

RURAL POVERTY RESEARCH PAPER SERIES

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POOREST OF THE POOR:
A COMPARATIVE STUDY OF RURAL POVERTY
IN TWO VILLAGES OF NEPAL

Murari P. Suvedi

HMG-USAID-GTZ-IDRC-WINROCK PROJECT
STRENGTHENING INSTITUTIONAL CAPACITY IN THE
FOOD AND AGRICULTURAL SECTOR IN NEPAL

FOREWORD

This Rural Poverty Research Paper Series is funded through the project, "Strengthening Institutional Capacity in the Food and Agricultural Sector in Nepal," a cooperative effort by the Ministry of Agriculture (MOA) of His Majesty's Government of Nepal and the Winrock International Institute for Agricultural Development. This project has been made possible by substantial financial support from the U.S. Agency for International Development (USAID), the German Agency for Technical Cooperation (GIZ), the Canadian International Development Research Centre (IDRC), and the Ford Foundation.

One of the most important activities of this project is funding for problem-oriented research by young professional staff of agricultural agencies of the MOA and related institutions, as well as for concerned individuals in the private sector. This research is carried out with the active professional assistance of the Winrock staff.

The purpose of this Rural Poverty Research Paper Series is to make the results of the research activities related to rural poverty available to a larger audience, and to acquaint younger staff and students with advanced methods of research and statistical analysis. It is also hoped that publication of the Series will stimulate discussion among policymakers and thereby assist in the formulation of policies which are suitable to the development of Nepal's agriculture.

The views expressed in this Rural Poverty Research Paper Series are those of the authors, and do not necessarily reflect the views of their parent institution.

Michael B. Wallace
Series Editor

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TABLE OF CONTENTS

	Page
INTRODUCTION	1
Objectives	2
Importance of the Study	2
METHODOLOGY	2
Sampling Method	3
Limitations	4
RESULTS AND DISCUSSION	4
Socioeconomic Characteristics	4
Occupation	5
Family Size and Type	5
Income	7
Education	8
Earning a Living	9
Problems Poor Villagers Face	10
Causes of Poverty	10
Farming System	11
Agricultural Practices	14
Food Problems	16
Health Care	17
Benefits from Development	18
Expectations	18
CONCLUSION AND POLICY RECOMMENDATIONS	20
Conclusion	20
Policy Recommendations	22
REFERENCES	23

LIST OF TABLES

Table 1. Distribution of Respondents by Age	4
Table 2. Ethnic Group Affiliation	5
Table 3. Distribution of Households by Occupation	5
Table 4. Distribution of Respondents by Household Size	6
Table 5. Distribution of Households by Farm Size	6
Table 6. Income Distribution of Respondents	7
Table 7. Literacy of Household Heads	8
Table 8. Educational Participation	9
Table 9. Main Problems of Respondents Family	10
Table 10. Perception of the Causes of Poverty	11
Table 11. Distribution of Crops Grown on Farm	12
Table 12. Types of Livestock Holding	13
Table 13. Fruit Trees Owned by Respondents	13
Table 14. Vegetables Grown by Respondents	14
Table 15. Awareness of Improved Agriculture	15
Table 16. Health Care Practices	17
Table 17. Benefit from Development	18
Table 18. How Money Should be Spent	19
Table 19. Expectations from Government	20

POOREST OF THE POOR:

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Murari P. Suvedi*

INTRODUCTION

Nepal has experimented, over the last three decades, with a range of strategies and models in search for a formula which could put an end to or at least reduce poverty, unemployment, and inequality. The quest for appropriate strategies has gone from the holistic approach of the community development era (Tribhuvan Gram Bikas), to single commodity production programs such as rice, wheat, and corn and then back to the interrelatedness of factors represented by integrated rural development. The flow of foreign assistance, financial and technical, has been remarkable throughout the last three decades of development efforts in Nepal (Pandey, 1983).

Yet development literature on Nepal reveals that the condition of the rural poor is deteriorating and overall poverty is increasing. A World Bank study team (1979) reports that when evaluated against a much larger perspective, the GDP annual growth rate of four percent offers little prospect of the rapid alleviation of poverty in Nepal. At present, about 60 percent of Nepal's population is estimated to be in absolute poverty compared with an average of 50 percent for all lower income countries. Based on projections in the World Development Report (1979), it appears that by the end of the century, nearly 50 percent of Nepal's population will be in absolute poverty, twice as high as for lower income countries as a whole.

Nepal's rural development efforts have failed to enhance the quality of life of the poor as they tend to concentrate on the provision of conspicuous project facilities, buildings, and vehicles which are out of place for a project which is supposed to deal with poverty at its worst (Pradhan, 1982).

Aside from the "what," "who," and "how" dimensions, people's participation in rural development remains a concept that is discussed rather than practiced. Furthermore, beneficiaries of rural development programs are mostly the privileged segments of the population (Pyakural, 1982).

This leads to the question: "Has there been any benefit to those who are the "poorest of the poor" from the past development programs?"

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Central to the task of improving the condition of the "poorest of the poor" is the determination of the "poorest of the poor." What means of livelihood are available to them? How poor are they and what do they think of their condition? What do they expect from the government? To what extent have they benefitted from development efforts over the past three decades (especially in agriculture, health, and education)? Is the nature and dimension of poverty of the hill poor different from that of their Tarai counterparts?

Although much effort has gone into general studies of the poor and the assessment of program impact, poverty is relative and the term poor is misleading (or illuminating?) depending upon the perspective and criteria used. Empirical data are also insufficient regarding the condition of the "poorest of the poor."

Objectives

The overall objective of this study is to assess the present condition of the "poorest of the poor" in rural Nepal. Following are specific objectives:

1. Draw up a demographic and socioeconomic profile of the "poorest of the poor."
2. Find out how the "poorest of the poor" henceforth--the poor--earn their living and what they perceive to be the cause of their poverty.
3. Explore the extent to which the poor have benefitted from past development programs especially in agriculture, health, and education.
4. Identify the expectations that the poor have for foreign aid which is directed toward alleviating their poverty through government action.
5. Compare the poor residing in the hills to their Tarai counterparts.

Importance of the Study

The findings of this study provide a basis to measure the extent to which past development programs in Nepal have been beneficial to the poor living in rural areas. Policymakers and development workers may find the results useful in their search for strategies to reach the people most in need of assistance.

METHODOLOGY

This study was conducted in Hamsapur Village Panchayat of Kaski District in the Western Development Region and Belawa Village Panchayat of Parsa District in the Central Development Region to represent the hill and Tarai areas respectively.

Hamsapur Village Panchayat is located in the eastern part of Kaski, about 25 kilometers from Pokhara, three hours walk from the nearest motorable road at Begnas Lake. The Panchayat is composed of seven

villages with 955 households. The major ethnic groups living in the area are Brahmin, Chhetry, Gurung, Maar, Sarki, Kami, Damai, and Newar. The primary occupation is farming. Paddy, maize, millet, wheat, buckwheat, and root crops are main crops cultivated in the area. Farms are diversified and cropping intensity ranges from 100 to 300 percent depending upon the irrigation facilities in the area.

Belawa Village Panchayat is located in the northeastern part of Parsa District 16 kilometers north of Birgunj. The nearest marketplace is Jitpur Bazar which is about 45 minutes walk from the area. The Panchayat is one of the largest in the District, with 1135 households. Mahato, Tharu, Musahar, and Dushadh are the major indigenous ethnic groups in the area. In addition, migrants of different ethnic groups such as Brahmin, Chhetry, Gurung, and Tamang from the hills make this panchayat very heterogenous. The main occupation of the villagers is farming. Paddy, wheat, maize, lentil, mustard, and vegetables are the main crops grown in the area and cropping intensity ranges from 100 to 300 percent depending upon the irrigation facilities in the area. Cattle, buffalo and goats are the main animals.

The main criteria for selecting these sites was based on the researcher's personal acquaintance with villagers in these areas. This personal contact greatly aided the research considering the nature and precision of the data desired from this study.

Sampling Method

A list of all household heads residing in each panchayat was prepared with the help of the respective panchayat offices. Each Pradhan Pancha was briefed on the subject of the study to be undertaken. At the request of the researcher, the Pradhan Pancha from each panchayat arranged an informal meeting with ward chairpersons to explain the purpose of the study. A list of household heads whom they considered the poorest 20 percent were identified and listed for each panchayat. It was interesting to note that different criteria were considered as indicators of poverty. Among the criteria were size of land holding and its quality, large family size with more number of dependent family members, education/skills of the household head and family members, family income, and above all whether the family could afford food throughout the year.

The list prepared was discussed again with local leaders. Considering the variations among the lower 20 percent poor some household heads were excluded from the sample. A 20 percent sample was randomly drawn from this group, resulting in a sample of 64 household heads--32 from each panchayat.

Data Collection and Analysis

Data for this study were collected during June 1985 using a pre-tested interview schedule. Each interview was conducted only after a rapport-building period of at least 15 minutes. Participant observation was also used to learn about the sociocultural aspects of rural poverty.

The data were analyzed qualitatively as well as quantitatively. Descriptive statistics and Chi-square tests are used to compare the situations in the two villages.

Limitations

The findings of this study are not conclusive, as these two panchayats do not represent a large enough sample for generalization to the rest of Nepal, although they are a start toward identifying the rural "poorest of the poor".

RESULTS AND DISCUSSION

This section begins with a discussion of socioeconomic characteristics of the respondents, an examination of how they earn their living, their perception of the causes of poverty, farming systems, and awareness of improved agricultural practices. Finally, the extent to which the respondents perceived benefits from past development efforts and their expectations from the government as a means of alleviating their poverty are addressed.

Socioeconomic Characteristics

Age. The age of the respondents ranged from 20 to 72 years, with an average of 44 years. The respondents in Belawa Village Panchayat were relatively younger than that of Hamasapur Village Panchayat. (The terms "Hill" and "Tarai" are used to represent the village Panchayat Hamasapur and Belawa, respectively. These terms are used to geographically distinguish the two village panchayats. However, this study is not intended to make generalizations for the entire hill and Tarai areas of Nepal.) The younger age of the Tarai poor could be attributed to the fact that immigrants in the area were observed to be relatively younger than the permanent residents (Table 1).

Table 1. Distribution of Respondents by Age

Age Group	Percent Responding		
	Hill (N=32)	Tarai (N=32)	Total (N=64)
Below 30 years	3.1	25.0	14.1
31 to 40 years	31.2	25.0	28.1
41 to 50 years	31.2	43.7	37.5
51 to 60 years	18.7	6.3	12.5
61 years and over	15.6	0.0	7.8

Ethnic Affiliation. Both the villages are heterogenous in terms of ethnic representation. Respondents in the hills belong to ethnic groups such as Brahmin, Gurung, Magar, Kami (Vishwakarma), Gharti, and Sarki, while Tarai respondents are Brahmin, Chhetry, Tharu, Mahato, Masahar, Dushadh, Dhanqad, Tamang, and Gurung as shown in Table 2. Most of the Brahmin, Chhetry, Tamang, and Gurung ethnic groups migrated to the Tarai during the past 20 years. In addition, members of some ethnic groups such as "Chhetry" did not fall in the lower twenty percent in the hill village.

Table 2. Ethnic Group Affiliation

Ethnic Group Affiliation	Percent Responding				Total (N=64)
	Hill (N=32)		Tarai (N=32)		
	Number	%	Number	%	
Brahmin	8	25.0	4	12.5	18.7
Chhetry	-	-	6	18.7	9.4
Kami (Vishwakarma)	11	34.4	-	-	17.2
Gurung	5	15.6	1	3.1	9.4
Ghatri	4	12.5	-	-	6.3
Tharu	-	-	7	21.9	10.9
Mahato	-	-	7	21.9	10.9
Musahar	4	12.5	4	12.5	12.5
Others	4	12.5	4	12.5	12.5
Total	32	100.0	32	100.0	100.0

Occupation

Farming is the main occupation of the majority (65.6 percent) of the hill respondents, while a great majority (84.4 percent) in the Tarai do not farm. Most of the respondents in the Tarai and about one-third in the hills earn their income through agricultural wage labor. Almost one-fourth (21.9 percent) of the respondents in the Tarai indicate that they earn their livelihood by collecting firewood in the nearby forest and sell it in the market. A few respondents (9.4 percent) in the Tarai also said that they buy buffalo in the local haat bazaar in Jitpur and sell as meat in Kathmandu. Most of the respondents from both the villages are employed as agriculture laborers during crop transplanting and harvesting seasons and in nonagricultural labor such as carpentry, black-smithy, portering, and vegetable vending during other seasons.

The Chi Square (X^2) value of 16.6 indicates a significant difference between the main occupation of the household heads living in the two villages. This finding is attributed to the higher percentage of landlessness among the Tarai respondents.

Table 3. Distribution of Households by Occupation.

	Percent Responding		
	Hill (N=32)	Tarai (N=32)	Total (N=64)
Farming	65.6	15.6	40.6
Nonfarming	34.4	84.4	59.4
Total	100.0	100.0	100.0

$$X^2 = 16.6 \quad P=0.0002$$

Family Size and Type

The household size of the respondents ranges from 1 to 17 with a mean of 6.2 and a standard deviation of 2.5. The average family size in the hills is slightly smaller (6.0) than that of the Tarai (6.4). The

findings indicate that more respondents (50 percent) in the Tarai tend to live in extended families as compared to the hills (32.2). The reasons for extended families in the Tarai are probably an indication of cultural behavior among Tarai ethnic groups.

Table 4. Distribution of Respondents by Household Size

Household size	Percent Responding		Percent Total (N=64)
	Hill (N=32)	Tarai (N=32)	
3 or less	6.2	12.5	9.4
4 - 6	50.0	50.0	50.0
7 - 9	43.7	31.2	37.5
10 and above	0.0	6.2	3.1
	Mean = 6.2		
	S.D. = 2.5		

Farm Sizes. Respondents include both landless or of nearlandlessness households--some with more than one Bigha of land.

Table 5 shows that about one-third (34.4 percent) of the respondents in the Tarai are landless while only one (3.1 percent) in the hills are in this category. Among those who own land, the average size of land holding was 11.2 kathas (0.4 ha) in the hills and 8.5 kathas (0.3 ha.) in the Tarai. It should also be noted that size of landholding is not found to be related with annual family income and size of family of the respondents.

In addition to the land they own, one-fourth of the respondents in the hills also cultivate land they bought under mortgage. An equal number of farmers (25 percent) in both the hills and the Tarai cultivate some land under sharecropping. Further, two respondents in the Tarai were are cultivating some land on a contract basis. One half of the landless respondents in the Tarai also till small parcels of land on a sharecropping basis.

Table 5. Distribution of Households by Farm Size

Farm size	Percent Responding		Percent Total (N=64)
	Hill (N=32)	Tarai (N=32)	
Landless	3.1	34.4	18.7
1 - 5 kathas	25.0	18.7	21.9
6 - 10 kathas	25.0	34.4	29.7
11 kathas and above	46.9	12.5	29.7

Farm size in Table 5 excludes land held under sharecropping, mortgage, and contract but includes khoriya (slash and burn type of farm) and kharbari (land under grass for thatching purpose) in the hills as reported by the respondents. If the land under kharbari and khoriya is excluded, the average size of land holding by the hill households is smaller than that of the Tarai. In most cases, the hill farms are marginal, located near forests where wild animals damage crops or the land is susceptible to soil erosion. Farms in the Tarai are rainfed upland and irrigation water is the main problem.

The selling of land under the mortgage system benefits the landlord as the money can be reinvested more productively without bothering about tenancy rights, and as the price of land is ever increasing, the tenants can be paid back at any time. Most of the land that the respondents are tilling under sharecropping is of poor quality. In addition, the informal relationship between the tenant and the landowner discourages the tenant to claim tenancy rights.

Income

The average annual family income of the respondents is Rs.6579 with a per capita annual income of Rs.1052 at current prices. The annual family income of the poor in the hills and the Tarai is Rs.5124 and Rs.8034, respectively, with the average annual income in the hills notably lower than that of the Tarai (Table 6).

Table 6. Income Distribution of Respondents

Income category	Percent Responding		Percent Total (N=64)
	Hill (N=32)	Tarai (N=32)	
Below 3000	15.6	12.5	14.1
3001 - 6000	50.0	18.7	34.4
6001 - 9000	28.1	43.7	35.9
9001 and above	6.2	25.0	15.6
Total	100.0	100.0	100.0

Coefficient of variation for the Tarai = 61 percent

Coefficient of variation for the hills = 41 percent

The data show that even among the poor, there is more disparity in the Tarai as than in the hills. The higher income among some Tarai respondents can be attributed to the fact that they have a regular income from selling firewood in the nearby market. Moreover, the number of family members engaged in selling firewood in a family is directly related to the amount of annual income earned by the family. Thus, it is probably an indication of income disparity among the Tarai poor.

Education

The majority of the household heads (59.4 percent) report that they can not read and write. The literacy rate among the household heads in the Tarai is a little higher (43.7 percent) than the hills (37.5 percent). Younger household heads tend to be more literate than the older ones, while the immigrants in the Tarai tend to be more literate than the indigenous residents. Furthermore, respondents belonging to higher castes are more literate than those in the lower castes. The Tarai panchayat in this study has only one primary school while the panchayat in the hills has 9 primary schools, 2 lower secondary schools and a secondary school. As the schools in the hills were established during the past two decades, a higher educational attainment is expected among the young members of the respondent's families in the hills (Table 7).

Further analysis of educational participation reveals that male literacy of total family members 6 years old and above is higher (58.0 percent) than that of females (16.9 percent). Literacy in the hills is higher (50.3 percent) than in the Tarai (30.6 percent). In addition, the percentage of both male and female literacy is higher (70.1 and 24.2 percent) in the hills as compared to that of the Tarai (46.8 and 10.5 percent).

More school age children (ages 6 to 20 years) are attending school (55.8 percent) in the hills than in the Tarai (30.7 percent). The percentage of females attending school is also much higher (34.9 percent) in the hills than in the Tarai (9.5 percent). Again, the higher educational participation in the hills can be attributed to the greater number of schools existing in the area (Table 8.).

Most of the students drop out after elementary school and more females than males tended to drop out earlier. The most frequent reasons for dropouts are: economics (cost of school dress, fees, books and supplies), unwillingness of children to go to school, and the need for labor on the family farm, or as a wage laborer. Thus, most of the children do not continue their education and only 5.1 percent of the school age population of 6 to 20 years or 12.1 percent of school-going children go on to high school (grade 6 and above).

Table 7. Literacy of Household Heads

Literacy :	Percent Responding		Percent Total (N=64)
	Hill (N=32)	Tarai (N=32)	
Literate	37.5	43.7	40.6
Illiterate	62.5	56.2	59.4

Table 8. Educational Participation

Facts	Percentage	
	Hill	Tarai
1. Male literacy of family members of 6 years of age and above	70.1	46.8
2. Female literacy of family members of 6 years of age and above	24.2	10.5
3. School age (6 to 20 years) population attending school	55.8	30.7
4. Female attending school	34.9	9.5

Earning a Living

The poor in both villages earn their living by doing many kinds of work. As indicated earlier, farming and wage labor are the main sources of earning cash. Among those who farm, all the respondents reported that they work as wage labor whenever they are free from farm work. The number of working age family members in a family tends to be directly related to the amount of income earned by the family.

Beyond farming and wage labor, some respondents (12.5 percent) report that their families are supported by their richer relatives. Food aid, financial aid, providing a piece of land under sharecropping or contract, supporting a living for some children, and providing loans during weddings, funerals, or to buy livestock are the main forms of support from relatives. These forms of support are more prevalent among Gurung, Magar, and Tharu than other ethnic groups and serves as an indication of an ethnic unity behavior.

Some respondents from both villages make alcoholic beverages and sell them in the local stores. They also indicate that this business is highly profitable but risky as it is illegal.

Most of the respondents in the Tarai said they collect firewood from the nearby government-owned forest and sell it in the bazaar. They earn an average of Rs.15 per bhari (approximately 30 kg.) of firewood. Among the hill people who have migrated to the Tarai, both men and women participate in this endeavor, while only men among indigenous Tarai people tend to sell firewood. Selling firewood as a source of income is not practiced at all in the hills, and has a limited future in the Tarai, until a sustained yield of fuelwood can be maintained by using proper forest management techniques.

Most of the respondents from the hills buy clothes from the local stores on credit, and they are always in debt. The Tarai respondents, on the other hand, usually pay cash for clothing. Some respondents indicate that aside from the high price of goods, the annual interest

rate is as high as 40-50 percent. It was not unusual for a client to pay in kind with a goat, buffalo, or cow instead of cash.

Respondents from both sites indicate that during a crisis they receive some assistance from the community. Forms of community cooperation include sympathy, food for handicapped beggars, exemption of interest on a debt, and employing younger children as servants or workers.

Problems Poor Villagers Face

The main problems faced by families are food and clothing (78.1 percent), lack of access to land (26.6 percent), debt (32.8 percent), poor health (18.6 percent), wedding costs (10.9 percent), education, and employment for the family members (Table 9).

Causes of Poverty

Most of the respondents reported two to five reasons for the cause of their poverty. The most frequent cause is that the household has no land or has land which does not assure subsistence. Other causes of poverty are: family debt, low productivity of family labor, poor health, a large number of dependents (children, aged, sick, or disabled), large family size, lack of productive employment opportunities, natural disasters, and wedding expenses (Table 10). About one third (31.2 percent) of the respondents reported that they were born in a poor family, brought up in poor family environments, and are living in the same situation.

Table 9. Main Problems of the Respondent's Family.

Problems	Frequency *				Total percent
	Hill		Tarai		
	Number	percent	Number	percent	
Food and clothing	27	84.4	23	71.9	78.1
Debt	17	53.1	4	12.5	32.8
No access to land	1	3.1	16	50.0	26.6
Poor health	5	15.6	7	21.9	18.6
House to live/home lot problems	4	12.5	6	18.7	15.6
Marriage cost for daughter	-	-	7	21.9	10.9
Educating children	-	-	4	12.5	6.2
Others	4	12.5	5	15.6	14.1

* Some respondents indicated more than one problem which they perceive equally important.

 Table 10. Perception of the Causes of Poverty

Causes	Percent Responding		Total * percent
	Hill (N=32)	Tarai (N=32)	
No land or little land	59.4	81.2	70.7
Debt	59.4	12.5	35.9
Low productivity of family members	42.7	18.7	31.2
Poor health	18.7	12.5	15.6
Lack of productive employment opportunities	18.7	9.4	7.8
Natural disaster	6.2	9.4	7.8
Cost of children's weddings	-	6.2	3.1

* Total exceeds 100 because of some multiple responses.

Farming System

Most of the respondents engaged in farming are growing paddy, wheat, maize, millet, mustard, lentil, and vegetables. Nearly half (46.9 percent) of the respondents in the Tarai and about two-thirds (65.6 percent) in the hills grow paddy. About one-third (37.5 percent) of the respondents in the Tarai grow an improved variety of wheat. Local varieties of maize and millet are grown by all respondents in the hills while in the Tarai none of the respondents grow millet and only 10 percent grow maize.

Mustard intercropped with lentil is grown by nearly one-third (32 percent) of the respondents in the Tarai. Major cropping patterns are Rice-Fallow-Maize and Maize-Millet-Fallow in the hills, and Rice-Wheat-Fallow and Rice-Mustard/Lentil-Fallow in the Tarai. Intercropping, relay cropping, and mixed cropping occur in both villages.

Table 11. Distributions of Crops Grown on Farm

Crop grown	Percent Responding				Total * (percent)
	Hill		Tarai		
	Number	percent	Number	percent	
Paddy	21	65.6	15	46.9	56.2
Wheat	1	3.1	12	37.5	20.3
Maize	30	93.7	3	9.4	51.6
Millet	31	96.9	-	-	48.4
Mustard	1	3.1	11	34.4	18.7
Lentil	-	-	11	34.4	17.2

* Percentage exceeds one hundred because of cropping pattern.

Livestock is an important component of the farming system of the respondents. Small farm animals, such as goats and chickens, are quite popular among the poor. Goats are raised by more than half (53.1 percent) of the respondents (62.5 percent in the hills and 43.7 percent in the Tarai), and an almost equal number are raising chicken (53.1 percent in the hills and 46.9 percent in the Tarai). Buffalo are found in 84.4 percent of the farms in the hills as compared to only 9.4 percent of the farms in the Tarai. Cows and bullocks are raised by less than one-third (26.6 percent in the hills and 29.7 percent in the Tarai) of the respondents (Table 12). The respondents feel that goats, pigs, chicken, and buffalos are like a cash deposit in the bank for they can be sold at any time.

In addition to growing field crops and raising livestock, nearly half (48.4 percent) of the respondents (62.5 percent in the hills and 34.37 percent in the Tarai) have some kind of fruit trees in their backyard. Banana, guava, lemon, mango, jackfruit, and papaya are the most frequently mentioned fruits (Table 13). All respondents except two in the hills report that most of the harvest is consumed by the family and there is very little marketable surplus of fruits.

Table 12. Types of Livestock Holding

Livestock raised	Frequency				Total percent
	Hill		Tarai		
	Number of farmers reporting	percent	Number of farmers reporting	percent	
Cows	8	25.0	9	28.1	26.6
Oxen	9	28.1	10	31.2	29.7
Buffalo	27	84.4	3	9.4	46.9
Goat	20	62.0	14	43.7	53.1
Chicken	17	53.1	15	46.9	50.0
Pig	8	25.0	-	-	12.5

Table 13. Fruit Trees Owned by Respondents

Fruit trees	Frequency				Total percent
	Hill		Tarai		
	Number	percent	Number	percent	
Banana	17	53.1	5	15.6	34.4
Lemon and orange	17	53.1	4	12.5	32.8
Guava	3	9.4	4	12.5	10.9
Papaya	6	18.7	1	3.1	10.9
Mango	2	6.2	4	12.5	9.4
Jackfruit	1	3.1	2	6.2	4.7

Vegetables are another aspect of respondent's farming systems. About two-thirds (65.2 percent) of the respondents in both villages grow winter vegetables and even more (71.9 percent) grow summer vegetables. Rayo, radish, tomato, okra, chili, brinjal, potato, and cabbage are frequently mentioned winter vegetables. Gourds (bottle gourd, snake gourds, bitter gourds, round gourds) okra, cucumber, cowpea, chili, cocoyam, yam, and beans are grown during the summer season. Except a few respondents in the Tarai, all indicated that the family consumes all the vegetables.

Table 14. Vegetables Grown by Respondents

Kinds of Vegetables	Number of Farmers Growing	
	Hill	Tarai
<u>Summer vegetables</u>		
Round gourd	28	19
Snake gourd	17	3
Bitter gourd	13	4
Bottle gourd	4	8
Pumpkin	18	15
Chilli	2	11
Cucumber	20	4
Cocoyam	12	-
<u>Winter vegetables</u>		
Rayo	16	18
Radish	11	11
Potato	8	7
Tomato	4	10
Brinjal	1	5

Agricultural Practices

Being a predominantly agricultural country, agricultural development has received high priority during the past three decades. Diffusion of improved yield varieties of crops and animals, along with agricultural credit through agricultural extension have been given high priority. The awareness of new agricultural innovations is much higher among the respondents living in the hills than in the Tarai (Table 15).

Table 15. Awareness of Improved Agriculture

Improved agriculture awareness	Percentage reporting awareness	
	Hill N=32	Tarai N=32
Improved rice	62.5	59.4
Improved wheat	71.9	56.2
Improved maize	90.6	53.1
Chemical fertilizer	100.0	100.0
Improved breed of chicken	78.1	21.9
Improved breed of cow	68.7	59.4
Improved breed of buffalo	84.4	53.1
Improved breed of pig	93.7	53.1
Improved breed of goats	53.1	53.1
Agricultural credit	84.4	50.0

Improved rice is known to about 60 percent of the respondents and adopted by 15 percent in the Tarai and 9 percent in the hills. The source of information for most of the respondents is through informal channels such as travel, relatives, friends and neighbors. However, of those who are aware of improved rice varieties, almost half (48.7 percent) do not know where to go for seeds.

Improved wheat varieties are known to 64.1 percent of the respondents, and awareness is much higher in the hills (71.9 percent), than in the Tarai (56.2 percent). Of those who report awareness of the improved wheat varieties, an overwhelming majority (95.6 percent in the hills and 94.4 percent in the Tarai) indicate that their source of information is through neighbors, relatives, friends, travel, and again, a majority (58.5 percent) did not know where to get improved seed.

More than two-thirds (71.9 percent) of the respondents indicate that they are aware of improved varieties of maize. The awareness is much higher in the hills (90.6 percent) than in the Tarai (53.1 percent). Most indicate informal sources of information and more than half do not know where to get improved seed.

Chemical fertilizer is known to all respondents and is used by about one-third (32.8 percent). Most know about it through neighbors or friends and indicate that it is available in the local sajha store. Chemical fertilizer is mostly used on the wheat crop in the Tarai and the millet seed bed in the hills.

A much higher percentage of respondents in the hills (78.1 percent) are aware of improved breeds of poultry than those in the Tarai (21.6 percent). Travel and neighboring farmers are the main sources of information, and the majority of the respondents (65.6 percent) do not know who to contact for baby chicks. None of the respondents have raised any improved chickens so far.

About two-thirds of the respondents (68.7 percent in the hills and 59.4 percent in the Tarai) indicate knowledge of improved breeds of cows mostly through informal sources and again, most of them lack knowledge about where to get them.

The majority of the respondents (68.7) are aware of improved breeds of buffalo. Awareness is much higher in the hills (84.4 percent) than in the Tarai (59.4 percent). Again, all the respondents indicate that their source of information is informal and less than one-fifth (18.2 percent) indicate knowledge about whom to contact for improved breeds of buffalo calves.

All the respondents except one in the hills and about half (53.1 percent) in the Tarai are aware of improved breeds of pigs. However, only one respondent in the hills is raising a landrace pig. Here again, the source of information is informal and the majority of the respondents (76.6 percent) do not know whom to contact for the piglets.

Improved goats are raised by more than half (53.1 percent) of the respondents, they received the information informally and most of them (73.5 percent) lack information about where to obtain improved goats.

The majority (67.2 percent) of the respondents are aware of the availability of agricultural credit through the Sajha or the Agricultural Development Bank. The awareness is much higher (84.4 percent) among hill respondents than those of the Tarai (50 percent). Only about one tenth (11.6 percent) indicate that the source of information is institutional or formal. About 15 percent of the respondents in the hills and only one in the Tarai have benefitted by taking a loan. Most of the respondents (73.4 percent) indicate that they know whom to contact for credit. However, several respondents indicate that they do not have suitable collateral needed to receive a loan.

Food Problems

Few respondents indicate any food crisis during the rice harvest season and the majority reported a food crisis during the summer months. The data also indicate that about one-third (29.7 percent) had to buy food throughout the year. More than two thirds (70.3 percent) reported the harvest from the farm is enough to feed the family for only about 2-3 months and they have to buy food for the rest of the months. It should be noted that farmers harvest rice during Aswin-Kartik in the Tarai while rice and millet are harvested in the hill during Mangsir and

Poush--this season tends to be prosperous in terms of food availability. Thus, the availability of food tends to be seasonal and in crop harvesting months it is more plentiful than in the non-harvesting months.

Health Care

The health of villagers directly affects their work productivity. The findings indicate that all the respondents are aware of hospital and health post services available in their districts. More than four-fifths (81.2 percent) of the respondents have visited hospitals, health posts, or Ayurvedic hospitals. A little over one-tenth (12.5 percent) visit hospitals whenever their family members are sick and the rest follow traditional methods of treatment such as local herbs or traditional healers (Dhami). Fewer respondents in the Tarai (9.4 percent) indicate that they visit private medical workers for treatment and then only go to them if local herbs do not serve the purpose.

The primary kinds of health problems in the two villages are similar. Children are prone to stomach parasites and other diseases producing diarrhea, especially during the rainy season. Adults seem most affected by gastric and respiratory infections. In general, the adult women are less healthy than the adult males and this is attributed both to numerous childbirths as well as the prevailing cultural pattern of the male being served first in the kitchen.

The majority (85.9 percent) of the respondents report that inoculations for smallpox, cholera, and DPT were given to their children by village health workers. However, those who live away from the central village report that their children have not been inoculated against any diseases.

Table 16. Health Care Practices

Facts	Percentage responding	
	Hill (N=32)	Tarai (N=32)
Awareness of the existence of hospitals/health posts/Ayurvedic	100.0	100.0
Visit hospital/health post whenever sick	12.5	12.5
Visit hospital/health post only when seriously sick	66.7	66.7
Follow local herbs for treatment	43.7	37.5
Follow local herbs as well as witchcraft for treatment	87.5	37.5
Visit private medical worker for treatment	0.0	9.4

Benefits From Development

The findings in Table 17 reveal that only 7.8 percent of the respondents indicate they receive benefit from agricultural development services and only 28.1 percent from health related development services. The majority of the respondents (53.1 percent) indicate that they have benefitted from educational programs. Relatively more respondents from the hills indicate benefits received from educational and health related development services.

Table 17. Benefits from Development

Development programs	Percent reporting benefit		
	Hill (N=32)	Tarai (N=32)	Total (N=64)
Agricultural development services	6.2	9.4	7.8
Health services	43.7	12.5	28.1
Educational services	81.2	25.0	53.1

Expectations

A series of questions were asked about how they would spend a certain amount of money in order to know the priority needs of the respondents.

In response to the question "what would you do if you were able to earn an additional 10 rupees more today than yesterday?", a majority (85.9 percent) indicate that they would buy food, while the rest indicate that they would buy medicine, drink tea in the teashop, or pay school fees for the children (Table 18).

Responding to a similar question "what would you do if someone gives you 100 Rupees as Bakshish?", most of the respondents indicate that they would spend the money for food (29.7 percent) and clothing (37.5 percent). Others said that they would invest it in buying chickens (10.9 percent), buying medicine (12.5 percent), or save it for the future (9.4 percent). Similarly with 1000 rupees, 59.4 percent of the respondents indicate that they would invest in livestock (especially goats), 15.6 percent would pay their debts, 14.1 percent would buy land, and rest would spend it on food and clothing.

When asked "If you were to win a lottery of Rs.10,000 today, how would you utilize the money?", a great majority (76.5 percent) indicated that they would buy land. About one-eighth (12.5 percent) would buy buffaloes, and the rest would spend it on other activities such as wedding expenses, constructing a home, or running a small business.

Table 18. How Money Should be Spent

Amount of money	Priority areas for expenditure	Percent reporting		
		Hill (N=32)	Tarai (N=32)	Total (N=64)
Rs.10	1. Buying food	78.1	93.7	85.9
	2. Others	21.9	6.2	14.1
Rs.100	1. Buying food	40.6	18.7	29.7
	2. Clothing	25.0	50.0	37.5
	3. Invest buying chickens	12.5	9.7	10.9
	4. Buy medicine	9.4	15.6	12.5
	5. Save for future use	12.5	6.2	9.4
Rs.1000	1. Invest buying livestock	37.5	81.2	59.4
	2. Buy land	21.9	6.2	14.1
	3. Pay debt	31.2	-	15.6
	4. Others	9.4	12.5	10.9
Rs.10,000	1. Buy land	78.1	75.0	76.5
	2. Buy livestock	6.2	18.7	12.5
	3. Others	15.6	6.2	10.9

Government Services. Respondents have various expectations of services/provisions from the governmental development programs to alleviate their present poverty. The majority of the respondents (65.6 percent) expect a piece of farm land along with a pair of bullocks under a resettlement program. However, some of the respondents who expect farm land also indicate that the government might not be able to provide farm land for them. About two-thirds (65.5 percent) expect agricultural loans to buy some goats, buffalo, or a pair of bullock. Education and employment for family members is expected by 43.7 percent and the rest indicated irrigation facilities, and a provision of food and clothing for disabled and aged persons.

Table 19. Expectations from the Government

Expectations of services/ provision	Percent responding		
	Hill(N=32)	Tarai(N=32)	Total(N=64)*
A piece of farm land	53.1	78.1	65.6
Agricultural loan	56.2	75.0	65.5
Education and employment for family members	65.6	21.9	43.7
Others (irrigation water, food and clothing for disabled and aged)	9.4	31.2	20.3

* Percentage exceeds 100 because of multiple responses.

Conclusion and Policy Implications

Conclusion

The advantages of various development programs have yet to reach the rural poor in the two villages. The majority of the population is illiterate. They earn their livelihood either by tilling a small and marginal piece of land and tending some livestock, which sometimes are not owned by them, or by working as wage labor. Family labor is not very productive because of poor health and high competition for employment opportunities with others in a similar condition. The household's stock of food is low and seasonal. Most of what is earned in cash is soon used up in buying food; food and clothing are the main problems cited by the respondents.

Poverty at the household level means a deteriorating socioeconomic condition which can be characterized by a lack of food, shelter, clothing, basic education, health care, adequate employment, and production opportunities.

Based on the findings and close observation of the respondent's condition, a typology of rural poverty, in order of urgency of assistance needed is as follows:

1. Rural beggars

This are individuals who earn their living mostly by begging. They could be young orphans, old people with no supporting family members, or the sick and handicapped. Their kin and relatives show sympathy to them but do not provide much assistance. They were found in both villages studied.

2. Sufferers from natural disaster

These include farmers whose farm was washed away by erosion, crops completely damaged by flood or hailstone, house burnt, or the sudden death of a milking buffalo. This form of poverty appears temporary in nature--if recovered, families in this classification may or may not belong to the category of the poorest of the poor. If they are unable to overcome such a disaster, they tend to belong to the landless or nearlandless category or even a beggar, depending upon the nature and extent of the disaster.

3. Landless or nearlandless laborer

These include "Sukumbasi" (migrants from the hills squatting on forest land in the Tarai), "Haruwas" (servants), vegetable vendors, porters, other wage laborers or tenants who mostly till others' land under contract or on a sharecropping basis. The household is physically weak with more dependents. Both husband and wife work as wage laborers. Children usually babysit their younger brothers and sister and thus do not attend school, or drop out early. They are easily exploited by moneylenders, landlords, or even by petty officials. Except for "Sukumbasi", they are the most invisible rural poor to development workers and rural researchers; because they are busy working every day from sun-rise till late in the evening and they rarely have time to sit and talk around the village tea shops.

4. Small farmers

The popular terminology of rural development "small farmer" is far too vague. Two district categories of "small farmers" can be described as follows:

a) Invisible small farmers:

This group of small farmers includes mostly farmers belonging to lower caste and/or ethnic groups. They grow a variety of crops and tend livestock. Their farms are marginal and do not assure subsistence. They also could be tilling some additional land under a sharecropping, contract, or mortgage basis. Both husband and wife work as wage laborers whenever they are free from their farm work. They tend to be ignorant about events beyond their neighborhood. They are illiterate and their children may go to school but drop out early. Like landless or nearlandless laborers, they too, are not visible to developmental workers and rural researchers.

b) Visible small farmers

This category includes farmers mostly belonging to higher caste or ethnic groups. Their farms barely assure subsistence. They grow a variety of crops and also tend livestock. Most of the farm work is done by the woman of the family. Because of their higher social prestige, the men tend not to work on others' farms as wage laborers. Husbands usually sit idle around the village teashop, mostly playing cards and perhaps drinking alcohol. They frequently interact with outsiders who pass by the tea-shop. They may

own a radio or a bicycle or both and are well aware of local events as well as political affairs around the world. They are in constant touch with local development workers and are always watchful for handouts through some government development programs. Some attend public meetings and even could speak out about their problems. They are the visible poor.

The less than satisfactory experience with past developmental approaches seems enough to show that alternative approaches are warranted if one is serious about reaching the most disadvantaged rural poor. Change in their socioeconomic opportunities with a strong bias towards the poor is highly desirable. An environment conducive to enhancing the poor participation in development programs should be created without putting the burden of development only on the poor in the name of popular participation. Planners and policymakers can make use of this typology to develop strategies for basic education, health care, agricultural credit, employment opportunities, and other services reaching those who are most in need of them.

Policy Recommendations

The following range of policies/programs options are needed to solve the problem.

1. Strengthen and expand the activities of the existing programs for disabled, handicapped, and orphans.
2. Provide alternative employment skill generating training to people belonging to traditional occupational castes and give them priority in hiring.
3. Create a special fund at the panchayat level to support the sufferers from natural disasters. The beneficiaries could repay the amount borrowed when they recover from the disaster.
4. Reorganize the food-for-work programs to carry out work-for-food projects to strengthen local irrigation, build local roads, repair school buildings, and control local rivers. Schedule these activities during the periods in which the poor are unemployed or have acute food problems.
5. Initiate programs to make agricultural inputs more accessible to cash poor farmers and provide access to currently existing resources.
6. Start a special loan (non-collateral/non-specific) program to identified poor families guaranteed by the government up to a determined amount. The program could be organized in such a manner that mobile credit teams could move from panchayat to panchayat in order to facilitate ease of access.
7. Expand health care infrastructures and support systems in rural areas and provide free or reduced medical care for qualified poor people.

8. Subsidize education beyond elementary school for qualified poor families.
9. Assign field level development workers such as JT/JTA's to look after a specified number of identified "invisible poor" so that they could get benefits.
10. Agricultural research systems should give due attention to work on crops extensively grown by the poor, i. e., finger millet in the hills and lentil and mustard in the Tarai.
11. Develop and implement policies that encourage the poor to participate in the management of government-owned forests so that they can get sustained benefit.

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7

21

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