

Understanding Rural Poverty in Nepal

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1. Introduction

a. General background of the country

Nepal, with an area of 147,181 square kilometers (km²), is a land of enormous geographical diversity. The country has three main geographical/ecological regions: the *terai*¹ region, the hill region and the mountain region, which cover 23.1 percent, 41.7 percent, and 35.2 percent of the total area, respectively. Each ecological region is a narrow strip of land stretching from east to west. These three regions not only manifest immense diversity of geographic features, but also display immense diversity of human settlement patterns; population and land distribution; availability of productive resources; and levels of economic, human and infrastructure development.

The terai region has a high population density² but relatively low population pressure on the farmland and relatively advanced infrastructure development. The conditions of the hill region appear to be somewhere between those of the terai region and the mountain region, with a relatively moderate population density and moderate population pressure on the farmland. The mountain region has a low population density but relatively high population pressure on the farmland, as well as difficult terrain, adverse climatic conditions, and very little infrastructure development, and that rudimentary.

Nepal's population is currently projected at a close to 23 million. The distribution of population across the three ecological regions is continually changing due to migration, particularly from the hill/mountain region to the terai region, but also from neighboring countries. However, the 1991 population distribution was 46.7 percent for the terai region, 45.5 percent for the hill region, and 7.8 percent for the mountain region. The population distribution is closely related to the distribution of the farmland (total area of holdings): 52.9 of the arable land is terai, 40.3 percent is hill country, and 6.8 percent is mountainous.

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¹ Narrow strip of flat alluvial terrain in the southern part of the country, with a mostly humid and tropical climate.

² In about 1991, population density was 254 persons/km² in the terai region, 137 in the hill region, and 28 in the mountain region.

Nepal also has five development regions: Eastern, Central, Midwestern, Western, and Far Western. Each development region is a narrow strip of land stretching from north to south. Each development region includes the three ecological regions. Several development indicators have persistently shown that the Eastern, Central and Western development regions are relatively better off than the Midwestern and Far Western development regions (ICIMOD, 1997; NESAC, 1998).

Nepal is one of the least urbanized countries in the world. The 1991 census reported that around 9 percent of the total population resided in urban areas, which comprise 33 municipalities. Out of these 33 municipalities, 22 are in the terai region and 11 in the hill region. The availability of the basic amenities of life is highly urban-biased. For instance, around 80 percent of all urban households have access to electricity for lighting, while less than 10 percent of all rural households do so.

Nepal, with an annual per capita income of around US\$ 200, is one of the poorest countries in the world (World Bank, 1997). The country's employment and economy depend heavily on agriculture. In the past, numerous nationwide surveys have repeatedly shown agriculture as the main economic activity of over 80 percent of the nation's labor force. Likewise, numerous national level surveys have repeatedly shown that over 60 percent of total household income originates from agriculture.

b. Recent poverty scenario

Regional disparities in the incidence of poverty and illiteracy are quite stark in Nepal. In essence, regional disparity is a major dimension of poverty. The incidence of poverty, for example, ranges from 28 percent in the Rural Eastern hill/mountain region to 72 percent in the Rural Midwestern and Far Western hill/mountain region. Likewise, the illiteracy rate ranges from 54 percent in the Rural Western hill/mountain region to 77 percent in the Rural Central terai region (Table 25.1).

Some distinct poverty scenarios of Nepal emerge from Table 25.1. The level of rural poverty is almost twice as high as that of urban poverty. Despite the obvious advantages of the terai region over the hill region, the incidence of poverty in the terai region is higher than that in the hill region. This finding is a reverse of past trends.³ Another anomaly is that the rural Central region, which suffers from a relatively lower incidence of poverty, experiences the highest illiteracy.

c. Poverty reduction initiatives

Poverty has always been an overriding concern of planned development efforts in Nepal. However, the first attempt to formulate a separate plan with a long-term perspective for poverty alleviation was made during the Seventh Plan period (1985–1990), which was

³ The 1978 estimates of the incidence of poverty were 32 percent for the terai region, 35 percent for the hill region, and 72 percent for the mountain region; the corresponding 1988 estimates were 35 percent, 50 percent, and 44 percent.

Table 25.1. Poverty Indicators for Areas of Nepal

	Poverty Incidence (percent)	Poverty Gap	Illiteracy (6+) Rate (percent)
Ecological Region			
Terai	42	0.099	69
Hill	41	0.136	58
Mountain	56	0.185	75
Nepal	42	0.121	64
Rural/Urban			
Urban	23	0.070	37
Rural	44	0.125	67
Rural Eco-Development Region			
Rural Eastern hill/mountain	28	0.068	59
Rural Eastern terai	42	0.095	62
Rural Central hill/mountain	67	0.108	66
Rural Central terai	38	0.082	77
Rural Western hill/mountain	40	0.128	54
Rural Western terai	40	0.092	69
Rural Mid & Far Western hill/mountain	72	0.281	73
Rural Mid & Far Western terai	53	0.132	72
Interurban Variation			
Urban Katmandu Valley ^a	4	0.004	24
Other Urban	34	0.109	45

Notes: ^a Includes municipalities—Katmandu, Bhaktapur, and Lalitpur—and accounts for 35 percent of the urban population.

Source: Prenzushi (1999).

later abandoned. The Eighth Plan (1992–1997) and the Ninth Plan (1997–2002) have poverty reduction as their main objectives. The Ninth Plan set out to reduce the incidence of poverty in Nepal from 42 percent to 32 percent by the end of 2002. Some of the major initiatives of the Government to reduce poverty are the Agriculture Perspective Plan (APP), economic reform, the Local Self-Governance Act (LSGA) and adoption of an interim Poverty Reduction Strategy paper (PRSP).

The APP was formulated in 1995 with a 20-year time horizon and provides a strong basis for planning and implementing agricultural development programs in Nepal. The objective of APP is to raise the annual growth rate from around 3 percent to around 5 percent by 2015. The plan places special emphasis on increasing use of modern agricultural inputs. If the APP is successfully implemented, the population living below the poverty line should decline significantly. The Ninth Plan's strategy for agricultural growth is based on the APP.

Nepal has been in the deliberate process of economic reform since 1985. The process accelerated after 1992. At the aggregate level, reform has produced some very tangible results: increased gross domestic product (GDP), increased exports and foreign exchange reserves, increased revenue, and compression of inflationary pressures.

Realizing the importance of decentralized mechanisms, the Government of Nepal in 1999 promulgated the LSGA. The act created 75 District Development Committees (DDCs), 58 municipalities, and 3,912 Village Development Committees (VDCs). The lowest tier

of local self-governance is the ward committee. The act aims principally at enabling the VDCs and DDCs to prepare and implement their development work locally.

The National Planning Commission (NPC) has recently prepared an Interim Poverty Reduction Strategy Paper (I-PRSP) based on a poverty situation analysis of the country, plus public consultations and focus group discussions. It has recognized poverty assessment and monitoring as an integral part of the poverty reduction exercise. It looks to (i) improve and institutionalize data collection and analysis of poverty indicators and (ii) strengthen the capacity for monitoring and evaluation at various levels of the country.

Microcredit finance and targeted poverty alleviation programs are other types of initiatives. These initiatives, introduced by governments and other agencies, are discussed elsewhere (see, for example, Pyakuryal [2001]).

d. Objective and organization of the paper

Poverty in Nepal is predominantly a rural phenomenon. The main aim of this paper is to understand the rural poverty of Nepal at both the macro and the micro level. In this paper more emphasis is placed on understanding the underlying factors that perpetuate poverty in Nepal. For this purpose, several available databases and indicators of development and deprivation were reviewed and analyzed. Whenever possible, data for rural areas were separated out and analyzed. The process of separating out data of rural areas was not always possible, and in many cases reported results are for the nation or regions. Due to the predominance of rural poverty, however, the national poverty scenario largely mirrors that for rural poverty.

Poverty outcomes at a given time are a reflection of past economic, social, and political development; so poverty needs to be understood in the broader context of development. With this premise, section 2 presents a brief review of some major political and economic events in Nepal during the period 1955–1990. Sections 3 and 4 review and analyze the indicators of economic growth and population growth. Land is the main productive asset of the rural people. Its access, entitlement and institutional framework are reviewed in Section 5. Section 6 reviews disparities in education among quintile groups, male/female groups, and caste/ethnic groups. Section 7 identifies the most “backward” region of the country and briefly reviews the socioeconomic indicators of the region in the context of poverty. The nature and causes of poverty vary from one population or household group to another. Poverty and its determinants, therefore, need to be understood for various population or household groups. With this premise, Section 8 makes a separate comparative appraisal of socioeconomic and demographic characteristics of poor and nonpoor farm households of three categories: marginal, small, and large.

2. Brief Review of the Political Economy of Nepal: 1955–1990

This section attempts to examine in retrospect how political developments have affected the course of economic development in Nepal.

Nepalese society first opened to the outside world after the overthrow of the Rana oligarchy in March 1951, nearly four years after India's independence from British imperialism and two years after the establishment of the People's Republic of China (PRC). The next five years were spent in a political transition to democracy, during which economic agendas hardly surfaced. The systematic drive for national economic development began in 1956, when the National Planning Commission (NPC) and the Nepal Rastra Bank (NRB) were established.

The NPC drafted and introduced the First Five Year Plan (1956–1961) under a very unfavorable situation characterized by mass illiteracy (around 95 per cent), high mortality and fertility rates, high incidence of endemic diseases, almost no physical infrastructure, no skilled manpower, and severe financial constraints. To execute the national economic development plans effectively, the Public Service Commission was established in the same year. The inflow of foreign aid to Nepal began in the early 1950s, from the United States and subsequently from India, the PRC, and other individual aid providers. Nepal then adopted a mixed economic strategy: the State and the market-led private sector complemented each other.

Meanwhile, the Nepali Congress Party, led by B. P. Koirala, won Nepal's first-ever general election held in 1959. Koirala, a leading figure of the Socialist International, was a committed democratic socialist. Koirala continued the 1956 mixed economic strategy, and accelerated welfare measures. In the process, he abolished the *Birta* system (huge land grants to members of the nobility and aristocracy, and perks and privileges for erstwhile royals in the hill principalities).

The Nepali Congress Government committed itself to a significant land reform program; this commitment was almost certainly one of the factors that motivated the conservative landowners to support the King's overthrow of the Government in December 1960 (Seddon, 1987). The royal coup subordinated Nepal's economic agenda to the political agenda of the King's government.

A land reform program was introduced in 1964. The program abolished intermediaries in the land revenue collection system, provided security of tenure to sharecroppers and tenants, and imposed land ownership ceilings. However, the policy of redistributing "ceiling-surplus" land from landlords to the land-poor was only marginally successful (Seddon, 1987).

After the royal coup, several factors led to a greater injection of foreign aid into Nepal: the 1962 Sino-Indian War, the intensification of the Cold War after the Kennedy-Khrushchev confrontation over Cuba, and the use of aid funds in the competition between the West and the Soviets for third-world influence. The Western individual countries provided "soft" aid, whereas the Soviets and Chinese built large factories (leather, brick and tile, pulp

and paper, sugar, cigarette and the like), hydroelectric generators, highways, and a stadium. India too extended aid in the form of roads, health facilities, and education facilities. This contributed to national (social, cultural, religious, and economic) integration and increased popular legitimacy for the King. The State's share of national output increased considerably and employment opportunities in the modern sector increased. All these measures helped to widen the revenue base.

Some new measures in the social sector were also initiated. In the health care sector, endemic diseases such as smallpox, malaria, and cholera were eradicated from Nepal. In order to reduce fertility, the use of family planning methods was widely encouraged. In the education sector, the National Education System plan, introduced in 1971, brought all private schools and institutions of higher education into the public sector. This measure proved to be quite expensive and unmanageable (Manandhar, 1995). In 1981, the Government changed the educational regulations and allowed the private sector to operate, under the condition that they implement the national curriculum. Private schools were allowed to use supplementary reading materials as well. Subsequently, the Government also opened up higher education to the private sector. Private schools that have opened since 1981 are very expensive compared to the pre-1971 period. Public schools continue to operate, but their quality has become much lower than that of the private schools.

Starting in the mid-1970s, political dissent, which had been under control since the 1960 royal coup, began to surface in the media, colleges, intelligentsia, and even in the street. This dissent was spearheaded by the political parties operating within Nepal and by Nepalis residing in India, who advocated the restoration of multiparty democracy. The dissent sometimes surfaced in the form of mass demonstrations and at other times in the form of insurgent and terrorist assaults against the Government. In 1979, the nationwide mass movement reached the point where the King declared a national referendum with the choice of "Reformed Panchayat" or "Multi-Party Democracy." The referendum results favored the former choice by a margin of 10 percent. The constitution was subsequently amended, incorporating some democratic ideals. These political developments again pushed economic issues into the background.

Nepal's economy passed through a difficult time in the early 1980s, which led in December 1985 to the implementation of a stabilization program supported by the International Monetary Fund (IMF), followed by a structural adjustment program (SAP) to address long-term problems with structural adjustment loans (SAL I in 1987 and SAL II in 1989), and an IMF Structural Adjustment Facility in 1988 (Shrestha, 1993). Acharya and Karki (1996) discuss the post-SAP macroeconomic scenario in Nepal.

India, the dominant neighbor surrounding Nepal on the east, south, and west and with which Nepal shares an open border, imposed a total economic (trade) blockade against Nepal in 1988–1989. This blockade inflicted severe economic damage on Nepal. It was also during this period that the left-leaning and democratic alliance of Nepal staged a nationwide mass political protest against the partyless Panchayat system and in favor of restoration of multiparty democracy. The Panchayat was eventually overthrown in 1990.

This overthrow led to the formation of an interim coalition Government of the Nepali Congress Party, the United Left Front, and the royal nominee. The Government was vested both with legislative and executive power. The principal mandates of this government were drafting a new constitution and holding a free and fair general election, both within a year. Both of these mandates were accomplished successfully: the 1991 general election returned the Nepali Congress with an absolute majority.

3. Economic Growth

Economic growth is a precondition for poverty reduction. In an agrarian country like Nepal, the growth of the agricultural sector is even more essential, since individual country studies have shown that agricultural sector growth has the largest effect on poverty reduction (Datt and Ravallion [1998] on India; Thorbecke and Jung [1996] on Indonesia). This section reviews the growth and structure of the country's GDP by sector (agriculture versus nonagriculture) and analyzes their implications for poverty, particularly rural poverty.

a. Growth in gross domestic product

Nepal's gross domestic product (GDP) growth rate is quite erratic and unstable (Table 25.2). During the various development plans, the GDP growth rates show large swings (1.8 percent to 4.9 percent). Sectoral growth rates reveal even larger swings. Nonagricultural growth rates have remained consistently higher than agricultural growth rates in every plan period except the Sixth. Overall GDP growth rates in the Third, Fourth, and Fifth Plan hardly kept pace with the population growth rate of 2.5 percent. Notwithstanding such variations, the overall economic growth rate appears to have accelerated during more recent plan periods. This preliminary finding warrants a more comprehensive analysis of agricultural and nonagricultural GDP.

Table 25.2. Growth Rates of Gross Domestic Product by Sector and Plan Period

Sector	Third Plan (1965–70)	Fourth Plan (1970–75)	Fifth Plan (1975–80)	Sixth Plan (1980–85)	Seventh Plan (1985–90)	Eighth Plan 1992–97
Agriculture	2.9	1.5	-1.1	5.1	4.1	3.0
Nonagriculture	2.4	2.2	9.0	2.1	5.5	6.3
Overall	2.7	1.8	2.3	4.0	4.8	4.9

Source: Shrestha (1993) for Third to Seventh Plan, with corrections in the Seventh Plan; for the Eighth Plan, findings calculated from available data.

Table 25.3 summarizes GDP growth rates by sector for each of the 12 years, 1984/1985 to 1996/1997, with the year 1984/1985 as the base year. This choice is governed by the fact that in the following year (1985/1985), Nepal started macroeconomic adjustment programs. In the 12 years to 1996/1997, agricultural GDP growth rates show relatively large variations and tend to cluster at around 3.0 percent. Nonagricultural growth rates, on the other hand, exhibit a more stable growth path and tend to cluster around 6.6 percent. Overall GDP growth rates tend to cluster at around 5.0 percent.

Table 25.3. Gross Domestic Product Growth Rates by Sector
(base year 1984/85)

Period	Agricultural GDP Growth Rate	Nonagricultural GDP Growth Rate	Overall GDP Growth Rate
1984/85–1985/86	2.7	6.7	4.7
1984/85–1986/87	1.0	5.7	3.3
1984/85–1987/88	2.8	6.3	4.5
1984/85–1988/89	3.6	5.9	4.8
1984/85–1989/90	4.1	5.5	4.8
1984/85–1990/91	3.7	6.4	5.1
1984/85–1991/92	3.0	6.8	5.0
1984/85–1992/93	2.6	6.8	4.8
1984/85–1993/94	3.1	6.9	5.1
1984/85–1994/95	2.8	6.8	4.9
1984/85–1995/96	2.9	6.8	5.0
1984/85–1996/97	3.0	6.6	5.0

Note: GDP = gross domestic product.

Source: Computed for CBS (1999).

Assuming an annual population growth rate of 2.5 percent during the 12-year period, the per capita agricultural and nonagricultural GDP growth rate turn out at 0.5 percent and 4.1 percent respectively. Thus, in terms of per capita sectoral growth rates, the nonagriculture sector exceeds the agriculture sector by a multiple of 8. The high and stable growth rate of the nonagricultural sector is attributable to economic reforms. The unstable growth rate of agricultural sector is attributable to the vagaries of the monsoon. Some problems related to sluggish growth of the agricultural sector are discussed below.

The per capita GDP growth rate (proxy for per capita income) during the reference period of 12 years turns out to be 2.5 percent per annum. This scale of growth would be encouraging, provided the increased income were equitably distributed between rural and urban residents. The GDP data are not segregated at the rural and urban level. However, estimates of rural per capita income and urban per capita income are available from nationwide surveys. This information is used in the following analysis.

The per capita income (PCI) of rural and urban areas for the years 1984/1985 and 1995/1996 is summarized in Table 25.4. The figures may not be strictly comparable, since data may have been collected using different methodologies at different times. Notwithstanding, the following finding raises an important question that needs further investigation.

Table 25.4. Comparison of Per Capita Incomes of Rural Urban Residents

	PCI in 1984/85 (in Rs.) ¹	PCI in 1995/96 (in Rs.) ²	Growth rate in PCI (in percent)
Rural Nepal	2,456	7,075	10.1
Urban Nepal	4,108	16,118	13.2
Ratio of urban PCI to rural PCI	1.7	2.3	

Note: PCI= per capita income; Rs. = Nepali rupees.

Source: ¹ NRB (1988); ² CBS (1996).

The ratio of urban per capita income to rural per capita income clearly indicates that the gap between the two is quite large and growing. Specifically, the ratio of urban PCI to rural PCI (rural-urban gap) increased from a factor of 1.7 in 1984/1985 to a factor of 2.3 in 1995/1996.

PCI growth rates are high in both rural and urban areas (Table 25.4, last column), and demand some explanations. The PCI in both time periods is valued at current market prices. When the rate of inflation is taken into account, the growth rate figures change drastically. The GDP deflator, a proxy for the rate of inflation, increased from 100 in 1984/1985 to 310 in 1995/1996, resulting in an annual average inflation rate of 11.1 percent (CBS, 1999). Sadly, the growth rate of rural per capita income at 10.1 percent falls below the rate of inflation (11.1 percent). This implies that there has been virtually no growth in per capita rural income during the reference period. This result broadly supports the hypothesis that the past economic reforms in Nepal have not resulted in any reduction in rural poverty. This finding is very crucial in the context of the country's economic development and needs further serious scrutiny.

b. Structure of GDP

The impact of economic reforms is more pronounced in the nonagricultural sector. The expanded numbers of business enterprises and service centers are the visible impact of economic reforms, reinforced by the political liberalization in the 1990s. The continually increasing ratio of nonagricultural GDP to total GDP (Figure 25.1) is a manifestation of the expanding size of Nepal's nonagricultural economy. In fact, the size of the newly developed sector's economy has exceeded the size of the several-centuries-old agricultural economy.

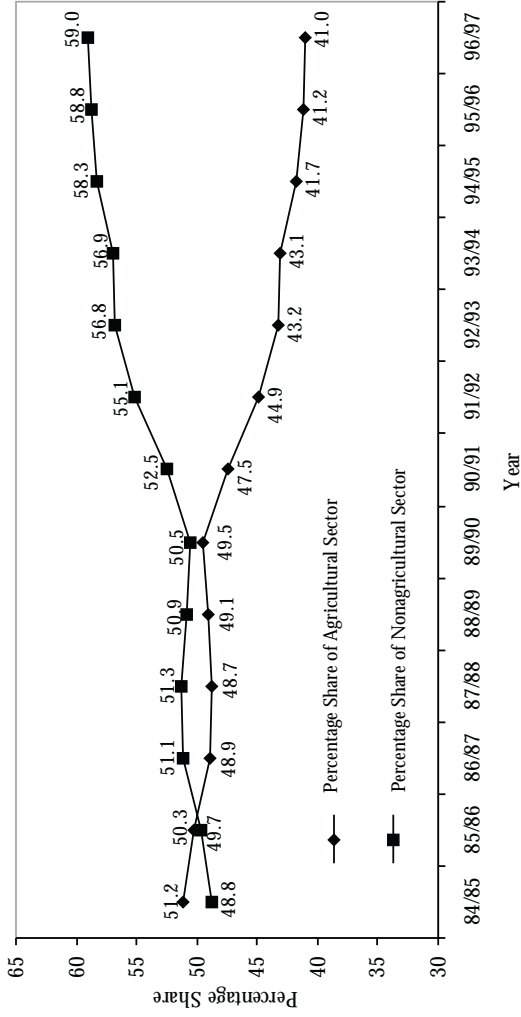
Labor productivity (production per worker) in the agricultural sector is much lower than that in the nonagricultural sector and the gap in labor productivity is continually widening. This is evident from Figure 1 under the prevailing condition that an overwhelming majority of the labor force is engaged in agriculture.

c. Remarks on the sluggish growth of the agricultural sector

Nepal has long had sluggish growth in agriculture. The multifaceted impact of this sluggish growth on poverty is well documented (see, for example, APROSC and JMA [1995]; World Bank [1990]; and Seddon [1987]). The main reasons for the agricultural sector's low growth are low input use and low productivity.

The use of modern inputs in Nepal remains well below the levels prevailing in neighboring countries. The farmer's decision to use inputs—for example, fertilizer—is influenced by the relationship of the price of fertilizer to the price of the crop concerned, and the anticipated additional yield of the crop, since together these determine the additional anticipated income (Rao, 1994). These observations are important in the context of recent reforms: a cut in subsidies to agricultural inputs and a withdrawal of the minimum guaranteed price

Figure 25.1. Percentage Share of Agricultural and Nonagricultural Sectors in Total GDP



Source: Prepared from National Account Statistics, CBS, 1999

of major crops. The fall in the price of agricultural products due to the withdrawal of the minimum guaranteed price and the rise in the price of inputs due to the cut in subsidies on agricultural inputs have definitely discouraged farmers from using yield-increasing modern inputs. The Government should make serious efforts to encourage farmers to use more inputs; otherwise the whole objective of APP may be defeated.

4. Population Growth

Economic growth alone is not sufficient to reduce poverty. In the previous section, population and economic growth rates were used to understand the causes of income poverty at the macro level. This section reviews the past growth and age composition of the population, and analyzes their implications for poverty, particularly education poverty.

Population growth has remained a major concern of the planned development efforts in Nepal. The first population policy in Nepal was made in the nation's Third Five Year Plan (1965–70). The Plan's document discussed the importance of family planning in reducing the crude birth rate. Family planning contraceptive services were actually made available to married couples in 1966 (Joshi, 1995). Since then, fertility reduction has remained a major agenda of population policy in subsequent Plans. In spite of all the efforts, the total fertility rate (TFR) remained at a high and constant level between 1971 and 1981, and between then and 1991 has declined only from 6.3 births per woman to 5.6. As a result of high TFR levels and the declining trend of mortality,⁴ intercensal population growth rates in Nepal remained at high levels, with large regional disparities (Table 25.5). The excessively high population growth rate in the terai region is attributable to population migration from the hill/mountain region as well as from neighboring countries.

Table 25.5. Intercensal Population Growth Rates by Region
(percent per year)

Period	Terai	Hill/Mountain	Nepal
1961–1971	2.39	1.85	2.05
1971–1981	4.11	1.61	2.62
1981–1991	2.75	1.52	2.08

Source: CBS (1995).

a. Demographic profile

Because of high population growth, the population of Nepal continues to have a large proportion of children below 15 years of age (Table 25.6). This has resulted a high child dependency ratio.⁵ The two factors, low economic growth and a high child dependency

⁴ In the absence of a vital registration system, mortality parameters are usually estimated by survey data using different techniques. In a strict sense, the estimates are not comparable. However, estimates of the infant mortality rate have declined from 172 deaths per 1,000 live births in 1971 to 117 in 1981, and to 97 in 1991.

⁵ Defined by the ratio of children under 15 years of age to the population 15 to 64 years of age.

Table 25.6. Age Composition of the Population
(percent of total population)

	1971	1981	1991
Children (14 years of age)	40.5	41.4	42.4
Adults (15 years of age)	59.5	58.6	57.6

Source: 1971, 1981 from CBS (1987): Table 3.14; 1991 based on 1991 population census data.

ratio, prevent poor parents from sending their children to school. They would rather send them into the labor market as wage earners. Putting children to work instead of sending them to school creates a vicious circle: initially, work adversely affects schooling; later, little or no education perpetuates the practice of child labor (Thapa, Chhetry, and Aryal, 1996).

Child deprivation is an emerging issue of poverty in Nepal. In 1991, out of 2.3 million Nepalese children in the 10–14 age group, around 37 per cent were illiterate, among which 66 per cent were girls. Gender disparity in education, as in other countries, begins from early childhood in Nepal. In Nepalese society, girls are often treated as the property of others and are deprived of their right to education during childhood (Acharya, 1995).

5. Land: Access, Entitlement, and Institutional Framework

Land is the most common productive economic resource for rural people. Its possession offers them both economic and food security. Often its possession entitles them to high political and social prestige in the society. It is, therefore, important to understand its access, entitlement, and institutional framework at the national as well as the regional level.

a. Access to land

In 1992, the National Sample Census of Agriculture (NSCA) estimated the area of land holdings in Nepal (hereafter operational land) at 2.6 million hectares (ha) and the number of holdings (hereafter farm households) at 2.7 million, Nepal is not in a position to add more land for farming, except at the expense of the remaining forestland. Access to land is higher in the terai region than in the other two regions. Of the total 2.7 million farm households, for instance, 40 percent located in the terai region cultivate around 53 percent of the operational land, while 60 percent located in the hill/mountain region cultivate 47 percent of the operational land.

The average farm size in Nepal has decreased from 1.13 ha in 1981/1982 to 0.95 ha in 1991/1992. The decrease in farm size is attributable to family breakups under the existing laws of inheritance. The average farm size varies across the region and descends as one ascends to higher altitudes: 1.23 ha in the terai region, 0.77 ha in the hill region, and 0.68 ha in the mountain region. Agroclimatic conditions of the hill and mountain region are favorable for the development of horticulture, cash crops and off-season vegetables. Unfor-

tunately, this production potential has not yet been utilized because of the persistent problems of accessibility to markets.

b. Land tenure

The dominant type of land tenure in Nepal is owner-tiller (owned and operated land). According to the NSCA estimates, around 91 percent of the total worked agricultural land in Nepal is owner-tiller, and the remaining 9 percent is rented. With regard to regional variations, owner-tiller based tenure is highest in the hill region (95 percent), followed by the mountain region (94 percent) and the terai region (87 percent).

The dominance of owner-tiller landholdings likely resulted from the dual ownership (tenant and owner) of land induced by the 1964 land reforms. From the start, this created a situation where neither party was motivated to invest in land improvement (NESAC, 1998). In this regard, the rural credit survey reports that investment in land improvement is less than 3 per cent of household income (NRB, 1994). The dual ownership of land was abandoned in 1996, and half of the tenancy land was legally transferred to the tenants.

c. Institutional framework

Distribution of operational land and farm households across the farm categories clearly demonstrates that the land distribution is skewed (Table 25.7). At the national level, for instance, marginal farmers comprising 43 percent of all farm households cultivate only 11 percent of the total operational land; small farmers comprising 46 percent of all farm households cultivate 47 percent of the total operational land, while "large" farmers com-

Table 25.7. Distribution of Farm Households and Operational Land across Farm Categories

	Farm Category			Total
	Marginal (< 0.5 ha)	Small (0.5–2.0 ha)	Large (>2.0 ha)	
a. Terai				
Farm households (percent)	35.6	45.8	18.7	100.0
Area (percent)	6.6	37.9	55.5	100.0
Average farm size (in ha)	0.22	1.04	3.75	1.23
b. Hill				
Farm households (percent)	47.3	46.6	6.2	100.0
Area (percent)	15.8	56.8	27.3	100.0
Average farm size (in ha)	0.26	0.94	3.48	0.77
c. Mountain				
Farm households (percent)	52.9	42.9	4.1	100.0
Area (percent)	21.1	57.2	21.7	100.0
Average farm size (in ha)	0.27	0.91	3.62	0.68
d. All Nepal				
Farm households (percent)	43.1	45.9	11.0	100.0
Area (percent)	11.3	46.8	41.9	100.0
Average farm size (in ha)	0.25	0.98	3.67	0.95

Note: ha = hectares.

Source: Compiled from Table 2.6 of CBS (1994).

prising only 11 percent of all farm households cultivate 42 percent of total operational land. The land distribution is most highly skewed in the terai region, followed by the hill region and the mountain region.

The average farm size of marginal, small, and large farmers at the national level is correspondingly 0.25 ha, 0.98 ha, and 3.67 ha. The disparity in access to land across the various farm categories has to be seen against the background of the average farm household size.⁷ The average farm household size also varies across the farm category: 5.1 persons for marginal farmers, 6.2 persons for small farmers, and 8.3 persons for large farmers. This positive correlation between farm size and household size suggests that “per capita farmland” is more appropriate than “per household farmland” when measuring inequality in land distribution.

Due to family breakup under the prevailing laws of inheritance, land is continually fragmenting. Land fragmentation is a serious problem in Nepal. The analysis of the 1991 NSCA data show that around 82 per cent of farm households in the country have fragmented land: 40 per cent have two to three parcels and 42 percent have four and more (Chhetry and Subedi, 1997).

6. Disparity in Education

Human poverty is immense in Nepal. A large proportion of the population is deprived of education, resulting in mass illiteracy. It is believed that mass illiteracy keeps people from taking advantage of the opportunities that are offered by economic reforms (Sen, 1996), social services, and modern agricultural inputs. Regional disparity in education is very high (Table 25.1). Disparity in education among various population groups also persists in Nepal. This section reviews the disparity in education among various population groups.

a. Disparity among quintile groups and women

Table 25.8 summarizes the literacy rates across the various quintile groups.⁸ Literacy rates, irrespective of male and female, increase across successively higher quintile groups. The

Table 25.8. Literacy Rate (6+) by Gender and Quintile Group
(percent)

Quintile Groups	Male	Female	Total
First	31.9	8.8	20.0
Second	41.3	15.6	27.7
Third	45.7	20.9	33.0
Fourth	63.0	30.5	46.2
Fifth	75.9	44.0	59.2

Source: CBS (1996).

⁷ Farm population/farm households.

⁸ Defined according to the level of household consumption expenditure; the lower the level of the quintile group, the higher the degree of poverty.

literacy rate among people of the fifth quintile group (59.2 percent) is almost three times higher than that of the first quintile group (20.0 percent), implying a very wide disparity in the literacy status between the lowest 20 percent and the top 20 percent. In most of the quintile groups, the female literacy rate is less than half of the male literacy rate, showing a wide gender disparity in education. However, the gap between male and female literacy tends to narrow across successively higher quintiles.

b. Disparity among caste/ethnic groups

Nepal is a country of striking caste/ethnic diversity. The precise number of caste/ethnic groups of Nepal is not known. Nevertheless, the 1991 Population Census collected data on various aspects, including literacy, of 60 caste/ethnic groups. Figure 25.2 displays the literacy rates of 29 selected caste/ethnic groups of Nepal.

These 29 groups account for 90 percent of the national population. The literacy rate ranges from 4.2 percent among the Musahar group to 61.8 percent among the Terai Brahman. Disparity in literacy status is huge across the caste/ethnic group population, making caste/ethnic group a major dimension of education poverty in Nepal.

Many problems of human poverty can be better understood when such problems are analyzed from the perspective of caste/ethnicity. For example, despite the obvious economic advantages of the terai region over the hill region, the illiteracy rate in the terai region is significantly higher than that in the hill region (69 percent versus 58 percent). This problem is better understood if the residents of the terai region are classified into the two broad caste/ethnic groups: terai origin and hill origin. The predominance of the terai origin population and the low literacy⁹ among them pulls down the literacy rate of the whole terai region (Chhetry, 1999).

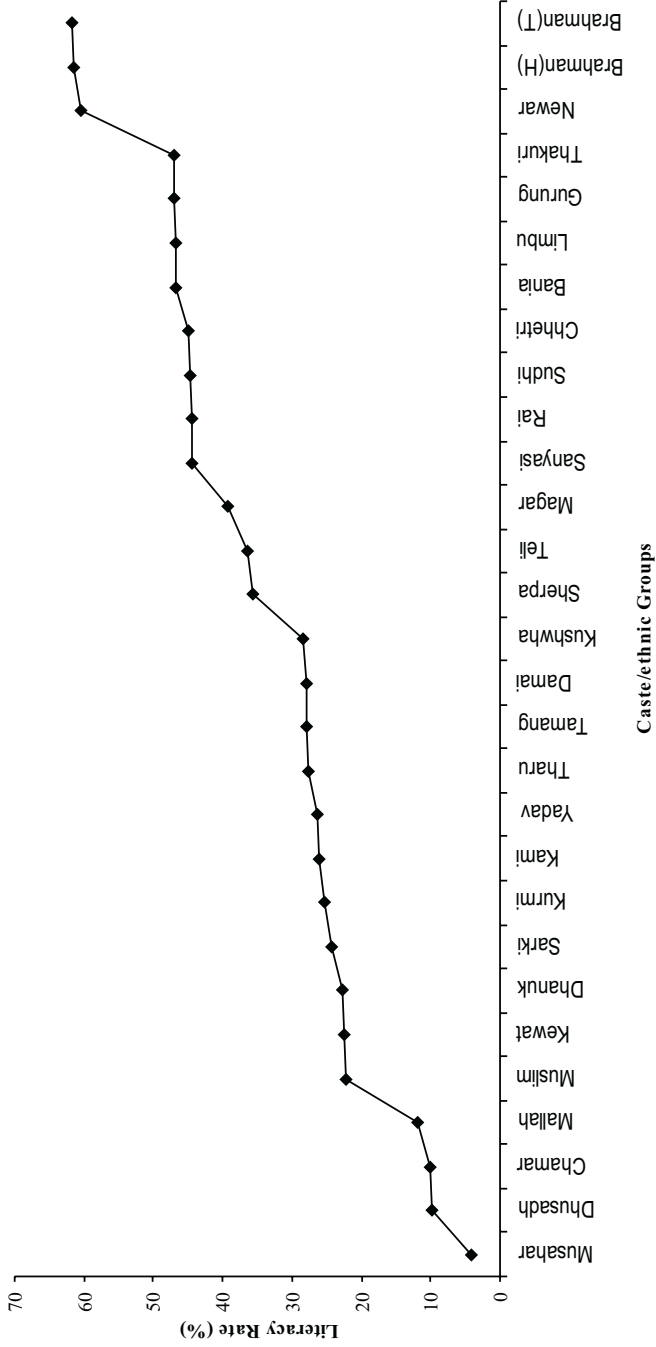
7. Regional Disparities

Up to now, the development process in Nepal seems regionally unbalanced. Some regions fall far behind others. This disparity is reflected in the district-level indicators of development (ICIMOD, 1997) and also in the district-level Human Development Index (NESAC, 1998). The purpose of this section is to identify the most poorly developed region of the country and briefly review the socioeconomic indicators of the region in the context of poverty.

The Overall Composite Index of Development of the International Centre for Integrated Mountain Development (ICIMOD) and the Human Development Index of the Nepal South Asian Centre (NESAC) indicate that development in the Midwestern hill/mountain region and Far Western hill/mountain region is far behind that of the other regions. In this

⁹ Literacy rates among terai and hill origin population were 27.5 percent and 53.4 percent, respectively, in 1991.

Figure 25.2. Literacy Rates of 29 Major Caste/ethnic Groups



Source: Prepared from the 1991 Population Census Data

study, for convenience, these two regions were combined and named “the backward region,” where the incidence of poverty (72 percent) and illiteracy rate (73 percent) are the highest in the country.

The backward region accounts for 34 percent of Nepal’s total area and 13 percent of the nation’s population. Infrastructure is extremely poor in the backward region: the region accounts for only 3 percent of the nation’s black-topped and graveled road; 6 percent of the country’s banks and cooperatives; and 2 percent of the country’s urban population. It is characterized by a high labor participation rate, with the overwhelming majority in agriculture (Table 25.9). The average farm size is small. Incidentally, the backward region contains the very districts where the Maoist insurgency first erupted in 1995, and grew rapidly thereafter; today, these areas are in effect ruled by the Maoist insurgents.

Table 25.9. Comparison of Backward Region’s Poverty with all Nepal’s Poverty

Indicator	Backward Region	All Nepal
Labor participation rate (10+) in percent	72	54
Percent of labor force in agriculture	93	79
Average Farm size in hectares	0.6	1.0

Source: Computed from the Database of ICIMOD (1997).

The backward region, though poor in terms of agricultural land, is endowed with rich natural resources such as grassland and forest. However, no public policies encourage the more productive use of these natural resources for the betterment of the local poor. The failure to link human labor to the area’s plentiful natural resources compels people to stick to below-subsistence farming. Roads constitute the basic infrastructure for expanding the accessibility and size of the region’s markets. Unfortunately, the condition of the roads in this region is extremely poor. Government policies that would use the region’s abundant natural resources to generate employment, and policies that would extend roads to create a market for these resources, would be effective actions for alleviating poverty in the region. Market facilities are also essential for implementing the APP in the region. Extreme regional disparities, if not addressed soon, will escalate sociopolitical tensions beyond repair.

8. Socioeconomic and Demographic Characteristics of the Poor and Nonpoor

Comparative analysis of socioeconomic and demographic characteristics of the poor and nonpoor is an important tool for understanding poverty. In particular, it identifies factors that divide the population or households into poor and nonpoor groups. It also reveals the disadvantages faced by the poor as compared to the nonpoor. Comparative analysis at the aggregate level, however, tends to hide sharp variations between different regions and different subgroups, implying the need for analysis at a more disaggregated level. An appropriate disaggregation scheme for rural households is to categorize them by the size of their operational land (farm size)(see Table 25.10). Chhetry (1996) carried out one such comparative analysis by disaggregating the rural households into three categories: (i) land-

Table 25.10. Socioeconomic and Demographic Profile of Landless/Marginal, Small, and Large Farm Households in Nepal

	Landless/Marginal	Small	Large	Overall
Percentage of Poor and Nonpoor Households				
Poor	58	50	28	50
Nonpoor	42	50	72	50
Average Farm Size (hectares)				
Poor	0.24	0.98	3.18	0.82
Nonpoor	0.20	1.08	3.75	1.33
Both	0.22	1.03	3.59	1.07
Percentage of Owner-Tillers (land entitlements)				
Poor	87.3	89.5	88.5	88.9
Nonpoor	84.2	85.4	85.5	85.4
Both	86.1	87.4	86.3	86.7
Percentage share of Farm Income				
Poor	37.7	64.7	76.0	56.9
Nonpoor	25.6	56.5	67.1	53.3
Both	30.2	59.0	68.2	54.3
Average Household Size				
Poor	5.4	6.8	9.9	6.4
Nonpoor	4.4	5.8	8.7	6.0
Both	5.0	6.3	9.1	6.2
Average Number of Children Per Household				
Poor	1.8	2.0	3.1	2.0
Nonpoor	1.1	1.4	2.0	1.5
Both	1.5	1.7	2.3	1.7
Average Number of Literate Persons Per Household				
Poor	1.3	2.3	3.7	2.0
Nonpoor	1.6	2.8	4.7	2.8
Both	1.4	2.5	4.4	2.4

Source: Estimated from the database, NRCS (1992).

less/marginal (farm size < 0.5 ha), (ii) small (farm size 0.5 to 2.0 ha) and (iii) large (farm size > 2.0 ha). This paper also uses the same disaggregation scheme and carries out comparative analysis using Nepal Rural Credit Survey data.¹⁰ In this analysis, the incidence of poverty is assumed to be 64 percent in the hill/mountain region and 34 percent in the terai region. The results of the analysis for all Nepal are presented in Table 25.10, and the main findings are discussed below.

a. Poverty across types of farms

The notion that poverty is the lot only of landless/marginal farmers is untrue in the context of Nepal. For instance, around 28 percent of Nepalese households in the large farm category, and 50 percent of households in the small farm category, are found to be poor. A similar analysis carried out using the 1996 Nepal Living Standard Survey data, revealing an overall incidence of poverty of 42 percent in the terai region, 41 percent in the hill region, and 56 percent in the mountain region, showed that around 36 percent of households in

¹⁰ The survey, covering 7,336 households from all over Nepal, was carried out by NRB in 1992.

the large farm category and 37 percent of households in the small farm category were indeed found to be poor.

Farm size is a minor factor for dividing households of each farm category into poor and nonpoor groups. For instance, the difference in farm size between poor and nonpoor is 0.04 ha among landless/marginal farmers, 0.1 ha among small farmers, and 0.6 ha among large farmers. Household size, land productivity, land entitlements, and access to nonfarm employment are among the factors that may explain how households divide along poor and nonpoor lines.

Further analysis shows that land entitlement is also a minor factor for dividing households into poor and nonpoor. The percentage of owner-tillers among the poor tends to be higher than the percentage of owner-tillers among the nonpoor within each farm category.

Analysis also shows that land productivity (farm income, farm size) is an important factor that divides households into poor and nonpoor, since the average land productivity of the nonpoor is almost twice as high as that of the poor within each farm category. Land quality, irrigation facilities, agricultural inputs (fertilizer and improved seeds), access to credit and markets, and crop diversification are determining factors in land productivity. Unfortunately, due to the paucity of data, analysis on these determinants of productivity was not carried out.

The percentage share of farm income to total income increases with the increase of farm size for both the poor and nonpoor. Farm income is the major source of income for poor and nonpoor farm households in the small and large farm categories. On the other hand, nonfarm income is the major source of income for poor (62 percent) and nonpoor (74 percent) landless/marginal farmers. An important implication of this finding is that the landless/marginal farmers' farm size is so small that they cannot escape from poverty on their farm income alone. Further analysis shows that the relative magnitude of per capita non-farm income of the nonpoor is nearly three times higher than that of the poor.

In Nepal, some caste/ethnic groups on average tend to have larger households than others. For instance, on average, the Muslim and Tharu groups tend to have large households. In Nepal, the average household size increases with the increase in farm size for both poor and nonpoor household groups. But the average household size is higher for the poor than for the nonpoor within each farm category.

The average number of children (below 10 years of age) increases with the increase in farm size in both poor and nonpoor households. But the number of children per household on average is higher for the poor than for the nonpoor within each farm category. The demand for more children among the poor households is due to a low rate of child survival. Another factor that pushes the demand for children is the number of activities that a subsistence farm household undertakes. For instance, a child is assigned with the task of fetching water, while another child is needed to take care of cattle, yet another child is needed to collect fire wood, and so on.

The average number of literate persons per household increases with the increase in farm size, in both poor and nonpoor households. But the average number of literate persons per household is higher for the nonpoor than for the poor within each farm category.

8. Conclusions

This paper attempts to explore and understand the dimensions of rural poverty in Nepal. It also attempts to capture those factors that perpetuate poverty in Nepal. For this purpose, available time series and cross-sectional databases and indicators of development and deprivation pertaining to the period 1984/1985–1996/1997 were reviewed and analyzed. Some conclusions drawn from this analysis are that Nepal's poverty is predominantly a rural phenomenon. Over 95 percent of total income poor or education poor reside in rural Nepal, where agriculture is the main source of income and employment. Unfortunately, the performance of the agricultural sector continues to remain poor. During the review period, agricultural GDP grew with relatively larger variations, tending to cluster at around 3.0 percent. Heavy dependence by agriculture on the vagaries of weather, and insufficient delivery/use of key agricultural inputs are some of the important factors that are impeding the realization of the full potential inherent in Nepal's agricultural sector. Due to the vagaries of weather, the rural economy remains at a greater risk of crop failure. Sluggish growth of the agricultural sector in turn compresses the likely increase in per capita agricultural income. A large percentage of household income in rural Nepal continues to originate from agriculture. Unfortunately, during the review period, the growth in per capita agricultural GDP (proxy for per capita agricultural income) is very low compared to the per capita growth of nonagricultural GDP. The per capita nonagricultural GDP growth rate is more than eight times higher than the per capita agricultural GDP growth rate.

The economic reforms initiated in 1985 have had a profound impact on the nonagricultural sector. During the review period, nonagricultural GDP grew with relatively small variations and tended to cluster at around 6.6 percent. The share of nonagricultural GDP in the total has increased from 49 per cent in 1984/1985 to 59 per cent in 1996/1997. The results of two nationwide household surveys, the Multipurpose Household Budget Survey and the Nepal Living Standard Survey, have shown that there has been virtually no growth in per capita household income among rural residents during the period under review. Viewed against the background of economic reform measures implemented during this period, this result raises some important questions about the contribution made by economic reforms to reducing rural poverty.

The declining trend in the share of agricultural GDP, given that an overwhelming majority of the labor force is engaged in this sector, implies that labor productivity in the agricultural sector has been declining continually since 1984/1985. In order to improve the performance of the agricultural sector, the Nepal Government endorsed the Agriculture Perspective Plan (APP) in the Ninth Five Year (1997–2002) Plan. The success of the APP largely depends upon the delivery/use of key agricultural inputs. But a fall in the prices of agricultural products due to the withdrawal of the minimum guaranteed price, coupled with a rise

in the price of inputs due to the withdrawal of subsidies, has definitely discouraged farmers from using inputs. The Government should make serious efforts to encourage farmers to use more agricultural inputs. Otherwise the whole objective of the APP is sure to be defeated.

Human poverty is immense in Nepal. High population growth and low economic growth continue to push a large proportion of children into the labor market as wage earners, resulting in a large pool of educationally poor people, with the result that women suffer much more than men. Disparities in education across caste/ethnic groups is immense, implying that caste/ethnicity is an important dimension of deprivation in education. This dimension has so far been completely ignored in Nepal's review of poverty.

The most backward region of the country, that is, the region with the lowest level of both human and infrastructure development, suffers from the highest incidence of poverty. The paradoxical situation of the region—very low average farm size (around 0.6 ha) and an overwhelming majority (over 90 percent) of the labor force employed in agriculture—partially explains why the incidence of poverty is very high in the backward region. The backward region, though poor in terms of agricultural land, is endowed with rich natural resources such as grassland and forest. However, no public policies encourage the more productive use of these natural resources for the betterment of the local poor.

Comparative analysis of the poor and nonpoor within each of the three farm household categories—marginal, small, and large—generated some interesting results. Significant proportions of not only marginal but also small- and large-sized farm households are suffering from poverty in Nepal. Thus, farm size and land entitlement are not the determining factors for dividing them into poor and nonpoor. This finding is a major departure from the conventional analysis of poverty so far done in Nepal. The most important factor that divides them into the poor and nonpoor is the productivity of their land. The state of poverty of small- and large-sized farm households is therefore transient, in the sense that with the help of improved technologies, inputs, and better market facilities, they could escape from the grip of poverty. The state of poverty of marginal farm households is chronic, in the sense that due to their small farm size, they are unable to escape from poverty through their farm income alone. In the prevailing paradoxical situation (a significant proportion of large-sized farm households are poor), land redistribution alone does not seem to be an efficient strategy for poverty reduction. On the contrary, it is a poverty-sharing strategy. Large household size, with more children and more illiterate persons, is the major sociodemographic characteristics of the poor in Nepal.

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