

UNDERSTANDING POVERTY AND VULNERABILITY IN INDIA'S UTTAR PRADESH AND BIHAR: A MIXED METHOD APPROACH

Barbara Parker and Valerie Kozel (World Bank)

I. INTRODUCTION: POVERTY AND VULNERABILITY

The continued existence of poverty despite decades of anti-poverty programs has led area specialists to the conclusion that poverty is more complex than was initially assumed. Increasingly, they have acknowledged that income poverty is only one facet (though a very important one) of a multi-dimensional phenomenon. Levels of income and consumption are critical to determining who is poor. If, however, one household has better access to health care, educational services and other public services than another household at the same income level, then the two cannot be said to be equally deprived. Particularly in a culturally rich and socially diverse setting such as India, poverty is, in fact, a highly complex phenomenon. It is comprised of economic, social, cultural and political factors that interact to maintain long-term structural disparities in opportunities and resources. To identify the full range of factors involved in poverty and to examine their interaction, it has been necessary to broaden our conventional research agendas and expand our repertoire of methods.

This paper describes a study that examined poverty and vulnerability in one of India's poorest regions by using a multidisciplinary approach in which household economic data and economic analysis were applied in interaction with open-ended qualitative research methods. Conventional stand-alone household surveys, while indispensable for the measurement of income and consumption variables, are not enough in themselves to yield a complete understanding of the complex phenomenon of poverty.

India's states of Uttar Pradesh and Bihar are host to one of the world's largest populations of poor and destitute households. In a country with wide economic and growth discrepancies between states, UP and Bihar are clearly lagging, and (together with Madhya Pradesh) comprise what has been called India's "poverty belt." This area is, therefore, a highly relevant site for examination of the factors that contribute to poverty and vulnerability. Although a definitive analysis of poverty and vulnerability worldwide or even in India are beyond its scope, this paper presents the findings of a study that utilizes a variety of both quantitative and qualitative methods to explore key issues concerned with poverty, risk and vulnerability. Its immediate goal was to improve the focus and effectiveness of the World Bank's India country assistance program; but it also serves as an illustration of the value added by a mixed methodology in revealing the dynamics of impoverishment and downward mobility among the poor and the near-poor.

The slow pace of poverty reduction in some of India's poorest states could be interpreted to mean that poor Indian households experience a constant state of deprivation with little change from year to year. In reality, poverty is often a volatile condition. For many low-income households, a rapid slide into acute poverty and destitution is an ever-present threat. A catastrophic loss of economic well-being can occur for any number of reasons. Adverse shocks occur more often among the poor because they encounter greater risks in terms of dangerous working conditions, poor nutrition, lack of preventive health care,

and exposure to environmental contaminants. What is more, the poor possess fewer cushions in the form of savings and insurance. Thus, not only are adverse shocks more likely to occur among the poor, but the impact of these shocks on overall well-being is generally greater among them, since any given emergency is likely to absorb a larger share of their limited resources in comparison to the more ample resources of the better-off. When a shock occurs in these households, destitution is a common outcome. Once destitute, it is usually difficult if not impossible for the afflicted household to recover or regain basic economic security.

Poverty and vulnerability arise and are maintained as a result of a wide variety of interacting economic and non-economic factors. If poverty is to be reduced in all its varied dimensions, then it is crucial to develop an understanding of how these factors work both individually and in relation to each other. Similarly, if programs are to be effectively designed to promote security and reduce risk for the most vulnerable households, then the processes that cause these households to descend irreversibly into destitution must be better understood.

A. The Mixed Method Approach (Qsquared)

A decade ago, the literature on research methodology was sometimes characterized by an atmosphere of controversy, either overt or covert, about whether quantitative or qualitative research is superior and better suited to the examination of poverty. More and more, however, researchers are attempting to transcend this controversy by looking to both qualitative and quantitative methods for the specific strengths and insights they can bring to the research effort. As early as 25 years ago, groundbreaking researchers were beginning to draw attention to the advantages of the mixed method approach. Evaluation studies in particular have been a fruitful forum for the application of a dual methodology, and a number of studies of poverty-related issues have also begun to test the usefulness of the combined approach.

As one component of a complementary approach, quantitative research is required to ensure reliability and representativeness, while the qualitative component can contribute to validity by ensuring that the questions being asked are appropriate to actual conditions on the ground and that the interpretation of results is accurate. Attempts to approach the “why” questions (“why did you withdraw your daughter from school?”) through survey questionnaires have proved disappointing for the most part. Surveys, by seeking uniformity of response, are generally not flexible enough to probe the motives that lead to behaviors (though the behaviors themselves may be quantifiable). Qualitative research, which is flexible, opportunistic and heuristic, provides more appropriate techniques for this purpose. Because qualitative researchers do not assume that they have advance awareness of the possible universe of responses, they are prepared to follow up any unexpected responses and pursue them – using probing and improvisation – as opportunities to gain new and previously unexpected information.

II. THE UP/BIHAR STUDY OF RURAL POVERTY AND VULNERABILITY

The UP/Bihar Study of Rural Poverty and Vulnerability was a multi-method examination of factors that maintain and exacerbate poverty, and that lead to upward and downward economic mobility, in the study region. Its broad objective was to contribute to the achievement of India's poverty-reduction goals by updating and enriching the current understanding of how economic, social, cultural and political factors work, individually and in relation to each other, in creating and maintaining disparities in opportunities and resource endowments.

The specific objectives of the study were the following:

1. To update and expand our understanding of poverty and vulnerability in rural India, in terms of a) key characteristics of the poor and vulnerable in India's most poverty-stricken areas, b) recent changes in the conditions and characteristics of the poor, and the causes and implications of these changes.
 2. To explore the multiple dimensions of poverty -- including not only the pertinent economic constraints and opportunities, but also the critical social and cultural factors which may influence these constraints and opportunities
 3. To better understand the constraints and opportunities that determine economic mobility (both impoverishment and potential routes out of poverty) primarily from the perspective of rural households, both poor and non-poor.
1. To assess the role and impact of basic services and the anti-poverty programs of the Government of India (GOI) in protecting the vulnerable and facilitating improvements in the economic-well-being of the poor.

III. METHODOLOGICAL APPROACH

A. Overall Organization of the Study

Approach:

The benefits of the Q2 approach cannot be fully realized unless the two methods (quantitative and qualitative) are sequenced such that each can enrich and clarify the results of other. The design of the study, therefore, was based on a phased, iterative methodology that joined a modified Living Standards Measurement Survey (LSMS) questionnaire survey with a complementary qualitative research initiative. The qualitative component was scheduled first ("qual-quant" sequencing), so it could be used not only to create a free-standing qualitative data base, but also to focus and strengthen the survey questionnaire and to ensure that questions and code categories reflect the true range of possible issues, factors and responses. More specifically, qualitative methods were used for three purposes:

1. To identify factors linked to the perpetuation of poverty which are known to the poor themselves but may not be fully reflected in conventional surveys,

2. To provide, through example and case history, an understanding of the specific mechanisms through which poverty arises and is maintained in the study villages,
3. To build theories and hypotheses which will help in designing the household survey and for testing in the quantitative portion of the research project; and to ensure that the survey instrument is well-tailored to the examination of specific local conditions.

Since the qualitative work was initiated first, it offered significant insights about the research questions even before the quantitative results were compiled and analyzed. These insights permitted the development of a richer analytic frame that assisted the researchers to comprehend the significance of certain patterns of economic and social behavior. These patterns, in turn, were explored in ensuing analytic work based on household and community surveys. After the survey data was analyzed, two additional mini-studies using mostly qualitative methods were initiated to follow-up and clarify ambiguous points raised by the survey results. The finalized research agenda, then, actually pursued a “qual-quant-qual” sequencing pattern in which the household survey was both preceded and followed by related qualitative work.

The overall design of the study, therefore, reflects several important assumptions; first, that qualitative and quantitative methodological approaches provide different types of information; second, that each approach provides unique information that is valuable in its own right as well as in combination with other sources of information, and third, that to fully capture the advantages of the combined approach, the two components must be sequentially phased and integrated. What we refer to as quantitative and qualitative approaches are complements rather than substitutes, and any effort to determine which is better or more important in terms of poverty analysis is misguided. In short, the goal of the study’s integrated methodological approach was to achieve a more comprehensive view of the multiple dimensions of poverty than could be obtained through either approach alone.

Preparation:

The field research was carried out by a team of Indian nationals drawn from Allahabad University and local NGOs. In addition to Bank staff inputs¹, a team of seven researchers² (six local, one international) were assembled during the six months preceding the start of the fieldwork, and the full team was actively involved in determining the final design of the fieldwork and developing the instruments used. For example, although the international consultant was responsible for the initial draft of the PRA instruments, they went through extensive changes and enhancements as a result

¹ From the Bank side, the work was overseen by Valerie Kozel, SASPR, with additional inputs from Barbara Parker (anthropologist, consultant), Giovanna Prenushi, PRMPO, Peter Lanjouw, DECRG, and Salman Zaidi, DECRG.

² The study team in India was headed by Professor Ravi Srivastava (Department of Economics, Allahabad University). Field team leaders, who prepared the background papers on which much of this paper is based, include Professor Nisha Srivastava (Department of Economics, Allahabad University), Madhavi Kuckreja (Vanangana, Karvi, UP), Ajay Kumar (Center for Action Research and Development Initiatives, Patna, Bihar), Sandeep Khare (Vigyan, Lucknow, UP), and Sashi Bhushan (Patna, Bihar).

of comments from the local research team. The full team met in informal workshops on three separate occasions prior to the start of the fieldwork -- first to discuss initial drafts of the qualitative field instruments, next to discuss the results of field testing (each team field-tested the qualitative instruments in one of the sample villages before they were finalized); and again for a 6 day period of training, which included all field staff engaged in the qualitative component of the survey. The team met again after most of the qualitative fieldwork had been done to help with the analysis of results and with the design of the quantitative questionnaires. This final workshop ensured that the questionnaires fully reflected the key lessons learned in the initial qualitative phase of the work. The development of instruments and the qualitative analysis, therefore, were flexible and participatory processes in which team members who conducted field exercises, discussions and interviews were fully involved.

B. The Qualitative Component

In order to elicit the participation of villagers in identifying the key social, institutional and economic forces that perpetuate poverty in these districts, a qualitative substudy featuring Participatory Rural Appraisal (PRA) techniques and in-depth, semi-structured interviews was implemented in 30 villages. These villages were located in the Allahabad, Gorakhpur and Banda Districts of Uttar Pradesh, and in the Jehanabad, Vaishali, Munger and Saharsa Districts of Bihar. Each village was visited for a period of about one week by a 4-8-person research. The qualitative component was designed to systematically listen to and learn from the poor themselves. To this end, a series of research instruments and exercises were developed to capture the views of a wide range of villagers -- poor, middle-income, well off, male, and female. The teams carried out the exercises in roughly the order below

1. Village Overview: Upon entry to each village, the teams met with village leaders to obtain a general overview and history of the village. They prepared an "objective" map (as opposed to a social map) that identified all hamlets and neighborhoods (*tola*) and whether each one was wealthy, poor or mixed. Based on this map, the team selected a subsample of one to three communities for intensive study -- at least one with a majority of poor households. Team members then visited these sites and listed the names of household heads (through transect walks with key informants).

2. Social Mapping Exercise: Villagers were asked to prepare a "social" map of their own *tola*. The objectives of the social mapping exercise were:

- a.) To provide a visual display of community members' perceptions of the physical dimensions of their village in social and economic terms, and to obtain an inventory of village resources (wells, handpumps, schools, public services buildings, commonly held lands, etc.) and households (including the number that are poor, middle-income and upper-income).
- b.) To pinpoint the location of village resources in relation to the households of differing wealth levels, and
- c.) To initiate discussion among participants and bystanders about past and present relationships between rich and poor households; and about differential access to local resources and whether access is a factor in the perpetuation of wealth differentials within the village.

3. Wealth Ranking Exercise: As a technique to focus the attention of participants on issues related to wealth and poverty, a group of villagers in each tola was asked to rank a randomly chosen sample of 30 village names on the basis of relative household wealth. The exercise was carried out in one poor and one non-poor community to compare the perceptions of persons of different levels of economic well-being. The objectives of this exercise were:

- c.) To obtain local views on the characteristics of wealthy and the poor households, and to compare differences between the views of rich and poor on the key components of wealth,
- b) To elicit opinions on means of upward mobility among the poor, and on the most common causes of downward mobility among all income groups,
- c) To initiate discussion of why some households can succeed in gaining wealth while others fall behind economically.

3. Social Capital Inventory: The Social Capital Inventory attempts to identify organized groups (indigenous or introduced) and mutual assistance networks or relationships that exist in the research villages. The goals were to ascertain the importance of social capital to households of different economic standing; to determine whether the poor were as well-supplied with informal support system as the better-off, to examine the economic uses of social capital among the poor and non-poor, and to assess current trends in its distribution.

4. User Perception of Government Programs and Survey of Facilities: The teams asked focus group participants in each study village to identify all government and NGO programs that are active in their communities and to describe any benefits they or their neighbors had received from these programs. The research teams also visited public facilities and talked with staff members who were found on site. The objectives were to examine whether the poor are aware of the GOI's anti-poverty and social protection programs; whether these programs are working well for them, and to identify shortcomings and their causes. The research teams also explored users' perceptions of benefits received, and of the importance of these benefits either in overcoming poverty or in cushioning them against loss of assets or debt acquisition during lean periods.

5. Women's Roles and Gender Issues Exercise: During the initial review of the PRA instruments, some of the field team leaders observed that issues concerning gender and poverty might not be adequately revealed by the first set of instruments. To fill this gap, these team leaders designed and tested two separate exercises that would foster a discussion with poor women participants of their own unique problems. The first encouraged a group of women to draw pictures or symbols of the good and bad things about being a woman, and to explain their drawings. The second was a series of ambiguous images of women interacting with men and children in a village setting. The women were asked to tell a story about what was happening in the pictures, and to comment on whether this story was typical of life in the village.

6. Case History Interviews: Team members carried out a series of 8-10 case history interviews with lower and middle income members of the target communities. The

research instrument was designed to elicit a description of actual events as they have unfolded in the lives of the informants. Household decision-making with respect to social services was emphasized, including the perceived availability and utilization of educational and health resources in the area. The goal was to yield a composite picture of common responses to decision-points and life events presented by the interviewees -- enrollment of children in school, treatment-seeking in case of major illness, need for credit, food shortages in the home, shocks and disasters, etc. – in order to explore felt needs and the barriers that prevent the poor and vulnerable from meeting these needs.

C. The Quantitative Component

1. The Household Questionnaire.

After the Phase I qualitative data collection was completed, the research group analyzed the results and identified issues and themes that were particularly appropriate for follow-up in the planned multi-topic household survey. A household questionnaire was designed, building on a modified version of the Living Standards Measurement Survey (LSMS) format. The questionnaire has ten core sections; (1) the household roster; (2) economic activities; (3) housing; (4) education; (5) health; (6) marriage and maternity history; (7) consumer expenditures and durable goods; (8) vulnerability; (9) farming and livestock; and (10) remittances and transfers.

To this basic questionnaire, questions were added to reflect issues that the qualitative results (Phase I) had revealed to be important dimensions of poverty in the study villages. These included questions on stability and diversity of economic activities, gender relations, female autonomy and violence; use of key public service programs, use of common property resources, inter-caste and inter-class debt and economic relationships, and the frequency of shocks (particularly health shocks). The field survey was administered in 120 villages drawn from 12³ districts in UP and 13⁴ districts in Bihar. Of the sample of villages, 30 had been visited previously in the qualitative phase of the work and 90 were drawn at random from the sample districts. In those villages covered under the qualitative phase, a total of 30 households were interviewed, while only 15 households were sampled in the “new” villages. The overall size of the household sample was 2252 households.

2. The Village Questionnaire

In addition to administering a household survey, a range of quantitative information was collected at the level of the revenue⁵ village. This information complemented and expanded upon information collected in the earlier qualitative component of the study. Included in the village questionnaire are sections on (1) village characteristics, including size, caste composition, and political structure, and infrastructure; (2) access to facilities

³ Allahabad, Banda, Gorakhpur (phase I), Mirzapur, Jaunpur, Basti, Sidharthanagar, Hamirpur, Mau, Ghazipur, Faizabad, and Bahraich.

⁴ Jehanabad, Vaishali, Saharsa, Munger (Phase I), Muzaffarpur, Samastipur, Bhojpur, Saran, Gaya, Madhepura, Araria, Bhagalpur, and Pashchimi Champaran.

⁵ A revenue village is primarily an administrative entity in India. It typically consists of a group of settlements (also called *tolas* or *bustis*) clustered around the main or central village.

and services; (3) agriculture, irrigation, and forestry; (4) employment and migration, including wages; (5) anti-poverty programs and organizations; (6) changes over time; (7) visits to facilities, including the Anganwadi Center, primary schools, health posts, and the PDS fair price shop.

IV. THE STUDY AREA -- SOUTH/EASTERN UP AND NORTH/CENTRAL BIHAR

UP and Bihar, together with Madhya Pradesh, have been referred to as India's "poverty belt" because all three states are characterized by unusually large populations whose per-capita expenditure levels fall below the poverty line. Of all of India's states, UP has the largest population and, according to 1993-94 estimates, the highest number of people below the poverty line; in 1993/94, UP accounted for 17.9 percent of India's rural population and 20.3 percent of the country's poor (nearly 42 percent of the population in UP fell below the poverty line in 1993/94). Bihar, which lies just to the east of UP, has the lowest per capita rural income in India, and with 87 percent of Bihar's population classified as rural, it is the most rural state in the country. It has suffered from unrest, inter-caste conflict and political violence during the past decade. Poverty levels are even higher in Bihar than in UP -- an estimated 55 percent of the population lived below the official poverty line in 1993/94.

V. STUDY FINDINGS

This section describes a number of key findings drawn primarily from the qualitative fieldwork and analysis and focusing on areas where we feel that qualitative methods have made a unique contribution to the overall objectives of the study.

A. Who Are the Poor and Vulnerable?

The Wealth Ranking and Social Mapping exercises yielded a composite picture of impoverished households and the ways in which they differ from the better off. The results supported the proposition that poverty is caused by low levels of assets coupled with low and uncertain returns. The poor⁶ were found to be a highly heterogeneous group whose situation is characterized by a complex set of social and economic relationships. These relationships often do not work to their advantage, and they perceived themselves as highly vulnerable. The poor face many risks and barriers in their attempts to rise out of poverty, and were far better able to describe these barriers than means and opportunities for achieving success. They have few assets beyond their own unskilled labor. Usually without fertile land in an agrarian setting, they suffer from *poverty of private assets*. In addition, the poor have limited access to such public assets as community infrastructure, basic services and government programs. They therefore suffer from *poverty of access to public goods and services*. Finally, they are

⁶ In the PRA exercises, the poor were identified by local respondents according to their own criteria and not criteria predetermined by the study team. These criteria may or may not correspond to identification through consumption-based poverty lines (note that future work is planned to compare poverty rankings from the PRA exercise with consumption-based rankings from the household survey). In addition, respondents may be addressing poverty as a relative rather than absolute concept, e.g. which households are the poorest in a particularly village, rather than which are the poor according to some externally defined standard.

often deprived of informal systems of support and social capital – *poverty of social relationships*. (Kozel and Parker, EPW)

The households described as the *poorest* were relatively few in number, They were generally without private assets in the form of land, animals, farming equipment or, often, even a homestead plot. Most had become destitute through idiosyncratic shocks that permanently undermined their physical or human resource base. Many were headed by women without husbands or adult male relatives. These women, particularly if they have small children to support, were invariably rated among the poorest by informants in all the study villages. Widowhood and abandonment, in fact, were mentioned by informants in all sites as being among the most common shocks that lead households into destitution. Many of the poorest households are those with living but disabled breadwinners.

The research team was surprised to find that the cost of medical care was a significant cause of destitution. The government of India is committed to providing free primary health care to the poor. Nevertheless, many of the poorest households had become destitute through serious illness of a family member. To clarify this issue, a third component of the study was launched in which a qualitative district health assessment was carried out to determine why the health needs of the poor were not being met by the government's primary health care program⁷. It was learned that the first contact level of the government health care system was usually by-passed by the poor, primarily because it lacked medicines and supplies. Instead, they patronize untrained or minimally trained private practitioners ("jhola chap doctors" or "quacks") whose services are expensive and often ineffectual. These qualitative findings were borne out by the survey findings.

⁷ Follow-up research was also carried out to clarify the issue of why, given the inefficiency and leakages that are known to characterize India's Public Distribution System, many poor informants nevertheless characterized this government program as the one that was most beneficial to them.

THE ROLE OF “ALTERNATIVE” HEALTH CARE PROVIDERS

Much has been made of the public/private split in the provision of health care in India. But the split between untrained providers (at least not trained in Western medical practices) and trained providers is equally important. Of those respondents who were ill and consulted a medical practitioner in the 12 months proceeding the household survey, nearly 60 percent visited an untrained health care provider (first consultation) – including indigenous practitioners, faith healers, Jhola Chap doctors (quacks), and the local chemist. Even wealthy households made surprisingly extensive use of the local Jhola Chap doctors. In contrast, government health care providers, particularly those located in the CHCs, PHCs, or Subcenters, were visited infrequently, consistent with the findings from the qualitative field studies. In fact, indigenous practitioners and faith healers accounted for a larger share of the market than PHC/CHC/subcenter providers.

Medical Practitioner, Initial Consultation	Per capita consumption quintile					Overall
	1 st	2nd	3rd	4 th	5th	
Indigenous Practitioner/Faith Healer	8.6%	11.7%	7.8%	8.4%	5.3%	8.3%
Jhola Chap Doctor	53.2	52.6	49.6	42.9	43.1	48.3
Chemist	0.9	1.6	1.7	3.0	0.9	1.6
Govt. Doctor: PHC, CHC, Subcenter, or Village Health Worker	5.1	4.0	5.2	6.4	5.5	5.2
Govt. Doctor, Hospital or Other Major Facility	9.0	10.4	10.6	12.9	14.7	11.5
Private Doctor or Clinic	23.0	19.4	24.7	24.7	30.5	24.5
Charitable, NGO, Other	0.2	0.3	0.5	1.8	0.1	0.5
Overall	100.0	100.0	100.0	100.0	100.0	100.0

Even if the illness was successfully treated in the end, the household could be carrying an overwhelming debt burden in consequence. In addition, informants often classified families with a large number of daughters among the poorest, because the marriage and dowry expenses of these daughters is expected to plunge the family deeply into debt. *As a result of cultural and social factors, then, the birth of several daughters appears to be regarded as a slow-motion economic shock.*

DESTITUTION IN RURAL INDIA

Ramesh belongs to one of the scheduled castes in Allahabad District, UP. He was married at the age of 12. He used to be able to support his mother, wife and three children by cultivating the fields of the wealthy as a tenant farmer. Now, however, he has contracted tuberculosis and is too weak to perform manual labor. He is illiterate, and so he knows he would not be eligible for skilled employment even if it were available in his village. His wife works during the harvest season, but the season is brief and she earns only Rs. 15 or two-and-a-half kg. of rice in kind for a day's labor. Ramesh cannot even get a loan, because everyone knows he is too ill to work it off or pay it back. As a result, Ramesh's family often sleeps hungry, unless fellow villagers donate a meal out of pity. Ramesh doesn't know very much about health. He believes illness is caused by the attack of evil spirits, and he does not know that immunization might have prevented the deaths of some of his and his neighbors' lost children. However, he does receive treatment for his TB from a government hospital in Allahabad, and he is able to buy his allotment of subsidized grain and kerosene every month from the local PDS shop. These services help him to survive, but he cannot afford to send any of his children to school. He says he would like to educate both his daughters and his son, but he knows that all his children will grow up to be illiterate and without job skills. He fears that their lives will be no different than his own.

In some districts, the very poor were characterized as those who must rely on collection and sale of firewood or fodder for their livelihood. The women and children of these households are often the primary collectors of these products. In the case of children, being forced to contribute in this way to household subsistence deprives them of educational opportunities that might break the cycle of poverty – an example of poverty of access to public services. In the case of women, collection of forest products exposes them to threats and harassment and adds significantly to the “double burden” of domestic and external responsibilities that all but the wealthiest women must bear.

These households are characterized by what may be called Destitute Poverty. The destitute poor are usually those who were low-income or economically insecure to begin with and who then experienced a specific shock, catastrophe or personal problem that has left them without a livelihood or so deeply indebted that they have little or no hope of emerging from debt. Most of the destitute poor have few or no social ties, so they cannot expect to be absorbed into a larger family or extended kin unit. Many are single individuals living alone or single parents with children. While the destitute are a small proportion of the poor, the quality of their lives is precarious in the extreme.

In contrast, informants identified a typical *poor household* as one which is at the low end of the caste hierarchy -- most often a member of the Scheduled Castes or Scheduled Tribes. The ST and SC households are usually grouped in a separate hamlet at the edge of the village, but a few of these families occupy a homestead plot in the village which belongs to their upper-caste employer. Landlessness in terms of lack of access to fertile, well-watered agricultural land was mentioned as a cause and characteristic of poverty in every village. If the poor own any land, it is usually unproductive. Land

quality was found to be at least as important as size of land holdings in determining which families prosper, because many of these villages are subject to flooding, water-logging and salinity, while other plots are dry and distant from any source of irrigation water.

Lack of a homestead plot was said to be particularly grave, since homelessness places a family at the mercy of wealthier households. In some parts of the study region, landless households entered into attached labor arrangements in order to secure place to live. Attached laborers typically received a small plot of land (homestead and/or agricultural) and, in some but not all cases, other benefits, such as access to credit and food during lean periods, from an upper-caste patron. In return, the attached laborer must work on the agricultural fields of the patron whenever called, usually at a wage that is half the rate for unattached casual labor. When not working for the patron, the attached laborer may work for other employers as casual labor. Most informants agreed that this arrangement is undesirable, not only because the wages are low, but also because the attached laborer and his family usually must suffer daily insults and humiliations that spring from the differences in caste standing between them and their upper-caste neighbors. *In the aftermath of an economically devastating shock, a rural laborer without savings may become bound to a patron landowner through chronic indebtedness.* Debt bondage is illegal in India, but cases can still be found. More commonly, the laborer is simply obliged to work in the patron's fields until the debt is paid off. If the debt is very large, this might equal a lifetime commitment. In any case, the attached laborer's household is usually unable to regain lost economic ground during a period of debt obligation.

A second poverty syndrome may be said to characterize this group of households. Structural Poverty describes those whose poverty is chronic through several generations and in many cases is linked to their social identity. Individuals afflicted with a stigmatized social identity are often caught in a poverty trap which is a feature of a particular social system. In traditional India, individuals were born into occupational roles and each occupation was allotted a position in a prestige hierarchy which defined and delimited economic opportunities. Although that system has begun to give way (even in the study area, which is still traditional in comparison to other parts of India), nevertheless, the structural poor in this study were found mainly among those who belong to SCs/STs, and in some cases, lower caste groups within the broad group of Extremely Backward Castes (EBCs). In the qualitative fieldwork, caste identity was one of the most frequently cited characteristics that distinguished poor from better off households.

The question of the relationship between poverty and social identity was examined further in the analysis of survey data. Results indicated that, although not all impoverished households are also low in social status, low social standing is strongly associated with poverty in all its many dimensions. For example, analysis of recent rounds of India's National Sample Survey (NSS) show that SC/ST household are much more likely to be poor than majority households (Table 1).

Table 1: Poverty Incidence by Caste, 1987-88, 1993-94, and 1999-00

Year	Caste Group	Incidence of Poverty			Percentage of:	
		Urban	Rural	Overall	Population	Poor
1987-88	SC / ST	48.3	56.2	55.3	24	32
	Other	35.7	37.5	37.2	76	68
	Overall	37.4	42.3	41.5	100	100
1993-94	SC / ST	57.5	58.6	58.4	23	33
	Other	31.3	37.0	35.7	77	67
	Overall	35.0	42.4	40.9	100	100
1999-00	SC/ST	44.1	44.0	44.0	26	35
	Other	30.3	29.4	29.6	74	65
	Overall	32.5	33.2	33.1	100	100

Source: NSS 1987-88, 1993-94, 1999-00.

Low caste households were heavily represented in the agriculture sector, particularly working as low-paid, low-status casual labors. Many of them did not own land, but instead worked on land owned by their upper caste neighbors. Those who did not work as casual laborers in agriculture were likely to be working as casual laborers in non-farm activities. Few members of low caste households in rural UP had permanent or secure jobs. (Table 2)

Table 2: Composition of Employment Days, by Caste

Distribution of Employment Days	Upper	Other Backward	SC/ST
Self emp: farming	39.1	42.2	20.5
Self-emp: non-farm	14.8	19.9	11.8
Agriculture laborer	1.5	7.6	29.4
Non-farm laborer	11.0	17.5	23.6
Salaried employment	31.6	11.2	12.0
Total	100	100	100

One of the most critical dimensions of poverty is illiteracy and low educational attainments. The quantitative portion of the study revealed that, while poverty is strongly associated with illiteracy and low enrollments, caste is also a strong predictor of low educational attainments, particularly for girls. As the table below demonstrates, only 55% the SC/ST girls in even the highest income quintile were found to be enrolled in school (in contrast to nearly 90% of upper and middle caste households in the same income quintile):

**WEALTH AND CASTE:
EFFECTS ON SCHOOL ENROLLMENTS**

Survey estimates from the study indicate that 73.9 percent of primary school-aged boys (6-12 yr.) attend school as compared to only 54.9 percent of girls, despite the fact that most households lived within 3 kilometers of a public primary school. Enrollment rates vary not only by per-capita expenditure levels but also quite significantly by caste. With the exception of upper caste households, poverty has a far stronger impact on enrollments levels of girls than those of boys. For example, only 35 percent of poor SC/ST girls (defined as 6-12 year old girls from households in the bottom 40% of the welfare distribution) were enrolled in primary school, as compared to over 70 percent of poor upper and middle caste girls. In contrast, 55 percent of poor, SC/ST boys were enrolled in school in comparison to over 75 percent of equally poor, upper and middle caste boys. Caste-based differences in girl's primary school enrollments were still evident for well-off households: only 55 percent of SC/ST girls living in the wealthiest quintile of households were enrolled in primary school, as compared to 90 percent of girls from wealthier upper caste households

School Enrollments of Boys – by Caste and Per-capita Consumption Quintile

Caste group	Per capita consumption quintile					Overall
	1st	2nd	3rd	4th	5th	
Upper / middle caste	60.0%	93.1%	92.5%	95.9%	96.6%	83.1%
Backward agriculture	73.5	78.0	75.1	74.6	90.6	78.8
Backward – other	62.8	74.2	78.1	90.9	85.0	75.9
SC / ST	48.9	59.3	65.6	77.7	82.7	60.1
Muslim	50.4	58.2	70.1	67.6	88.9	63.6
Overall	57.3	70.6	75.2	81.2	91.4	73.9

School Enrollments of Girls – by Caste and Per-capita Consumption Quintile

Caste group	Per capita consumption quintile					Overall
	1st	2nd	3rd	4 th	5th	
Upper / middle caste	72.7%	78.2%	60.2%	89.2%	89.7%	83.4%
Backward agriculture	24.3	42.8	74.8	59.4	78.8	58.4
Backward – other	39.3	49.8	55.0	57.7	63.0	49.6
SC / ST	30.3	39.3	46.7	54.4	55.1	39.1
Muslim	46.3	38.8	54.8	51.8	70.8	50.5
Overall	35.6	46.0	58.7	64.5	80.2	54.9

Although structural factors may impose a barrier to upward mobility for some with a stigmatized social identity, there is no barrier to downward mobility. A household that is structurally poor may join the destitute poor if a destabilizing shock occurs. *Low caste and tribal households who are also low income may be particularly vulnerable to the impact of shocks.* Those whose poverty is long-term and multi-generational are unlikely

to possess saleable assets. What is more, their social capital networks are unlikely to be very useful sources of economic assistance, since these networks are usually caste specific, and other members of stigmatized castes are also likely to be poor. As noted above, human capital is also lower on average than among higher caste households, and so SC/ST workers are less likely to possess the job skills that might allow them to recover lost ground after a shock. In sum, households suffering from chronic and structural poverty should be targeted for special attention in the design of safety net schemes.

The *less poor* (e.g. the best-off among poor households) are generally those who own a small amount of productive agricultural land. Some less poor households have begun to diversify their earnings portfolio, e.g. through petty trading or small business activities often linked to agriculture or livestock (selling eggs or milk, producing simple prepared foods). Many of these are members of Extremely Backward Castes (EBCs) and Other Backward Castes (OBCs)⁸; both are higher in the caste hierarchy than SC/STs. In this dry region, access to inputs and especially irrigation water is required if land is to yield wealth. Better-off households are more likely to own private ponds and pumpsets, or they are able to utilize political contacts outside their tola and village to ensure that public wells and pumpsets are located on or near their own fields. Among those who have no private water source and no political influence, land may lie fallow due to lack of irrigation water. The dividing line between the poor and the less poor less a function of land than of food self-sufficiency. Those households which are able to produce enough food, either through agriculture or employment, to feed all family members throughout the twelve months of the year were identified as those which can attain a steady state or may even have the potential for advancement. Those who can feed themselves for only part of the year are expected to lose ground and to fall into chronic debt.

Among the less poor, impoverishment may in some cases be a transient condition. Mobile poverty describes a situation in which households are low-income but debt free; they possess assets or employment sufficient to maintain at least a steady state; and they face fewer social constraints to economic mainstreaming than do the structural poor. Often, though not always, they are members middle and lower caste groups from the OBCs, and a few of the higher ranked caste groups from EBCs and SC/STs. Some of the poor exhibit clear potential for beginning to accumulate surplus resources and climb out of poverty. Informants' statements revealed that, although intensive utilization of a small piece of land was often a component of a successful strategy for this group, nevertheless very few aspire to expand their land holdings or, for those without land, to acquire it. The stagnant land market and prohibitive prices may account for this. Instead, poor households at all levels generally expressed the desire for jobs outside agriculture, since *in their view a steady income from off-farm employment is the most reliable route out of poverty.*

⁸ The caste system in India is complex. For purposes of this paper, we prefer to upper castes (Brahmins and Thakurs), other backward castes (denoted OBCs), extremely backward casts (EBCs), and scheduled castes and scheduled tribes (SC/STs). Within any broad caste grouping -- e.g. the OBCs -- there are hundreds of castes and subcastes and all have a hierarchical or vertical relationship to one another.

THE "MOBILE" POOR

A Yahdev (an OBC caste) household in Banda, UP, shows classic characteristics of economically mobile albeit poor households in rural India. The household has managed to escape extreme poverty by virtue of owning a small piece of rain-fed agricultural land; but since five sons were born to the household head, the family was threatened by impoverishment through subdivision of a small landholding. The father was able to avoid this danger by securing cooperation among his grown sons in a family-owned business. In part by intensive cultivation of their land, the household was able to accumulate a herd of about 50 cows. These animals produce enough surplus milk for the household to produce a variety of popular milk sweets for purchase by wealthier households in the village. Although transport costs have prevented the five brothers from extending sales outside the village, expansion to a nearby town is planned if the business continues to prosper. According to the household head, the upper castes are against him and resent his success. Nevertheless, his household is upwardly mobile and, barring unforeseen shocks, shows promise of making the transition to the rural middle-class.

Thus, although a specific household may show overlapping traits, three different types of poverty syndromes were described by study informants in the PRA exercises. These syndromes do not represent discrete categories of poor households, but rather schematic types. Each of these three poverty syndromes entails its own set of circumstances in terms of barriers and possibilities. Strategies for survival or improvement vary in consequence. An effective assistance approach will not be uniform for all three. Instead, *separate assistance tools and tactics may be required to effectively address the specific conditions of each syndrome*. Clearly, a micro-credit program would be more appropriate for the structural poor or the mobile poor than for the destitute, since the latter could hardly avoid utilizing the loans for consumption purposes and thereby deepening their debt burden. On the other hand, a particular anti-poverty program or intervention could be utilized differently -- and yet equally successfully -- by the poorest, poor and less poor respectively. A food distribution or support program, for example, could constitute the last protection against starvation for the destitute, while for the less poor, it may free up resources for more productive investment.

C. Mobility, Vulnerability, and Risk

The poverty problem appears to have been undergoing a change in the past two decades. Several examples were found to illustrate the fact that the absolute ascendancy of the upper castes is being slowly eroded, and in some areas, wealth is no longer coterminous with caste standing. There is evidence that the jajmani system is on the wane, in so far as attached labor is now less common than free (casual) labor in most of the study villages. This freedom allows casual laborers to negotiate with various employers (even within the agricultural sector), both within and outside the village, for higher wages, but it has led to a diminution of credit opportunities and other traditional safety nets. This vulnerability has been exacerbated in many villages by high-caste encroachments on common property resources that once served as a resource of last resort in lean seasons. *Because free laborers are without the safety nets that were once*

provided by employers, there is some suggestion that the poor are looking to government to provide these benefits.

Social Capital: Source of Opportunity or Source of Protection?

The density and use of social capital, defined for purposes of this study as ties of cooperation and mutual assistance, were among the factors found to be strongly related to the issues of poverty and economic mobility. Wealthy households were frequently found to maintain more extensive horizontal networks of mutual assistance than do poor households. Even at the level of the household, wealthy families were found to have more extensive social capital. This is because they are better able to conform to the cultural ideal of maintaining a joint family structure in which brothers reside together after marriage, pool their resources and cooperate productively. Poor families, it was said, were forced by necessity to break from the joint household and set up nuclear families. These nuclear families are viewed as inferior in so far as they can command fewer resources, benefit less from economies of scale, and have less political influence than can a large joint family. The household survey suggests that upper and middle caste households are almost twice as likely to live in joint families than lower caste households. Both income and land holdings were found to be particularly important factors in determining whether households were joint or nuclear; the wealthiest land-owning households nearly always had a joint family structure.

Outside the household, upper-caste households were again found to hold the advantage in terms of the density and utility of horizontal social capital ties. In one UP village, informants in a low-caste tribal *toila* described their sources of small-scale and short-term assistance in times of emergency as being largely limited to a few close kin and neighbors. For large-scale or long-term help, such as they might require in case of major illness or natural disaster, they would have to turn to money-lenders or members of the dominant caste. The money-lenders would charge high interest rates and the dominant caste members would be likely to ask for the pawn of some of household's productive assets, which would be confiscated if the loan is not repaid according to a set schedule, or for a labor commitment. Members of an upper-caste household in the same village, by contrast, said they could ask for help or interest-free loans from a large group of about twenty families to whom they are related through the male line.

SOURCES OF CREDIT FOR HOUSEHOLDS, BY CASTE OF BORROWER

According to the household survey administered for the study, an estimated 41 percent of upper caste households took out some form of loan (excluding IRDP) in the 12 months preceding the survey, in comparison to 62 percent of SC/ST households. Many of these loans were primarily used to finance short-term credit needs. In the case of upper caste households, the primary source of credit was households in their own (upper) caste group, although many also obtained loans from relatives and family members. In addition, upper caste households were far more likely to utilize institutional sources of credit (banks, other financial institutions) than lower caste households, even at roughly equal levels of income. In contrast, SC/ST households were likely to borrow from households who had a higher caste rank than their own (in part because upper caste households hold more of the wealth in the village), or from money-lenders. Note that employers (primarily upper caste land-owning households) were an important source of credit for (poor) SC/ST households as well:

Primary Source of Funds -- Loans Taken in Past 12 Months

Source of Funds	Upper Caste	SC/ST
Employer	4.0 %	15.8 %
Moneylender/Trader	12.1	21.6
Relative	16.3	10.4
Credit Group	4.1	0.5
Institutional (Bank, Coop)	9.5	1.7
Other -- similar caste	30.3	9.8
Other -- higher caste	13.3	34.5
Other -- lower caste	8.4	4.8
Other -- unspecified	2.1	1.0

Focus group discussion results suggested that members of elite groups who borrow (whether from relatives or from formal sources) sometimes do so in order to acquire capital for investment in productive assets. Low caste and poor rural informants never mentioned productive loans, though there is evidence that the urban poor are more sophisticated about productive uses of credit. Instead, borrowing by the rural poor was most often linked to shocks and/or meeting emergency consumption needs. Expenses associated with illness were said to be a common cause of emergency borrowing. The quantitative analysis supported the fact that, although illness strikes households at all economic levels, the poor are less able to depend on savings and more likely to cope by taking unsecured loans:

Table 3: Sources of Financing for Illness-Related Expenditures

Means of financing Expenditure	Per-capita Consumption Quintile					
	Poorest	2	3	4	Richest	Overall
Savings	68%	69%	77%	82%	92%	77%
Sale of Assets	5%	2%	2%	2%	1%	3%
Unsecured Loans	23%	23%	19%	14%	7%	18%
Mortgage or Assistance	3%	6%	2%	2%	1%	3%
Total	100%	100%	100%	100%	100%	100%

Source: UP/Bihar Poverty Study (Annex I)

When these loans are provided by private money lenders, interest rates may be ruinous. When they are provided by members of higher castes and/or village elites, an attached labor relationship may be a condition of the loan. In an ongoing patron-client relationship of this type, the poor household may gain basic security but is usually trapped in poverty if it remains tied to the relationship. Vertical relationships of this type, then, may be viewed as a form of social capital that cushions the vulnerable; yet it is not a form that lifts them from poverty – quite the reverse, in fact. There is, then, a tension between the desire to retain a time-honored form of security and the desire to tap opportunities for economic advancement.

In recent decades, the prevalence of attached labor has been declining in favor of free or casual labor. Under a casual labor arrangement, the worker sells his labor to the highest bidder, who has no obligation to him beyond the daily wage. While this frequently raises wage rates and income levels, the worker often becomes more vulnerable to idiosyncratic or other shocks. A number of factors have promoted this transition. One of them is the series of legal changes that followed upon Indian Independence. The outlawing of debt bondage, land reform, SC/ST set-asides and other legal rights and protections that were developed to assist the poor have had a limited impact, at least in the areas in which the law has been observed. The ultimate impact of the GOI's decentralization initiative is as yet unclear, but it is bound to have had some influence on the relations between the better-off and poor. Improvements in roads and transportation infrastructure more generally have permitted the rural poor to migrate or commute to employment centers in urban and peri-urban areas. Expansion of the job market in these centers as a result of growth has provided new incentives to do so.

Government programs, as the section following will demonstrate, have also played a role. If the government provides alternative safety nets, then the landless and unskilled laborer is not defenseless without a traditional patron. *The GOI, then, has an essential role to play in protecting the vulnerable as an alternative to the now deteriorating jajmani (patron-client) system.*

To summarize, the typical poor household lacks the extensive horizontal social capital enjoyed by the better-off, and they also lack personal or household savings. Consequently the poor household is in danger of falling into chronic debt and destitution (joining the ranks of the destitute) as a result of shocks such as illness of a family member or death of a breadwinner, local crop failures, or even through unavoidable marriage and dowry expenses. Traditional *jajmani* or attached labor relationships may have reduced this vulnerability in the past, but the cost of these dependency relationships has been high. Poor families who are dependent on a wealthy patron are effectively prevented from advancing economically or socially. To exit such a relationship is to lose a very basic but reliable form of security, but it is also to gain the opportunity to act as a free agent in the open labor market.

Not every family has been willing to assume this risk, but the qualitative data suggests that the greater proportion of the poor are eager to participate in this transition from a traditional “feudal” structure to a modern market-oriented system. Although many factors may have encouraged this transition, study findings suggest that, to some extent, some of GOI's antipoverty programs may be working to provide an alternative safety net (that is, alternative to protection provided under the traditional structure) that can shield many households from total destitution, particularly starvation. In such case, more effective design, implementation, and targeting of these programs would not only provide a more

effective form of social protection, particularly for the most destitute and structural poor, but also help to reduce risk and facilitate more rapid transition and growth in incomes for the rural poor.

Social Capital and Access to Benefits

Upper caste households, unlike the poor, were also said to have extensive contacts and ties outside the village. Such linkages improve the chances that the educated child of a well-connected, wealthy family will find a white collar job. A similarly educated son or daughter of a poor family with limited contacts outside the village is less likely to find suitable employment and more likely to join the ranks of the educated unemployed. Contacts outside the village, therefore, enhance the returns to education for the wealthy and thus may render them more likely than the poor to invest in the education of children. To illustrate, reports from Bihar field studies revealed the following:

“**Pairvi**, the common term for ‘finding favor’ works almost as a rule. It very often works against legitimate economic relationships or even against criteria set by the legal system. Genuine beneficiaries are often denied their rights or deprived of their entitlements in favor of **apana admi** (our own men). Carefully crafted social relationships, often based on kinship or caste and frequently extending beyond the narrow boundaries of the village, exert overpowering influence on all matters of interest”.

These external contacts also can work to allow better off and more powerful households to capture government and other resources slated for the village. And, since residence patterns are often segregated by caste, this often means that resources such as drinking and irrigation water, schools, health posts, infrastructure projects, Public Distribution System (PDS) shops, etc. become concentrated in the wealthy or dominant-caste communities. When the school is at the far end of the village, the poor are less likely to enroll their children (especially girls), and low caste people have expressed unwillingness to brave the insults and humiliations they receive when attempting to utilize PDS fair price shops and other resources located in high-caste neighborhoods. *Lack of external contacts, therefore, contributes to the failure of the poor to gain access to or to effectively use many of the government services that were designed to help them.* In rural India, then, poverty of social relationships, then, is linked to poverty of access to public resources.

In addition to disparities in the extent of social capital between rich and poor, informants also described ways in which social capital is differently utilized by the two groups. Particularly in Bihar, social ties among the rich were found to be used more often the secure economic advancement through jobs and loans taken for purposes of productive investment. Among the Bihar Harijans (scheduled castes), associations were formed for the purpose of mutual protection, such as when a group of SC men travel outside the village in search of employment, or to push authorities and local leaders to grant them the legal rights to which they are entitled. Poor women in UP also tended to travel in groups when they went to the forest to collect fuel wood or other forest products to sell in nearby villages, reportedly for mutual protection. Women traveling alone in rural areas, particularly poor/lower caste women, claim they are frequently harassed or faced with threats of violence. In this sense, social capital could be said to perform a defensive function among the poor while it is used more often by the well-off to support or improve their economic position.

The comments of informants in this study revealed that many of the of the government of India's anti-poverty programs, as well as basic services like health and education, are serving the wealthy and powerful far better than the poor. Most of the programs are under-resourced, poorly supervised and poorly targeted. With no functional system of monitoring and accountability in place, there is no means of preventing politically and economically powerful local elites from gaining control of the benefits of these programs and services. Capturing these resources strengthens their ability to retain economic and political dominance of their villages, and to block lower caste households from moving up in the economic hierarchy.

THE ITERATIVE APPROACH TO Q2

To summarize, the sequential phasing of the qualitative and quantitative components of the study allowed the research team to fully capture the advantages of the combined approach. The iterative approach also permitted to team to build and revise theory, and to add pertinent hypotheses, throughout the research process in response to what is learned and how it is learned. By leading off with the qualitative component, the team was able to tailor the survey questionnaire to actual field conditions and pertinent issues. The subsequent questionnaire survey supported many of the qualitative findings and provided an opportunity to examine causal relationships between variables. The follow-up qualitative ministudies then provided an opportunity to clarify ambiguous survey results. Each of the two methodologies, therefore, was useful for focusing and strengthening the results of the other.

More specifically, the qualitative component identified three broad poverty syndromes and highlighted the significance of both shocks and structural poverty associated with stigmatized caste identity. Specific factors that trapped households in poverty or plunged them into destitution – such as chronic debt obligations, expensive health shocks, and sparse, localized social capital networks -- were identified for subsequent quantitative examination. The survey results then cast additional light on these issues by demonstrating that the poor do face high costs when illness strikes them and that members of stigmatized castes do suffer specific disadvantages. They receive lower returns to their material and human capital assets, they are more likely to take emergency loans from higher caste individuals than are members of the caste elite (who usually borrow from relatives); and public resources are more often located in upper-caste neighborhoods. The question of the impoverishing impact of health shocks was then examined through a qualitative district health assessment that revealed the many factors that lead to under-utilization of free government services and direct the poor toward expensive (usually untrained) private providers. In sum, this study's qual-quant sequencing enabled each component to add value to the previous one by clarifying, explaining or supporting its findings.