda (1987) in an examination of South Nigerian data suggest that three forms of implicit contract within the family: that between children and parents; that between spouses and the extended family; and that between spouses; will have a bearing on fertility intentions. They suggest that among other factors, the relative access of each marriage partner to scarce economic resources, the relative value placed upon goods and services which each partner produces, the relative ease with which alternate sources for these can be found by either partner, socialized expectation and normative sanctions surrounding marriage roles and the extent of conjugal caring are important in determining the relative power of partners in decision making processes, including those surrounding fertility.

Female autonomy is a subject of crucial significance to women themselves, since it affects their ability to influence matters which directly concern them. Beyond this some demographers have suggested that female autonomy is a good predictor of changes in fertility and child mortality. Dyson and Moore (1983), for example, have suggested that in North India where female autonomy is low the "demographic regime" consists of high fertility and mortality. Conversely, in South India where autonomy is relatively somewhat higher fertility and child mortality are lower.

In terms of these indicators, women in the study villages have low autonomy. As Chapter Two showed, fertility and mortality rates are high and there is an adverse sex ratio for females. Chapter Three showed that women's access to land is extremely limited, while Chapter 6 showed that women in Dharmnagri and Jhakri do not, by and large work for wages. Literacy rates for women are low - 10%, as is the age at marriage. The pervasive nature of these factors affecting women's autonomy in the study village does not allow them to be used to differentiate among women in relation to autonomy and fertility. I do not intend to pursue them in any depth in this chapter. Dyson and Moore attempt to add a further dimension to this understanding by consideration of
marriage distance - the distance a woman moves from her natal home on marriage - as an indicator of autonomy and the main argument below will examine this more closely.

Sources of Data

The sources of data used in this chapter are threefold. The first source of data are the responses of women sampled by the Social Organisation of Childbearing Project to a set of questions regarding their own social networks. As well as information on the structure of their marital household, the women were also asked about the geographical distance between their marital and natal villages, the frequency of visits to the latter and their experience of the differences between the two.

The second set of data is a similar set of questions asked by me of their husbands, that is the men in my own sample. Specific use is made of information about the timing, circumstances and frequency of visits made by these men to their sasural (ie their wife’s natal home). I also asked men what the advantages and disadvantages of different marriage distances are and their own experience of these.

The third source of data is somewhat less systematic in that it consists of more or less opportunistic discussions with men about present levels of dowry and how levels of dowry have changed over the past twenty years or so. Sometimes these discussions took place during wedding festivities themselves when the dowry provided was put on display for all to see. More usually however, conversation about dowry was instigated by me in the general course of conversation.

The Structure of Marriage and Kinship - General Norms.

The general pattern of marriage and kinship in North India is well documented, and the study villages fit generally with what has become known as the "Northern Pattern" (Dyson and Moore: 1983) where the rules of marriage are broadly those of patrilocality for women within a system of patrilineal descent. However, the extent of adherence to this pattern should not be overdrawn, since the rules vary for Hindus and Muslims. Therefore, in this section I shall outline Hindu "norms" Muslim "norms" before going on to discuss in the next section how these rules are played out in Dharmnagri and Jhakri. It is not my intention to be exhaustive here, but merely to give a thumbnail sketch of "norms" so that we may better understand their practice.
in the study villages and set the ensuing discussion of marriage distance in context.

Hindu Norms: For Hindus, the normal form of marriage is arranged marriage with patrilocal residence and patrilineal descent. Marriages are caste endogamous, but four-gotra exogamous (that is a person may not marry any of the offspring of four grandparents). Village exogamy also operates among Hindus and according to Dumont (1986) and Hershman (1981) is characterised by non-reciprocity. In short this means that a caste may not take brides from villages into which they have already married brides. This arises out of the inferiority of bride-givers to bride-takers.

The act of giving a bride is characterised by the gift of a virgin or kanya dan. In this respect, brides are accompanied by a dowry, and kanya dan may also be associated with the seclusion of women, the segregation of the sexes and the practice of purdah.

Muslim Norms: For Muslims, the normal form of marriage is also patrilocal with patrilineal descent, caste endogamy and kanya dan and the associated purdah practices. There are, however, two major differences. The first is that marriages are allowed between sets of first cousins and the second is that village endogamous marriage is allowed.

These are the barest skeletons upon which marriage practices in the study villages are founded. To breathe life and diversity into these abstractions, let us take a look at the organisation of kinship in the study villages.

The Structure of Marriage and Kinship in Dharmnagri and Jhakri.

Kanya dan - The gift of a Virgin: Marriage is characterised for the bride’s family by kanya dan. Ideologically, this is seen as an act of religious merit and part of life-cycle duty for both men and women. Materially, it would be very difficult to marry a daughter conventionally under prevailing circumstances in Bijnor, were it widely known or believed that her virginity was not intact. Consequently, from before the onset of puberty, daughters are taught to be modest in their habits and as they approach puberty, and the age at which their marriage negotiations will begin, they become more secluded and adopt some of the outward signs of purdah. It is not unusual to see eleven year old girls withdraw from play with their younger siblings and start to wear a shawl which covers their hair and the upper part of their body.
The notion of *kanya dan* is a wide ranging one and is not only related to sexual experience. Essentially it means that a girl’s parents must not be seen to derive any material gain from their daughter either before or after her marriage. Ishwar, a Hindu of Sahni caste, told me for instance that he would not eat bread if his daughter cooked it since he would consider this an infringement of his daughter’s virginity. Suleiman, a Muslim Sheikh said that he did not allow his eight-year-old daughter to milk family cows as the milk was produced for sale and if his daughter milked the cows, he would be living from her earnings. Sunil, a young Dhimar told me that once, his wife Santosh, had been working in the fields during a visit home to see her parents. He himself went and discovered that this was true and had berated his father-in-law for living off the earnings of his daughter.

Further, the definition of *kanya dan* is likely to vary according to class and ethnic group. Some of the poorer Sahni and Chamar households either used their unmarried daughters to labour in their own fields, or sent them out to perform wage labour. Among the Muslims, the proscription on outside work seems to be more strict than among any of the Hindu castes except possibly the highest. Even so, one or two Muslim households used the labour of girls to help with the sugar cane planting.

Daughters are not taught the same skills as their brothers, but those which are deemed to be suitable to their role as a wife and mother. At the same time as her brother is learning to sow, plough, plant reap and cultivate, she will be taught to sew, cook, clean, milk animals, make ooplay, and be given some responsibility for childcare. A girl is likely to be taken out of school before her brother if she ever entered it in the first place. Female literacy rates in the village are very low at ten per cent.

**Dowry:** I have already suggested in Chapter Three that dowry should not be seen as a form of productive property. Productive property in the study villages generally passes from father to sons in equal amounts. Yet for almost all people, dowry plays an important part in the conclusion of a successful marriage and for villagers is an integral part of *kanya dan*.

Dowry has existed in this part of India for a very long time. There is, however, evidence from the study villages to suggest that the amount and variety of goods which is expected to be given with a daughter has increased dramatically over the past twenty years or so. Older men and women remembered a time when dowry consisted of a small number of suits for the
bride, a few pots and pans and a spade.

The items now considered by village men to be an essential part of any dowry make for a lengthy and expensive shopping list. It is usual for the dowries of wealthier Hindu and Muslim brides to contain up to 51 suits of clothes, as many brass plates, a bed, quilts, a mattress, a radio, a watch, a bicycle, and perhaps electrical items like a table fan as well as a gift to the Temple or Mosque. These categories of items are the same for the dowries of the poorest brides, the difference being in the quality and quantity of items given. Among the Hindus a cash sum is also given.

The groom's family must also spend money. Usually this means buying some jewellery and perhaps some clothes for the new bride to wear. In addition both families will have to spend a considerable amount in feasting their neighbours. Among the Muslims, this usually means feasting the whole village. Among the Hindus, usually all caste-members resident in the village. For the wealthy, the marriage of a son or daughter probably costs in the region of Rs20,000. Even for the poorest, the cost is likely to be reckoned in thousands rather than hundreds of rupees. As reported by Sharma (1980) a wedding is likely to cost about a year's income.

Why has this increase taken place? The first and perhaps most surprising point to note is that the increase in dowry is not associated with any change in women's work, leading to a perception of its greater or lesser value. Unlike the Punjab (Sen: 1982) there seem to have been no changes in the work which women do, for example to make them greater or lesser wage earners than before. Women's work in the study villages is that which is documented as giving women low autonomy and status - non-wage work related to women's roles in reproduction, with no control over productive resources (Sen: 1982; Whitehead: 1984; Sharma: 1980; Harriss: 1981). I spoke with several men about this possibility, and their answers while not informative in an objective sense are heuristic. Yasin sums up the collective attitude of men to the idea that women's work is more valuable these days:

"Women have always been useless" (sic)

The most common explanation for the increase in dowry was that the surplus from agriculture had gone up and that some of this was being spent on increased dowry to ensure a wealthier match for daughters. It would seem that the earlier Hindu pattern of substantial dowry among the highest castes became a possibility for many for the first time.
Mahipal, a Hindu of the Sahni caste maintains that he was the second man in the village to receive a watch, a cycle and a radio in his dowry. The first man to receive these items was the eldest son of Bharat Singh, a wealthy Sahni landowner. He was married in 1965, about two years after the introduction of new technology associated with the "green revolution" was introduced to Uttar Pradesh in the Intensive Agricultural Development Programme (Frankel: 1981).

The increase in dowry then seems not to be associated with any elevation or decline in the status of women in the study villages. However, concentrating on levels of dowry does not give the complete picture. Control over dowry is also important. I have already shown in chapter three that control over a woman's jewellery is more likely to be in the hands of her marital kin than herself. A woman herself has relatively little control over the disposal of her dowry. In practice if not in principle, a woman's dowry belongs to her affinal kin and not to her or her agnates. She is more likely to have control over the dowries of her own daughters-in-law later in her life cycle than she is to have control over her own.

Post-Marriage Residence Patterns and Fertility

The rest of this chapter concentrates on post-marriage residence patterns among village women and their possible relationships to fertility.

Patrilocality: The post marriage residence pattern in Dharmnagri and Jhakri is patrilocal. But is it simplistic to assume that patrilocal means the same thing for all women in this study? Women from different ethnic groups and classes were married at different distances from their natal villages. Do they varying distances have any bearing on the autonomy of women and consequently upon levels of fertility?

In this respect Dyson and Moore (1983) have argued that marriage distance, defined as the distance between a woman's natal and marital villages is a good guide to autonomy, if it is used as a proxy for kinship structures. The main thrust of Dyson and Moore's paper is to associate different kinship structures, through differential female autonomy to the different demographic regimes of north and south India. In the south, shorter distances allow a woman to maintain more substantial contacts with her natal kin than in the north. This is associated with lower fertility and lower child mortality in
the south than the north where marriage distances are further.

By conventional indicators of autonomy - property inheritance, level of education, extent of wage labour, the existence of purdah and dowry have low autonomy. What can an analysis of marriage distance add to this understanding?

Table 1 below outlines the pattern of marriage distance in the base villages and among the sample. The distances used in the table were selected to be socially significant. If the effect of marriage distance is through contact with natal kin, then the ease with which a woman can make visits is of importance. Women, during the course of fieldwork were asked for the name of their natal village. This was then located on a map. In the tabulation, distances under 5 kms. suggest that a woman can make the round trip on foot in a day, whereas distances over 10kms would require transport. The distances are not quite as clear cut as this explanation might suggest. The distance a woman can walk in a day might be affected by the season or the number of small children she might have to take with her. For longer distances, the availability and cost of transport as well as a male chaperon are factors to be considered.
Table 1:
Percentage of Women Married at Different Distances by
Religion and Landownership

DISTANCE IN KILOMETRES

<table>
<thead>
<tr>
<th></th>
<th>Less Than 5kms.</th>
<th>5-9kms.</th>
<th>10+kms.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Women Sample</td>
<td>All Women Sample</td>
<td>All Women Sample</td>
<td>All Women Sample</td>
</tr>
<tr>
<td>MUSLIM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landed</td>
<td>47 (61)</td>
<td>25 (14)</td>
<td>0 (28)</td>
<td>0 (100)</td>
</tr>
<tr>
<td>Landless</td>
<td>6 (16)</td>
<td>0 (4)</td>
<td>6 (88)</td>
<td>0 (100)</td>
</tr>
<tr>
<td>HINDU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landed</td>
<td>6 (107)</td>
<td>0 (17)</td>
<td>6 (88)</td>
<td>0 (100)</td>
</tr>
<tr>
<td>Landless</td>
<td>30 (58)</td>
<td>0 (2)</td>
<td>0 (70)</td>
<td>0 (100)</td>
</tr>
</tbody>
</table>

Number of Women
(44) (14) (23) (0) (175) (22) (242) (37)

Source: Village Census 1982.

The overall pattern suggested is that women in landed Muslim households generally marry closer than poorer Muslims. Hindus including Harijans generally marry more distantly than Muslims, though there is a tendency for landless Hindus to marry closer than their landed counterparts. Thus we might expect, using Dyson and Moore's formulation, that landed Muslim women and landless Hindu women have more autonomy than other groups.

Among the sample the pattern is more clear cut, though of course the numbers are smaller. All landed Muslims in the sample marry close while landless Muslims marry further away. For the Hindu sample the pattern is more clearly one of further marriage for all groups. An idea of what men and women in the sample think of their own marriage distance can be gained by looking at their responses to the networks questions. The opinions of men and women on
marriage distance and their experience of it take us beyond spatial distance and into social distance.

Preferred Distance

This section outlines the distances which men and then women prefer between their natal and marital villages.

Men: Both Hindu and Muslim men, suggested that it was not good for their wife's natal village (ie the man's sasural) to be too far away. They suggested that if this were so it would be expensive for them to go there as so they would not be able to go often. Almost all men suggested that if your sasural was too far away then news of any illness, death or happy event (dukh-dukh) would not be able to reach you easily and this was not good. Jabruddin, a Sheikh informant put it like this:

"...if there is a death in some woman's natal home in Islampur Das [a village about 2kms. from Jhakri] then no matter what time of night it was someone would come and ask the woman to go home. If it was in Muzaffanagr [the neighbouring district] then they sent someone to tell you. The people in the woman's natal home would also be worried and would be looking down the road to see if she was coming as well as looking after a very sick person." 

This for men, however, is not the only consideration. It must be balanced against the possibility that a woman's parents will hear of "every little worry" which their daughter has in her sasural. This could lead to fights and disagreements between families and be a cause of concern to a girl's parents, who should not interfere in domestic disputes in their daughter's sasural. Sunil, a Dhimar whose sasural was about 20kms from Dharmanagri said:

"...the disadvantage of living near to your sasural is that you would probably get into some kind of trouble with your wife's parents. They would get to hear of every little thing and if they thought that anything untoward was happening then they would be over immediately for a fight"

I asked what he meant by anything untoward.

"....if the girl was having worries like being beaten or ill and not being well treated."

Men also suggested that women could ask to go home for any little thing if their natal village was close by, whereas if it were further away they were
less likely to do this. Frequent visiting and the possibility of trouble with in-laws were for some men connected. Vikram, a landless Harijan expressed this view.

"It is better to be married far away from your sasural than nearer it. If you are close to it you could fetch and send news quickly. This is good, if someone is sick or there is a happy event. This is outweighed by the fact that if your sasural was too close and your children went off there everyday by themselves or your wife went every second day, then her parents would hear everything. They would complain that she was never away from their house and the relationship would go bad. It is useless to get married too close".

For both Hindu and Muslim men then the preferred distance is one which is close enough to have news travel quickly, but far enough away to maintain day to day living separate from interference from their wives' agnostic kin. This would suggest that for men it is important that their wives contacts with natal kin is kept at a controllable level so that she may effectively be kept under the tutelage of her affinal kin.

Women: Surprisingly, in the light of Dyson and Moore's analysis, sample women also prefer to have some distance between their natal and marital villages. Their reasons for this tend to be that firstly if their parents are too close to their sasural, they will get to hear more of her everyday existence and where this is difficult, it will cause them concern. It will also put her parents in a difficult position since they are not expected to interfere in the affairs of their daughter after she is married and living in her sasural. One Muslim woman put it like this:

"There is no benefit in it [a close marriage]. There is more fighting and when my mother and father hear about it their hearts become soured too because they worry about every fight after hearing about it."

The other reason which women gave highlights the way in which women's various roles are fragmentary and cause friction and difficulty for them. This relates to the sexual nature of the role of wife and mother, exemplified by childbirth, and the asexual nature of her role as sister and daughter. Almost all women maintained that they should not in normal circumstances be in the presence of their parents when pregnant or giving birth, as this was a matter of great shame. Viramvati, the wife of a landless Jatab said:

"I would not like to visit my parents when I am pregnant I would feel far too much shame in front of my
This view seems much less widely held among the Muslims, who are perhaps more used to the idea because of the possibility of village endogamy. Overall though women would rather not confront their parents with their pregnancy if possible. Among women as well as men then there is a preference for some distance between natal and marital villages.

These preferences by men and women for some distance between marital and natal villages are well highlighted by two situations in which, by contrast to prevailing patrilocal patterns women live in their natal villages after marriage. The first of these is gaon-ki-gaon marriage (village endogamy) and the second that of the ghar-jemai (living-in son-in-law).

Gaon-ki-Gaon Marriage: Marriage within the village is only relevant for Muslims and while there are very few of these marriages they give some insight into informants' views of appropriate contact between marital and natal kin. As we have seen above, both women and men saw some advantages in close marriages but Muslim men and women alike were largely opposed to the idea of gaon-ki-gaon marriage. Women were opposed because they could not retreat to their parents' house for a visit without the possibility of being called back by their affines. They also found it difficult to maintain the distinction between their male natal kin and male affines in avoidance behaviour. For example, when pregnant she cannot conceal her condition from her agnates. In addition her parents will be affected by news of any difficulties she may have in her affinal home, which marriage at some distance would protect against. Marriage at no distance then carries more problems than benefits for women.

For men the problems are seen from a different angle. The distress of their wife's parents is seen as a potential threat to their control over a wife while she is in her sasural. Secondly, their wife's closeness to her natal home may mean that she wants to go there more often than she would if married at some distance. Thirdly, as wife-takers, they are entitled when they visit their wife’s sasural to special treatment. All male informants suggested that if you were married too close to your wife's natal home then the novelty value of your visits and the quality of the treatment you would therefore receive would decline more rapidly for a near marriage than a more distant one. This is especially the case if your wife comes from the same village. For example I was asking Jabruddin about his networks. We were joined on the bhaitak (male sitting room) by Ismail whose wife is from Jabruddin's haveli. When I asked about the difference between gaon-ki-gaon
and other marriages he answered like this:

"Look at Ismail! He is now sitting at his *sasural*. He is wearing his old shirt and *dhoti*. He has been sitting here since nine o'clock this morning and no-one thought anything of it...he has not even been given a cup of tea. He comes more or less everyday and it is nothing special or different"

**Ghar-Jemai:** Both men and women think that the situation where a man goes and lives in his wife's natal village is not desirable. Men considered this to be a weak position to be avoided at almost all costs since it would leave them open to the criticism of living from his wife's family. **Ghar-Jemais** are often the butt of jokes and ridicule because of this. One informant, Mahipal had gone with his wife to work on her father's land since she was an only surviving child and they were short of labour. He had come back after three years, saying this about his experience.

"I came back after three years because people do not like it when a man stays at his *sasural*. People swore at me all the time calling me *sala* and *bahinchut*. You can never get away from this if you live where your wife was born. People fight with you at the least opportunity. It takes all your honour away."

The words used to curse Mahipal, *sala* and *bahinchut* have particular significance in this context. The literal translation of *sala* is wife's brother, but carries the connotation of "sleeping with" his sister, undermining his ability to protect her honour. The literal translation of *bahinchut* is "sisterfucker" which carries implications of incest.

These findings are not what one might expect if Dyson and Moore's argument were to be accepted in its entirety. That some distance is preferable to no distance suggests that the distinction between marital and natal villages is important for both men and women and we shall return to this below. In the meantime it is plausible to argue that the frequency and ease with which visits can be paid to a woman's natal village (her *mainka*) has some bearing on her autonomy. It is necessary to assume here that this type of contact is desirable for women and that they would pay as many visits as possible to their natal villages. This point of view is borne out by the opinions of informants. Women distinguish between their natal village where they are surrounded by those who love them, have no responsibilities and can therefore rest, and their sasural where they must do their affines bidding and have the responsibility for the work of the household. What then affects the frequency of such visits by men and women and what does this tell us about their relative positions?
Factors Affecting Visiting Patterns

The following factors affect the frequency and timing of visits by both men and women to a woman’s natal village: distance, and the economic position of the household. In addition to these common factors a woman’s ability to maintain contact with her natal kin is affected by their inability to visit her, the demographic composition of her household, her requirement to be granted permission to go by her affines and the availability of a suitable male chaperone to take her. I shall deal with each of these in turn below.

Factors Affecting Both Men and Women

Distance: The distance between mainka and sasural has a direct effect on the ability of men and women to visit as it costs money in fares to go. This is a particularly salient point for men married at longer distances, when especially among the poor, fares can be prohibitive. One informant, Udayan, whose wife’s village is 50kms from Dharmagiri stated this point very clearly:

"I do not have the money to go twice a year. If I had the money I would go more often. It costs Rs20 for each of us each time we go. I could get a suit of clothes for that!"

This is reflected in the fact that his wife at the time of fieldwork had not been to visit her natal home for eighteen months. She said that she would like to go more often, but cannot because of shortage of money.

Others married less distantly acknowledged that cost was a factor but that it would not prevent them from going, though it would make each visit more expensive.

Muslim women who are married within easy walking distance of their natal village distinguish between going to meet their parents and going to stay. Such women hurry through their days work and go to visit their parents for a few hours later in the day before returning to their sasural in the early evening. These visits do not necessarily involve a male chaperone and women sometimes go on their own, with their children, or with other women from the same natal village making the same kind of trip. Many of the Hindu and Muslim male informants also made similar trips when their sasurals were within easy walking distance. Though these visits are not a daily occurrence, many of the men joked that they visited their sasural forty or fifty times a year.
Going to stay is a more formal occasion. Both Hindu and Muslim women married more distantly rarely go to visit on their own. They are either 'called' by their agnates at the time of a festival, birth wedding or death; or accompanied by their husbands. Their visits entail staying in their natal villages for some time, and usually involve some expense such as fares and gifts for affines and partly because of this are not very frequent.

The Economic Position of the Household: This factor is obviously tied to that above. In addition though it affects the ability to visit through its effect on the workloads which men and women must bear. For men this means making visits at agriculturally slack times of the year. In richer households it also means that someone must be found to look after animals. This is a problem for women in richer households too. These women are responsible for the husbandry of milk animals and they must find a suitable replacement to do this work if they are to be allowed a visit to their mainka. One or two poorer Hindu informants also went to their sasural to work at times when they could make some extra money there. Vir, for example, a landless Jatab, went to work on a market garden in his wife's natal village for a few months. Others transplanted rice or worked on colhus in their sasurals, but this happened in only a few cases.

Factors Additionally Affecting Women's Contact With Her Natal Kin

The Requirement to Seek Permission: All women and men in the sample agreed that a woman can never go to her mainka without permission. Women's visits to her natal village are then mediated through her marital kin, who can, and sometimes do refuse her permission to go. For most male informants, this ability to control their wife's movements lies at the very heart of their relationship with her. Naresh, a Jatab, sums up the view which all male informants held on the possibility of their wives going to their natal villages without asking:

"She can never go without my permission and sometimes when I, or my mother or father say she should go, then she has to go. She can never go without asking. If she did then the regime of her sasural would be finished. It would be completely without honour after we had made the relationship formal and spent all that money on the wedding and on looking after her since she had been married. It had cost us a lot of money, and she had disobeyed us? It could never happen!"

Most women also say that they cannot go without asking their husband's
permission. Kamla, a Dhimar Woman whose natal home is about 30kms. away said that she goes home about twice a year and would like to go more often, but.....

"Without my husband's permission what can I do?"

Like Naresh, Maya, the wife of Mahipal, stressed that going without permission would throw the validity of the marriage into question:

"I cannot go without asking my husband. If I did he would not come and fetch me back. He could also beat me if someone did come to fetch me"

Permission to go and the length of time for which a woman can go, as I have outlined above are affected by her workload in the sasural. This varies with the seasons in the same way as men’s work, but additionally women’s work tends to comprise of many tasks which must be completed everyday to be successful. All women cook and clean and look after the needs of small children. Besides this the workloads of poorer women, in the absence of regular wage opportunities for women, tend to be lower than for their richer counterparts. These richer women will have milk animals to service, crops to clean and store at harvest times.

The presence of milk animals has daily implications for the work which a woman must do and can therefore affect her ability to go visiting. Women are also responsible for making fuel from dung. Making and stacking dung cakes (ooplay) takes women about 2-3 hours a day during the dry seasons, while during the monsoon, when it is too wet to make ooplay women are responsible for collecting the dung and tipping it into the household midden.

Kamla, part of whose responsibilities includes looking after the household’s milk animals cited this as one of the reasons she is not able to visit her parents more often.

"....There are animals here who will do that work when I go?"

The responsibility for cooking is often cited by women and men as a reason why women are refused permission to leave their sasural for a visit to their mainka. Pusha wife of Vijay Pal, a Dhimar put it like this:

"I want to go more often. I am not unhappy in Dharmanagri but I have to cook.

The Demographic Composition of the Affinal Home.
The effect of such workloads on visiting patterns for women would be less restricting if a woman could find suitable substitutes to perform her work for her while she was away. Since potential substitutes are likely to be found within the woman’s household we must consider its demographic composition through the life-cycle. Particularly important here are the number small children and the presence or absence of her mother-in-law.

The person most likely to stand in for a woman while she visits her mainka is her mother-in-law. Men very rarely take over their wife’s work while she is away, and as her natal kin very seldom visit her when she is there, so they are very unlikely to do her work when she is away.

In the early years of her marriage a woman often shares the same cooking-hearth as her mother-in-law. This relationship is not an equal one. A mother-in-law expects to control the workload of daughter-in-law (bahu) as well as her mobility, while the bahu, in realising her responsibilities suggests that it is not acceptable for a bahu to rest while her sas works.

Chulas in which two brothers and their wives work jointly in both consumption and production are rare and quarrels between bahus over workloads, are often given as reasons, by women themselves for chulas separating. In these circumstances, women cannot call easily on their brothers’ wives to take care of their workload while they visit their mainka. Thus a woman living with her sas can expect to have her mobility controlled by the latter, while a woman living on her own is restrained by being solely responsible for the workload of her chula.

The other demographic factor affecting her mobility is the stage which she is at in her own childbearing career. Early in her marriage she can expect to spend more time at her mainka, but after she has children the number and duration of her stays are likely to decline. When her own daughters are old enough to take some of her workload, or indeed when she becomes a mother-in-law herself, she may have more time to go, but by then her own parents may be dead, and her contacts with her natal kin will have been eroded by years of responsibility in her sasural. An example here will help to highlight some of these constraints.

Qudsia is a Muslim woman married into Jhakri from another village which is only 2kms. away. She has three small children and is the only adult woman in her household. Her sas and her husband’s two brothers’ wives all live in
separate chulas. Her household owns land and animals. The women do not share work although the brothers farm jointly. Her brother visits her occasionally but never her father or her mother. She herself had not been to her natal village for two years.

Her husband on the other hand goes there often. He had been the day before he was interviewed by me and was going the day after. He said he often went as he had business to conduct with them like buying seed or arranging for fertiliser to be bought from the sugar cane society. These differences in the visiting patterns of Qudsia and her husband serve as a poignant indicator of the way in which a woman can have her mobility restricted by her affines. What does this power consist of?

The Regime of the Sasural.

We have already seen: in the husband’s ability to refuse his wife permission to visit her mainka; and in the mother-in-law’s expectation that she will be able to control her bahus; that relationships between women and their affines are heirarchical. This hierarchy also extends to the woman’s agnates.

The superiority of bride-takers over bride-givers noted by other researchers (Sharma: 1980; Dumont: 1955;) is a strong source of support for such control in the study villages. Villagers - both men and women - firmly believe that a woman’s place after marriage is in her sasural. Her parents must not and do not interfere except in the very direst of circumstances. Mahipal, who intended to marry his eldest daughter the following year hinted at this in the following quote:

".....the boys people are always more important than the girl’s people. They have your daughter in their hands. Because of this you have to make sure that the relationship you make is a good one as you only have one chance. I am responsible for marrying my daughter out into a family where she will get good food and clothes and be well treated."

This difference is highlighted by two factors. Firstly, women are not often visited in their sasural by natal kinfolk, especially not their mother or sister. Secondly, a woman’s husband expects to receive very good treatment when he goes to his sasural and that her affines expect her to bring gifts back when she visits her parents. The implications of these two factors are outlined in turn below.
Visits to her Sasural by her Natal Kin.

The lack of visits which women receive in their sasural from their natal kin emphasises the erosion of the ties a woman has with her agnates. Her married sisters are likely to be constrained by the same factors as they themselves are, while unmarried sisters will not be allowed to go visiting by themselves. Considerations of hypergamy mean that a man is likely to leave visits to his daughter in the hands of his brother. Some informants said that is was especially bad for mothers to visit a daughter in her sasural. Santosh, a Hindu woman suggested this was because......

"My mother never comes because it looks bad for a mother to eat her daughter's food. Even when I was ill she did not come. If she came people would swear at her and chase her away without even a drink of water. My father should not really come too often either only when necessary, like for sickness or to take me home when no-one else can. Mother's especially are not supposed to take anything from their daughter's once they have been given away."

Some informants, especially among the Hindus, suggested that if a wife's father came then he would have to pay his way at her marital home. Ashok, a wealthy Rajput had this to say about visiting his married daughter in her sasural....

"I have never been to visit her in her sasural. If she needs to be called then I will send my son. It does not look good if I go myself and eat my daughter's food. If I did I would have to pay for it. I would give at least ten rupees."

I asked Mahipal whether his father-in-law would have to give a gift if he came to visit his daughter. He sums up the general point I am trying to make here:

"Of course he will have to give! Haven't you seen here yet that it is the girl's people who are givers and the boy's people who are takers?"

In this vein, Caldwell et al (1982) have argued for south India that men also receive preferential "loans" from their wives' parents. There is some evidence to suggest that this is also the case in Dharmnagri at least. For example, Vir was able to persuade his father-in-law to buy him a new bicycle to go to work at the barrage. Sunil also borrowed several amounts of money from his father-in-law during our visits and also received, like other men,
presents of livestock.

Visits by Men to their Wives’ Natal Villages.

All male informants agreed that the treatment you received from your wife’s natal kin was better if you were married at some distance and could not go quite as often. If men married at some distance went to their sasural, they expected to be feasted and sometimes also to have gifts of cloth and perhaps grain. For men married closer to their own natal village, who visit more often this is not so. Both groups however stressed that they expected to be treated with respect when visiting their wife’s sasural.

All men said that they would try to send their wives home twice a year. Among the Muslims, this tended to be once at the wheat harvest (Serai) and once after the rice harvest (Samni). Among the Hindus it tends to be at the festivals of Tijo and Raksha Bhandan. At the end of these visits, or at other visits where women had stayed in their mainka for some time, or were visiting for the first time after a spell of not visiting, men tended to go and collect their wives, who would return with gifts for her affines from her agnates. The extent of these gifts vary with class, the length of time since the previous visit and whether any special event had happened in her sasural since then, such as a birth. For example, Nirmala, wife of Naresh a sharecropping Jatab returned home for a visit, the first since the birth of her daughter. She stayed for six days, at the end of which her husband went to fetch her. On her return brought with her a shirt and sari for herself, clothes for their three children, five kilos of flour and the return fare.

Qadir, one of the poorer Sheikh farmers in Jhakri said that his wife was called to her natal home by her agnates twice a year at the harvests. At the wheat harvest she would be given wheat and flour, usually about ten kilos of each, and the same at the rice harvest. If the harvests were good then she would also be given some cloth for herself and the children. Vir, a landless Jatab, said that his wife, Vimla, had just been called to go to her mainka for Tijo. Her brother had come to take her. He said that when this happened then she would bring back two or three kilos of grain, cloth for a shirt, or perhaps for the children if they could afford the latter, which was not every time.

These extra expenses incurred on special visits restrict rather than enhance the frequency with which a woman is allowed to visit her natal home. In conjunction with the superiority of bride-givers over takers, they ensure
that visits are strictly controlled and that women's future interests lie with their affines, not with her agnates.

Marriage Distance and Fertility.

In summing up then, it is clear that a woman's contact with her natal kin is affected by many factors of which the geographical distance between her natal and affinal homes is only one. A woman's visits to her natal home are affected by the ability of her affines to refuse permission, the economic position of her household, the availability of suitable people to do her work while she is gone, and the demographic composition of her household as well as the view that a married woman's place is in her sasural. A woman's husband is more likely to be able to visit her natal home and often does so without her. When he goes, he is treated with respect, fed well and rested before being sent home with gifts.

A woman can expect no such treatment. She has responsibilities in her sasural and should abide by the instructions of her affines. The regime of the sasural overrides considerations of distance as the discussion of gaon-ki-gaon marriage showed.

The data on fertility from the study villages is not of sufficient numbers to make a watertight demographic argument on the same scale as Dyson and Moore's, but it is worth making a few points about it. First of all we have seen that Muslim women marry nearer than Hindu women, yet we have already seen in Chapter three that there is no great difference between the three ethnic groups in terms of mean number of children ever born (Muslims 5.21; Hindus 4.91; Harijans 5.28).

Table 1, suggested that richer Muslims married geographically closer than the other two groups, yet these figures suggest they have the highest fertility. Caste Hindus as a group rank next in closeness. However, the poorer Muslims, though they tend to marry geographically more distant, marry more closely geneologically. This suggests that in the study villages, marriage distance does not act as a very good indicator of autonomy, because it does not reflect kinship structure very closely. Kinship structures and female autonomy in Dharmagri and Jhakri would seem more to be is controlled through marriage practices by a woman's affinal kin. The possibility of lasting and more than fleeting contact with loving sisters and mothers is gradually worn away by the day to day responsibilities which a woman adopts and the controls to which she is subjected in her affinal home. At the end of this long
process, a woman is no longer a daughter but a mother-in-law.
Chapter 8: Women's Work

"While members of any given community may believe that their particular division of labour between the sexes is the 'natural' one ......... other communities may have completely different ways of dividing the burden of work among the sexes and they too may find their ways just as 'natural'.


"I cannot plough I am a woman."
Somi, a Dhimar woman.

"Women’s work is dirty and men don’t usually do it."
Kishin, a Chamar man.

The last chapter examined the structure of kinship and marriage and its effect on women’s autonomy. In this chapter I want to look at the sexual division of labour within this kinship system. I do not want to use the term work in the narrow sense of labour in the fields or labour for wages. We have already, in chapter six, seen that this is a limited way in which to try and understand the tasks for which women are primarily responsible. In fact, understanding work only in this narrow sense considerably underestimates the work which women do and therefore fails to understand the nature of women’s subordination (Epstein:1981, Beneria: 1982, Dixon: 1982).

Rather, following the authors cited at the beginning of the last chapter, I include any activity which contributes to the reproduction of the social system to which that activity itself belongs. Using this understanding of work, the contribution of village women to social and economic life becomes clearer. It also highlights the reasons why the work which women do does not give them more autonomy.

How is this related to fertility? Todaro and Fapohunda have suggested that fertility decision-making is "essentially determined by who allocates economic resources within the household" (1987: p12). I have already suggested that women’s autonomy is limited by the structure of kinship and marriage in which they are embedded. They are isolated from their natal kin, from control over productive property and under the tutelage of their affinal kin. It is possible that a woman’s ability to influence household decisions, including those about her own fertility, may be enhanced by her ability to earn income. In this chapter a closer look is taken at the influence which women have over the major resources of their households. How much influence does a woman have over what her household grows in the fields, whether they buy and sell land or animals? The central question asked in this chapter is
what effect does women's work in the study villages have on their autonomy?

Sources of Data

The major sources of data in this chapter are semi-structured interviews with women about the work which they do and whether they have any control over decision-making processes in their marital households. This information was collected by female research assistants from women in the Social Organisation of Childbearing Project sample. This data is used in two ways. Firstly it is used to delineate the tasks for which women in general are responsible. Secondly, it is used to highlight variations in the workloads of women according to key variables.

Data collected by me from men in the sample are also used in this chapter. As part of the networks questionnaire used in the last chapter, I asked men who would perform their wife’s work if she was ever away from her sasural. This data provides an interesting insight into how men see themselves in relation to women’s work, and is used to highlight major points.

The rest of the chapter is divided up as follows. Firstly, I discuss the sexual division of labour between men and women and how this has changed over time with the introduction of new technology. Secondly, I move from a discussion of the work of women in general to the explanation of what particular women do. The major discussion is variations in women’s work according to the class position of their households, ethnicity, the structure of the household, life-cycle and personal biography. Finally I want to examine the implications which the division of labour has for the power of women within the household by an examination of their role in decision-making affecting major resources within the household.

The Sexual Division of Labour

The division of labour between men and women is not merely the way in which households at various stages in the life-cycle deal with the practical problems of production and reproduction. It also has implications for the distribution of resources which the various tasks undertaken by its members, men and women, boys and girls, produces. Whitehead’s concept of the conjugal contract again proves useful here. It highlights the fact that an exchange of values is implicit in the arrangement which exist in the household. Following Leonard and Delphy (1984), one might add that the sexual division of labour creates a hierarchy of status on which the various activities performed by
men and women are placed. In terms of this hierarchy, which tasks are thought of as women's tasks in the study villages?

This is not an easy task to accomplish. While trying to obtain an answer to this question in Dharmagri it became clear that people's responses were shot through with understandings of what women should do rather than what they actually did. While some responses are not helpful in determining the finer divisions of labour between men and women, they at least help in defining a starting point.

Following local categories for women's work leads us to two categories. The first of these is *ghar ka kaam* 'housework' and *bahaar ka kaam*, 'outside work'. To these categories it is useful to add a third category that of interstitial work, where the tasks involve a woman going between her home and the outside. A cautionary word is perhaps apt at this point. It is not helpful to interpret these categories as one would for a sample of women in a developed country. As we shall see below, these categories refer to where the work is done, rather than what actually is done there. I also wish to point out that there is no discussion of what others (e.g. Sharma: 1986) have identified as household service work - for example marriage negotiations and the maintenance of kin contacts. I have no systematic data on this subject since it was not central to the present study. Notions of 'housework' in the study villages are somewhat wider than those in the west. In the light of other studies (Sharma: 1980; Beneria: 1982; Jain and Banerjee: 1985) it is perhaps hardly surprising that women in this part of the world have a heavy burden of reproductive duties in their households. In the study villages these include cooking, cleaning, washing clothes, childcare, the cleaning and processing of crops, making fuel, animal husbandry and sometimes working on the fields. These are discussed below.

**Ghar ka Kaam**

This is work which women do at home.

**Cooking**

Women are entirely responsible for the preparation and cooking of food in the household. This usually involves the preparation of two main meals a day - one in mid-morning and one late afternoon - in addition to any snacks or special festive fare which may be produced. The staple food at these two meals is usually rice in the morning and bread in the evening. These are
usually accompanied by a dish of lentils, usually *urad* or *masur*, or a vegetable curry. Among the muslims a meat dish may be prepared regularly on Wednesdays as the butcher visits the local market at Begawala about a mile away.

Cooking and preparing food can take a long time. Lentils and rice must be picked over to remove foreign matter and spices ground by hand before the cooking commences. Furthermore rice must be husked and wheat ground before they can be cooked. Both these tasks require women to take sizeable amounts of both staples to the local village mill regularly for processing. After the food has been eaten, women are also responsible for cleaning the soiled dishes - a task accomplished with cold water and a scouring with ash or sand.

**Household Cleaning and Maintenance**

Household cleaning is a daily activity which requires women to sweep the floors of both the living quarters and the courtyard outside as well as cleaning out the stalls of domestic animals. In addition to sweeping, women carry out small household repairs. Most commonly this involves regular resmearing of *katcha* walls with fresh mud or resealing mud floors with fresh *gobri* (a mixture of dung and water). Women are also responsible for washing and repairing the clothes of household members. In some households, where there is a sewing machine, women may also make clothes.

**Crop Processing**

In landed households, women are also responsible for the processing and storage of the household's staple food crops of wheat and rice. Women build the household grain store of mud. Once built these fine structures, often decorated with mirrors and figures to ward off the evil-eye, last for many years. The store must however be repaired at least every year with fresh mud if it is to remain pest-proof. Headloads of mud are brought up from the gulleys by the road side for this purpose. During the study period, many women worked for as long as two weeks on the repair of their grain stores.

**Interstitial Work**

This is work which women perform across the boundaries of their own household.
Making Fuel

The fuel most commonly used for cooking is also made by women. This fuel is called ooplay (cakes formed from gobar - a mixture of animal dung, and straw). To make ooplay, a woman must first of all collect the gobar from the stalls of household cattle. She then headloads it in a basket to the ooplay patch. Here she combines it with straw and water and then forms it into large dinner size plates. These are then stood in the sun for several days and turned till they are baked dry. After drying they are stored in large conical stacks and covered over with thatch and topped out with a terracotta pot to keep them dry until required for cooking. Ooplay are not made in the monsoon as they would be destroyed by rain before they had a chance to dry. During the monsoon, the gobar is dumped in the kuri (household midden) where it left to mulch down before use as organic fertiliser on the sugar cane crop. It thus has considerable value as a direct agricultural input, but this not acknowledged locally.

Taking Food to the Fields

In addition to cooking the food women may also have to take food to their menfolk in the fields. This is not a task which women will necessarily have to do every day. It largely depends upon the intensity of the work which their husband’s are doing. Women are more likely to have to do this during busy agricultural periods when their menfolk do not want to be away from the fields for the time it takes to eat.

Childcare

Perhaps women’s most ubiquitous responsibility is childcare. This is particularly consuming if a woman has a few very small children, when in addition to her other work, the new mother must breastfeed her infant and clean the baby’s soiled clothes. Care of sick children is also a women’s responsibility and may involve a time-consuming trip and wait at the local dispensary. The load of childcare is sometimes alleviated by a woman’s older children. It is not unusual to see an older girl at play with a younger sibling on her hip.

Animal Husbandry

This is a task which can be less clearly allocated to women than those mentioned above. The first point of note is that men tend to care for the
household’s draft animals in the public space of the bhaitak (male sitting room) while women take care of the milk animals in the relative privacy of the sehn (household courtyard). Animal husbandry gives rise to a daily round of activities which are particularly intense in the early morning and evening. Among wealthier households, women usually milk animals where the milk is to be used for domestic consumption. It is only in poor households, with no land that women in the childbearing age groups have this task. The exception to this rule is one woman from a landed household in Jhakri outside the childbearing age group who also sells milk.

Milk animals are milked morning and night, while both draft and milk animals are stall-fed at both those times. Stall-fed animals are fed a mixture of grasses, sometimes specially grown, and in the winter sugar cane tops.

Once it has been brought home, fodder is chopped by three main methods in the study villages. It may be chopped by diesel-driven chopper, animal-driven chopper or hand-driven chopper. Where fodder chopping is at all mechanised it is done by men. Women are never to be seen chopping fodder by diesel engine or animal-driven chopper. This is men’s work. Where chopping is done by men, women will still be responsible for headloading fodder from the bhaitak to the sehn and for feeding it to the milk animals.

Bahar ka Kaam

This refers to work performed outside the boundaries of the household.

Fodder Collection

The extent to which women collect fodder and bring it home varies according to season, class and the availability of alternative sources of labour. In the busy agricultural seasons, when male family labour is likely to be tied up in agricultural work, women are more likely to have responsibilty for cutting fodder and bringing it home. This is sometimes done on the return trip having taken food to the men in the fields. The women of poorer household may also cut sugar cane for others during the winter and take cane foliage as payment to use as fodder. This is however usually done by men. It is also the case that men may bring cane tops home after their days work during the cutting season. When it arrives at the household, all of this fodder must be chopped up to make it edible for animals in the various ways outlined above.
Work in the Fields

The women most likely to work in family fields are those of poorer Hindu households where there is no alternative source of labour. Women in landless households may also work in the fields, for example to chop sugar cane for tops to use as fodder (cf chapter 6).

Where women work in the fields, their activities are mostly confined to weeding. Women are also hired as labourers at rice and wheat harvesting times, but all of these women are hired into the village from outside. None of the sample women worked in the fields as wage labourers during the course of the fieldwork period. Additionally, it was not expected, by and large, that women in the childbearing age group would do so. No Muslim women worked as wage labourers. Those women from Dharmnagri who did were largely young unmarried girls or older women outside the childbearing age range, though as we shall see below one or two women from poorer Hindu households did work in their own fields, especially when alternative family labour was short.

The Seed and the Field - Men and Women

If we can place all of the tasks which men and women might do along a continuum, then the ends of the spectrum are clear enough. At one end, only men plough. This is a fairly common feature of North Indian agricultural and has been reported in other studies. Dube (1982) has outlined how it fits in with commonly held beliefs of sexuality, particularly the notion of the seed and the field. The main characteristic of this view is that the field, symbolising woman, is passive and inherently unproductive. Only by ploughing and the casting of seed by men does it bear fruit, crops in the case of land: children in the case of women. It is more difficult to obtain an explanation of why women do not plough from village men themselves. This highlights the extent to which ploughing as man's work is embedded in local culture. When asked why women do not plough men cannot provide any explanation. It is considered natural.

This is a view which is deeply held by women too. I spoke to a Hindu woman, Santosh, about this. She had been complaining about her husband, Sunil's gregariousness generally, and his inabilitys as a farmer in particular. The immediate cause of her anger was that her husband was prepared to sharecrop some of his land out in return for only a third share, while the going rate was a half share.
Santosh: "He is useless, he cannot think or operate a plough."
Me: "Why don’t you run the farm and plough?"
Santosh: "I cannot plough, I am a woman"
Me: "Why not?"
Santosh: "I am a woman and women don’t plough."
Me: "Why not?"
Santosh: "If women plough then the earth they turn over will be sour and the crops will not grow there."
Me: "I have heard that women plough and sow in Muzaffarnagar district."
Santosh: "That may be so but I am a local and simple girl and I can only tell you what is in my heart. Women here do not plough."

This is important. Ploughing among village people is strongly associated with being a farmer and reaching manhood. Skill with a plough is the mark of a man. It is also associated with the power which having land bestows and is an integral part of the definition of being a farmer. The operation of the plough is a sure sign of control over land at the level of both practice and ideology.

At the other end of the spectrum - the most domestic of jobs, dealing with 'shit', is hardly ever done by men. 'Shitwork' may be taken both in the literal sense - for a great deal of women’s time in the study villages is spent working with animal-dung - and as a metaphor for the caring work which women do. Working with dung is not something to which men readily admit.

In one interview I asked Riasat whether he dealt with the animal dung when:

Me: "What do you do about the dung when your wife is away visiting her mother for a while?"
Riasat had hardly started to answer when Majid burst in laughing:

"He collects it himself in a basket. He scoops it up with his hands and then pops it into the basket on his head. Then the shit runs through the weave in the basket and down over his face."

Majid was slapping his knees and roaring with laughter.
Riasat hastily denied this account:

"No, no, brother! Dung is women’s work."
Attempts to find out if men ever did any "domestic" work were always met with great hilarity. This was especially true if I asked a man in the company of others. Men do sometimes cook when absolutely necessary, for example, if their wife is away paying a visit to her natal home for a day or longer and even then if there is no other woman in the chula to cook. Even in such circumstances men are sometimes still reluctant to take "domestic" work like cooking on. In May 1983 for example, I was visited almost every night at supper time by Riasat while his wife was away visiting her parents. Riasat hoped to obtain some handsome cloth as gift from his in-laws after such a long visit by his wife. In the meantime, he was alleviating his cooking problem by eating some of the food which was cooked for me every night!

Women most often said that the reason they did not visit their natal home more often was because their husband’s would have roti ki perishani - they would have to cook for themselves or have someone else, whose responsibility it was not, to cook for them. Men were sometimes reluctant to let their wives visit their natal home because they said there would be no one to do her work while she was away.

A Historical Perspective

The study villages are also different in some important historical respects from other areas where research on women has been done (Saradamoni:1982). Thus it is one thing to delineate what the existing division of labour among sample women in the study villages is and quite another to say how this has been affected by the major changes which have occurred there in the past twenty years. Women’s work also varies historically. This is a difficult issue to get to grips with in a thesis like this. There were limits of time and mobility and nor were resources such that an extensive historical aspect could have been built into the research design. I was at full stretch trying to gather what I could about the present. I have land records on the recent past. But primary historical material on women’s work at any level, never mind the level of the village, is notoriously conspicuous on the sub continent, as elsewhere, by its absence. It is indeed well hidden from history.

However, I did manage to glean some impression of what women did in the past by casual conversation with villagers. Care is required though as this account is probably not subtle enough to catch the major differences which would have existed among women in the past as they do in the present according to the criteria outlined above. It is worth noting at the outset of
this historical excursion that changes in the recent past have been changes in magnitude rather than changes which have altered the power which women gain from the work which they do.

The major changes which have taken place in the last twenty years or so are those related to the "green revolution". This has altered both the cropping pattern and intensity of cropping in the study villages as well as introducing irrigation technology into the study villages for the first time. The major effect which this has had on women's work within the study villages is that it has increased the amount and changed the timing of crop processing and cleaning which women have to do. It of course follows that this is likely in the absence of hiring to increase the intensity of work of higher rather than lower class women (the latter have no land and therefore no crops to process). The amount of work which each woman has to do depends on the yield from her household's fields, the number and type of crops grown and and the presence of other women in the household who are able to share the task of processing and storing. All accounts suggest that there is more of this kind of work now than there was in the past.

This has been partly offset by the introduction about fifteen years ago of an electric milling machine into the village. Before this women had to grind wheat daily and hand mill rice for domestic consumption. This was more likely to be the task of younger than older women, and would be delegated from sas to bahu. Every household in the village now has all its wheat and rice ground or husked by electric machine. It is cheap and quick and complaints about cheating not withstanding, no woman ground wheat or milled rice by hand.

Another major change which preceded the introduction of the "green revolution" technology was the bringing of khader grass lands into cultivation. This process was started as early as 1932 and probably intensified with "green revolution" technology as the potential for profit increased under the new regime. The consequence of this on women's work comes through the decreased availability of firewood. Before the intensification of khader cultivation, women used to go and collect wood for cooking fuel there. As it became more scarce a switch occurred from wood to more intensive use of dung as fuel. The greater part of fuel production now is not foraging for or collecting wood, but making and storing oopay.

Women's work in animal husbandry has also increased, especially the collection of fodder. I think this comes from the intensification of men's work during the agricultural cycle, because of watering and fertilising more
on each crop as well as the increased number of crops each year. Abdul an elderly Muslim man, suggested that his mother did not even know where the family fields were because she never had to go there. Younger women took the food out to the men and the men brought the fodder in from the fields to the house.

This historical excursion could be extended, but the point to be made is that there has been no change either away from or towards a division of labour which gives women control over productive resources or that which they produce. This is not surprising in the light of other studies (Croll: 1981; Sharma: 1980; Whitehead: 1981; Sen: 1982). Women in these study villages have not lost control over productive resources, as they have in areas in South India (Jain and Banarjee: 1985) because they never had control in the first place.

Where we start from then, in trying to understand the present sexual division of labour in the study villages, is from the fact that women in these villages have never in living memory been in control of productive resources. Control over these has always been firmly in the hands of men. The balance of tasks has changed, but the power of women relative to men has remained low. There is a system of hierarchical arrangements between younger and older affinally related women whose interests are fragmented by the nature of the patrilocal, patrilineal family. But women of all ages also have an interest in the family to which they belong, for village women, there is no alternative.

This should alert us to the fact that the division of labour is not only a list of tasks which are performed by men and by women. It is also a way in which entitlement to resources, within the structural arrangements analysed in the last chapter are allocated. In Whitehead's terms (1981) the conjugal contract is thrust upon women in Bijnor, they have no alternative but to accept it and indeed as outlined above have interests in accepting it. The structure of kinship and marriage in Bijnor legitimises the existing division of labour in which the work men do is judged to be sufficiently more important than that which women do to allow the former control over all resources.

I do not want to deny the material basis of relations between men and women. Clearly legitimacy is directly related to patriliny and patrilocal marriage. But how does men's work come to be seen as giving them legitimate control over the resources which the household to which they belong produces?
The Work of Specific Women

The work which specific women do, rather than what women in general do is affected by several factors, each of which I will deal with here in turn. This is not a procedure with which I am completely happy because these features do not affect a woman’s experience or position in isolation from each other. Their cumulative and conflicting effects are felt and experienced together. I intend to make up for this analytical simplicity towards the end of this section by considering some case studies to elucidate how these factors operate together. The following subsections outlines how the work of specific women varies according to the structure of their household; class; ethnicity; age, the life cycle and personal biography.

Household Structure

The new bride in Dharmagri is a social being with little or no autonomy. If she is the first woman to marry into a household then she will normally share work with her mother-in-law. The sharing out of work is not a democratic process. The former may expect to be allocated work on the latter’s instruction. More common though is the expectation that a woman has come to her marital village to work. Asghari, the only daughter-in-law in a class II household of two brothers put it aptly:

"it does not feel good for the bahu if the sas does the work, that is why the bahu herself does the work."

It is unusual, however, for a group of affinally related women to work together over a long period of time. As the table below shows, only a quarter of women in the sample were in joint households at the time of fieldwork.
Table 1:
Number of Women Working Jointly and Separately from Other
Women among Sample Households

<table>
<thead>
<tr>
<th>Religion</th>
<th>NUMBER OF WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL</td>
</tr>
<tr>
<td>HINDU</td>
<td>19</td>
</tr>
<tr>
<td>MUSLIM</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37</td>
</tr>
</tbody>
</table>

Source: Key Informants 1983.

The most commonly given reason for women starting to work separately is that women cannot work together without fighting. There is little evidence to support this contention, but it is a strong ideology among the women. Generally it would seem that in the long term each woman is made to be responsible for her own nuclear family. One mother-in-law said of her daughter-in-law:

"I made her go separate because there was another daughter-in-law being married in and I did not want there to be any fighting between them."

Others suggested that they had separated the work of household women because one of them was seen not to be pulling her weight. One landless Harijan widow, speaking of her decision to separate the work of her daughter-in-law from her own said:

"[She] used sometimes to cook her own food separately while I used to cook for them all and when she began to refuse to cook for them all I made her go separate, for being on your own gives you an idea of how money is earned. I used to say to her that since her father-in-law was dead, I would do the outside work and she should cook, but she refused to cook or do the housework, so I made her go separate."

The exception to the separation of women’s work within the household is that one daughter-in-law will continue to have her mother-in-law stay and work in her own chula or perhaps come back into it after some time apart. For example a mother-in-law may elect on the marriage of a second son to make the first daughter-in-law separate, but decide to live with the second. Thus depending on the timing of her husband’s younger brother’s marriage a woman can expect to find herself in a chula where she is responsible for all of the
tasks outlined above. For example, Nirmala, an elder daughter-in-law now lives separately from her mother-in-law and husband’s younger brother’s wife. She cooks, washes and cleans for her own husband and children, but, works jointly with her sas in the making of ooplay from draft animals.

Fatima, the youngest bahu married into a Muslim household, works jointly with her sas and has a similar workload to Nirmala:

"...I do all of the work, sweep, wash up, grind spices, cook, lift the dung and make ooplay, give water to the buffaloes and oxen, all I do is work all day."

Pushpa on the other hand shares household work with her Husband’s elder brother’s wife and her sas. Her workload is somewhat lighter:

"I just cook and wash up. I don’t lift dung or make ooplay yet. My sas and jethani [HeBW] do that. Muni [her HeBW] also milks the animals. I just cook and wash the dishes."

Class

As we have already seen in chapter 3, women very rarely own land in the study villages. My interest in class here then is not related to access to productive resources from which a woman may earn an independent source of income. Rather I want to focus on how the class position of the household to which a woman belongs affects the work which she must do.

The most important effect of class on women’s work is that women from class II households are more likely only to work in and around their house than poorer counterparts. Only one of four class II women in the sample went to collect fodder from the fields, for example, while two-thirds of other women in households with animals did this.

Neither are women in the richer households likely to work in their own fields or the fields of others as labourers. This is partly because if labour is short, it is more likely to be hired. This is somewhat affected by the life-cycle. Women in the childbearing age-ranges do not by and large work in the fields. Outside these years some Hindu women did work in their own family fields in weeding operations. For example, in one of the Hindu sample households in class III, the mother-in-law spent about five or six days weeding wheat during the study year.

Another important effect of class is that women in richer households are more
likely to have a greater amount of work relating to animal husbandry as their households own a greater number of both milk and draft animals. This is compounded by the fact that household men in richer households also have a greater amount of work to do in the fields. There are four aspects to working with animals for women: feeding them, milking, chopping fodder and collecting fodder from the fields.

Almost eighty-percent of sample women said that they fed household animals. In most cases these were both milk and draft, except where these different types of animals were stalled separately. Milking animals tends also to be the work of women. Where fodder is chopped by hand cranked machine, all sample women are involved in this operation for their households. In some class II and III households, the chopping of fodder is acheived by either an animal or machine powered thresher. In these cases, it is the household men who will operate the chopper and women will be responsible for taking the chopped fodder from the bhaitak where it is chopped and feeding to it to the milk animals in their compound. As we have already seen in chapter 4, richer households stay joint in production for longer and this has the effect of lightening the fodder chopping load for women in these households as there are more men around to chop it.

The collection of fodder from household fields is obviously not a task which the landless can undertake. Women in class II households never do this. Those in class III households may sometimes when taking food to men in the fields, bring back a headload of fodder which they cut from their own fields. Qudsia a class III woman said when asked if she did any work in the fields:

"I just bring fodder and take food out there. I do not cut cane tops [for fodder] only clover"

Cutting cane for others and taking the tops for fodder is by and large the work of men, but some class IV and V women also do this sometimes. Sabra’s household in class IV has an unusually large number of animals for a class IV household, from which they sell milk. She cuts clover and sometimes cane for fodder:

"I cut clover from the land which we have taken on sharecropping. I sometimes cut cane, but usually this is done by my husband."

Cutting fodder and taking it home then is largely men’s work, but women in all but class II sometimes cut it from their own fields and women from classes IV and V additionally sometimes cut it from wild grass or the cane fields of others.
It is also the case that richer women have more work associated with the processing of the staple crops rice and wheat than women in poorer households. Apart from the cleaning of the cut crop, women whose households have land are also responsible for the storage of the crop. This involves the building and maintenance of a mud grain store - a koti.

**Ethnicity**

A major difference between Muslim and Hindu women is that the former are never defined as working in the fields. This may partly be the effects of class, since the Muslim sample households tend as a group to belong to classes II and III. However, this is not the whole explanation of differences between the two groups of women. In Muslim class IV households, women were just as secluded as their richer counterparts. In landless Muslim households women did not do any independent wage labour in the fields.

It is difficult to know how much significance to attach to these observations. The two class V women in the Muslim sample also had unusual personal biographies. One was married into Jhakri from 400 miles away after leaving her first husband, while the latter was married to a ghar jemai (marrying-in husband) and therefore living in her natal village. In the first case there seems to be no prima facie case why this woman did not perform wage labour, except that she is a Muslim woman. In the second, Muni undoubtedly did more work outside than other Muslim women. She cut cane for fodder and sometimes helped her husband stoke the cane crusher's fires when he was employed there during the winter months. But she did not go and work for wages anywhere.

Among the Hindus by contrast, women from class III and IV households were sometimes involved in labouring in their own household's fields. This is especially true for households where little alternative family labour was available. Low caste low class Hindu women in the childbearing years, however, did not work as wage labourers. Women wage labourers in Dharmnargi are poor women outside the childbearing age group.

Some Hindu women are then recruited to work on their own household land. But such recruitment is by no means indiscriminate. For example two Hindu sample women said that they worked on their own family fields. The factor which they both have in common is the loss of a household member and its attendant effect on household income. Chandresh for example, is the only woman in a
class III Chamar household. Her mother-in-law had died and this had an effect on the work she had to do.

"if my sas were still alive I would have less work to do. Now I have to leave my [infant] son behind and go and work in the fields. I do all the work in the fields, I help to plant, weed and thresh and I collect grass [for fodder]."

One other Hindu sample woman, Urmila from a class IV Sahni household reported working alongside the rest of her household in the fields after her father-in-law died.

"...my sasur died in the middle of the rice harvest. He had done some cutting before his death and after his death, my husband, his sisters and me too did the rest. I have planted wheat behind my husband working on the plough."

Life Cycle, Age and Personal Biography

These are the key variables, which cement all the others together, when trying to understand women’s work in the study villages. They help to explain differences in conjunction with other variables when phenomena seem not to be explicable by a single variable on its own. Women’s experience cannot be related with reference to a single variable, but rather all of these factors must be brought into play before we can fully understand the nature of the workload which individual women must perform for adequate reproduction to occur within the context of their own chula.

In the early years of her marriage a woman’s workload is an increasing one. She starts work, ideally in a household where joint production and consumption exist. Work will be allocated to her by her sas. If there are several women in a joint household work tasks will be shared. Women themselves say that they are ready to take much of the responsibility for performing the work which requires to be done in their hearth as it does not look good for the bahu to be sitting while her sas is working. Gazala, described her early married years like this:

"I cooked the roti from the time I was married and my mother-in-law lifted the dung and made the ooplay...a year after this I started to lift dung and make ooplay too."

Her workload will increase in the middle years of her reproductive cycle. She is likely to have children for whom she is wholly responsible in addition to her other work. She is likely to separate from her sas and will be solely responsible for the work of her chula as well as looking after her children.
Visits to her natal village may well be curtailed during this period also.

As her children grow up her workload may lighten if she has daughters as they will begin to help with her work in preparation for marriage. If she has only sons then her burden of work will not be lightened until they are married and her bahus are safely installed with her in their sasural. Finally her bahus will go alagh (live and work in separate chulas), all but one who will remain in the sas’s hearth to look after her in her old age or perhaps she will rejoin the hearth of a daughter-in-law who earlier went separate.

It can be seen that this ideal transition of a woman through her life cycle is not based on the passage of time alone. It partly depends on the number and sex of children a woman has. This will affect her workload in her earlier years as a married woman. It also greatly affects her experience in later years. For example, if a woman has only daughters, she may have help with her workload before they are married. They will all eventually be married out, and if she has no sons she will have no bahus coming in on whom she could rely for help with her workload and over whom she would have control. Having children particularly sons is crucial to the status and position of women. It would of course be possible for one of her daughters to bring a husband in. The status of ghar javai is not one which is considered desirable by villagers. It rarely occurs, and is only considered as a last resort. The fundamental contradiction for sample women in the study villages is that the household is both the locus of women’s subordination and their interest. Given that no real alternative exists for them, it is in their interests to develop what power they can within the household. This means having children. The question remains, what control do women have over decisions surrounding their own fertility.

A few case studies illustrate more aptly how the various factors outlined above affect a woman’s workload, before I finally move in this chapter to consider whether the contribution which women make through their labour to the household gives them any say in decision-making over the distribution and use of household resources.

Maya w/o Mahipal, Hindu Sahni, Class III

Maya’s husband owns 10.75 bighas of khader land. She was married about fifteen years ago and has had six children – five girls and a boy. She belongs to the Sahni caste – a low, but clean caste Hindu group who were traditionally vegetable growers. She herself is an only surviving child. Her
parents had had three other children; two girls and a boy who had all died in childhood. Because Maya’s mother and father are on their own, Maya’s eldest daughter, aged 11, lives with them to help with domestic chores and animals. Her second daughter also went to live with them during the fieldwork period.

Maya lamented that she had wanted this girl to stay with her to help with the work. The girl however preferred to stay with her maternal grandparents as that household was richer, owning some 40 bighas of land, and therefore she could eat better food there. The remaining four children are all aged under six and are therefore no great help to their mother and father as yet.

Maya said that she did all her chula’s work on her own. She prepares food and cooks, washes up, takes wheat to the chaki (electric mill) to have it ground, looks after the children, does the washing and cleaning. In addition to this she takes her husband’s food to the fields when he is working there. Because the children who live at home are small, she must also work in the fields alongside Mahipal, doing weeding and digging mostly. They cannot afford to hire labourers as a matter of course for cultivation operations. She will also collect fodder and cut it on her jethani’s (Husband’s elder brother’s wife) hand machine if he is not at home, though she says she only has to do this morning and evening!

Being the only woman in her chula severely restricts her mobility and though she would like to go more often to her parent’s house she cannot as there is no one to fill in for her. When she does go her sas does her work, it is never done by her jethani or dorani (Husband’s younger brother’s wife). While she was still sajhe she could go more often as tasks were shared by other household women. She said that she hardly ever goes now because of this.

On household decision making Maya said:

"My husband certainly takes my advice for any work which is to be done. If he does not like my advice he does not pay any attention to it."

Pushpa w/o Punni, Hindu, Dhimar, Class III

Pushpa is a young woman, less than twenty years old at the beginning of the fieldwork period. She is a Hindu woman from the Dhimar caste, lowish but clean. Her husband has title to about eight bighas of land, but farms jointly with two brothers each of whom has a similar amount of land.
Although married into a household with a similar land profile as Maya, Pushpa was at a much earlier stage in the life cycle. She had been married only about two years before the beginning of the fieldwork period and was heavily pregnant with her first child when interviewed. When she was married, her husband was joint with two of his elder brothers. The men shared the farm work and all three brothers with their wives and children and Pushpa sas ate at a single hearth. In short, their household is joint in both consumption and production.

Married to the youngest of the three brothers, she is the latest addition to her marital household. She said that the only work for which she was responsible was the cooking and dish washing. The animal husbandry and the making of ooplay are shared by her sas and jethani. None of the women, Pushpa maintained, worked in the fields: all of this work was done by the men. This includes collecting fodder from the jungle. She had not been doing much work since about the seventh month of her pregnancy, but maintained that cooking and cleaning was her normal work and nothing else.

Pushpa then would seem in an easier position than Maya in some respects. She has no children to look after as yet. She is also sharing a chula with her sas and jethani, which means that there are women around to share the jobs which the household requires women to do. There are also three men in the household to do the farming work and so the women are not required to go to the fields.

However, relationships between women in the joint chula are hierarchical and therefore not as supportive as say friendships between unrelated women of the same age might be. (Whitehead:1981) This is a haveli in which there was a great deal of quarreling among the women.

Pushpa's role in decision making is similar to Maya's

"Generally the men decide as they wish and sometimes they ask my advice. If it seems O.K. they listen, if not they just do as they please."

Asghari w/o Ahmad, Muslim, Sheikh, Class II

Asghari is married into a wealthy Sheikh household, owning 36 bighas of prime bangar land. Her natal village is Chandpuri, about 2 kilometres from Jhakri. She had been married about two years when fieldwork began and had one child, a daughter. Her husband is one of two brothers and when she was married they
were all joint with her sas and sasur, as they still were during the fieldwork period.

When asked about her work, Asghari said that she cooked, cleaned dishes swept and cleaned the house, lifts gobar and makes ooplay. She also goes to her family's fields to cut fodder and chops it with the men. She said that her sas did some of this work too.

On the division of labour between herself and her sas, she said that no one decided it should be like this. She herself thought that it did not look good for her sas to be working if she herself was not and so she took on the work herself. Her sas also had sole responsibility for a buffalo which provided milk for sale to a dealer from Bijnor.

Asghari was never involved in any cultivation work. She was never asked for her opinion on what should be grown in the fields. These decisions were made by her sasur and his sons, the final decision resting with the sasur. Neither did she have the responsibility to trade grain from the household reserves with petty traders. This was the preserve of her sas.

Umrao w/o Usman, Muslim, Teli, Class V.

Jhakri is Umrao's natal village. Her sasural is in the adjoining district of Muzaffarnagar. She had been married when she was only nine years old, with her gauna (first cohabitation) taking place seven years later, after puberty.

She had started her married life in her sasural being joint with her husband, sauteli-sas (step-mother-in-law) and sasur and her husband's sister. She had been unhappy in her sasural, and said that she had been treated very badly by her sauteli-sas. She had been given 5kgs. of silver by her sasural on her marriage but this had all been stolen by her sauteli-sas and there had been a fight and she and her husband had moved back to her natal village of Jhakri.

Umrao has a long and checkered maternity history. She has had nine children, only four of whom are still alive. First she had a girl and then two boys and two girls who died, a girl who is still alive and then a boy who died, and then another two boys who are still alive.

Her husband owns no land. During the cane season he works as a fire-stoker at one of the local cane crushers. He does whatever work he can during the time
when the cane crushers are closed. Their existence, as Umrao's maternity history suggests, is a tenuous one, and it seems that there has hardly been a year since she was married when there has not been a life-threatening event or illness. Her husband also complained that it was more difficult to obtain work these days as farmers were either doing more of their own cultivation, or gave you work on a per-acre basis which grossly underestimated the amount of work which you would have to do and therefore the pay you would receive.

When asked about the work she did Umrao said that she did all the cooking, cleaning, looked after the children, and collected fodder for their buffalo and made ooplay. She also did some goat herding. They hoped to raise goats and sell them to buy milk buffaloes. This plan was always interrupted by some emergency or another in which they would have to sell the goats in order to survive. She also said that during the cane season, she helped her husband at the colhu. The children helped with collecting fodder for the goats.

Conclusion

What can we learn about women's work from these brief accounts of the work responsibilities of four women? First, and this fits well with the general argument, there seems to be a set of reproductive tasks which centre around the home. All of these women are entirely responsible for: childcare, cooking, cleaning, regardless of differences in their positions. However, what they do on top of this, or to what extent they are responsible for the domestic tasks themselves does vary according to the indicators mentioned above.

Pushpa for instance is the youngest bahu in her extended household and is therefore not responsible for tasks like lifting gobar or making ooplay and collecting fodder which are the responsibility of her sas and jethani. Like Asghari, the presence of her sas limits the extent to which she can spend resources, or indeed even make decisions about how resources are collected or spent.

Maya is the only adult woman in her household and because her own parents are short of labour and richer than her marital household, she has had to send her eldest daughter there and has no one around the house to help her, though other women in the village with daughters the same age as hers can and do have help from their daughters every day as a matter of course. Her caste and the absence of family labour in combination with relative poverty means that she also has to go and labour in the fields along with her husband.
There are other women in the village who do not. For example, a wealthy Rajput household in Dharmnagri has as little labour in it as Maya's chula, but the women there belong to a wealthy and high caste household, where shortages of labour at peak times are met by hiring rather than drawing family labour into operation in the fields.

Asghari is at an early stage in her life cycle - like Pushpa - but she has more responsibility for chopping fodder because she is the only bahu. This in combination with the fact that the household has a lot of land but chops fodder by hand-turned machine means she has the responsibility for this work. It was not uncommon to see Asghari and her sas chopping fodder while her husband and his younger brother ate or rested on a charpai.

Umrao is the poorest of these four women. She is past the childbearing age-group and lives in her natal village. She is, therefore, arguably relatively free from the rigours of seclusion which the other women are not. She has no sas or sasur living with her, or indeed even in Jhakri, nor does she have any contact with them. She does have some help with her work from her eldest daughter, but she can expect this to end when her daughter is married and goes away to her own sasural. Yet because of the general restriction on Muslim women of doing wage labour in the fields she does not earn any money. Hindu women in similar positions, however are able to work for wages. For example, Kishin Singh, an elderly Chamar and his wife work both, from time to time work as wage labour. Gomti a Hindu widow works as a wage labourer to earn her living. Young unmarried Hindu girls work as wage labour also, but Umrao's girls do not. She goes to help her husband at the colhu but they receive no extra money for this, it makes his work load easier.

Decision Making

Sample women, then, are responsible for a very wide range of tasks all of which must be achieved successfully for their households to be well run on a daily basis. One might reasonably expect that this would allow them a say in how household resources are generated or dispensed with. To investigate this issue sample women were specifically asked what part if any they played in decisions regarding which crops to plant or whether to buy and sell animals or land. This gives rise to a crude classification into those women whose advice was sought and taken and those whose advice was not. It ought to be borne in mind that this is a crude measure of the contribution of women to
decisions and covers only one area of competence. Neither does it consider the role of women in fertility decision-making which will be considered in chapter 10. Bearing this in mind, the answers women gave are summarised in the table below.

Table 2:
Number of Women Involved in Household Decision Making among Sample Women by Ethnic Group

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>INVOLVED</th>
<th>NOT INVOLVED</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>3</td>
<td>13</td>
<td>16¹</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>30</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

Note: 1. Data were not collected from three Hindu women on this topic.

Source: Key Informants 1983.

Very few women were involved at all in decisions relating to the way in which household income and resources were generated or disposed of. Maqsudi perhaps sums up the general picture best of all with the following astute comment:

"My father-in-law and my husband make decisions ..... nobody asks women about anything ... we are only here to do the 'housework'."

Even in the few cases where Hindu women work in the fields, this seems to have no effect on the power which a woman has to influence decisions. Urmila, who as we saw above did work in the fields, had this to say:

"... that [decision-making] is the work of men, if they do ask, they do as they please even then."
About half of the women suggested that their husband's asked them what they should do, but if they did not like the advice, they went ahead and did what they pleased. One or two women gave this as a reason for not attempting to even offer advice. Nirmala for example:

"My husband will do what he wants, even if I do not agree, and he will not listen even if I want to prevent him, so that is why I do not even offer advice."

Among the Muslims an interesting variation is that some women suggested age as an added factor legitimising the power to make decisions. Najma for example lives in a joint household with her husband and parents-in-law:

"my sasur is the oldest, he makes all the decisions and does not ask me about anything."

Some Muslim women also suggested that they could spend or barter small amounts of household grain for goods on offer from travelling salesmen, such as vegetables or glass bangles, but that only their menfolk could decide to buy or sell large amounts:

"if it is a question of selling a lot of grain, them men alone sell it. I only sell grain to pay for needs around the house. Men sell sugar cane so they pocket the money."

One or two women also said that sometimes they managed to obtain decisions they were in favour of, but only when they happened to co-incide with what their husband wanted anyway. Ruxana and her husband had together agreed to buy a milk buffalo:

"For a long time we both wanted to buy a buffalo. We both made the decision. Decisions generally get made if they are what my husband wants. I may make suggestions on some matters, but he does what he wants."

Women in the study villages are then responsible for all the work which sustains and reproduces the material conditions of life outside production and wage labour. It has been argued that though women in general are responsible for this work in its entirety, this tells us little about the work which individual women do. This varies according to class, the life cycle, ethnic group and personal biography. Young unmarried women may be involved in wage labour as are a few women beyond the childbearing years.

Some Hindu women also work in the cultivation of crops on their own family's land though this work is restricted to the relatively low status tasks like weeding and harvesting, not ploughing watering or fertilising. Most
importantly this work does not increase the power they have over the produce which comes from the fields. This remains in the hands of men, except at the margins of consumption, when some women can exchange household produce for daily needs of vegetables or other foodstuffs. Even when women work in production then, this does not give them control over the product of their labour, the land from which it is produced belongs to men and control rests firmly with them.

The sexual division of labour in the study villages makes demands of women in a very particular way. They are deeply embedded in the family as the receivers of and processors of food and other materials required to sustain life. They are never seen as producers, even when directly involved in production. Their work away from cultivation and wage labour is seen as natural and not thought of as work at all. Women as a group are indispensable, but individual women are not thought of in this way. However, because all of the work for which women are primarily responsible can be related to their role as biological reproducers, it can easily be categorised as non-work.

These two chapters have argued then that the structure of kinship and marriage and the sexual division of labour associated with this operates in the study villages to effectively isolate women from land and other productive resources which might give them some autonomy. The 'conjugal contract' in the study villages makes women dependent on their affines. They have no resources with which to bargain for better positions. The household is then both the locus of women's subordination and a considerable arena of interest for them. There are no viable alternatives to marriage. Any autonomy a woman gains must be within the confines of marriage and the affinal household. As the final section above showed, however, the degree of autonomy which women have in the study villages is very low indeed. In short the structure of kinship and marriage and the sexual division of labour in the study villages have a negative effect on women's autonomy. In the final two chapters, I shall explore the consequences of this in relation to fertility decision making.
Chapter 9: Men and Fertility

An Unlimited Desire for Children of Either Sex?

In the next two chapters I want to analyse some questions of crucial significance in relation to fertility. In the next chapter I will compare the views of men and women on fertility. This chapter will examine the views and intentions of sample men on fertility.

Firstly, the question of whether men want an unlimited number of children is addressed by an examination of desirable family size and whether sample men say they want any more children. Secondly, I examine whether sample men view their sons and daughters as being of the same value. Thirdly, the effects of class, ethnicity and mortality on fertility are examined. Finally, the views of sample men on contraception are discussed.

Sources of Data

The data on which the following discussion is based come from two main sources. The major source is a series of semi-structured interviews with men on their networks and their family building intentions. The questions on fertility were basically aimed at encouraging two topics of conversation. Did the sample men think they had enough children, if so why and what did they intend to do about having no more? If their family was too small, why and how many more children would they have and what would they adopt as a family planning method when their family had reached the size they wanted?

In addition I asked men whether they thought the government was right when it said that two children were enough and that boys and girls were the same. The discussions which I had with men on these issues form the basis of of this chapter.

The second source of data used in this chapter is that obtained by female research assistants from maternity histories. These maternity histories were collected from all ever-married women in the two villages. This village-wide data is used to examine some of the issues around fertility and child mortality which are raised by the sample data.
Desirable Family Size and Sex Composition

Table 1 summarises the overall pattern of fertility and fertility desire among sample men.

Table 1:
Overall Pattern of Fertility Desires by Number of Current Live Children and Mean Live Children

<table>
<thead>
<tr>
<th></th>
<th>Number of Men</th>
<th>Total Number of Children</th>
<th>Mean Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>WANT MORE</td>
<td>24</td>
<td>36</td>
<td>32</td>
</tr>
<tr>
<td>WANT NO MORE</td>
<td>13</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37</td>
<td>62</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: Key Informants 1983.

The table shows that thirty-five percent of sample men feel that they already have enough children and want no more. Those who want no more children have on average about four live children, with two sons and just under two daughters. Those wanting more children are at earlier parities on average. They have 2.8 children with 1.5 sons and 1.3 daughters.

All except three men said that they did not want to have an unlimited number of children, or had never thought about how many children they would have. In other words, almost all of the men in my sample had some notion of the size and composition of children they would like to have, even if they wanted to have more. The most commonly given reason for wanting to limit the number of children was that the men felt they would not be able to provide basic food clothing and shelter for their children if they had too many. Shankar, for example: Hindu, Chamar, parity 1 son, Class IV:

"I do not want to have more than three children. I only have a little land and if I have more children than this, I will not be able to feed, clothe and educate them. My sons will be poor enough if there are only two of them - never mind any more than that"
Some expressed the effect of having many children in such poor conditions a little more graphically.

Naresh: Chamar parity 1 son, 1 daughter, Class III

"Three children, two boys and a girl would be best. Lots more than this would be no good. If you have lots of children you never feel under control. Some would be fighting and some sick, some would be peeing and shitting all over the common courtyard. That was useless. The smaller your family, the easier, the bigger, the more difficult."

Desirable Sex Composition

The sex ratio of live children is slightly in favour of boys. This should not however be taken as a sign that preference for sons is slight. It is rather the result of the age and sex composition of living children. Mahipal for example has four daughters and two sons. When I asked if he wanted more children he said that he already had more than enough children. The problem for Mahipal is that he wanted two sons. He did not want six children. His expressed preference was for two boys and a girl. He had however been father to four girls, a boy, a girl and a boy in that order.

I asked him why he had had that number of children. His answer is instructive:

"I was desperate for sons"

He said that two or three children were enough:

"If you have more than this you will not be able to feed and clothe them well. But plenty of people would have only girls and they would continue to have children in the hope of a son or two."

When I asked him if he thought boys and girls were the same thing, he said:

"Boy equals girl is not wrong, but people here like boys better than girls. Here in Hindustan, it is not like England. If a man had only girls and they were all married then he will have to sit by himself in his old age. If he has a son or two, then they will get jobs and do their father’s farming work and bring in wives and goods and children. The house will grow full from them."

The importance of having sons of your own is paramount, even though it would be possible for a daughter and her husband to come and live with her parents after marriage. The status of ghar-jemai, however, is not a popular one
among village men. It has great shame attached - the implication being that you are living from the earnings of your wife. It also has little security, as rights to affinal property are to say the least tenuous and may involve a man in dangerous conflict with his wife's agnatic kin.

The only man with no sons who said he wanted no more children was a landless chamar, Vikram. His wife was pregnant at the time of the interview and the decision to have no more children was highly contingent on the outcome of the latest pregnancy. His married sister, who was home on a visit for Tijo was present during the early part of the interview.

AL: "How many more children do you want?"
Vikram: "My wife is pregnant and after this I will have enough children"

AL: "What if you have another girl?"
Vikram’s sister: "He will certainly have a son. We have all been praying that it will be a boy this time and surely it will, because they have had two girls already"

AL: "The government says that two is enough. Is that right?"
Vikram: "Yes it is. Two children would be enough for me but I am having a third to see if it will be a boy. Three or four children are enough."

AL: "Is there no difference between two and four children?"
Vikram: "Two would have been enough but I do not have a son"

AL: "If the next is again a girl what will you do?"
Vikram: "It will be difficult to decide. I think I would have one more after that. Girls go away after marriage and boys stay. A house without a son would become useless."

Refering to Mamdani, I said that I had read that it was good to have as many children as possible. What did he think of that?

Vikram: "This is not true. Daughters go away after their wedding while boys would stay at home. Some men have eight children standing behind them - where would they get the money to sustain and then marry that many children on a daily wage of ten rupees when they could get work. One boy and one girl are enough. I am having a third child to try and have the one boy"

Only one man in the sample wanted his next child to be a daughter. When interviewed, Jag Ram had four sons and he highlights the individual reasons men have for wanting more children. Jag Ram now considers that he has more than enough sons, but wants a daughter. Jag Ram had already told me that two
children were enough. But the sex composition of your children has to be acceptable too.

Jag Ram: "Ah! After the second son what we wanted was a daughter. We have been looking for one ever since. When there are too many children you cannot feed, clothe or send them to school nor arrange good weddings for them. My sons will have very little land and it comes their turn to be householders. If we could have a girl which lived, we too would stop having children. My wife would be sterilised. Sons and daughters are not the same. When a girl is married, she goes away and stays at her own house. Who keeps their daughters at home like their sons? - no-one! Boys stay at home and look after the land, house and everything else. Because of this boys and girls are different.

But you still need to have one daughter so that she can tie her brother’s Rakhi at Raksha Bandhan. (the act during the festival which above all symbolises the relationship between brother and sister as one of love and protection). You could have your neighbourhood sisters do it for you, but this is not the same as a real sister. If a son had no sister to tie on his rakhi he would be very upset.

AL: "Why then do you not need to have fewer or more than two sons?"

Jag Ram: "If you have two daughters and a son, and the son died, the daughters would have no one to go and fetch her from her sasural. The sister would be stuck there on her brother’s death. If you have only one son he will have all the worry on his own head. If he had no brother, who would look after the house while he was away fetching his sister? It is impossible for one man to do all that needed done on a farm - sometimes farming, sometimes a trip to the sugar mill, sometimes visits to relations, sometimes ill."

For these reasons it is better to have two or three sons. It is also possible that one son could turn out bad. If this were true, it would be better to have a second son lest the first should fail you. In any case, you certainly need to have one daughter, otherwise how would sons be born." (Gales of laughter from accompanying men.)

Jag Ram then, in contrast to all the other men was waiting for a daughter. But all the other men also had an idea of how many children they would like and what the sex composition of their family should be. These were not a group of men favouring unlimited fertility. Rather they were by and large at an earlier stage in their life cycle with relatively strong views on how many children they wanted and what their sex composition should be.

Devinder, a Dhimar in class III had already had four children by the time I spoke to him. Three of these were still alive, all had been girls. He already considered himself in a difficult position but wanted to have one more child to see if it would be a son.

Devinder: "Two children are enough, otherwise how could a single breadwinner earn all the money required to keep four or five
children well fed and clothed. It is impossible. But I want to have one more child and this should be a boy."

AL: "Are boys and girls the same thing?"

Devinder: "They are not! Boys are liked better. When a boy is born, we sing and dance and make a big noise and have a jestawn and make lots of celebrations. If it was a girl - then there was silence. Boys have a big name and girls a little name. Girls go away after they are married. Boys stay at home even after they are married to look after their father and his land and so on. Daughters empty a house while sons fill it.

It is possible of course that sons as well as daughters might leave their parental home. However, in the study villages, outmigration is conspicuous by its absence.

Class

Table 2 below shows the distribution of desire for more children by class category.

<table>
<thead>
<tr>
<th>Class</th>
<th>WANT MORE CHILDREN</th>
<th>WANT NO MORE CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Mean Live</td>
</tr>
<tr>
<td></td>
<td>MEN</td>
<td>BOYS</td>
</tr>
<tr>
<td>II</td>
<td>2</td>
<td>2.3</td>
</tr>
<tr>
<td>III</td>
<td>13</td>
<td>1.5</td>
</tr>
<tr>
<td>IV</td>
<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td>V</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Source: Key Informants 1983.

The numbers in the table are, of themselves, too small to be conclusive. They suggest that the relationship between class and desired number of children is positive. In the group wanting no more children, the class II man has six children while those in classes IV and V have three on average. In the group wanting more children, the class II households have four children and all the other groups less than three. More qualitative data from the sample men
suggest that the greatest difference is between those in class II and the rest of the sample.

Only three male key informants thought that an unlimited number of children was desirable and these men were all of class II and among the most wealthy in the study villages. In Jhakri only Dilshad said he could see no limit to the number of sons who would benefit him. He is an only son and was having difficulty working the land because of labour shortage: his sister’s husband contrary to local norms lives in Jhakri and helps with the work.

AL: "How many more children do you want?"
Dilshad: "I will take just as many children as God gives."
AL: "Will this never be too many?"
Dilshad: "No. I am on my own here and there is lots of room. There are not enough people in the family to do all the work. The government is wrong to say that two children are enough. One should keep on having children.... we have lots of land and no one to work.

It will not matter if I only have girls from now on. I have only one daughter and there is lots of room. The difference between sons and daughters is not that great. Isn’t my sister here with her husband. He works for us. I will have more children. they will help with the land and save me from being alone as I am now, the only worker?"

Bhagwana, a class II Dharmnagri farmer who originally said that his three boys and three girls were enough finally said:

"As many children as I have, that many will benefit me. True, the girls will go away. But the boys will bring brides in, and I have equal numbers of both. I am not worried about having too many. I will inherit 90 bighas (about 18 acres) from my father, so I will be alright in my old age."

For these men, having many sons reduces their dependence on wage-labourers and enhances income. Each son can expect a reasonable inheritance. Among the others, only Nisar thought that a large number of children would benefit rich and poor alike:

AL: "Are boys and girls the same thing?"
Nisar: "No boys stay and do service for their father girls go away and if anyone sees benefit from their labours it is not her parents. It is the same for labourers. If a labourer has three sons they could earn Rs 10 - 15 a day each. If he had only one son then he would earn a third of that. Is there not benefit in three sons?"
AL: "They would all have to be fed and clothed as well."
Nisar: "Yes, but they would earn more than they could eat. This is
quite apart from the benefit of sons carrying on your name after you were gone and giving you some rest in your old age."

The rest of the men think the benefit of more than two sons would be rather limited no matter how much land a family holds. Liaqat, a Muslim in class III, who owns about 20 bighas of bangar land has six sons and had this to say:

I said that I had heard that it was good to have three or four sons to look after the family farm when their parents were old. What did he think of this?

Liaqat: "Two sons are enough for this. I have about twenty bighas of land and six sons. They will inherit just over three bighas each. They will be neither farmers or labourers but will constantly be worried about what type of work they should do to keep their family alive. Two sons and a father were more than enough to look after twenty bighas of land. Even two men were enough if the father should become old and weak or if one of them should fall ill."

AL: "Is there any benefit in having eight children?"

Liaqat: "I am telling you there is no benefit, only pain. The children have been born and of course they are my children and I will look after and love them, but they will prove expensive. The land will be fragmented and I have to arrange the marriages of all eight and in the meantime I have to clothe and feed them and send them to school.

Suleiman, a Shiekh, with only about 3 bighas land, was clear about the reason for wanting more children and had a very definite idea that a smaller rather than a larger number of children would have been beneficial to a man in his position. He had had five daughters and wanted a son.

AL: "How many more children do you want?"

Suleiman: (Laughing.) "I don't want anymore girls! I have more than enough of them. I'd like to have a little bit of a boy. It is not good to have lots of children. I think two boys would be enough, if you have more than this, they just end up fighting over shares of land."

AL: "I have read that in the Punjab and Ludhiana, that a farmer of labourer could benefit from just however many children he had. They would all work and earn money for their parents. Is this true?"

Suleiman: "Well first of all you have to think of the difference between boys and girls. If a man had a hundred bighas then it might be true, but for people like me with little land the right size of family is two boys and a girl. Then I would have been able to give my daughter away in marriage and the sons would have brought in two brides. The sons would have been able to help each other and my land would not be split into tiny tiny plots when I die."
Riasat a class III Teli, with about ten bighas of land said:

"I only have a little land. If I have few children I will be able to look after them properly... if I have more, from where will I give them anything?"

While Khalil, with 20 bighas pointed out that alternatives to using your children as labour exist.

AL: "How many children do you need to work your twenty bighas?"

Khalil: "For twenty bighas, two men are more than enough. If there were anymore than this they would not have enough to live in the next generation after children had been born. Even if a man has a hundred bighas, two men would be enough as they could hire mazdoors (labourers)."

Rohtash, a class IV Dhimar whose wife had been sterilised after the birth of their second child put it like this:

"Two children are enough - that is true for me. With two children I will get some rest. We will stay happy. We ran into trouble with the birth of our second child and we had to sell some prime bangar land to pay off the debts we incurred then. We could not afford to do that every time a child is to be born. If we had more than two children, then I would have to work from morning till night to stop them from going around naked and hungry. There would be no chance of keeping them well fed and clothed. They would run around in rags on part filled stomachs even if I could find work all the time.

It is reasonable to conclude here in the interim that outside of the richest farmers, there is a wide ranging view that it is economically beneficial to limit the number of children which you have. As we shall see below however, this must be qualified somewhat to take account of other factors than class.
Table 3 shows the pattern of fertility desires by ethnic group.

Table 3:
Overall Pattern of Fertility Desires by Current Live Children (Mean) and Religion

<table>
<thead>
<tr>
<th>WANT MORE CHILDREN</th>
<th>WANT NO MORE CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of Men</td>
<td>Number of Children</td>
</tr>
<tr>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>HINDUS</td>
<td>12</td>
</tr>
<tr>
<td>MUSLIMS</td>
<td>12</td>
</tr>
</tbody>
</table>

TOTAL 24 36 32 1.5 1.3 13 26 25 2.0 1.9

Source: Key Informants 1983.

Of the 19 Hindu men in the sample 7 said that they now had enough children and did not want any more. These men have on average just 3.8 living children, 1.4 of whom are boys and 2.4 girls. The sex ratio is in favour of girls, somewhat unexpectedly in the light of the arguments which I have made relating to son preference. But as I have outlined above in relation to table 1, this is explicable by the birth order of children rather than sex preference. The sample men in Dharmnagri who said they wanted more children, were not expressing a blanket wish for an unlimited number of children. Rather they had a clear idea of what the sex composition of their children should be and they had not reached that composition as yet, either because they were at too early a stage in their life cycle at the time of interview to have had them, or they had had a string of children of one sex. The pattern in Jhakri is more complex.

Table 3 shows that Muslim men who want no more children already have a greater mean number of children than their Hindu counterparts. Thus Muslims who want more children have as a group 1.7 mean boys and 1.1 mean girls, while those Muslims who want no more children have a greater mean number of
boys than corresponding Hindus (2.7 against 1.7).

The Jhakri group is more varied than the Dhammagnagri group in terms of stage in the life cycle. Some men are at very early stages, but equally six of the ten have had five or more children - only two men are at an early enough stage in the life cycle to have had the time only to have one child. In one case, that of Quram's wife there was a period of infertility for which treatment was sought. In the other, Ahmed's wife Asghari has tuberculosis which affects her fertility. Yet another man, Riasat, has had three children, two of whom have died.

The ethnic differences in the mean number of girls for the two groups is somewhat more complex, with Hindus in both groups having more girls than corresponding Muslims. As suggested above, this reflects the birth orders of children rather than differing views on the sex composition of desirable families.

Muslim men tended more to say that the number of children which they had directly reflected the will of God. Accepted local rhetoric on fertility was sometimes extremely difficult to get around. Without exception when asked about fertility, their first reply was always that it was not up to them but up to God. Nisar sums up the initial responses of Muslim men:

AL: "How many more children do you want?"

Nisar: "I will take what God gives me. You should not ask anyone else in the village this question, you will be wasting your time. Everyone will say the same thing."

Jabruddin, for example, knew that he would prefer to have only three children but would take what God had to give. When I asked how many more children he would like, he replied:

"I will take what God gives."

AL: "God is creator, but you must think something about it in your own heart."

Jabruddin: " Three children are enough, but only God knows what is ahead of me. I have never tried to stop children and never will. The government is wrong to say that two are enough, only God knows how many children are enough. Even though I think that three children are enough I will do nothing about it. It is up to God how many children I have."

With the exception of one man, all those in Jhakri who say they have enough children have four children or fewer. In addition, the sex ratio of live
children for these men is heavily in favour of sons. All of the men in the Jhakri sample who said they had enough children already have at least two sons. This fits well with the general trend in discussions in which men by and large preferred to have two sons. But I do not believe we are witnessing a marginal process here. Some of the men, rather than stressing that they had enough children were apt to say cynically sometimes that they had too many children. But, as we shall see below, the feeling that they had too many children should not be taken as a proxy for the imminent adoption of some family planning technique.

Mortality

Table 4 summarises the infant and child mortality experience of key informants.

Table 4:
Infant and Child Mortality as a Percentage of all Live Births by Sex of Children, Class and Desire for More Children

<table>
<thead>
<tr>
<th>Class</th>
<th>WANT MORE CHILDREN</th>
<th>WANT NO MORE CHILDREN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>All</td>
</tr>
<tr>
<td>II</td>
<td>0</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>III</td>
<td>27</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>IV</td>
<td>0</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>V</td>
<td>33</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>22</td>
<td>26</td>
</tr>
</tbody>
</table>

Number of Deaths: 196

Source: Key Informants’ Maternity Histories 1983.

Sample men as a group have extensive experience of child mortality. On the whole, a quarter of all children born to these men have subsequently die. Girls are more likely to die than boys (29% against 21%), although the data are not sensitive enough to pick up differences in the survival chances of first born and higher parous daughters.
Comparing those men who want more children with those who do not highlights that those with enough children have lost a greater proportion of girls everborn than those who want more children (32% against 26%). Conversely those who want more children have lost a greater percentage of sons everborn, 22%, than those who want no more, 18%.

The pattern of mortality by class is somewhat more difficult to discern, partly because of the small numbers involved from a demographic point of view. The data suggest that children in class IV have a much greater chance of survival than those of any other class. However, the 6 households in class IV, account for only 11% of children everborn to the sample. It is difficult therefore to attach great significance to this finding. The pattern of mortality experience is otherwise negatively related to class.

Among the more affluent, there is a clear pattern of higher overall mortality among those who want no more children than those who want more. But the numbers of men here are too small to allow any conclusion to be drawn with confidence. However, this relationship disappears among the poorer class IV and V informants, whose mortality experience is more varied than their richer counterparts. Once again the number are small, but a qualitative analysis of the data suggests an underlying trend of greater mortality among poorer informants. For example, five of the eleven children born to the two class V men who did not want any more children have subsequently died. Those class V informants who want more children are at an early stage in their life cycle. Their children are still young enough to be at greater risk of life threatening illness than their older siblings.

The replies of some men to my line of questioning was certainly influenced by recent tragic deaths among their children. Wajid, a class V Teli, had, in the few months before fieldwork began lost a 14 year old son in a sudden illness. There were rumours that the boy had been effectively killed by dispensary staff, who injected him five times in one night before he died. Another of his three remaining sons was sick with similar symptoms when I interviewed him. He himself was sick with malaria.

AL: "How many more children do you want?"

Wajid: "I cannot say, this is for God to decide. I have had four sons which is more than enough, but God has not given me a daughter. Now one of my sons has died and who knows whether the second will live or not?"

AL: "Are the government right when they say two are enough?"
Wajid: "They are right, if I had two children I would be able to feed and clothe them properly. But it is God who decides how many children I will have not the government. They [the government] can take away the power to have children by sterilisation, but they cannot give you children back if they die".

Among the sample men, Mansur, a class III Sheikh, has extensive experience of infant mortality. Of five children born to him and his wife three - two girls and a boy - have died. He farms jointly with his father. He had this to say.

AL: "Are two children enough?"

Mansur: "No, two children are not enough. If you only have two and they die after you are sterilised, then you would be in great trouble. You would have neither a daughter to give (in marriage) or a son to look after the farm and his mother and father. Those who have no children will lie on their charpais staring helplessly at the thatch in their old age. They will be too old to make any money, and will have no one to do it for them."

Zakir, a class V Teli exhibited similar logic when asked similar questions:

AL: "Are two children enough?"

Zakir: "No, if you only have two and then have sterilisation like the government said and they die, then what would you do? If you have lots of children and two die, you will still have some left."

The pattern of mortality is clearer among the sample by religion than by class as the following table shows.

**Table 5:**

Infant and Child Mortality as a Percentage of all Live Births by Religion, Sex of Children, and Desire for More Children

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>WANT MORE CHILDREN</th>
<th>WANT NO MORE CHILDREN</th>
<th>WHOLE SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>All</td>
</tr>
<tr>
<td>HINDUS</td>
<td>6</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>MUSLIMS</td>
<td>31</td>
<td>38</td>
<td>34</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>26</td>
<td>24</td>
</tr>
</tbody>
</table>

Number of Deaths (10) (11) (21) (6) (12) (18) (16) (23) (39)

Source: Key Informants' Maternity Histories 1983.

Looking at the overall pattern, those men wanting more children have lost a greater proportion of sons and a lesser proportion of daughters than those wanting no more. However, a greater proportion of Muslim children have died..."
than Hindu. Thirty-four percent of all children born to Muslim sample men have died, against 14% of Hindu children. There are also large difference in the sex-specific infant and child mortality rates. Among Hindus, the proportions, at 10% for boys and 16% for girls, are relatively even compared to the Muslims among whom 43% of girls everborn have died. Among those Muslims wanting no more children half of all girls ever born have died.

Son preference leaves us with a conundrum to solve though. Why is it reflected more starkly in the Jhakri than the Dharmnagri figures? The sample size is small, and it may be that the different sex compositions reflect this rather than any more meaningful configuration of explanations.

But what do data for the whole village show? If the same level of mortality differential and sex composition, then there is a stronger case to be made that this difference indicates some inadequacies in using a demographic regimes approach to fertility. If we were to accept Dyson and Moore’s argument that marriage distance is a good proxy for female autonomy we would expect Muslims to have have less drastic female mortality rates than Hindus since they marry closer. The fact remains that Muslim rates of fertility and female mortality are both higher than those of Hindus and not only among the sample as table 6 below shows.

Table 6:
Mean Number of Births and Infant & Child (0-4) Mortality Rate by
Religion: Study Villages, September 1985

<table>
<thead>
<tr>
<th></th>
<th>Average Number of Births per woman</th>
<th>Mortality Rate per 1000 Births</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Muslim</td>
<td>Hindu</td>
</tr>
<tr>
<td>All Ages</td>
<td>5.19</td>
<td>4.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Demographically speaking, the numbers in this table are small - 244 ever-
married women and 1136 live births and there are no statistically significant differences. But the village data seem to fit with the picture of higher Muslim fertility and mortality. Additionally, the sex specific rates are higher for girls than for boys in every group, with the Muslim rate being exceptionally high. Almost forty percent of all Muslims girls born die before their fifth birthday. This finding corroborates the sample findings, outlined above, in which Muslim men who said they did not want anymore children have both a higher proportion of sons and female deaths.

Decisions about Contraception

One interesting feature of the interviews is that although men have a clear idea of the number of children they want, they are less clear on what they will do about limiting children once they have reached their desired number and sex composition. A desire for no more children on the part of sample men does not necessarily imply the imminent adoption of some fertility limitation technique. We have already seen in the landholding chapter that some women were already practicing some form of contraception. By definition, however, women married to the men in my sample were not in this group. What factors influence whether they are likely to do so?

The single most important factor is religion. The most important difference between Muslim and Hindu men was in their willingness to use contraceptive techniques. Muslim informants were not prepared to contemplate sterilisation as a method of birth control, whereas Hindus gave this as the method they were likely to adopt when they reached their desired family size and composition. Suleiman is a good example of the Muslim position:

AL: "After you have two sons, will you make some arrangements to stop having children?"

Suleiman: "No it is against my religion to do that, you cannot go around saying that two is enough when the Koran says that god will provide. There is only one instance when we would use pills. After my grandchildren are born, it would look shameful if we had more children. I would use the pill then.

For some Muslim men the Koran Sharif was interpreted to mean that they should not accept sterilisation as a means of birth control, while for others it meant that Muslims should not practice any form of birth control. We have already seen instances of the latter above, where men who said they did not want anymore children also said that they would not practice any form of family planning. Haroon is a good example of this.
Haroon: "I do not want anymore children. Three (two boys and a girl) are more than enough. But what can I do, only God knows how many more children I want, or rather will have."

He went on to say that the Koran Sharif told him that God would provide for children and that sterilisation was contrary to the tenets of Islam. Then I asked:

AL: "If you think you have enough children and it is not against your religion, why don’t you use the contraceptive pill?"

Haroon: "Maybe my wife will not have any more children, and then the money I spend on pills will be wasted, if there are more children, God will provide"

I pursued this point, but Haroon and the other men in the bhaitak were tense and exasperated by my line of questioning. The final comment came from Yasin, Khalil’s father’s younger brother who was also present:

"Muslims can use pills, but they will not and that is that. No matter how many men you ask, you will get the same answer."

Haroon: "The government is wrong to say that two children is enough"

AL: "But you think that three are enough."

Haroon: "This is true, but only God knows how many children are enough. I will tell God in a prayer that I want no more children, but if they come, then they come"

This line was not however taken by all Muslim men who wanted no more children. At least two of the men who wanted no more children, had with their wives, tried to secure an abortion for their latest pregnancy (successful in only one case.) Some of the others had tried pills after our visit to the village in 1983.

Khalil has four live children, two girls followed by two boys.

AL: "Do you want any more children?"

Khalil: "Definitely not."

AL: "Why not?"

Khalil: "Why do you only have two or three in your country, because they are expensive? It is the same here. If you have lots of children then how are you supposed to feed, clothe and educate them?"

AL: "Why did you want four children?"

Khalil: (Laughing) "What should I tell you? It was God’s will that I
should have four."

AL: "Why did you not want a different number?"

Khalil: "Two would have been enough, if one of them had been a boy. My children were just born without any planning. Now we have been using the pill for about eight months. We buy it from Bijnor."

The most unequivocal statements of having too many children though came from Liaqat. In 1983 I had a protracted conversation with him about the number of children her had. He is father to six boys and two girls, none of whom have died. He wanted no more than three children, and had gone to the dispensary to ask about family planning after his third child. He was unsure about sterilisation but thought that the dispensary staff would be able to suggest something else, but......

AL: "How many children do you have?"

Liaqat: (throwing his head back to the sky and laughing) "Eight!"

AL: "Do you think that is too many?"

Liaqat: "I will have no more children."

AL: "Were eight children necessary?"

Liaqat: (Laughing) "Are you joking? Of course it is too many."

AL: "What will you do?"

Liaqat: "I will get you to write down the name of some medicine."

AL: "If you did not want eight children, why did you not use some medicine before now?"

Liaqat: "I didn't know about it. I have been praying let there be no more children, let there be no more children, for a long time now - since the third child was born. I went to see the doctor and the ANM (Auxilliary Nurse Midwife) in the dispensary and they told me there was no such medicine. They told me that the doctors were thinking about it but had not come up with anything yet and that I should have sterilisation instead. But I am a farmer and have to work hard and am therefore scared that sterilisation would leave me or my wife weak. The ANM called me about six months ago and said that there was a new sterilisation operation [laproscopy] and that I could have it done in Meerut. She said that they would pay for my wife to go and would pay all her expenses until ten days after the operation. I was ready to go, but then she said that I should bring one other woman from Jhakri in addition to my wife. Bringing my own wife is one thing but asking me to bring the wife of someone else is too much. I have no right, nor have they (the ANM) to tell anyone that they had better not have anymore children. I want no more children, but someone else might want to have lots. I refused and they again told me that there was no other medicine."

He asked me about the pill and I told him what I knew. He said that if he had
known about this medicine he would have used it. Hindu sample men were more likely to consider sterilisation as a form of birth control. For example, I spoke with Pratap, a class III Dhimar. He had already told me that he preferred the idea of a smaller rather than a larger family.

AL: "What does your wife think of this?"

Pratap: "She agrees that we should have a smaller rather than a larger family. She is the same as me in wanting at least one son."

AL: "What will happen then?"

Pratap: "My wife will be sterilised."

AL: "What if your next child is a girl?"

Pratap: "We will then have to see what God has in store for us in the next one. We need to have one son."

Pratap's younger brother Punni, though he exhibited the same logic when discussing family size and composition, was in a better position to make more definite plans as he already has a son.

AL: "How many more children do you want?"

Punni: "I want one more boy. Two boys are better than one as they can help each other and bring their sister home from her sasural more easily."

AL: "What if the next child is a girl?"

Punni: "Two boys and a girl would be best, but even if the next child is a girl, my wife will still be sterilised. You could die waiting for God to give you a son."

Riasat in his mid 20's has one daughter. His wife had had another stillborn daughter the year before and he now wanted one more child - a boy. He was unsure about what they would do if a subsequent child was another girl. He thought that he would try to have a son. He wanted to have at least one son. If his still born daughter had lived, they would certainly have tried for another pregnancy to obtain a boy. But he would not have an unlimited number of daughters while trying for a son.

AL : "What will you do when you have a son?"

Riasat: "I will not have sterilisation, that is against Islam. I will fetch some medicine for my wife from Bijnor. I will buy those goley poley (pills) you told me about from the chemist. What if my wife does not agree? I will show her the fatstick I was talking about earlier. [in an earlier conversation about taking permission
from him to visit her parents he said that if she went to her parents without taking his permission, he would beat her with a bamboo stick]

Like other men in the Jhakri sample, he feels that sterilisation is not possible and intends to use the pill as a method of contraception. Will this be possible? In principle it should be. The dispensary has a supply, but Riasat does not trust the dispensary staff to give him the correct pills at all. This implies a trip to Bijnor to pick them up every time they run out, on his own incentive and from his time, in a busy agricultural cycle.

Part of the key to understanding this I think lies in a basic and well placed mistrust of government family planning services. All men who said they would think about obtaining the pill for their wives said they would fetch it from a private doctor in Bijnor and not from the conveniently placed dispensary. This is part of a more general feature of distrusting government health services, of which people's experience is generally bad.

This is a widely expressed distrust. Consider the following conversation. I had spoken to Khalil about his own fertility plans and then asked him about sterilisation. The ensuing conversation highlights many of the shortcomings and misgivings which many people had about the government medical services on offer.

AL: "Are two children enough?"

Khalil: "In one way it is right."

Nisar, who his cousin, was sitting in the background shaking his head in disagreement and saying it was completely wrong.

Khalil sat back and drew on the hooka, reflecting for a moment, and then continued on the subject of sterilisation.

Khalil: "It is wrong in this way though. The government say that two are enough, they persuade you to have nasbandi, they take away your possibility of having any more children. Then when your children were sick, they never look at you. If you go to the hospital and give them the 50 paisa for the prescription, then they will give useless pills which were all broken and powdered and old. They would not give you good medicines unless you went privately and paid them four or five rupees. If a man had nasbandi, and his children became sick then you could expect the government to do nothing and they would die.

The government have made this rule for their own benefit, to solve
their own problem, they were not thinking of the poor at all....they have made their own law that two is enough to suit themselves, and then they force sterilisation on people. Until they start to think of the poor, and what they need, then sterilisation is no good. people do not want a thousand children. Who wants a lot of children these days? Who can afford them? But people do not like sterilisation, because they think the governemnt will not look after them afterwards."

Denial of medicines and rough treatment at the hands of the medical services was something which villagers had in common, they had come to expect nothing else. Anyone would tell you of their experiences at the government medical centres. Santosh for example presented herself for ante-natal tetanus injections, and was told she could have them - if she volunteered for sterilisation after the baby was born.

Part of the reason for not adopting sterilisation as a means of family planning, or using the government health service as a source of other forms of family planning, is that the services themselves have done nothing to prove that they can meet any need other than their own. If a villager goes for advice on family planning other than sterilisation, the health worker is likely to suggest precisely the latter. If you accept, the health service will not look after your children when they are sick. Furthermore, both sterilisation and the pill require proper pre and post-adoption check-ups, neither of which was available to villagers at the time of the study.

The pill is not seen as a spacing contraceptive by the men in either village. It is seen as an alternative terminal method to sterilisation. The men liked the idea that as long as their wives took the pill they would not conceive but that if any of their children should die they could have others if necessary. Only Ghulam saw the pill differently. He had already confided to me that he thought he had been married too early. He was studying M.Comm in Bijnor and felt that early marriage and childbirth would interrupt his studies. Whenever we spoke about the issue of children, Ghulam was always very secretive and would creep around and look up the sides of buildings in the best ham tradition , to make sure no one would overhear, before embarking on a conversation. He was afraid lest his father should find out that he was not too keen to have children this early in his marriage. We were sitting out in front of his father's bhaitak. I asked him how many more children he wanted. He put his finger to his lips to quiet me and getting out of his chair crept stealthily into the bhaitak to make sure that no one was asleep inside. He came back and looked up and down the road. Leaning right across to me he whispered:
"It would have been better if I had not been married at all. I was not ready for it. I told my father so, but he went ahead with it anyway. I don't want to have too many children, I would be bogged down by them."

AL: "So how many do you want?"

Ghulam: (grinning) "At least a hundred!"

Entering into the spirit of this I made to write his answer down.

Ghulam: "No! No! I'm only joking. Two or three children are enough. It does not matter whether they are boys or girls. Then I will see what God has in store for me."

AL: "When you have the number of children you want what will you do?"

Ghulam: "You mean like nirodh (condoms) or tablets? [he lowered his voice further still]. We have used tablets once already. They were called something like UG40. I think they were for twenty-one days. We used them only for one month. I bought them myself in Bijnor without my father's knowledge and I will get more."

I was intrigued and asked more, whose decision had it been? Did his wife agree? What if she hadn't?

Ghulam: "The decision was mine. My wife agreed with me. But if she hadn't it would have made no difference. I would have made her eat them in front of me. This would have been difficult though, she might have told my father."

Ghulam was highly motivated not to have too many children too quickly, but as his own story suggests, he was not really in a position to be completely in control of his wife's fertility, or to have the number of children he wanted. In fact his experience of using the pill is typical of those one or two sample men who had used it with their wives. Its use was usually discontinued after a short time either because it was too inconvenient to go to Bijnor every time the supply run out or its further use was unacceptable because it was deemed, through its effect on the menstrual cycle to cause heating illnesses associated with the retention of menstrual blood.

In these circumstances, it would appear that Hindu men are more likely to have their wives adopt sterilisation as a method of contraception. In no case are Muslims willing to try this. Sample Muslims were attracted to the idea of the contraceptive pill, but under existing conditions are most likely to be unable to obtain timely supplies if they choose to adopt it as a method.

However, it should be assumed that once the decision to adopt sterilisation has been taken that it will immediately be followed through. Perhaps the last
word on this should go to Mahipal. In the monsoon of 1985 Mahipal considered his family complete. He thought that he would send his wife to be sterilised in the winter. It was not possible to have the operation done in the monsoon. He said this was partly because they would need money not only for the operation itself, but also for medicine and sustaining food during the post operative period. This money was not available to them in the monsoon, the slackest agricultural period of the year.

Mahipal: "We have milk from our own buffalo and we could make some ghee [clarified butter] but would need to have money in case something went wrong. The monsoon is not a good time of the year to have an operation. the weather is bad. The wound could become more easily infected at this time of the year than at any other. We have not made a decision about exactly when yet. We will wait and see when we have the money and have the operation done then."

Just as the interview was finishing Mahipal added another reason for waiting, the risk of his infant son, which he had desired for so long, dying during his first six months of life.

"Look at my children! They are running around half naked! If I had had boys in the beginning we would have been much better off. We will be better waiting till the winter in every sense before having the (sterilisation) operation done."

I asked what he meant.

"Well, in addition to what I have told you before, my son is weak still. If he is stronger in the winter and everything else is better then it will all work out"

Conclusions

The first conclusion to be drawn from the data presented above is that as a group, sample men did not want an unlimited number of children. With the exception of three class II men, all had a clear idea of the size and sex composition of family which they wanted.

Those who initially said they wanted no limit on the number of children they had were mostly Muslims, and in discussion the reasons for this were either that they thought it against Islam to use any form of family planning, or in a few cases, some aspect of their own family history and experience led them to want a high enough number of children for this to appear unlimited.

It is not surprising that men who said they had had enough children did not want an unlimited number of children and most of these thought that two boys and a girl would have been enough. But of these men, only one has fewer than
What is perhaps more surprising is that among the Dharmanagri men even those men who said that they did not have enough children wanted to limit their family size. They were in an early stage in their life cycle. They too envisaged limiting their family size when their family had safely grown to a size and composition which they deemed to be acceptable.

Secondly, a factor which strongly influences completed family size is the sex composition of surviving children. Not one of the men in my sample regardless of any social indicator by which they might be grouped, thought that boys and girls had the same worth. They all prefered boys. They all expected that their sons would stay at home, while their daughters, when they reached puberty would be married and move away from their parental home taking a substantial dowry with them. The former could be expected to make some contribution to the household in their adult years while the latter could not.

Dowry as suggested above (in Chapter 3), does vary with wealth. But it also has a minimally-defined level below which it cannot fall without the marriage chances of daughters being harshly affected. Neither does this outflow of wealth stop with dowry, it continues afterwards in numerous prestations and the general ethos of asymetrical relations between bride givers as inferior and bride takers as superior.

But, the marriage of a daughter not only represents the outflow of a substantial amount of wealth, but the permanent removal of women from their natal households. This is why people talk about their houses becoming empty on the marriage of a daughter. They mean not only wealth, but people and possibility of the continuation of family line. Daughters produce heirs not for their own parents but for the parents of their husbands.

In these circumstances, sons are essential not only to the continuation of family line, but, in the absence of any other form of security, to ensure that parents have some degree of rest in their old age. Some of the large family sizes in the sample can be explained by this fact alone. Mahipal had, by his own definition, to have too many children, in order to secure two sons.

It is worth noting, however, that poorer men had fewer expectations on this front than their richer counterparts, a fact which is born out by the more
extended intergenerational structure of richer households. Poor men, by and large, set up house on their own after marriage. While the sons of the more landed, as suggested in earlier chapters, are more likely to remain in joint production with their parents or siblings.

Most men wanted to limit their fertility, after they had safely reached a certain number of children. This is complicated by the fact that sons are preferred to daughters, so that in order to gain a certain number of desired sons, it may be necessary, if earlier parity children are girls, to have several children more than desired, in order to secure the required number of sons.

The sample data would also suggest that religion is a contributory factor to fertility desires. Muslim sample men reach larger family sizes before they decide that they want no more children. In addition Muslim mortality rates for both boys and girls, but especially the latter are higher than their Hindu counterparts, both for the sample and the entire population of both villages.

I have not undertaken any detailed analysis of why this is so and to what extent the two phenomenon are linked. However, conversations with Muslim sample men would suggest that there is a positive link between the two, although the direction of causation is not clear. Muslim men did, however, state that a reason for not adopting sterilisation was the possibility of further child deaths afterwards.

What are the implications of these findings for the economic theory of fertility? Firstly, it would seem that there is a positive relationship between fertility desires and class. Only three men in the sample wanted an unlimited number of children and these were all class II men. However, among the rest of the sample there is a widely held view that while some children, especially sons, are necessary, there is a limit to this. There is no evidence to suggest that the poor’s knowledge of contraception is any worse than their richer counterparts among sample men. Mortality, a supply factor in economic terms, and not included in the demand for children, seems to have a positive effect on desire for more children.

Perhaps the single most important conclusion to be drawn from the data presented above is that there is wide variation both in experience of fertility and mortality. Such wide variability, cautions against any monocausal theory, whose assumptions are cast so widely that they explain
everything and nothing at the same time. Conditions in the one village which Mamdani studied in the Punjab in the early 1970’s may have favoured high fertility, but the data presented here suggest that a supranational theory of peasant pronatality is immoderate.

In terms of Mamdani’s framework, sample men do not agree with his conclusion of more means better. All sample men but three suggested that family limitation at some level was benificial. Of those three who did not, one quoted religious reasons rather than economic ones as the spur to unlimited fertility. Neither did sample men agree that boys and girls are of homogenous value to their parents. In the next chapter I want to see if the views of women differ from those of their menfolk.
Chapter 10: Women and Fertility

"When I knew I was pregnant, I was very happy! When I have so many children already, should I be happy? But when it has happened, then what should I do? It's God's decision, what can I do about it? I don't want anymore children, have I only a few? When do men ever think about this, and what can we women do?"

Latifan, mother of eight children.

The last chapter showed that sample men in Dharmnagri and Jhakri did not want an unlimited number of children. Nor do they consider their sons and daughters to be of equal value to them. One central question remains to be answered. Do men and women always want the same number of children?

This issue is of considerable theoretical interest, since some recent studies suggest alternative conclusions on this issue. Mead Cain (1984) explicitly analyses the effect of son preferences on fertility and has a great deal of explanatory value. His model, based upon risk-avoiding strategies, is heuristic in that it alerts us to the inadequacies in a model which takes little account of uncertainty. His treatment includes the usual argument that a larger than desired number of children may be born to couples in order that they may have a desired number of surviving sons. It goes beyond this, however, to look at the need which women may have for sons in societies where, because of restrictions on their movements, they are not able, in the event of widowhood, to earn an independent living.

His criticism of Dyson and Moore (1983) is that they build their argument on the assumption that women, by and large, desire to have fewer children than their husbands (assuming that no one else affects the decision). If women had more autonomy, therefore, they would choose to have fewer children.

Cain maintains that this is mistaken. Lower fertility in the South India where women have more autonomy comes not from different fertility desires, but from the effect of underlying effects of other variables on fertility. That is through differences in the age at marriage operating through education, which is allowed in the south because of lesser patriarchal control over women, or patterns of cohabitation which may vary by landownership (1982, 1984).

Cain argues then, that the family is a corporate unit and as such, women are likely to have similar fertility desires to their husbands. The rest of the paper then concentrates on showing how even when women have more autonomy,
the effect of this on fertility can be mitigated by the form of the family. For example women in Jamaica have a greater degree of autonomy than women in Asia, but still have a high fertility rate because they enter a number of unions with men who take no responsibility for the bearing of children.

Cain’s argument can be summarised as follows: the pattern of fertility we are presented with on the subcontinent can be partly understood in terms of the need to reduce the risk of destitution and overwork in the later stages of life. Sons provide an insurance against such risk and are therefore desirable. Other uncertainties – such as the defaulting of sons on their duties to look after parents; infant and child mortality; the birth of daughters etc; means that fertility is often higher than one would anticipate if risk factors were not taken into consideration. To understand these effects fully, one must take both the autonomy of women and the structure of marriage into account. Briefly stated, this is presented by Cain as the “strongest conjugal bond and the least independence for women give the highest fertility rates.” There are no fertility reduction success stories in countries where the structures of patriarchy are strong. For Cain, the family is a corporate unit in which women have a considerable interest and therefore their fertility desires are likely to be similar to those of their husbands.

Cain’s argument is a tempting one to accept for the sub-continent, as it locates the fertility desires of women at the level of structure. But is it really acceptable to say that the fertility desires of women in Dharmnagri and Jhakri are similar to the men with whom they live?

The shortcoming in Cain’s analysis is the assumption that considerable interest means that women have the same interests as men within the family. This is a considerable leap of faith. There is no logical connection which leads one to the conclusion that having a considerable interest in the family should lead women to have the same fertility desires as their husbands. Socialists in recent writings (Whitehead: 1981; Leonard and Delphy: 1984; Benria and Sen: 1982) suggest that the family is a considerable area of interest for women but is also the immediate locus of their oppression.

At the heart of Cain’s criticism of Dyson and Moore’s argument is that the latter’s marriage distance analysis is misguided, because it assumes that if women were more autonomous, they would choose to have fewer children. Cain argues that at the level of population growth, autonomy is likely to operate through proximate variables, such as the effect of education on age at marriage rather than through desires and autonomous action to limit
fertility.

Women clearly have an interest in having at least some children. At present, there is little viable alternative to marriage for most women in India, and women therefore must make the best they can of it. Their future power and well being depend upon having children. Like their husbands, they will depend upon their sons to provide for them in their old age. The number of sons they have will also determine the number of daughters-in-law they have control over when these sons are married. But does this allow us to say that women’s fertility interests are the same as their husband’s and that there is therefore no conflict of interests between men and women within the family?

Here there is more than academic interest. If we are to understand what we might effectively do to improve the position of women in India, we must properly understand the structures and processes within which they live their lives. At the level of policy Cain’s analysis is not helpful. He maintains that there are no success stories of fertility decline where the structures of patriarchy are strong, but makes no analysis of the meaning of structures for women, in their everyday lives, within the family. That women cannot make a living outside the family affects those women inside the family too. His comparison of Asia to Jamaica is interesting and alerts us to the fact that merely changing one aspect of structure or the other will make little difference to fertility.

The important question arising from this is if Asian women had more autonomy, would they choose, ceteris paribus, to have fewer children? What light does an examination of data collected from sample women cast on this issue? The rest of this chapter forms an examination of this question.

It is not my intention to examine the fertility desires of women on their own, in the manner in which those of men were examined in the last chapter. There are two main reasons for this. The first is that my main focus in this thesis has been the fertility rationale of men. In this context, a comparative analysis of the views of men and women serves to explain more than a replication of the last chapter, substituting women for men would. This is not meant to be a denial of the importance of these views. Jeffery, Jeffery and Lyon (forthcoming) provides for a fuller treatment of these views. Here the focus is on fertility decision-making.

The second reason is that the data relating to women was collected, not by me, but by other members of the Social Organisation of Childbearing Project.
As I have already outlined, the main focus of that project is the social organisation of childbearing. Consequently, the data collected from women has a different direction than that collected by me from men. This makes a direct comparison of the views of men and women on specific topics impossible.

Sources of Data

The women whose views form the basis of the fertility analysis in this chapter are all key informants, the wives of the men whose views were presented in the last chapter. These women were selected into our sample primarily because they had either recently delivered a baby or were pregnant when fieldwork began. Information on fertility was collected from these women during the course of an interview, conducted by research assistants or Patricia Jeffery which included questions on their most recent experience of pregnancy and childbirth. In relation to fertility, the women were specifically asked whether or not they were happy to find themselves pregnant during their most recent pregnancy and whether they wanted more children.

The rest of this chapter takes the following form. Firstly the number of living children which women with different fertility desires is examined. Secondly, I examine whether the desire for further children among sample women is the same as that of their husbands. Thirdly, the circumstances in which these views coincide and vary are examined. Finally, some conclusions on fertility decision making are drawn in the light of these data.

Number of Living Children

Table 1 summarises the relationship between the number of children women have and whether they want more children.
Table 1:

Total Number of Children and Mean Number of children by Desire for More Children

<table>
<thead>
<tr>
<th>No of Women</th>
<th>Total Number of Children</th>
<th>Mean Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>WANT MORE CHILDREN</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>WANT NO MORE CHILDREN</td>
<td>24</td>
<td>54</td>
</tr>
</tbody>
</table>

Total 37 62 57 119 1.7 1.5 3.2

Source: Key Informants 1982-83.

It is clear from the table that those women in the sample who want more children are at an early stage in their childbearing careers. In comparison with the men as a group, it is interesting to note here that women as a group say that they want more children at lower parities than men. The average number of live children for men in this category is 2.6, for women the figure is only 1.9.

In common with men as a group, women who want no more children have on average 4 live children with almost exactly the same sex composition as the men. In short, these women are at greater parities than those who want more children.

Do Women and Men want the Same Number of Children?

It is difficult to arrive at the correct degree of subtlety in such an analysis. It would be wrong to characterise relationships between men and women as being interests ranged against each other at all times. Structural factors working against the interests of women have already been outlined in a previous chapter: isolation; separation of consumption interests; control over resources; age and control over sexuality; do affect women in various ways. One must bear in mind though that any attempt to describe the complex ways in which these factors find their way into the daily behaviour and expressed views of informants is likely to be overdrawn. However, the following table illustrates that the views of women on fertility do differ.
from those of men outlined in the last chapter.

Table 2:

Numbers of Sample Men and Women by Desire for More Children

<table>
<thead>
<tr>
<th></th>
<th>WANT MORE CHILDREN</th>
<th>WANT NO MORE CHILDREN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEN</td>
<td>24</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>WOMEN</td>
<td>13</td>
<td>24</td>
<td>37</td>
</tr>
</tbody>
</table>

It is clear from this table that sample men and women do not have the same fertility aims. A greater number of sample women than men are inclined not to have any more children. However, this aggregate view, is too simplistic to tell us much about what these differences mean in practice. If we introduce religion into the analysis, the picture is that presented in table three.

Table 3:

Numbers of Men and Women by Desire for More Children and Religion

<table>
<thead>
<tr>
<th></th>
<th>WANT MORE CHILDREN</th>
<th>WANT NO MORE CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Muslims</td>
<td>Hindus</td>
</tr>
<tr>
<td>MEN</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>WOMEN</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83.

This table indicates that while a smaller number of women than men want more children overall, only 4 Muslim women, less than a quarter of Muslim women in the sample want to have any more children, while two-thirds of Muslim men want more children. This difference is not so stark between Hindu men and women. Twelve Hindu men and nine Hindu women want to have more children. It is wrong to assume from this data, however, that some Muslim women disagree with their husbands while Hindu husbands and wives agree about the number of children they should have. Table four looks at this data a little more closely by an examination about the extent of agreement between husbands and wives on fertility intentions.
Table 4:
Extent of Agreement Between Husbands and Wives on Fertility Desires

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>NEITHER WANTS MORE CHILDREN</th>
<th>HUSBAND WANTS MORE, WIFE DOES NOT</th>
<th>WIFE WANTS MORE, HUSBAND DOES NOT</th>
<th>BOTH WANT MORE</th>
<th>ALL COUPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Muslim</td>
<td>6</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>11</strong></td>
<td><strong>13</strong></td>
<td><strong>2</strong></td>
<td><strong>11</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83.

Several interesting features emerge here. The first is that, overall, 60% of couples agree on whether they want more children or not. These are made up of eleven couples who agree that they want no more children and another eleven who agree that they both want more children. Between the two ends of this spectrum there is considerable variation. Among the Hindus of the seven couples who are disagreed, in five cases the husband wants more children, and in two the wife. Among the Muslims, none of the women want more children when their husband does not, while eight husbands do.

This variation goes to the heart of the debate outlined above. I intend therefore to spend the rest of this chapter unpacking it in some detail. I will proceed by discussing each of the categories in the table above in a section of its own. In this way some understanding of the effects of these agreements and disagreements and their effects on fertility can be understood. It should be borne in mind throughout what follows that the relative views of husbands and wives were collected at different times, in all except one case.

Both Husband and Wife want More Children

This group, perhaps not surprisingly, has the smallest mean number of boys and girls. Typically, they are at early stage in their married life, when the birth of children is a welcome sign of a fertile union. The table summarises their fertility experience.
Table 5:
Numbers of Children Where Both Husband and Wife Want More Children

<table>
<thead>
<tr>
<th>Religion</th>
<th>Number of Couples</th>
<th>Number of Children</th>
<th>Mean Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Hindu</td>
<td>7</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Muslim</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83.

All of the couples in this table are first or second parous women, with the exception of one Hindu, Promilla, married into a class III household. She has three girls and wants to have at least one son.

"...if there is any medicine to change the sex of my pregnancies I will certainly take some the next time I am pregnant."

Pregnancy early in marriage is welcomed by the other women in this group and is a cause of some celebration. However, the underlying power of the husband to control his wife's fertility is not forgotten. Shakuntala and Shankar form a class IV chamar household. Shakuntala was obviously happy to have had her first child as the following quote from her shows, but compare her views on her own fertility with those of her husband:

"I was happy when I knew I was pregnant and so were the other people in the house. It was my first child and only a year after I was married. We did chati on the fourth day and the naming ceremony on the 11th, when we gave a feast to the whole village. So far my periods have not begun again, and I don’t know whether I will have another child quickly or not. With only one child what can be said [about family planning]. My husband knows Shankar: "I want three children. Two boys and a girl. I already have one boy. This means I want one boy and one girl more."

AL: "What will happen if you have two girls in a row?"

Shankar: "That would be difficult but I would still not want more than three children."

AL: "What will you do to stop children?"
Shankar: "I will have my wife sterilised."

AL: "I thought people in the village were scared of sterilisation."

Shankar: "Why should I be scared? It is my wife who will be done and not me. What about pills? The 28 day type would be good, as after sterilisation, you could have no more children, and one might die."

Durgi and Devinder are part of a class III Sahni household, they have two daughters and would like a son. Durgi was acutely aware of her husband's anger when their last child was a girl. They have also had a son and a daughter who subsequently died.

Durgi: "I was happy to be pregnant again. Two of my children had died and we also did not have a son. When I had a girl, we just did the chati and the naming ceremony, nothing else, for there was already one girl and now we had another. My husband thought so badly of this that in his anger, he did not come to visit me for three days. I want to have one boy at the very least and so does my husband. When I am pregnant again, I will take medicine to ensure the birth of a boy."

Devinder: "It is essential to have one boy."

AL: "Is it better to have two sons?"

Devinder: "If they came first and then a girl, it would be best. But now I have two daughters and a daughter and a son have died. But it would be stupid to go on having girls and hope for a boy and so have ten girls. Ask me how many children I want next year."

AL: "What if the next child is a boy?"

Devinder: "I will think about having my wife sterilised. My wife agrees with this and will stand by what I say."

Among the Muslims in this group, those at low parities, have similar opinions to their Hindu counterparts. Take Asghari, living in a class II Sheikh household. She has one daughter. She also suffers from tuberculosis.

Asghari: "This is just my first child so what can I say about other children? I want only a few children, but I have not said anything to anyone yet."

Listening to her husband Ahmad talk about fertility, one is left wondering whether Asghari will find herself in a similar position to those women above who want no more children but whose husbands will not contemplate family limitation.

AL: "How many children do you want?"

Ahmad: "It has nothing to do with me, I will take what God gives me."
It does not matter whether it is a hundred or two hundred....I have no power in this, God will give, I will take"

In her answer, Ruxana, married to Riasat, a class III Teli is aware that having given birth to only one child, a daughter, she is at too early a stage in her maternity career to have any influence over her husband in this matter.

"So far I have just one child, what can I tell you about other children? They all come from God and that is why I cannot say anything and also I cannot say anything to my husband yet."

Her husband Riasat's ideas on family size are, as we saw in chapter 9 a little more formulated:

"I want to have one more child, a boy [after that]...I will not have sterilisation, that is against Islam, I will go to Bijnor and get my wife some pills. My wife is agreed. If she is not I will show her a fatstick [beat her]."

Wife Wants More Children and Husband Does Not

This is the smallest grouping among the sample. There are no Muslim couples in this group, and only three Hindu couples. These are characterised by small family size relative to the two groups discussed above as the table below shows.

<table>
<thead>
<tr>
<th>Religion</th>
<th>Number of Couples</th>
<th>Number of Boys</th>
<th>Number of Girls</th>
<th>Mean Number of Boys</th>
<th>Mean Number of Girls</th>
<th>Mean Number of All</th>
</tr>
</thead>
<tbody>
<tr>
<td>HINDUS</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

This group is also the most indeterminate in relation to fertility desires. For example Tarabati, a class IV chamar told us that she wanted one more son, but we were unable to ascertain why this should be so. She already has two sons and a daughter. When I interviewed her husband, Tulsi, there was a considerable crowd in attendance when he said he was thinking about having Tarabati sterilised as he wanted no more children. This led to a general
discussion on sterilisation, which was interesting, but the circumstances were not conducive to an intimate conversation with Tulsi.

One of the women, Viramvati, has two daughters and was pregnant with her third child at the time of her interview. For both her and her husband, their future fertility plans were contingent on the outcome of the latest pregnancy. Her husband was inclined towards having no more if the current pregnancy turned out to be a son and Viramvati towards having one more after the current pregnancy.

The most definite conclusion which can be reached about this group is that it is the smallest of all four, containing only three couples. This reasonably indicates that as a group, women are not so pronatal as their husbands.

Neither Husband or Wife Want More Children

Table 7 below summarise the number and sex of children which couples in this group have.

<table>
<thead>
<tr>
<th>Number of Couples</th>
<th>Number of Children</th>
<th>Mean Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Hindu</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Muslim</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Key Informants 1982-83.

This group forms 30% of sample couples. On the whole they have as a group more mean live children than those outlined above where the husband wants more children and the wife not. Among this group, the Muslims have fewer live children than their Hindu counterparts, but the sex ratio of their children is weighed more heavily in favour of boys. They have more than two live boys for every girl, compared to less than one among the Hindus.
This is partly explainable by the fact that two Hindu couples have a larger than average number of girls. One of these couples is Maya and Mahipal, who as we have already seen in the last chapter, had daughters first and kept having children in the hope of having a second son. The other couple includes Adesh, who is married into a Rajput class II household. She has five live girls and one son and had this to say about her last pregnancy:

"I was not happy when I found out I was pregnant for it was after seven years that I became so. If this girl had been a boy, then things would have been better, but it is not my fate to have two children. I do not want anymore children. In trying to have a son another girl has come."

It was also clear from my conversation with her husband, Ashok that he did not want more children either. The couple considered themselves menopausal and had never used any family planning method nor would they.

This raises the question of what couples who are decided they do not want anymore children are going to do about contraception. Other Hindu couples were not so clear about their intentions. Urmila for example, has two daughters and two sons. She and Udayan her husband, want no more children, but are scared to have sterilisation.

Urmila: "I do not want any more children at all...neither does my husband. I am frightened of having any operation or the copper-T. My husband does not want me to have the operation either. I will get medicine from a lady doctor in Bijnor to lengthen the time between my pregnancies"

Her husband Udayan was less sure, even about that. He was sitting with some friends when I asked him what he would do to stop having children.

"I'll use local medicine what else."
Friend: "What kind will you use?"
Udayan: "I don't know - that stuff they use in the temple."
Friend (to me): "There write that down he’ll use local medicine but he doesn't know if there is any!"
Udayan: "No! No! what about neem leaves mixed up with grass and all mixed up into a paste?"
Friend: "Sure!"
Udayan: "There'll definitely be some. Here write this down. I'll go to a doctor and ask him to give me some local medicine so we
don't have any more children."

AL: "Why not have the [sterilisation] operation done?"

Udayan: "Once they start playing about with your insides you would always be ill"

AL: "Does your wife agree with you on this?"

Udayan "Yes."

AL: "What if she was not?"

Udayan: "I am the boss in the house, she will do what she is told."

Among Muslim couples in this group, sterilisation was not an option at all. No Muslim couples said they would consider this. It was against their religion. The interpretation of Islam in relation to contraception for some men sometimes meant that although men did not want any more children, they were not prepared to contemplate any form of contraception. Take Imrana and Irfan. Neither wants more children, but Imrana is prepared to try some form of contraception, Irfan is not.

Imrana: "I do not want any more children. I have enough, but what does my husband know of the difficulty this causes me. He does not want me to have treatment so that I do not have more children."

Irfan: "I do not want any more children I have enough, but is has nothing to do with me. God gives and God takes away."

Even in cases where the husband does agree to the use of contraception, where it is not a once-of treatment, like sterilisation, logistic problems can stand in the way of a lasting contraceptive effect. Khalil and Khurshida, a class III Muslim couple had decided to use the pill. Khalil said:

"I definitely don't want any more children...two would have been enough if one had been a boy...We have been using the pill. I bought it from Bijnor."

Khurshida during her interview said:

"I do not want any more children. I have taken pills, but when they were finished, my husband did not bring me any more. I am six weeks pregnant."

Even when husband and wife agree on having no more children there is still the possibility that they will not be able for one reason or another to practice contraceptive techniques which have any lasting effect.

Husband Wants More  Wife Does Not
Thirteen couples, accounting for 35% of the sample, fall into this category. Of these, five are Hindu and eight are Muslim. The numbers of living children they have are summarised in table 8 below.

Table 8:
Numbers of Children among Sample Couples Where Husband Wants More and Wife Does Not

<table>
<thead>
<tr>
<th>Number of Couples</th>
<th>Total Number of Children</th>
<th>Mean Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Hindus</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Muslims</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

Total 13 27 21 48 2.1 1.6 3.7

Source: Key Informants 1982-83.

Overall, this group has 3.7 living children, of whom 2.1 are boys and 1.6 girls. Perhaps the most striking feature of the table is that while both Hindus and Muslims have a similar number of children, the Muslims have a larger mean number of sons than daughters.

The women in this group stressed the effect on their health of bearing large numbers of children. However, they stressed that it was their husband's decision rather than their own how many children they would have. This raises the question of the extent to which women are prepared to keep on having children because they want to, or because their husbands want them to. For some women at least this was very clearly a question of power. Take the case of Santosh for example. She was pregnant with her first child, when I asked her whether she wanted a boy or a girl. She thought for a few seconds and said:

"I want to have a boy"

AL: "Why?"

Santosh: "The name of boys is big. When they are born there is singing and dancing, lots of presents. My husband wants a son. This
will make him happy. If my husband is happy then I too will be allowed to be happy."

The baby was a girl, and two years later Santosh was pregnant again. This time I spoke to Santosh and Sunil together. The conversation was harrowing, as Sunil was goading Santosh by suggesting that she broke rules of acceptable behaviour surrounding visits to her mainka. He said specifically that she had gone without his permission and that he had gone to fetch her back and beaten her with a stick. Santosh was crying bitterly and exploded that it was not funny, especially when she was trying to be a good wife in the face of adversity. She said that she could die here and he would not go and tell her parents. He had not allowed her to go home for months on end.

When I asked how many more children they would have Sunil was clear enough. He said:

"If this child is a boy then we will have Santosh sterilised. If not then we will have just one more to see if we can have a son."

Santosh though, did not find pregnancy easy. Her first pregnancy had ended in miscarriage and she suffered stomach pains throughout her last pregnancy. The current pregnancy was similar. When she heard her husband's view, she let go a long and weary sigh and said in a quiet and tired voice, while pointing at their daughter, who was sitting on the charpai with us.

"Even if we have another one like this, let's still do it [have sterilisation] let's have no more after this."

Another Hindu woman in this group is Lakshmi. She is the only woman in a household shared by two Sahni brothers. Their’s is a class III household. She is the fifth or sixth wife of the younger brother. The elder brother has one daughter aged about twelve, but his wife is now dead. All three adults in the household were happy that Lakshmi was pregnant. But when the baby was born a girl, her husband's elder brother was so angry, he locked the grain cupboard and refused Lakshmi any food. He had wanted a boy. Celebrations for the birth were kept to a minimum. When asked how many more children she wanted Lakshmi had this to say:

"I have just one daughter aged 8 or 9 months, and even yet my periods have not started again. That is why I have no idea about how many children I should have or how many boys I will have. I do not know how long it is between my pregnancies. I will only know this when I am pregnant the next time... I do not know anything about this. It is my husband's decision. I cannot say anything about this matter.

Her husband, Lalit, had the following to say.
AL: "How many more children do you want?"

Lalit: "It is up to God really. But I want to have at least one boy. Maybe I could even have two."

AL: "What if God gives you six?"

Lalit: "I don’t want that many. After I have one or two boys I will have my wife’s sterilisation operation done."

AL: "Does she agree with this?"

Lalit: "It does not matter. I am her boss and she will stand behind me if I say what I want."

For these women, the ability to influence their husband’s decision is crucial. For the Hindu women in this group, having some form of family planning is at least negotiable, even if the outcome was not always favourable. This is not the case for Muslim women in this group, who as well as having to face the power of their husbands, also had to contend with the power and ideology of Islam. Maqsudi provides an apt illustration. She is a Sheikh married to Mansur and lives in a class III household. She has had five children, only two of whom are still alive. In 1983, she wanted no more children. She highlights the lack of control, which women have in this matter.

Maqsudi: "I do not want any more children. These which I have are enough. But it is a matter for my husband. If he fetches me contraception, then that’s fine, what can I do on my own? I have said nothing to my husband, but I will talk to him. If my husband does not listen, then I will be able to do nothing. With my sas the question is this: if my husband gives the medicine, what can she say?"

Compare this with what her husband had to say to me on the subject.

"However many children there are, it is still not enough. It is God’s will how many children we have and when he gives them he will also provide for them. My wife agrees with me on this. We have never used any contraception, and we never will."

This raises many issues. That Maqsudi can do nothing without her husband’s permission, is restricting in the extreme. She has no money with which to buy contraceptive items herself and she has not the freedom of movement which would allow her to do this undetected anyway. She must live her life in her husband’s haveli and stepping out of line on this issue or any other could have severe consequences. Take the case of Wasila a class V Muslim Teli woman. She has three sons, and in 1983, said she wanted no more children. But as the quotes below from both she and her husband show, she had to take into
account her poverty and the views of her husband on family size and could do nothing about it on her own.

"I was happy to be pregnant again! It is something to be happy about! It is given by God! What should we do, it is necessary to take. Otherwise, I pray and tell God that I have enough children. I cannot have the operation, that is wrong and I am also frightened. Tell me of some medicine. I cannot have an abortion. This is dangerous and we are poor and if anything went wrong I would not be able to have treatment. I have not talked to my husband, he would never be ready to take medicines. If I were to mention it to him, he would swear at me and say if anything has happened then I will beat you!"

Wajid: (her husband) "I cannot say how many children I want, this is for God to decide."

These sample women were very clearly aware of their position in relation to their husband’s. It would be misleading to suggest that they never tried to contracept without their husband’s knowledge. Several wanted to take action to prevent having more children, but were scared of the consequences should their husband find out. One Muslim woman, Zubeida, from a class V Teli family, had tried to prevent further pregnancies, without her husband’s knowledge, by eating carrot seeds, an indigenous abortificiant.

Zubeida: "When I knew I was pregnant what could I do, it was necessary, what else could I do, I was happy. I was also afraid because in previous pregnancies I had had a great deal of difficulty and had just escaped with my life. I did not try to cause a miscarriage but I took some medicine at my mother’s house. I drank carrot seeds so that I will have no more children. I have not told my husband. I did it behind his back. If he gets to know, he will beat me. My husband does not know because he does not permit me to take medicine. But I have to bring up the children. We don’t have much food and not enough workers. When you don’t have enough to eat, your health gets very bad.”

Zakir: "Among the Muslims we do not think about things like family planning. No matter how many children I have God will provide.”

AL: “Do you think you have too many children?”

Zakir: "No, but even if I did, where would I put them after God has given them to me?”

Several Muslim women when saying that they did not want any more children, stressed the effects of childbearing on their health and their husband’s insensitivity to this. This is highlighted in the following excerpt from a conversation with Dilruba a woman living in a class II Sheikh household. She has five children, four boys and a girl.

"I do not want to have any more children! I have to bring up the children, not my husband. Now I am not well either. As many
children as you have - that's just how bad your health gets.

Her husband Dilshad: "I will take just as many more children as God gives......there is lots of room"

Or Imrana:

"I don't want any more children, I have enough, but my husband wants more children. What does he know how difficult it is for a woman."

Her husband Irfan: "More children? I have enough, but it has nothing to do with me, it is up to God"

For the women in this group, the data suggest that control over their own fertility is denied. The key factor is that their husbands are not convinced of the need to stop having children. Control over resources exercised by their husbands is a key factor preventing them from taking part in any form of fertility averting behaviour. Independent covert action to prevent further pregnancies is possible, but very difficult, and not without risk if a woman's husband should find out she has 'gone behind his back' to obtain contraception.

Conclusion

A comparison of husbands' and wives' views on fertility suggests that women are not in control of their own fertility. Even where fertility desires are similar, women seem to defer to the views of their husbands. This seems most prevalent among Hindu women, especially where the women consider that they do not yet have the number or sex composition of children they would prefer. This highlights the fact that, not surprisingly, women do want to have children as borne out by the testimony of women at earlier parities. Women share the benefits of sons with their husbands and gain some power over daughter-in-laws later in their lives when their sons marry.

Husbands and wives are not always in agreement about how many more children they should have. Forty-percent of sample couples did not agree on whether they should have more children or not. Among these fifteen couples, the husband wanted more and the wife not in all but two cases, with disagreement being strongest among the Muslim couples in the sample. In such cases, the husband's control over economic resources is crucial to contraceptive behaviour. Women cannot move around easily, nor have they the money to spend on modern contraceptive techniques.

Deferring to husband was one of the three most common replies to questions about fertility planning. The other two were that there were still not enough
children, usually sons or that the woman was still in a period of post-partum amenorrhoea and did not need to take any precautions just yet but would when the time came. While it is possible for a woman to act 'behind her husband's back' to obtain contraception, while on a visit to her natal village for example, this is a risky strategy for women and not one to be entered into lightly.

Zubeida, quoted above, resorted to an indigenous method of fertility control, probably because she did not have free access to the resources which would have enabled her to pay for the services of a modern practitioner or to buy the contraceptives which he or she would prescribe. Nor could she openly seek such help, her husband would beat her if she acted against his wishes.

Some women did have the support of their husbands in seeking out a modern contraceptive technique, but even this does not always lead to a lasting contraceptive effect. Khurshida and Khalil had jointly decided that they wanted no more children and obtained a supply of the contraceptive pill from Bijnor. When it ran out, Khalil did not go or take his wife to fetch anymore. This highlights the difficulty of women maintaining control over their fertility when they are not free to move around at will or have the resources to make demand for contraception effective.

But even where women do have the key support of their husbands in obtaining some form of contraception and if this support continues to be effective, the medical services on offer by the government are not effective. Muslims in Jhakri considered nasbandi to be against the tenets of Islam as propounded in the village. There have been four cases of sterilisation in Jhakri that I know about. Of these one had been forcibly done with tragic consequences. One man had died after the operation and a woman who had been sterilised without her consent while giving birth in the government hospital in Bijnor had lost her new born child afterwards. None of these events had enhanced the reputation of sterilisation as a form of family limitation.

In Dharmagri, female sterilisation is more acceptable. But there too, the decision to be sterilised is not an easy one. The timing must be right, so that the new child is through the most life threatening period. The season must also be right, the monsoon is no good as wounds are likely to fester in the humidity and an operation put off has more likelihood of not being performed at all.
Chapter 11: Conclusion

Before starting on the conclusions, I wish to point out that the main body of the text closely follows chapter 8 of Jeffery, Jeffery and Lyon (forthcoming), the writing of which I was intimately involved in.

The Demographic Regime

a) Fertility

Fertility rates in Dharmagri and Jhakri are high. On average forty children per year were born between 1976 and 1985, giving a crude birth rate of 42 per 1000 per year during each of those years. Women aged forty-five an over reported an average of between seven and eight pregnancies lasting to term. Fertility rates are higher for Muslim and Harijan, just over eight such pregnancies than for Caste Hindus with just over six. Women from classes II and III averaged eight full term deliveries, while those in classes IV and V averaged seven. These figures may underestimate the case since women may not report some births, especially where the child died soon afterwards. Ethnic differences in social organisation may help to explain some of the difference, while better nutrition and higher life-expectancies provide a partial explanation of higher fertility among the richer households.

Better nutrition and longer life-expectancy may also have contributed to a rise in fertility for the whole population. Women born in the 1930's seem to have had more children by age 35 than those born in the 1920's or 1940's, but the differences are small and the village data on birth-dates deteriorate the further back they go. However older women believe that women these days become pregnant more quickly now than in the past. Changing social practices could certainly be having unintended consequences for fertility. For example, people now tend to marry at an older age than used to be common, but do not wait so long after marriage before cohabiting. Consequently, the age at cohabitation has gone up but not so much as the age at first marriage. These factors could help fertility to decline, but if the age at menarche has fallen, more women are likely to be menstruating, and therefore at risk of pregnancy, when they first begin to cohabit. Similarly, if, as some older women suggest, sons and daughters-in-law set up separate hearths more quickly these days than previously, this could increase fertility in two ways. Firstly while sharing a hearth with his mother, a man's sexual access may be controlled by his mother. Secondly, when living in a separate chula a
woman's responsibilities may restrict her more to her sasural than when she
is sajey and thus less able to visit and stay in her natal home, where she is
sexually unavailable to her husband. This tendency may be re-inforced if
increasing expectations of gifts from her natal to her marital kin on her
return from such visits prevent her parents from asking her home too often.
These factors in conjunction with a possible intensification of women's
work as a result of "green revolution" changes, has increased the time over
which a woman is sexually available to her husband.

Other potential contributors to fertility are: variations in the length of
time children are breast fed; the impact of post-partum taboos on
intercourse; changes in rates of widowhood; changes in seasonal migration and
the impact of better nutrition. I have no evidence to offer on these
factors. But even if the rate of fertility has not been rising, the
population has been growing, largely because of a decline in mortality.

b) Mortality

Children in Dharmagri and Jhakri are raised in an environment which poses
severe threats to their health well-being and survival. The causes of death
are difficult to diagnose, but more often than not, illness and death among
children results from combinations of poor nutrition, intestinal infections
dehydration and infectious diseases. During the fieldwork period in 1982-83,
eight percent of all babies delivered at term died in the first month of
life. But most children die in the following few years. When Patricia and I
returned to the villages in 1985, it was to find that twenty-five percent of
the 78 children born to our key informants after 1980 were dead.

These figures are grim. However, the maternity histories indicate that
infant and child mortality were much worse before 1960. Of babies born
before this date, fewer than 65% lived to see their fifth birthday. Survival
to age five was worst in Jhakri and among the Harijans (55%), while about 75%
of Caste Hindu children survived. The children of class II and III parents
had a better chance of survival (67%) than those of class IV and V (58%). Of
the children born in the 1960's, 74% lived to age five while 82% of those
born in the 1970's did so. Harijan children of the 1970's were almost as
likely to survive to age five (85%) as Caste Hindus (89%), but the chances of
Muslim children were still much lower at 74%. Class differences in child
mortality have all but disappeared.

Even without a rise in fertility, declining child mortality would have
resulted in larger completed families. Women age 45 and over gave birth to more than seven children on average, but have on average only five live children. Older women in Jhakri have had more children than those in Dharmnagri, but because of lower survival rates have fewer than 4.5 children alive compared with five in Dharmnagri. Women in both villages born in the 1940's have over five children still alive, while for younger women in both villages the relatively poor have fewer living children than the relatively wealthy. Women from class II and III households have had more children, more of whom have survived.

Overall, the possible rise in fertility and the definite decline in mortality suggest a recent change in the context of family building. Before 1960, the most pressing problem for couples was probably to ensure child survival. While fear of child death is still a factor, the possibility of having "too many" children has become an issue for parents in Dharmnagri and Jhakri. Family building in such an environment is still a risky business but increasing chances of child survival mean that people now have to consider a changing balance between the benefits of having children and the costs of bringing them up.

The Value of Children

In Dharmnagri and Jhakri, the chula is the basic unit of consumption and often the unit of production as well as the prime source of welfare. Even small children can be useful in this enterprise, tending animals, helping in the fields at peak times, running errands or looking after younger brothers and sisters. However, few key informants contend that the labour of pre-adolescent children is crucial. Even where children do not attend school, they are primarily considered consumers who must be clothed, fed and looked after while making a minimal contribution to the chula's well-being. Most key informants take a longer term view. By middle-age, landed men are unlikely to be in joint production with their brothers and landless men have been alagh for many years. When the ability to work declines, couples need children to grow or earn their daily bread. The alternative is a dismal and lonely old-age.

But this need for children is more accurately construed as a need for sons. Sons learn men's work gradually, working alongside their fathers until, by late adolescence, they perform a full day's work. A son's work should continue to benefit his parents into their old age. From this perspective his work in earlier childhood pales into insignificance. Under prevailing
circumstances in Dharmnagri and Jhakri, sons are perhaps the best form of security which men and women have for their old-age in the absence of pensions, state benefits or substantial savings of any kind.

Not all parents are equally endowed from sons, however. Sons cannot be guaranteed to be dutiful. Landowning parents are in a better position to persuade sons to stay in the joint chula enterprise by refusing to allocate land to them until after the parents death. Post mortem inheritance is the most common form of inheritance for sons in the study villages. Landless parents find it more difficult to hold this kind of sway over their sons and consequently expect the material benefits from their sons to be more short-lived and psychological, long term security if it comes from sons is viewed more as a bonus by this group.

Despite these benefits of sons, very few key informants want to have an unlimited number of children. Only three men foresaw no limit to the number of children from whom they would derive benefit. All of these men are in class II and among the wealthiest in either village. For these men having sons reduces their dependence on wage labourers, while the extent of their landholdings will ensure that each son can still expect a reasonable, viable inheritance. The general feeling among the rest of the key informants is that the benefits of having sons must be weighed against their costs and the responsibility which they have as parents to secure reasonable livelihoods for their children. For those with land the threat of fragmentation dominates, while those without foresee a more bleak future with fewer opportunities for wage labour as richer farmers use more family labour.

The possibility of having daughters must also be added to the family building equation. Given the present structure of work, marriage and residence, there are no economic grounds for wanting daughters in the study villages. After marriage a daughter should go to her "own house" and from that time be under the tutelage of her in-laws. The contribution of a daughter to her natal chula can only be short-lived and in the long run it is her parents-in-law who benefit from her labours not her parents. By and large parents are more worried about placing their daughters well in marriage and the attendant dowry and continued gifts she will take with her than they are happy about the merit which attaches to bringing daughters up. Consequently all the men preferred to have sons rather than daughters as did most of the women.

In summary, almost everyone in Dharmnagri and Jhakri weighs the benefits of
having children - especially sons - against their costs - especially daughters. Among the landed, all but the wealthiest are worried about the effects of fertility on land fragmentation. Among the landless the extra cost of feeding and clothing children who are less likely to provide support in the long run are paramount. Central to these calculations are the different futures of sons and daughters and the possibility that children might die.

As I have suggested above child death rates are higher in Jhakri than Dharmagri and this is reflected in the approaches of Muslims and Hindus to fertility. However, not all of the difference between the religious groups can be explained by differing levels of mortality. In Dharmagri all men were eventually able to talk about family planning and fertility. Indeed, almost all of them accepted contraception in principle and as something which they would contemplate when their need for sons had been fulfilled. In Jhakri, many key informants refused to discuss the issues surrounding contraception in depth at all in 1983. Instead they espoused the view that the use of contraceptive techniques was a sin against their religion which would prevent entry to Paradise in the afterlife. This was true even in some cases where Muslim men considered their children to be expensive and said that if it were up to them they would have no more. According to these men there was no point in asking them how many more children they would have since only God knew the answer. For most men though, the possibility of family limitation is something to be taken seriously.

Contraceptive Decision Making

However, men are not the only people who are affected by family building. Women too have views on this and they do not always co-incide with those of their husbands. The sex and number of children born and dying, the value and costs of children as well as the morality of trying to control fertility can be perceived differently by men and women. To unpick patterns of contraceptive use and intention requires considering the politics of decision making between men and women within the household.

Men maintained, especially in public, that they decided on family planning and connected matters and that their wives agreed with them - one way or another. Nearly every woman agreed that her husband's role is decisive in the decision to contracept or not. Without his support it is difficult for a woman to take action. Women do not have independent sources of income to generate cash which they may freely spend nor are they free to go around as
they please. These factors make it difficult for a woman to take independent action to limit her own fertility. While it may be possible for a woman to take unilateral (and covert) action to limit her own fertility, this is something which she can easily do. Nor is it without risk. Women are subject to their husband’s rule. Different fertility outcomes among key informants arise because husbands view fertility differently, not because they view being master of the house differently.

That said, in 1983, about 60% of couples agreed on the number and sex of children which they would like to have, though some of these couples were at earlier stages in their life-cycles and the possibility of disagreement as they approach their own personal targets for family size cannot be ruled out. For the rest the wife’s desire for family limitation is often frustrated by her husband’s power over her circumstances. Most women would settle for fewer children than their husbands and in these cases, the effect of the husband’s rule is forcefully felt. Even where women do have the key support of their husbands for fertility limitation, this is sometimes not translated into a lasting contraceptive effect, usually because such support is not carried over into practical action. This is especially true when couples choose to use oral contraceptives and menfolk, who are mobile and have cash, do not replenish stocks as necessary.

Among most couples, then, the wife is more likely to want to take action to limit family size than her husband. If she has one or two sons beyond the most vulnerable ages, her husband may agree. The question then arises which method to use. Use of indigenous methods of contraception are conspicuous in Dharmagri and Jhakri by their absence. "Country" methods do exist and most people knew about some method or another, especially among the women, but they were sceptical about their efficacy. Effectively the choice of method is limited to the available modern techniques of contraception.

Of these methods, sterilisation is the one most strongly advocated by the Government – both nationally in policy and locally in practice. In the study villages sterilisation is acceptable only to Hindus as a possible method of birth control. Before 1977, most sterilisations were vasectomies, but after the emergency most sterilisations were tubectomies and more recently laparoscopy has become available. However, both Hindus and Muslims, women and men alike, express strong doubts about the suitability of sterilisation as an option. These doubts come from a combination of the uncertainty that existing children will survive after sterilisation has taken place and from mistrust about the intention and ability of the medical services to provide proper
after-care, both for the sterilised couple, and their children should they fall sick.

From the Government’s perspective, nasbandi is the most cost-effective method of preventing births, as it requires no monitoring infrastructure or distribution services to maintain a regular supply of contraceptives. Further, it does not rely upon skill and motivation in use. Currently, health staff have targets to reach in providing sterilisation cases and face penalties if they consistently fail to provide them. Acceptors also receive "compensation" in cash, officially for lost earnings and medical expenses. The pressure on the local Auxiliary Nurse Midwife to provide sterilisation cases has not escaped villagers' notice. Many complained that the ANM lost interest in the health and welfare of people once sterilisation had been completed. This preoccupation of the health service with sterilisation is an important factor in people's mistrust of it. Villagers, especially Muslims, maintain that sterilisation suits the Government's ends and not their own and consequently resent it.

There is also a widely held belief that sterilisation is physically weakening and that people never really recover from it. Additionally among the Muslims it is considered a sin against God who will provide for the number of children which a couple have been allocated by Him. Only four Muslims have been sterilised and all but one felt under some pressure from the government to have the operation done. In Dharmnagri some people, especially men sterilised before 1977, complained of being pressurised into accepting sterilisation, but others adopted it freely and happily when their desired family size and composition had been safely reached.

From the information available it is reasonable to conclude that abortion is not a popular method of birth control in the study villages. Its unpopularity stems both from its cost, about Rs300 if performed privately and on moral grounds. IUD's were also unpopular during our initial fieldwork period. Only five had been fitted at the dispensary. Their unpopularity comes from fears of problems in use - there is no monitoring service - and from the fact that if problems do arise, the ANM refuses to remove the device unless the woman agrees to have nasbandi after removal. Condoms were considered unaesthetic by men and consequently not in use at all, except in the Bengali colony. This leaves oral contraceptives as a possibility.

In 1982, the ANM denied to villagers that oral contraceptives were available
at all in India, despite the fact that it was possible to buy them at any pharmacy in Bijnor town. At the beginning of the fieldwork period women and men in the study villages had not heard of oral contraceptives. Indeed, some of the men refused to believe they existed even after we had discussions about them. They argued that if such pills really did exist then why did the government persist with nasbandi. However, oral contraceptives were made available at the village dispensary from 1983 and several women, with the consent of their husbands obtained them there. Others, wishing to avoid the pressure of the ANM to have nasbandi preferred to buy them in Bijnor. One or two of the men also said that, on the completion of desired family size and composition, this was a course of action which they would take.

The Current Situation

If I had conducted my PhD. research on my own, I would probably draw to a close at this point. However, my involvement in the wider Social Organisation of Childbearing Project has meant that my understanding of the dynamics of fertility in Dharmagri and Jhakri have been enhanced by two return visits to the field. The first of these took place in 1985 when Patricia and I returned for three months, the second in 1986 when Patricia and Roger returned.

These visits suggest that 1982, when all three of us first went to the study villages, stands as a crucial time in their demographic history. Fertility remained high, but mortality had been declining for at least twenty years. In 1982, the overriding family building concern among villagers was to have sufficient children, especially sons, to ensure that enough would survive the first threatening years of life. Given the overall arrangements locally for production, marriage and residence, this is understandable. These features remain, but the decline in mortality and the change in production associated with the 'green revolution' have improved living standards. For most people, the prospect of land fragmentation, fewer wage-labour opportunities and the prospect of increasing dowry mitigate against previous levels of fertility.

In the early 1980's, these were fears which many key informants had begun to formulate, but, by 1986, it had become a major concern. The more widespread aim of family building now is to have the desired number of sons within a smaller completed family size.

The fertility experience of villagers and its interpretation vary
considerably across groups, as I have suggested in the main body of my thesis, but now only the most wealthy are insulated from the pressure of the changing logic of their own position.

This view is reinforced by the changing pattern of contraceptive behaviour of our key informants, and villagers in general, over this period.

When we first arrived in the village, to study childbearing and fertility, people were suspicious that we had been sent by the government as part of a 'family planning' campaign. Questions about fertility were answered with suspicion, if at all. This gave way to more open discussion of these matters and, among the women, to direct requests - with their husbands' permission - for Patricia's help in obtaining contraception.

The most dramatic change has come from Muslims, who, for perhaps the first time, have knowledge of acceptable alternatives to nasbandi. Overall, including Hindus, contraceptive use was widespread by December, 1986. In 1982, fewer than 10 women then under the age of 45 were effectively protected from conception by IUD, tubectomy or their husband's vasectomy. By 1986, 41 women had copper-T's inserted and a further eight had been sterilised. Another eight women - seven from Jhakri - regularly received supplies of oral contraceptives from the ANM, with others buying them privately in Bijnor. The rhetoric of Muslim men against contraception in 1983 had transformed itself into support for contraceptive action by 1986.

Apart from the changing logic of their own position, some of these changes are partly due to our presence, some to the Government's policy of making contraceptive techniques other than nasbandi more freely available and some to the presence of a new ANM who seems more concerned than was the previous one to provide a more comprehensive maternal and child health care scheme.

The following table compiled from the village dispensary record books shows patterns of contraceptive behaviour in the study villages in 1986.
Table 1:
Contraceptive Behaviour of all Fertile Women
in Dharmagri and Jhakri, September 1986

(Percentages of all women in each group in brackets)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>Muslim</th>
<th>Hindu</th>
<th>Harijan</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>I&amp;II</td>
<td>9 (45)</td>
<td>7 (47)</td>
<td>0 (0)</td>
<td>16 (43)</td>
</tr>
<tr>
<td>III</td>
<td>1 (5)</td>
<td>4 (20)</td>
<td>4 (27)</td>
<td>9 (16)</td>
</tr>
<tr>
<td>IV&amp;V</td>
<td>1 (7)</td>
<td>4 (33)</td>
<td>5 (36)</td>
<td>10 (25)</td>
</tr>
<tr>
<td>All</td>
<td>11 (20)</td>
<td>15 (32)</td>
<td>9 (29)</td>
<td>35 (26)</td>
</tr>
</tbody>
</table>

Source: Clinic Records Dharmagri Dispensary 1986.

Note 1: Number of Women = 133, Fertile defined as ages 15-44

It can be seen from this table that contraceptive behaviour is now fairly widespread in the study villages. However, class I and II combined, the more wealthy, display a more widespread use (43%) than class IV and V combined, the poorest (25%).

I do not have the data to give any idea why these changes have taken place in the villages since our first days there and our last. But these changes in contraceptive practice are dramatic and not without problems. That couples who want to limit their fertility seem more easily able to do so is encouraging, but the modern contraceptives currently on offer all have unsatisfactory side-effects which are borne most directly by women. Nasbandi operations should have after-care facilities but do not, while the use of IUD's and oral contraceptives ought to be preceded by a medical examination for contra-indications, and followed by adequate monitoring in use, but are not.

Furthermore, the medical infrastructure presently available to villagers does not have the resources to provide these services. The Government's pre-occupation with nasbandi highlights its emphasis on population control, not family planning, while incentives for health workers to provide nasbandi cases gives them no reason to prioritise after-care or alternative methods of...
contraception. Villagers in Dharmnagri and Jhakri have indicated in their changing pattern of family building behaviour that there is a need for a convivial and mother-child centred health service, of which family planning can form a part. But such changes in behaviour may be too slow for a Government impatient to bring the birth rate down. The changing situation is highly volatile.
Glossary

Note: Words given here are those used frequently in the text. Words that are used only occasionally always appear with their translation. In transliteration, I have omitted diacritical marks to indicate different values of d, t, r, glottal stops etc., and have made plurals by adding "s".

akeli: (f) akela (m): alone; in this context, after the death of her mother-in-law or (for a man) after the death of his father

alagh: separate; in this context, for a woman, living apart from her mother-in-law; for a man, operating an economic unit separately from his father and brothers

andarki: Gur which is finished into a flat slab shape, usually for the production of boora or "country sugar"

ANM: Auxilliary Nurse-Midwife; originally, nurse with 18 months training, now with 2 years training after 10th grade schooling; usually posted at sub-centres or Primary Health Centres with duties covering maternal and child health, including family planning

bahu: bride, wife; more generally, an in-married woman, especially a son's wife

band: retaining wall or dyke.

bangar: light upland soil away from the Ganges

bigha: unit of land that varies in size in different parts of India. In Bijnor, a katcha bigha is approximately one-fifth of an acre; three katcha bighas equal one pakka bigha. I use katcha bighas, the most common unit in everyday speech

chati: purification ceremony after a birth when festive food is cooked, especially but not exclusively among Muslims (see jesthawn).

chula: cooking stove; more generally, the people who eat meals cooked at one hearth; household.

colhu: gur boiler or manufacturer

compounder: pharmacist
dai: traditional birth attendant

dal: pulses, seeds of leguminous plants, such as lentils and split peas

dhoti: cotton sari worn by Hindu women; also wrap-round lower garment worn by men

Diwali: Hindu festival of lights held at new moon during the month of Kartik (October)

dukh-sukh: happiness-sadness, and news thereof

Id: two Muslim festivals, one at the end of the month of Ramzan (during which Muslims should fast between sunrise and sunset) and often called "sweet" Id because of the distribution of sweetmeats; the other on the tenth day of Zulhaj when pilgrimage to Mecca takes place and often called "goat" Eid since goats and other animals are sacrificed

garam: hot, warm, stimulating; quality of foods, climates, or people, within a theory of humours, not directly equivalent to the physical concept (see badi, thanda)

garami: heat, warmth, stimulation

ghar-jemai: in-living son-in-law, a man who has left his natal village and lives in his wife's parent's house

ghee: clarified butter

gindaurey: golfball sized lumps of finished gur

gur: unrefined sugar

hakim: practitioner of Unani medicine (generally Muslim)

haveli: a group of chulhas

Holi: Hindu spring festival held during month of Phagun (March), marked by breaking of normal social rules (women attack men with powdered dyes and
coloured water, men dress as women etc.)

imam: Muslim religious specialist

jacha: new mother, particularly during immediate post-partum period of "one-and-a-quarter months" or "40 days"

Janamasti: Hindu celebration of the birth of the God Krishna

jesthawn: Hindu ceremony after a birth at which priest removes birth pollution and names the baby (occasionally known as jasuthan)

kanya dan: the gift of a 'virgin' in marriage

khader: low lying alluvial soil next to the Ganges, clayey in texture

khandsari: country sugar boiler or manufacturer

khushi: celebration, jollity, happiness

khushi-ki-bat: matter of celebration

len-den: taking-and-giving; established gift exchanges, normally between kin at life-cycle events such as births and marriages

mainka: of the mother, the mother’s home; a woman’s natal village, where her mother lives

masur: Egyptian lentils.

maulwi: Muslim religious specialist

nand: husband’s sister

nasbandi: "closing the tubes", that is male or female sterilisation

mauluck: the first season’s growth of sugarcane after planting

neem: tree whose leaves have medicinal qualities; also half-trained, quack

paidey: second year’s growth of sugarcane from a single planting
paisa: one-hundredth part of a rupee

pandit: Hindu priest

puja: Hindu prayer offering

roti: bread, generally griddle-baked unleavened wheat bread

Rs: rupee, the Indian currency; in 1982, Rs 18 were equivalent to £1

sajey: joined or jointly; in this context, (for a woman) sharing with her mother-in-law or daughter-in-law, or (for a man) being part of production unit with his father, brothers or sons

saidey third year’s growth from a single planting of sugarcane

sas: mother-in-law (see susri)

sasur: father-in-law

sharm: (negatively) shame, embarrassment; (positively) modesty, bashfulness

sharm-ki-bat: shameful or embarrassing matter.

sasural: father-in-law's village (for women and men)

Shivaratri: Hindu festival in celebration of the God Shiva. Held on the 14th Magh, February/March, in the dark half of the month.

susri: mother-in-law, term of abuse used by women

Tijo: Hindu festival during Sawan (August), when married women return to their natal villages and sing songs while being swung on swings specially erected for the festival

Tikidar: a partner, in the villages, business partners in the operation of a gur boiler.

urad: type of lentil, black when unhusked and white when husked

Note on kinship terminology: kin terms used in Bijnor by Hindus and Muslims conform to the structure discussed by S. Vatuk in "Contributions to Indian
Sociology", vol.3, 1969, pp.94-115. Terminological distinctions between kin (and their associated roles) do not conform to those in English. I have adopted the notation M = mother, F = father, W = wife, H = husband, Z = sister, B = brother, D = daughter, S = son, e = elder and y = younger and inserted them in the text beside the less precise English term where relevant (eg MBD = mother's brother's daughter).
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259


262


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