

The views expressed in this paper are those of the author and do not necessarily reflect the views or policies of the Asian Development Bank. The Asian Development Bank does not guarantee the accuracy of the data presented.

Understanding Rural Poverty in Nepal

DEVENDRA CHHETRY

Devendra Chhetry is a statistics professor at the Tribhuvan University in Nepal. This paper is to be delivered at the **Asia and Pacific Forum on Poverty: Reforming Policies and Institutions for Poverty Reduction**, to be held at the Asian Development Bank, Manila, 5-9 February 2001.

I. Introduction

Nepal, with an area of 147,181 km², is a land of enormous geographical diversity. The country has three main geographical characteristics (known as ecological regions): the terai region, the hill region, and the mountain region. Each region is a narrow strip of land stretching from east to west. These three regions not only manifest a diversity of geographical features but also display an immense diversity of human settlement patterns, populations, land distribution, productive resources, levels of economic development, and infrastructure development.

The terai region has a high population density but a relatively low population pressure on farmland, as well as alluvial soils 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 a moderate population pressure on farmland. The mountain region has a low population density but a relatively high population pressure on farmland, as well as difficult terrain, adverse climatic conditions, and little infrastructure development. For the purpose of regional planning Nepal has five development regions: Eastern, Central, Western, Mid-western and Far-western. Owing to the regional diversity and subsequent socioeconomic diversity, the magnitude and depth of poverty varies across the regions (Table 1).

Nepal, with a per capita income of around US\$ 200 per annum, is one of the poorest countries in the world (World Bank 1997). Poverty in Nepal is predominantly a rural phenomenon with around 90 percent of the population living in villages, and whose main source of livelihood is agriculture. In the past Nepal experienced sluggish growth in agriculture (APROSC and JMA 1995). This sluggish growth had a multifaceted, well-documented impact on rural poverty (World Bank 1990 and Seddon 1987).

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 to 32 percent by the end of 2002. The National Planning Commission recently prepared an Interim Poverty Reduction Strategy Paper (I-PRSP) based on a poverty situation analysis of the country, public consultations, and focus group discussions. Its main objective is to produce a medium-term (three-year) time-bound action plan for poverty reduction (NPC 2000). Poverty reduction initiatives introduced by governments and other agencies are discussed elsewhere (Pyakuryal 2000).

Nepal faces immense social, economic, and political problems mainly due to the government's failure to provide a sense of security, control corruption, and provide economic relief to the poor. Other problems are political instability, quarrels between and within political parties, and a lack of agreement with respect to national priorities.

Table 1. Recent Regional and Rural/Urban Poverty Scenarios of Nepal

	Poverty Incidence (percent)	Poverty Gap	Illiteracy (percent population)
Rural Mid & Far Western hill/mountain	72	0.281	73
Rural Central hill/mountain	67	0.108	66
Mountain	56	0.185	75
Rural Mid & Far Western terai	53	0.132	72
Rural	44	0.125	67
Nepal	42	0.121	64
Rural Eastern terai	42	0.095	62
Terai	42	0.099	69
Hill	41	0.136	58
Rural Western terai	40	0.092	69
Rural Western hill/mountain	40	0.128	54
Rural Central terai	38	0.082	77
Other urban	34	0.109	45
Rural Eastern hill/mountain	28	0.068	59
Urban	23	0.070	37
Urban Kathmandu valley	4	0.004	24

Source: Nepal, *Poverty at the Turn of the 21st Century* (1998).

The understanding of poverty is necessary for the reduction of poverty. Poverty needs to be understood in the broader context of development. This paper reviews the available indicators of development and rationalizes them in order to understand rural poverty at the macro and micro level. Several political changes took place in Nepal between 1955 and 1990, directly or indirectly affecting the development process. Section II reviews these political and development processes. Section III reviews the available indicators of development and rationalizes them to determine the linkages of poverty with sociodemographic and economic variables at the macro level. A comparative analysis of socioeconomic characteristics of the poor and nonpoor, based on household survey data, is a

powerful means of understanding poverty at the micro level. Section IV presents such an analysis. Nepal's process of economic reform began 15 years ago, and accelerated after 1992. At the aggregate level, economic reforms have produced very encouraging results. Section V assesses the impact of economic reforms on the income generation of rural residents.

II. Development Processes: 1955-1990

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 People's Republic of China established a communist government. The next five years elapsed as a political transition to democracy, during which economic agendas were hardly noticeable. 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 percent), high mortality and fertility rates, a high incidence of endemic diseases, hardly any 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, People's Republic of China, and other ODA. Nepal then adopted a mixed economic strategy: the state and the market-led private sector complemented each other.

Meanwhile, the B. P. Koirala-led Nepali Congress Party won Nepal's first-ever general election in 1959. Koirala, a leading figure of Socialist International, was a committed democratic socialist. Koirala continued the 1956 mixed economic strategy, and accelerated the welfare measures. In the process he abolished the Birta System (huge land grants to members of the nobility and the aristocracy, and perks and privileges for erstwhile royals in the hilly 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 coup in 1960 (Seddon 1987). The December 1960 royal coup subordinated Nepal's economic agenda to the political agenda of a royal takeover of government. 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 ODA-Soviet competition for global supremacy. The ODA provided soft aid whereas the Soviets and the Chinese built large factories (leather, brick and tile, pulp and paper, sugar, cigarette, and the like), hydroelectric generators, highways, and stadiums. India too extended aid in the form of roads, health facilities, and education facilities.

This aid 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, in turn widening the revenue base.

Yet political dissent continued, within Nepal and from Nepalis residing in India, advocating the restoration of multiparty democracy. This dissent sometimes surfaced in the form of mass demonstrations and at other times in the form of insurgent and terrorist assaults against the establishment. In 1979, the nationwide mass movement culminated in the King's declaration of a national referendum: "Reformed Panchayat" vs. "Multi-Party Democracy." Referendum results favored the former choice by a margin of 10 percent. The constitution was subsequently amended, incorporating some democratic ideals. This political development again pushed economic issues into the back seat.

Nepal's economy passed through difficult times in the early 1980s, which led to the implementation of an IMF-supported "Stabilization Program (SP)" in December 1985, followed by a "Structural Adjustment Program (SAP)" to address long-term problems with the support of Structural Adjustment Loans (SAL I, 1987; SAL II, 1989), and a Structural Adjustment Facility in 1988 from the IMF (Shrestha 1993). Acharya and Karki (1996) discuss the post-SAP macroeconomic scenario in Nepal.

India, the dominant neighbor surrounding Nepal in 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 onto Nepal. It was also during this period that the left-leaning, democratic alliance of Nepal staged a nationwide political protest against the partyless Panchayat system in favor of restoring multiparty democracy. The Panchayat was overthrown in 1990. This overthrow led to the formation of an Interim Government led by the Nepali

Congress, consisting of the United Left Front and including 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 election, both within a year. Both of these mandates were accomplished. The general election returned the Nepali Congress to government with an absolute majority.

III. Indicators of Development and Poverty

A. Economic Growth

Nepal's development performance over the duration of seven periodic plans was characterized by low gross domestic product (GDP growth), high population growth rates, and only a marginal increase in per capita income (Shrestha 1993). Overall GDP growth rates in the Third Plan, Fourth Plan, and Fifth Plan hardly kept pace with the annual population growth rate (Table 2). The condition of the agricultural sector was worse than that of the nonagricultural sector. Annual fluctuations in agricultural growth indicate the decisive role of an unpredictable monsoon. During the Sixth Plan and Seventh Plan periods, the national economy performed better due to the improved performance of the agricultural sector in the Sixth Plan and the improved performance of the non-agricultural sector in the Seventh Plan.

Table 2. Growth Rates of GDP by Sector and Plan Period

Sector	Third Plan (1965/66- 1969/70)	Fourth Plan (1970/71- 1974/75)	Fifth Plan (1975/76- 1979/80)	Sixth Plan (1980/81- 1984/85)	Seventh Plan (1985/86- 1989/90)
Agriculture	2.9	1.5	-1.1	5.1	3.0
Non-agriculture	2.4	2.2	9.0	2.1	6.3
Overall	2.7	1.8	2.3	4.0	4.9

Source: Shrestha (1993) with corrected figures from the Seventh Plan.

A large section of the Nepalese nation remains a poor agrarian society characterized by underemployment and low labor productivity. Nearly nine tenths of the national population live in rural areas (villages) and nearly four fifths of the labor force work in the agricultural sector. The heavy dependency of a rural economy on agriculture and the poor performance of the agricultural sector have aggravated rural poverty. On the other hand a small section of the Nepalese nation, nearly one tenth of the national population living in urban areas (municipalities) is a modern society.

Several factors are responsible for the continuing poor performance of the agricultural sector: (i) the sector's heavy dependency on the vagaries of weather, since only 20 percent of cultivable land is perennially irrigated; (ii) the insufficient delivery of key inputs to farmers; and (iii) the inadequate institutional capacity (World Bank 1997).

The Agriculture Perspective Plan (APP), formulated in 1995 with a 20-year time horizon, 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 to 5 percent during the next 20 years. The plan places special emphasis on increasing the use of modern inputs. After the successful implementation of APP, the proportion of the population living below the poverty line would decline significantly. The Ninth Plan's strategy for agricultural growth is based on the APP.

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). This remark is important in the context of a cut in subsidies for agricultural inputs and a withdrawal of the minimum guaranteed price for major crops. A fall in the price of agricultural production and a rise in the price of inputs discourages farmers from using inputs. The government should create an environment that encourages farmers to use more and more inputs, otherwise the objective of APP may be defeated.

B. Population Growth and Composition

Intercensal population growth rates range between 2.05 and 2.62 percent (Table 3). A declining mortality rate without a parallel decline in the fertility rate is a principal contributor to the high population growth in Nepal. The other prominent cause of this population explosion is the inflow of immigrants, particularly from India.

Table 3. Intercensal Population Growth Rates (percent per annum)

1961-1971	1971-1981	1981-1991
2.05	2.62	2.08

Source: Central Bureau of Statistics (1995).

The population of Nepal is young. The proportion of young people below 15 years of age is relatively high (42-44 percent) in Nepal, resulting in a high child dependency ratio. Two factors—poverty and a high child dependency ratio—prevent poor parents from sending their children to school, rather, they send them into the labor market as wage earners. Putting children to work instead of sending them to school may create 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 or child labor 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 percent were illiterate, among which 66 percent were girls. Gender disparity in Nepal begins from early childhood. Acharya (1995) writes that girls are often treated as the property of others and are deprived of their right to education during childhood.

Nepal is a country of striking caste/ethnic diversity. The precise number of caste/ethnic groups in Nepal is unknown. Nevertheless, the 60 distinct caste/ethnic group populations reported by the 1991 Population Census account for around 96 percent of the total national population (18.5 million). Sporadically available socioeconomic indicators reveal that some caste/ethnic groups are in a more disadvantaged position than others (Chhetry 1996a and Gurung 1998).

C. Education

Before 1971, both public and private schools/colleges provided educational services in Nepal. Most of the private schools/colleges were run by local community people, hence, education was relatively less expensive. The National Education System Plan, introduced in 1971, brought all schools and institutions of higher education into the public sector. This measure proved expensive and unmanageable. 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. Similarly, the government opened up the higher education system to the private sector. Private schools opened after 1981 are very expensive, since individuals with business motives open most of them. Public schools continue to operate, but their quality is lower than that of private schools.

The literacy rate, an indicator of educational development, varies from region to region (Table 4). Literacy is highest in the hill region, followed by the terai region and the mountain region. Literacy

rates in urban areas are almost twice as high as in the rural areas. Gender discrimination in literacy is apparent everywhere. However, it is less prevalent in urban areas than in rural areas, since the number of literate females per 100 literate males is 70 in urban areas, and 42 in rural areas. Among the three regions, the mountain region appears to have the worst gender discrimination in literacy, followed by the terai region and the hill region. The gender gap in education widens further at each successive level of educational attainment.

Table 4. **Literacy Rates* by Sex, Region, and Rural/Urban Area**

	Male	Female	Both
Terai	49.8	22.7	36.5
Hill	60.2	28.2	43.9
Mountain	50.2	16.5	33.2
Nepal	54.5	25.0	39.6
Rural	51.9	22.0	36.8
Urban	78.0	54.8	66.9

Note: * ratio of literate population of 6 years and above age group to the population of the same age group.

Source: CBS (1995).

In summary, low literacy in Nepal may deprive the poor of the opportunities that result from economic reforms. In this regard Sen writes, "The social opportunities offered by market-based economic growth, particularly of integration with modern world markets, are severely limited when a large part of the community cannot read, write, or count, cannot follow printed or hand written instructions, cannot cope easily with contemporary technology, and so on." Mass illiteracy creates a huge productivity gap between the educated few (elite) and the illiterates. Such a gap persists in the areas of income earning and opportunity sharing.

D. Health

Endemic diseases such as smallpox, malaria, and cholera have been eradicated in Nepal. However, malaria has reemerged. The development of health care in the context of poverty may be reviewed through mortality and longevity indicators (Dreze and Sen 1993). The level of infant mortality has declined from 172 deaths per thousand live births in 1971 to 97 deaths per thousand live births in 1991 (Table 5).

Table 5. **Infant Mortality and Life Expectancy**

	1971	1981	1991
Infant mortality rate	172	117	97
Life expectancy			
Males	42.1	50.9	55.0
Females	40.0	48.1	53.5

Source: CBS (1995).

Male and female life expectancy has increased by about 13 years from 1971 to 1991 (Table 5). Male life expectancy is higher than female life expectancy in Nepal. This trend is contrary to the general norm and it reflects the *disadvantaged position of women in terms of survival* in Nepal.

E. Land

Land is the only productive economic resource for rural residents; its possession offers economic security. A large landholding commands a high political and social prestige among its owner's peers. Economically too, the well-being of livestock, an integral part of agrarian society, depends on the size of the landholding. Thus many Nepalese have a strong emotional attachment to land.

Land reform was introduced in 1964. The program abolished intermediaries in the land revenue collection system, provided security of tenure for sharecroppers and tenants, and imposed land ownership 'ceilings.' However, the redistribution of 'ceiling-surplus' land from landlords to the land-poor was only a marginally successful policy (Seddon 1987). Moreover, the dual ownership (tenant and owner) of land always created a situation in which neither party was motivated to invest in land improvement (NESAC 1998). In this regard, the rural credit survey (NRB 1994) reports that investment in land improvement is less than 3 percent of household income. The dual ownership, however, was abandoned in 1996, with half of the ownership over tenancy land granted to the tenant.

Operational land comprises a meager 18 percent of Nepal's total land area. Owner-tiller is the dominant type of land entitlement in Nepal. About 85 percent of the operated land in Nepal is owner-operated and the remaining 15 percent is rented (NESAC 1998). Due to Nepal's high population growth and inheritance laws, land is fragmented and farm size continually declines every year. The average farm size in Nepal is 0.96 hectares (Table 6). The distribution of operational land and farm

households across the region is uneven. Out of a total of 2.7 million farm households, 40 percent of farm households are in the terai region and operate 53 percent of the total land, while 60 percent of farm households are in the hill/mountain region and operate 47 percent of the total land.

Table 6. **Distribution of Farm Households and Operational Land**

	Terai	Hill	Mountain	Nepal
Distribution of farm households (in '000 ha)	1093 (40.4)	1351 (49.9)	261 (9.7)	2705 (100.0)
Distribution of operational land (in '000 ha)	1375 (52.9)	1047 (40.3)	177 (6.8)	2599 (100.0)
Average farm size	1.26	0.77	0.68	0.96

Note: Figures within parentheses are percentages of row total.

Source: Compiled from Table 2.2 of CBS (1994).

Land fragmentation is a serious problem in Nepal. The 1991 National Sample Census of Agricultural data shows that around 82 percent of farm households in the country are on fragmented land: 40 percent have two to three parcels and 42 percent have four or more parcels (Chhetry and Subedi 1997).

The distribution of operational land area (OLA) is very skewed (Table 7). At the national level, for instance, marginal farmers comprise 43 percent of all farmers yet operate only 11 percent of the total operational land. Small farmers comprise 46 percent of all farmers yet operate around 47 percent of the total operational land, and large farmers comprise only 11 percent of all farmers yet operate 42 percent of total operational land.

Table 7. Distribution of Farm Households and OLA across Farm Categories

	Farm Category		
	Marginal (< 0.5 ha)	Small (0.5 – 2.0 ha)	Large (>2.0 ha)
Terai			
Farm households	35.6	45.8	18.7
Area	6.6	37.9	55.5
Hill			
Farm households	47.3	46.6	6.2
Area	15.8	56.8	27.3
Mountain			
Farm households	52.9	42.9	4.1
Area	21.1	57.2	21.7
All Nepal			
Farm households	43.1	45.9	11.0
Area	11.3	46.8	41.9

Source: Compiled from Table 2.6 of CBS, 1994

F. Regional Disparity

Up to now the development process seems regionally unbalanced. Some regions fall far behind the 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 Overall Composite Index of Development of ICIMOD and the Human Development Index of NESAC indicate that the level of development in the Mid-western hill/mountain region and the Far-western hill/mountain region is far behind that of the other regions. For convenience, the two regions are combined and named "backward region." The backward region has several characteristics: low literacy, high child deprivation, high gender disparity in education, high labor participation rate in agriculture, small farm size, and crude, inadequate infrastructure (Table 8). The incidence of poverty in the backward region is around 72 percent (Table 1). Incidentally, this region contains the very districts where Maoist insurgency first erupted in 1995 and where Maoism expands rapidly even today. Table 8 represents a glance at the extent of regional disparity in 21st-century Nepal.

Table 8. **Extent of Regional Disparity in 21st-century Nepal**

Indicator	Indicators of Backward Regions	Indicators of Other Regions
Literacy rate (6+)	30.0	40.8
Child illiteracy rate (10-14)	49.6	34.6
Ratio of female literate to male literate	25.5	49.0
Labor participation rate (10+)	71.5	54.3
percent of labor force in agriculture	92.6	78.8
Farm size	0.6	1.0
percent of area coverage	33.8	66.2
percent of population	13.4	86.6
percent of number of institutions (cooperatives & banks)	5.9	94.1
percent of miles of blacktop and gravel roads	2.8	97.2

Source: Computed from ICIMOD (1997) Database.

The backward region, though poor in terms of agricultural land, is endowed with rich natural resources such as grassland and forest. However, it lacks public policies that encourage the most productive use of natural resources for the betterment of the local poor's livelihood. The failure to link human labor to the area's plentiful natural resources compels people to stick with below-subsistence farming. Roads are the basic infrastructure for expanding the accessibility and size of the region's market. Unfortunately, the condition of roads in this region is extremely poor. Government policies that use the region's abundant natural resources to generate employment, and policies that 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 Agriculture Perspective Plan in the region. Extreme regional disparities, if not addressed soon, would escalate the sociopolitical tension beyond repair.

In summary, the major factors in the continuing high level of rural poverty in Nepal include the low performance of the agricultural sector, population growth with a particularly high proportion of young people, and mass illiteracy. Regional disparities in poverty are immense, mainly due to regionally unbalanced development efforts of the past. This disparity means, in terms of poverty reduction, that those different regions may call for different action plans. The government should create an environment that encourages farmers to use more and more inputs.

IV. Sociodemographic and Economic Characteristics of the Poor and Nonpoor

Comparative analysis of sociodemographic characteristics and economic 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 by the size of operational land (farm size). Chhetry (1996b) carries out one such comparative analysis by disaggregating the rural households into three categories: (i) landless/marginal (farm size ≤ 0.5 ha), (ii) small (farm size 0.5 to 2.0 ha), and (iii) large (farm size > 2.0 ha). The analysis is based on data from the Nepal Rural Credit Survey conducted by the Nepal Rastra Bank in 1991/92. The incidence of poverty is assumed to be 64 percent in the hill/mountain region and 34 percent in the terai region. National results are discussed below and summarized in Table 9.

A. Poverty across Farm Categories

The notion that poverty is the phenomenon of only 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 poor. A similar analysis, carried out on the Nepal Living Standard Survey data, finds that around 36 percent of households in the large farm category and 37 percent of households in the small farm category are poor.

B. Comparison of Farm Size

Farm size is a minor factor in poverty even though it appears to be a major factor at the aggregated level. Household size, land productivity, land entitlements, and access to nonfarm employment are the important factors for the poor. The average farm size of poor landless/marginal households is so small that it is almost impossible for them to generate enough income to escape poverty.

Table 9. **Sociodemographic and Economic 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 Owned Land in Operation				
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 Agriculture 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 NRCS' Database.

C. Comparison of Land Entitlements

Further analysis shows that land entitlement is a minor factor for the poor. The percentage of owned land among the poor tends to be higher than the percentage of owned land among the nonpoor within each farm category.

D. Comparison of Land Productivity

Further analysis shows that land productivity (farm income divided by farm size) is an important disadvantaged factor for the poor, since 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 the marketplace, and crop diversification are determining factors in land productivity.

E. Comparison of Shares of Agriculture Income

Agriculture is the major source of income for poor and nonpoor farm households in the small farm and large farm categories. On the other hand, nonagriculture is the major source of income for poor and nonpoor landless/marginal farmers. Even though the poor earn a relatively higher proportion of their income from nonfarm sources, the demand for their labor in nonfarm activities originates from farming by the nonpoor.

F. Comparison of Household Size

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

G. Comparison of Number of Children

The average number of children (below 10 years of age) increases with an increase in farm size in both poor households and nonpoor households. An increase in the number of children 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 among the poor, and to a diversification of the activities of uneconomic size among the poor.

H. Comparison of Number of Literate Persons

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

In summary, poverty affects landless/marginal farm households as well as a significant proportion of the large-farm households. The state of poverty in small-farm and large-farm households seems transient; with the help of improved technologies, inputs, and better market facilities these households could escape poverty. At the same time, poverty is chronic in landless/marginal farm households; due to their small farm size they may be unable to escape poverty by way of their farm income only. These findings also suggest that the redistribution of land hardly reduces rural poverty; rather it is a sharing of poverty. The relative disadvantages of the poor as compared to the nonpoor are (i) household size, (ii) number of children per household, and (iii) number of literate persons per household.

V. Economic Developments since 1985 in the Context of Poverty Reduction

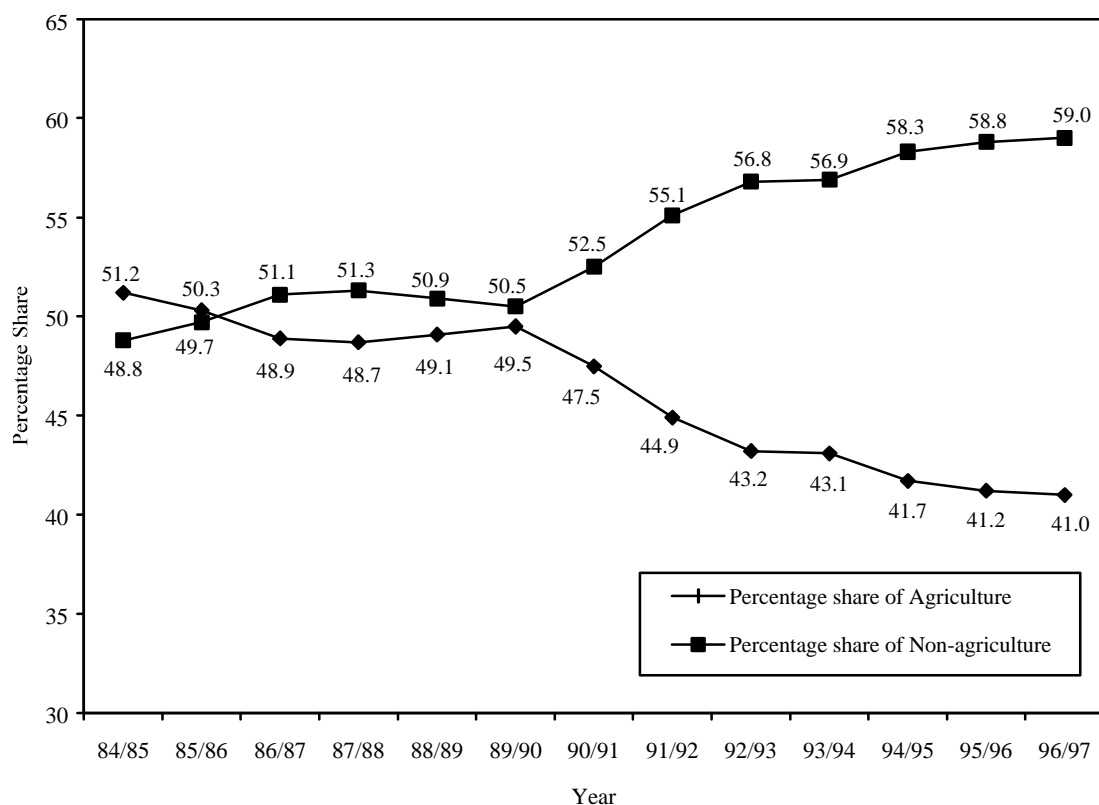
Nepal has been in the process of economic reform for the last 15 years, and the process accelerated after 1992. The results of these reforms are significant at the aggregate level. Results include a larger GDP, increased exports, greater foreign exchange reserves, increased revenue, and a compression of inflationary pressures. Unfortunately, these macroeconomic outcomes bypass rural Nepal and all poor Nepalis. Extreme polarization divides the lower-income and higher-income strata of Nepali society. Against such a background, this section analyzes the impact of economic reforms on the rural economy, particularly on the generation of income in the rural area.

A. Structure of the Economy

The impact of economic reforms on the nonagricultural sector is remarkable. The expanded number of business enterprises and service centers is the visible impact of economic reforms reinforced by political liberalization in the 1990s. The continually increasing ratio of nonagricultural GDP to total GDP (Figure 1) is just a manifestation of the growing trend toward a nonagricultural economy in Nepal. In fact, the volume of the newly born (in the context of Nepal) nonagricultural economy has exceeded the volume of several centuries-old agricultural economies. Is this new economy growing all over Nepal? Or is it concentrated only in some areas? What proportion of the

rural population benefits from this new economy? In the context of poverty, these and several other questions need to be addressed.

Figure 1. Percentage Share of Agriculture and Nonagriculture in Total GDP



B. Economic Growth

Using 1984/85 as the base year, Table 10 summarizes GDP growth rates for each of the 12 years by sector. Agricultural GDP growth rates with relatively large variations tend to cluster around 3.0 percent per annum, while nonagricultural growth rates with relatively fewer variations tend to cluster around 6.6 percent per annum. Overall GDP growth rates tend to cluster around 5.0 percent per annum. The high and stable growth rate of the nonagricultural sector is attributable to economic reforms. The unstable growth rate of the agricultural sector is attributable to the vagaries of monsoons. One reason for the agricultural sector's low growth is that the sector is virtually untouched by recent economic reforms, and remains at subsistence levels characterized by low

input use and low productivity (World Bank 1997). Another reason for the agricultural sector's low growth is the adverse effect of public policies such as the withdrawal of subsidies for microcredit and fertilizer; the withdrawal of a minimum guaranteed price for major crops; the relaxation of import controls for foodgrains; and the weakening of the Nepal Food Corporation, a business that used to hold a buffer stock of essential food items.

Table 10. **GDP Growth Rates by Sector (base year 1984/85)**

Period	Agricultural GDP Growth Rate	Nonagricultural Growth Rate	Overall 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

Source: Computed from CBS (1999).

Assuming the population grows at an average rate of 2.5 percent per annum, the per capita income growth rate during the reference period turns out to be 2.5 percent per annum. This growth rate is somewhat encouraging, provided that the per capita GDP (or income) is equitably distributed between rural residents and urban residents. The GDP data for rural areas and urban areas are not available. However, estimates of rural per capita income and urban per capita income are available from nationwide surveys; we will use these estimates to investigate whether per capita income is equitably distributed between rural residents and urban residents.

C. Comparison of Rural/Urban Per Capita Income

Annual per capita income (PCI) of rural areas and urban areas in the years 1984/85 and 1995/96 is summarized in Table 11. The ratio of urban per capita income to rural per capita income clearly indicates that the gap between the two is quite high and it has widened during the reference

period 1984/85 to 1995/96. More specifically, on average, urban resident per capita income was 1.7 times higher than rural resident per capita income in 1984/85; the corresponding ratio increased to 2.3 in 1995/96.

Table 11. **Per Capita Incomes of Rural/Urban Residents**

	PCI in 1984/85 (in Rs.) ¹	PCI in 1995/96 (in Rs.) ²	Ratio of 1995/96 PCI to 1984/85 PCI	Average annual growth rate in PCI (in percent)
Rural Nepal	2456	7075	2.88	10.1
Urban Nepal	4108	16118	3.92	13.2
Ratio of Urban to Rural PCI	1.67	2.28		

Sources: ¹NRB (1988)

²CBS (1996)

The high growth in per capita income (Table 17, last column) needs some explanation. These rates should be viewed against the background of the GDP deflator's growth. The GDP deflator increased from 100 in 1985/86 to 316 in 1995/96, resulting in an annual average growth rate of 11.0 percent (Central Bureau of Statistics 1997). It is sad to see that the growth rate of per capita income in rural areas is less than the growth rate of the GDP deflator during the period, implying virtually no increase in rural per capita income during the reference period.

In summary, economic reforms have an insignificant impact on the growth of rural per capita income.

References

- Acharya, M. (1995), "Status of Female-Selected Socio-Cultural and Economic Aspects," Population Monograph of Nepal, Central Bureau of Statistics, Kathmandu, Nepal.
- Acharya, K. P. and Karki, B. B. (1996), Review of Recent Macro-Economic Policies in the Context of their Effects on Poverty in Nepal, MIMAP- I Project, Agricultural Projects Services Centre, Kathmandu, Nepal and International Development Research Centre (IDRC), Canada.
- APROSC and JMA (1995), Nepal Agriculture Perspective Plan, Agricultural Projects Services Centre, Kathmandu, Nepal and John Mellor Associates, Washington, DC, US.
- Central Bureau of Statistics (CBS, 1994), National Sample Census of Agriculture Nepal, 1991/92, Analysis of Results, Central Bureau of Statistics, Kathmandu, Nepal.
- CBS (1995), Population Monograph of Nepal, Central Bureau of Statistics, Kathmandu, Nepal.
- CBS (1996), Nepal Living Standards Survey Report, Volume Two, Central Bureau of Statistics, Kathmandu, Nepal.
- CBS (1999), National Accounts of Nepal, Central Bureau of Statistics, Kathmandu, Nepal.
- Chhetry, D. (1996a), Educationally Disadvantaged Ethnic Groups of Nepal. MIMAP-I Project, Agricultural Projects Services Center, Kathmandu, Nepal. Unpublished Report.
- Chhetry, D. (1996b), Some Aspects of Poverty in Nepal: Micro-Analysis, MIMAP-I Project, Agricultural Projects Services Center, Kathmandu, Nepal and International Development Research Center (IDRC), Canada.
- Chhetry, D. and Subedi, B. P. (1997), Farmers and Farming Practices in Nepal: Situation Analysis of Agriculture in the 1990s. International Center for Integrated Mountain Development, Nepal.
- Gurung, H. (1998), Nepal Social Demography and Expressions, New ERA, Kathmandu, Nepal.
- ICIMOD (1997), Districts of Nepal - Indicators of Development, International Centre for Integrated Mountain Development, Kathmandu, Nepal.
- NESAC (1998), Nepal Human Development Index, Nepal South Asia Centre, Kathmandu, Nepal.
- NRB (1988), Multipurpose Household Budget Survey, Nepal Rastra Bank, Kathmandu, Nepal.
- NRB (1994), Nepal Rural Credit Review: Final Report, Nepal Rastra Bank. Kathmandu, Nepal.
- NPC (2000), Interim Poverty Reduction Strategy Paper, National Planning Commission, HMG of Nepal.
- Pyakuryal, B. (200), Nepal Efforts to Alleviate Poverty in a Rural Economy Initiatives and Challenges. Unpublished Research Paper.
- Rao, C. H. (1994), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Delhi, India: Oxford University Press.
- Shrestha, B. P. (1993), A Critique on Planning and Economic Development in Nepal, Future of Nepalese Economy, Nepal Foundation for Advanced Studies.
- Sen, A., (1996)., Radical Needs and Moderate Reforms, Indian Development Selected Regional Perspectives, edited by Jean Dreze and Amartya Sen.
- Seddon, D. (1987), Nepal : A State of Poverty, Vikas Publishing House Pvt. Ltd.
- Thapa, S., Chhetry, D., and Aryal, R. (1996), "Poverty, Literacy, and Child Labor in Nepal: A District-Level Analysis". Asia-Pacific Population Journal, Vol.11, No. 3, p 3-14.
- WB (1990), Nepal: Relieving Poverty in a Resource-Scare Economy. Vol. 1. Document of the World Bank.
- WB (1997), Nepal 1997 Economic Update: The Challenge of Accelerating Economic Growth, Report No. 17034-NEP, Document of the World Bank.