

ADB

# ERD Working Paper

ECONOMICS AND RESEARCH DEPARTMENT

SERIES

No. 57

## Practices of Poverty Measurement and Poverty Profile of Nepal

Devendra Chhetry

September 2004

Asian Development Bank

<http://www.adb.org/Economics>

ERD Working Paper No. 57

# Practices of Poverty Measurement and Poverty Profile of Nepal

**DEVENDRA CHHETRY**

September 2004

Devendra Chhetry is Professor and Head of the Department of Statistics, Tribhuvan University, Kathmandu, Nepal.

Asian Development Bank  
P.O. Box 789  
0980 Manila  
Philippines

©2004 by Asian Development Bank  
September 2004  
ISSN 1655-5252

The views expressed in this paper  
are those of the author(s) and do not  
necessarily reflect the views or policies  
of the Asian Development Bank.

## **FOREWORD**

The ERD Working Paper Series is a forum for ongoing and recently completed research and policy studies undertaken in the Asian Development Bank or on its behalf. The Series is a quick-disseminating, informal publication meant to stimulate discussion and elicit feedback. Papers published under this Series could subsequently be revised for publication as articles in professional journals or chapters in books.

## CONTENTS

Acronyms	vii
Abstract	ix
I. Introduction	1
II. Summary of Research	2
III. Statistical System and Data Sources	2
A. Statistical System	3
B. Income Poverty Data Source	3
C. Health Poverty Data Source	4
D. Education Poverty Data Source	4
IV. Poverty Lines and Poverty Rates: Measuring Issues	5
A. Minimum Calorie Requirements	5
B. Estimates of Poverty Lines	6
C. Definition of Poor	6
V. Income Distribution: Decile Shares	7
VI. Discrepancies in National Accounts and Household Survey Data	8
A. Comparison of Per Capita Consumption	8
B. Comparison of Per Capita Income	9
C. Comparison of Per Capita Farm Income	9
D. Comparison of Percentage Share	9

VII.	Nonincome Indicators	10
	A. Infant Mortality Rate—Estimating and Reporting Issues	10
	B. Infant Mortality Rate: Rural/urban Differentials	11
	C. Gross Enrollment Ratios	11
VIII.	Trends in Sectoral Economic Growth and Implications	12
IX.	Concluding Remarks	14
	Appendix	15
	References	22

## ACRONYMS

BNI	Basic Needs Income
CBS	Central Bureau of Statistics
CPI	consumer price index
GDP	gross domestic product
HS	Household Survey
IMR	infant mortality rate
NA	National Accounts
NLSS	Nepal Living Standard Survey
NPC	National Planning Commission
NRB	Nepal Rastra Bank

## **ABSTRACT**

This paper reviews the poverty measuring practices, available measures of poverty, and economic growth figures of Nepal. The currently available three poverty rates for fiscal years 1976/77, 1984/85, and 1995/96 are found to be not comparable mainly due to change in methodology over time. Despite such methodological changes, the three poverty rates average around 40 percent. Nepal has experienced relatively high economic growth during the Seventh (1985/86 to 1989/90) and the Eighth (1992/93 to 1996/97) Plan periods with no strong evidences of poverty reduction. This incompatible result is partially explained by comparing growth of the agricultural sector with the role of the sector in providing employment and income generation at the household level, and by comparing social indicators particularly literacy rate with the growth of the nonagricultural sector. Large discrepancies have been observed between the microeconomic (per capita household income/consumption) and macroeconomic (per capita GDP/private consumption) indicators, suggesting weak linkages between macro and micro economic development.



## I. INTRODUCTION

This paper investigates the several problems that persist in the measurement of poverty, especially income poverty, in Nepal. Two problems, namely the comparability and internal consistency of both poverty lines as well as poverty estimates (Asra and Francisco 2001), are the major concern of investigation of this paper for numerous reasons. First, in the absence of precise scientific methods for measuring income poverty—more specifically, for setting absolute poverty lines—Nepal has used different methods to estimate poverty. Such practices definitely create problems while comparing poverty rates over time. Second, the growing discrepancies (or inconsistencies) between the National Accounts (NA) and Household Survey (HS) statistics over time in many countries, especially in India, have raised controversy about the poverty counts and the relationship between economic growth and poverty reduction (Bhalla 2000, Deaton 2001).

After providing a summary of poverty issues in Section II, this paper reviews the statistical system of Nepal and various data sources pertinent to three dimensions of poverty—income, health, and education—in Section III. The practices of measuring poverty based on income-consumption household survey data in fiscal years 1976/77, 1984/85, and 1995/96 are reviewed in Section IV. The temporal change in income inequality is examined in Section VI. Several macroeconomic indicators<sup>1</sup> and microeconomic indicators<sup>2</sup> available for two time points (1984/85 and 1995/96) are compared in Section VI. Some measures of nonincome poverty—more specifically, infant mortality rate and gross enrollment ratio—together with their measuring issues are reviewed in Section VII.

This paper also examines the linkages between economic growth and poverty reduction. After the economic reforms initiated in 1985/86 and accelerated after political liberalization in 1990, Nepal has achieved relatively high economic growth without any evidences of reduction in poverty. The coexistence of relatively high economic growth without any evidence of reduction in poverty is tackled in Section VIII by comparing the socioeconomic indicators available from household surveys with sectoral economic growth. This issue has also been tackled (Chhetry 2002) by comparing rural/urban growth in per capita income, concluding that economic growth was mainly concentrated in urban areas.

---

<sup>1</sup> Per capita private consumption, per capita gross domestic product (GDP), per capita agricultural GDP, and share of agriculture GDP to total GDP available from national accounts.

<sup>2</sup> Per capita consumption, per capita income, per capita farm income, and share of farm income to total income available from household survey.

## II. SUMMARY OF RESEARCH

The three poverty rates available for 1976/77, 1984/85, and 1995/96 are not comparable. This is mainly due to change in the level of minimum per capita daily nutritional requirements, change in the approach for estimating food and nonfood poverty lines, and change in the definition of poor over time. Despite such methodological changes, surprisingly the three poverty rates corresponding to three time points are around 40 percent. The inequality in income distribution, measured by the Gini concentration ratio has increased from 0.21 in 1984/85 to 0.40 in 1995/96 in rural areas, and from 0.26 in 1984/85 to 0.46 in 1995/96 in urban areas.

Large discrepancies have been observed between the microeconomic and macroeconomic indicators within a span of 12 years, from 1984/85 to 1995/96. For instance, the ratio of per capita private consumption of NA to per capita consumption of HS has increased from almost unity in 1984/85 to 1.37 in 1995/96. Similarly, the ratio of per capita GDP to per capita income of HS has increased from almost unity in 1984/85 to 1.52 in 1995/96. On the contrary, the ratio of per capita agricultural gross domestic product (GDP) to per capita farm income of HS has remained almost unity in the years 1984/85 and 1995/96.

Rural/urban differences in both income and nonincome poverty is immense in Nepal. For instance, rural poverty rates are almost twice as high as urban poverty rates. No clear trend has emerged out of comparing poverty rates across the three regions (*terai*, hill, and mountain). Despite the fact that infrastructure development and economic opportunities are relatively better in the *terai* than in the hill/mountain region, the *terai* region appears worse than the hill region in terms of the indicators of nonincome poverty, i.e., infant mortality rate and gross enrollment ratio.

In spite of relatively high economic growth during 1984/85 to 1995/96, there is no strong evidence that supports the hypothesis that poverty has declined during this period. In fact, strong evidence is observed from the Nepal Living Standard Survey of 1995/96 that reject the hypothesis. This is evident when sectoral economic growth is viewed against the background of micro level socioeconomic behaviors. For instance, the sluggish growth of the agricultural sector (macroeconomic scenario) is incompatible with the micro level realities, since an overwhelming majority of individuals/households heavily depend on agriculture both for employment and income generation. Economic reforms have offered opportunities, but the poor fail to take advantage of these opportunities because of mass illiteracy. If this incompatible trend between the micro level socioeconomic behaviors and sectoral economic growth continues to persist, the reduction of poverty in Nepal may remain a very difficult task.

## III. STATISTICAL SYSTEM AND DATA SOURCES

The purpose of this section is to describe the statistical system of Nepal and, also, to describe three different sets of databases corresponding to three dimensions of poverty, namely income, health, and education.

## A. Statistical System

Nepal's statistical system is a decentralized one. A large number of government and semigovernment organizations are compiling, collecting, processing, and analyzing data. The major organizations are Central Bureau of Statistics (CBS), Nepal Rastra Bank (NRB), Ministry of Agriculture, Ministry of Health (MoH), Ministry of Education, and Ministry of Finance.

These six major organizations are involved under different capacities in building the statistical system in Nepal. The CBS, being the Secretariat of the National Planning Commission (NPC), has more responsibility toward capacity building of the nation's statistical system than any other organization. For example, CBS is responsible for identifying the country's data needs for planning and policy purposes. It is also entrusted with the responsibility of coordination and supervision of data collection and publication work carried out by other organizations. For these and similar other purposes, adequate authority is bestowed upon CBS through the Statistics Act. In spite of all these institutional arrangements, a variety of problems still persist in the statistical system of Nepal.

## B. Income Poverty Data Source

Even though a number of household surveys were conducted to collect data on income and consumption in the past, only a few of them were used to estimate poverty. Measurement of poverty was first made in Nepal in 1978. Since then two more attempts have been made.<sup>3</sup> These three attempts at poverty measurement were made by three different agencies: NPC in 1978, NRB in 1988, and CBS in 1998. These agencies (hereafter sources) had utilized the data on income and consumption they have collected through nationwide household surveys. Pertinent information from these surveys is summarized in Table 1.

**TABLE 1**  
**BASIC INFORMATION OF INCOME POVERTY DATA SOURCE**

SURVEY TITLE	SURVEY AUTHORITY	SURVEY YEAR	NUMBER OF SELECTED HOUSEHOLDS	
Employment, Income Distribution and Consumption Patterns Survey	National Planning Commission	1976/77	Rural	4,037
			Urban	932
			Total	4,969
Multipurpose Household Budget Survey	Nepal Rastra Bank	1984/85	Rural	3,662
			Urban	1,661
			Total	5,323
Nepal Living Standard Survey (NLSS)	Central Bureau of Statistics	1995/96	Rural	2,657
			Urban	716
			Total	3,373

<sup>3</sup> A fourth one is in process: the second NLSS survey started in March 2003 and completed recently, whose report may appear by 2005.

Even though different sources adopted different sample designs, all designs had a common objective to draw a representative sample of households. In this context, household or individual level estimates of income and consumption expenditure seem to be comparable to some extent across sources (or over time), provided the three sources had adopted the same methodology in recording as well as in defining household level income and consumption expenditure. The NRB and CBS sources appear closer in their definitions of household income. This is not the case between the NPC and NRB, or NPC and CBS definitions since the NPC did not include imputed income (rental value) from owner-occupied houses in the household income while NRB and CBS did. As for the consumption items (food and nonfood), the coverage of NLSS appears much wider than in other two sources.

Neither of the other two surveys had collected as much poverty-related information as NLSS did. The NLSS collected data on income, expenditure, health, education, employment, agriculture, ownership of assets, access to services, housing characteristics, and possession of basic amenities of life. Consequently, the scope of NLSS is much wider than the other two surveys. Several outputs of NLSS were incorporated in the Ninth Five Year Plan (1997/98 to 2001/02).

Macroeconomic indicators are important in poverty analysis. The main data source for macroeconomic indicators is the CBS, which has been generating annual GDP series by sector, private and total consumption, gross domestic savings, gross national product, and GDP price deflator. Due to technical reasons, the national account statistics were revised in 1993. The revised series of national account statistics are in use. The revised GDP series are available both at current and constant prices starting from FY1984/85 (mid-July 1984 to mid-July 1985) up to the present. All the national account statistics are available only at the national level.

### **C. Health Poverty Data Source**

The mortality indicators and their proxies are frequently used to assess health poverty across time and space. Like many developing countries, Nepal suffers from a low level of reporting of vital events, and the vital registration system is not sufficient enough to provide reliable information or estimates that can be used for various purposes at the operations level. Consequently, it has become a common practice to estimate mortality levels by applying different methods of estimation to either census data or nationwide survey data. The two major nationwide health surveys of Nepal, whose results will be used in this paper, are listed in Table 2.

Apart from the above surveys, census data are also used to estimate level of mortality. Several estimates of mortality for the year 1991 were made available from the two data sources—the 1991 Population Census and the 1991 Nepal Fertility, Family Planning and Health Survey—using different methods (see, for instance, Shrestha 1995, 106). The issues of estimating and reporting infant mortality rate will be discussed in more detail further below.

### **D. Education Poverty Data Source**

Literacy rates and enrolment ratios are more frequently used indicators to assess the level of education poverty over time and space. These indicators have both gender and regional

**TABLE 2**  
**BASIC INFORMATION OF HEALTH POVERTY DATA SOURCE**

SURVEY TITLE	SURVEY AUTHORITY	SURVEY YEAR	SAMPLE SIZE
Nepal Family Health Survey (NFHS96)	Ministry of Health	1996	8252
Nepal Fertility, Family Planning, and Health Survey (NFHS91)	Ministry of Health	1991	24754

dimensions. Literacy being an important variable, almost all the household surveys and all the population censuses have been collecting data on it. However, the census figures are used more extensively in Nepal.

The regular data source for enrollment ratios is the Ministry of Education. Data are just compilations of district level official records, and ratios are available by year, level, and sex. The school education structure in Nepal broadly consists of primary (Grade I to V) for 6- to 10-year-old children; lower secondary (Grade VI to VIII) for 11- to 13-year-old children; and secondary (Grade IX to X) for 14- to 15-year-old children. Very few nationwide surveys had provided estimates of enrollment ratios. The most recent survey that provides enrollment ratios is the NLSS of 1995/96.

#### IV. POVERTY LINES AND POVERTY RATES: MEASURING ISSUES

The purpose of this section is to summarize the practices adopted by three sources while estimating poverty lines and poverty rates in the past. The technical details are in the Appendix.

##### A. Minimum Calorie Requirements

In the process of measuring poverty, each of the sources estimated a fresh poverty line. The methodology adopted in estimating the poverty line varies from one source to another (for details see Appendix). For instance, even the basic component of the poverty line, namely the per capita daily calorie requirement for survival, varies from one source to another (Table 3).

**TABLE 3**  
**MINIMUM PER PAPIA DAILY CALORIE REQUIREMENT ADOPTED BY SOURCES**

SOURCE	TERAI	HILL/MOUNTAIN	NEPAL
NPC	—	—	2256
NRB	2140	2340	2250
CBS	—	—	2124

Sources: National Planning Commission (1978, 110); Nepal Rastra Bank (1988, 134); and Central Bureau of Statistics (1998, 32).

Note that no other sources, except NRB, have used two different minimum per capita calorie requirements—one for the population residing in the terai region (2140 calories) and the other for those residing in the hill/mountain region (2340 calories).

## B. Estimates of Poverty Lines

In the process of deriving the poverty line, each source first determined the minimum level of per capita consumption expenditure (hereafter simply expenditure) required to intake the minimum level of calorie requirement, called *food poverty line*. Then each source determined the minimum level of per capita expenditure required to meet other basic necessities, called *nonfood poverty line*. The methods involved in estimating these two poverty lines vary from one source to another remarkably (see Appendix). The final poverty line, presented in Table 4 in local currency unit (LCU), was obtained by adding the two poverty lines.

TABLE 4  
POVERTY LINE IN LOCAL CURRENCY UNIT BY SOURCE

SOURCE	TERAI	HILL/MOUNTAIN	NEPAL
NPC	—	—	720
NRB	1508	1930	1741*
CBS	—	—	4404

Note: \*Author estimates ( $= 0.4469 \cdot 1508 + 0.5531 \cdot 1930$ ). The weights are the proportion of population in the two regions.<sup>4</sup> Sources: NPC (1978, 111); NRB (1988, 135); and CBS (1998, 23).

It is important to note that the poverty lines estimated by NPC and CBS are in real prices, in the sense that they are corrected for spatial rather than temporal price differences. This may also be the case for the NRB poverty lines. However, this is difficult to ascertain from the methodology commonly reported. It is by now evident that the three poverty lines of Nepal are *not* comparable.

## C. Definition of Poor

The two sources, NPC and NRB, had defined those individuals as poor whose per capita income falls below the poverty line, while CBS had defined those individuals as poor whose per capita expenditure falls below the poverty line. The two definitions may not lead to the same headcount ratio even for a fixed poverty line. For example, the headcount ratios based on per capita expenditure and per capita income with poverty line of Rs 720 were 31.5 and 36.2 percent, respectively, in

<sup>4</sup> Note that NRB had introduced two separate poverty lines, one for the terai residents and the other for the hill/mountain residents. The author has combined the two poverty lines into a single one.

1976/77 (NPC 1978, 117). With this and other methodological problems, the estimated headcount ratios of three sources (Table 5) are not comparable over time. Nevertheless, these estimates clearly indicate that the incidence of poverty is more pronounced in the rural than in urban areas.

**TABLE 5**  
**ESTIMATED HEADCOUNT RATIOS BY SOURCE (PERCENT)**

ESTIMATING SOURCE	YEAR FOR ESTIMATION	RURAL AREAS	URBAN AREAS	ALL NEPAL
NPC	1976/77	37.2	17.0	36.2
NRB	1984/85	43.1	19.2	41.4*
CBS	1995/96	44.0	23.0	42.0

Note: \* Author's estimates ( $0.9306 \times 43.1 + 0.0694 \times 19.2 = 41.4$ ). The weights are the proportion of rural/urban population. Sources: National Planning Commission (1978, 117); Nepal Rastra Bank (1988, 136); and Central Bureau of Statistics (1998, 35).

## V. INCOME DISTRIBUTION: DECILE SHARES

This section presents the percentage shares of decile group of individuals<sup>5</sup> to the total income. The shares are presented separately for the rural and urban areas for 1984/85 and 1995/96. The cumulative percentage shares of decile groups to total income for 1984/85 and 1995/96 are summarized in Tables 6 and 7, respectively.

In 1984/85, the top decile group of individuals of the rural and urban area is observed to account for about 20 and 22 percent, respectively, of the total income generated in the corresponding area. Meanwhile, the bottom decile group of individuals of each rural and urban area is observed to account for 4 percent of total income generated in the corresponding area. The Gini concentration ratios of rural and urban areas in 1984/85 are 0.23 and 0.26, respectively.

**TABLE 6**  
**DECILE SHARES IN TOTAL INCOME BY RURAL AND URBAN AREAS IN 1984/85**

	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH	TENTH
Rural	4.3	10.1	17.2	25.2	33.9	43.5	53.7	65.5	80.1	100.0
Urban	4.4	10.3	16.3	23.4	31.7	40.8	51.4	64.0	78.2	100.0

Source: NRB (1988, 108).

In 1995/96, the top decile group of individuals of each rural and urban area is observed to account for about 33 percent of the total income generated in the corresponding area. The bottom

<sup>5</sup> Based on annual per capita income.

decile group of individuals of rural and urban areas is observed to account for 2 and 1 percent, respectively, of total income generated in the corresponding area. The Gini concentration ratios of rural and urban areas in 1995/96 are 0.40 and 0.46, respectively.

**TABLE 7**  
**DECILE SHARES IN TOTAL INCOME BY RURAL AND URBAN AREAS, 1995/96**

	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH	NINTH	TENTH
Rural	1.8	5.6	10.4	16.2	23.0	31.0	40.4	52.0	67.1	100.0
Urban	0.9	3.4	7.1	12.2	18.5	26.6	36.7	49.6	66.8	100.0

Source: Compiled from NLSS data for RETA 5917.

Consumption inequality in Nepal as a whole, measured by the Gini concentration ratio, is 0.34 (CBS 1998, 28). There is a big difference in the degree of inequality between urban and rural areas, with the Gini concentration ratio for urban areas as high as 0.43 compared to 0.31 in rural areas.

## VI. DISCREPANCIES IN NATIONAL ACCOUNTS AND HOUSEHOLD SURVEY DATA

This section compares the national level per capita income, consumption, and farm income available from HS with the corresponding proxies available from NA. Such comparison is made using two time points, 1984/85 and 1995/96.

### A. Comparison of Per Capita Consumption

The ratio of nominal per capita private consumption of NA to nominal per capita consumption of HS has increased from almost unity in 1984/85 to 1.37 in 1995/96 (Table 8). During the reference period the real per capita consumption estimates of HS have shown no growth, while those of NA have shown an annual average growth of 2.6 percent.

**TABLE 8**  
**COMPARISON OF PER CAPITA CONSUMPTION**

	1984/85	1995/96
Nominal per capita consumption available from HS	2211	6802
Nominal per capita private consumption available from NA	2227	9325
Ratio of NA to HS nominal per capita consumption	1.0	1.37
GDP price deflator	100	315



## B. Comparison of Per Capita Income

The ratio of nominal per capita GDP of NA to nominal per capita income of HS has increased from almost unity in 1984/85 to 1.52 in 1995/96 (Table 9). During the reference period the real per capita income estimates available from the household survey have shown no growth, while those available from the national accounts have shown an annual average growth of 2.7 percent.

**TABLE 9**  
**COMPARISON OF PER CAPITA INCOME**

	1984/85	1995/96
Nominal per capita income available from HS	2571	7690
Nominal per capita income (GDP) available from NA	2751	11659
Ratio of NA to HS nominal per capita income	1.07	1.52

## C. Comparison of Per Capita Farm Income

The ratio of nominal per capita agricultural GDP of NA to nominal per capita farm income of HS has remained almost unity in both years 1984/85 and 1995/96 (Table 10), implying survey and national account results are consistent (no discrepancy). In terms of growth, HS and NA figures have resulted 0.2 and 0.6 percent, respectively, of annual average growth.

**TABLE 10**  
**COMPARISON OF PER CAPITA FARM INCOME**

	1984/85	1995/96
Nominal per capita farm income available from HS	1452	4691
Nominal per capita farm income (AGDP) available from NA	1409	4719
Ratio of NA to HS nominal per capita income	0.97	1.01

## D. Comparison of Percentage Share

The percentage share of agricultural GDP to total GDP has decreased from around 51 percent in 1984/85 to around 40 percent in 1995/96. On the contrary, the agricultural/farm income accounted for about 56 percent of the total income in 19984/85 (NRB 1988, viii), and 61 percent of the total income in 1995/96 (CBS 1996b, 10).

## VII. NONINCOME INDICATORS

This section discusses some issues related to the measurement of two indicators, health and education.

### A. Infant Mortality Rate—Estimating and Reporting Issues

Several sources have applied indirect techniques to estimate infant mortality rates (IMRs) on census and national survey data. Some national sample surveys, however, have also provided IMRs using the direct method based on direct information on infant deaths. Mortality estimates based on survey data involve a relatively small number of cases, which often lead to unstable estimates. In order to avoid this problem, it is a common practice to estimate mortality over an extended period, usually 5- or 10-year periods preceding the survey. In this method, the IMR is averaged for the cohort of children born 0-4 or 0-9 years before survey date. The issue of small number of cases becomes more severe, if differentials in IMR are studied against the socioeconomic background or against the place of residence (e.g., regions and rural/urban) of the respondents. Different estimates of IMR based on different methods at two points of time are summarized in Table 11.

**TABLE 11**  
**INFANT MORTALITY RATE BY SOURCE AND METHOD**

DATA SOURCE	DIRECT METHOD BASED ON		INDIRECT METHOD
	5-YEAR PERIOD PRECEDING SURVEY	10-YEAR PERIOD PRECEDING SURVEY	
NFHS91	80.1	98.0	102
NFHS96	78.5	93.0	

Source: MoH (1993 and 1996).

The IMR, estimated from NFHS91 data source based on a 5-year period preceding the survey date, is the averaged figure for the cohort of children born 0-4 years before the survey date, that is, births between 1987 to 1991. Similarly, the IMR, estimated from the same data source based on a 10-year period preceding the survey date, is the averaged figure for the cohort of children born between 1982 to 1991. The estimates of IMR vary drastically from one method of estimation to another, implying that IMRs stated without method and data source always create comparability problems.

## B. Infant Mortality Rate: Rural/urban Differentials

The estimated IMR using the direct method based on a 10-year period preceding the survey is presented in Table 12. The rural/urban differential in IMR is remarkable. The two data sources consistently show that the estimated IMR is more than 1-1/2 times higher in the rural area than in the urban area.

**TABLE 12**  
**RURAL/URBAN INFANT MORTALITY RATE BY DATA SOURCE**

DATA SOURCE	RURAL	URBAN
NFHS91	100.2	60.4
NFHS96	95.3	61.1

Sources: NFHS (1993, 136) and NFHS (1996, 104).

## C. Gross Enrollment Ratios

Gross enrollment ratios for primary, lower secondary, and secondary school<sup>6</sup> are presented in Table 13. The gross enrollment ratio in Nepal is 86 percent for primary, which sharply falls to 39 percent for lower secondary, and to only 11 percent for secondary level. The sharp decline in ratio from one level to another persists in rural Nepal and is relatively slower in urban Nepal.

**TABLE 13**  
**GROSS ENROLLMENT RATES BY LEVEL, GENDER, AND RURAL/URBAN AREA, 1995/96 (PERCENT)**

	PRIMARY	LOWER SECONDARY	SECONDARY
Rural Nepal			
Boys	100	45	15
Girls	70	29	5
Both	85	37	10
Urban Nepal			
Boys	103	67	29
Girls	100	72	21
Both	101	69	25
Nepal			
Boys	100	46	16
Girls	72	31	6
Both	86	39	11

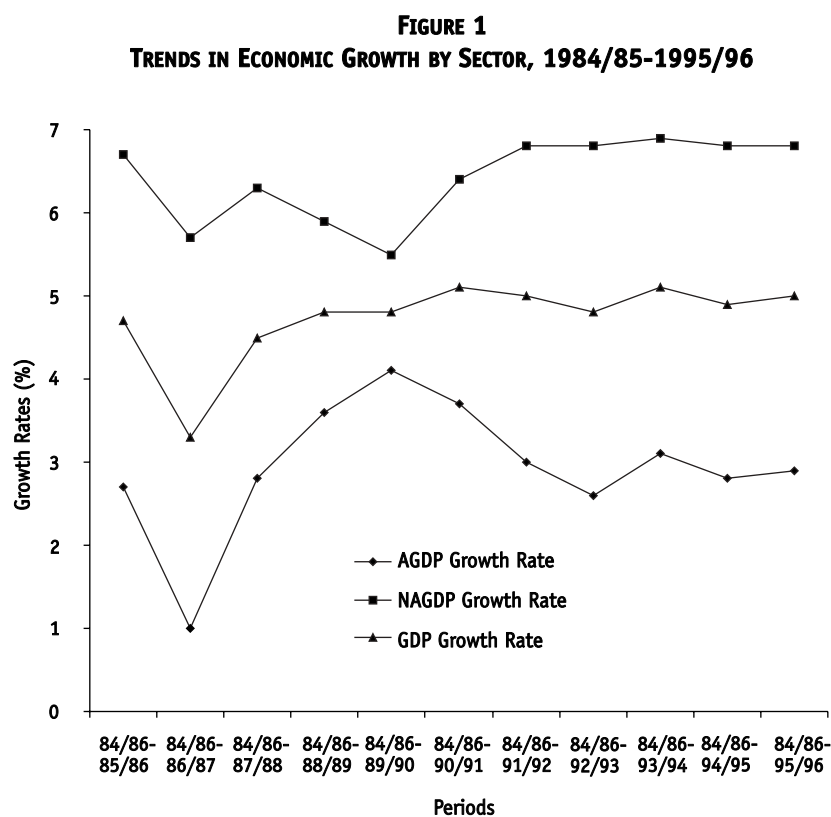
Source: CBS (1996a, 69).

<sup>6</sup> The gross enrollment ratio for a specific school level is computed as the number of children attending the specific school level as a percentage of the target age group of children of the specific school level. The target age group of children of primary, lower secondary, and secondary level are 6-10, 11-13, and 14-15 years of age, respectively.

Gender disparity in gross enrollment ratios in all levels is evident from the table. It is remarkably higher in rural Nepal than in urban Nepal.

### VIII. TRENDS IN SECTORAL ECONOMIC GROWTH AND IMPLICATIONS

The trends in economic growth during 1984/85 to 1995/96 are presented in Figure 1. During the reference period, agricultural GDP growth rates depicting relatively high variations tend to cluster around 3.0 percent. The unstable growth rate of the agricultural sector is mainly due to vagaries of monsoons. On the other hand, nonagricultural GDP growth rates, exhibiting a more stable growth, tend to cluster around 6.8 percent. The high and stable growth rate of the nonagricultural sector is mainly due to economic reforms initiated in 1985/86 and accelerated after 1990. The overall economic growth rates tend to cluster around 5.0 percent.



In spite of relatively high economic growth during the period, poverty did not decline as indicated in Table 5 (Section 4). The reason for this can be understood by analyzing the micro level socioeconomic indicators in Table 14 against information on sectoral economic growth. In particular, while the overwhelming majority of individuals/households heavily depend on agriculture for both employment and income generation, the growth of agriculture has been sluggish as pointed out above. Economic reforms may have offered opportunities, but the poor appear to have failed to take advantage of these, perhaps due to mass illiteracy (Table 15). As argued by Sen (1996), mass illiteracy deprives people from taking advantage of the opportunities offered by economic reforms. If the educational and related characteristics of large groups of the population do not improve, poverty may persist despite growth in nonagricultural sectors of the economy.<sup>7</sup>

**TABLE 14**  
**SOCIOECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF QUINTILE GROUPS**

	FIRST	SECOND	THIRD	FOURTH	FIFTH	ALL
Literacy rate <sup>a</sup> (percent)	19.9	27.8	32.9	46.2	59.3	37.8
Percent of population reporting agriculture as the main sector of employment <sup>b</sup>	87.6	85.7	85.5	84.6	71.6	82.9
Percent share of farm income to total income <sup>c</sup>	69	69	64	63	47	61

Sources: <sup>a</sup>CBS (1996a, 56).  
<sup>b</sup>CBS (1996a, 20).  
<sup>c</sup>CBS (1996b, 10).

Finally, the sectoral economic growth rates by Plan periods are summarized in Table 15. These rates need to be compared with great caution, since during each Plan period Nepal had adopted several reform policies. Some of the major reforms are Economic Stabilization Program, 1985; Structural Adjustment Program, 1987; Enhanced Structural Adjustment Facility, 1992; and implementation of Agriculture Perspective Plan in the Ninth Plan Period. During the same period, Nepal has witnessed several external shocks, the most major of which were the imposition of total economic (trade) blockade by India in 1988-1989, restoration of a multiparty democratic government in 1990, political instability that began around the mid-1990s, the Maoist insurgency that surfaced intensely in 1998, and the Royal Massacre in 2001.

<sup>7</sup> It is worth noting that the percentage of population reporting agriculture as the main sector of employment decreases as the quintile level increases. Likewise, the percentage share of farm income to total income decreases as quintile level increases. The decrease in both the indicators is sharp in the fifth quintile (Table 14).

**TABLE 15**  
**PLAN PERIODIC ECONOMIC GROWTH RATE (PERCENT)**

	<b>AGDP GROWTH RATE GROWTH RATE</b>	<b>NONAGRICULTURAL GROWTH RATE</b>	<b>OVERALL GDP</b>
Seventh (1985/86—1989/90)	4.1	5.5	4.8
Eighth (1992/93—1996/97)	3.0	6.3	4.9
Ninth (1997/98—2001/02)	3.3	3.9	3.7

Note: Two fiscal years—1990/91 and 1991/92—were plan holidays.  
Source: Plan Documents.

## **IX. CONCLUDING REMARKS**

Among other things, this paper has attempted to explore the several problems that persist in the measurement of poverty in Nepal. The main findings and conclusions are as follows.

The currently available poverty rates are not strictly comparable over time. Nevertheless, there is evidence that leads to a rejection of the hypothesis that poverty was reduced during the reference period, 1984/85 to 1995/96. While Nepal achieved high nonagricultural growth, agricultural growth has been low during the reference period. Socioeconomic data from household-level surveys clearly reveal the existence of mass illiteracy and high dependency of an overwhelming majority of the population on agriculture for both employment and income generation. Thus low agricultural growth would be compatible with an absence of poverty reduction over the reference period. Moreover, income inequality has increased over the reference period. If the pattern of sectoral economic growth continues to persist, poverty reduction in Nepal is likely to remain almost an impossible task.

During the Ninth Plan period, Nepal has passed through a most difficult period. However, during this period the average performance of the agricultural sector seems to have improved, while the performance of the nonagricultural sector has deteriorated. Nepal needs to learn the policy implications from this experience and pay more attention to the growth of the agricultural sector through the Agriculture Perspective Plan.

## APPENDIX: TECHNICAL NOTES

This annex attempts to provide a brief description of the methodology adopted by three sources—National Planning Commission, Nepal Rastra Bank (NRB), and Central Bureau of Statistics—while estimating (i) the poverty line and (ii) the incidence of poverty. The three sources estimated poverty line in terms of consumption (in Nepali Rupees, NRs), which basically is the sum of the food and nonfood poverty line. The food poverty line is the expenditure required for a person to be able to meet a certain minimum nutritional intake. The minimum nutritional requirements have been expressed in terms of calorie intakes. The nonfood poverty line is the amount needed to purchase essential nonfood items.

The poverty line, in fact, divides the population into poor and nonpoor. In Nepal two approaches—minimum subsistence consumption approach and minimum subsistence income approach—have been used for defining poor/nonpoor. According to the first approach, an individual is considered as poor if his/her per capita consumption level falls below the poverty line. According to the second approach an individual is considered as poor if his/her per capita income level falls below the poverty line.

### POVERTY ESTIMATION METHODOLOGY OF NATIONAL PLANNING COMMISSION

#### Food Poverty Line

First, NPC presumed 2,256 calories<sup>8</sup> as the average per capita minimal calorie requirement per day. NPC also presumed that this minimal requirement calorie could be fulfilled by consuming 605 grams of cereals (rice, maize, millet, or wheat individually or in combination) and 60 grams of pulses (*arhar, mas, masur, gram, khesari, etc.*)<sup>9</sup>. Second, the minimum subsistence level of per capita expenditure required to intake 2,256 calories was estimated at the national level by incorporating the variations among the regional level estimates (see second column of Table A1 ). Thus, the food poverty line turned out to be NRs 1.32 per day, 39.60 per month, or 475.20 per year.

#### Final Poverty Line

The lowest average actual daily expenditure on the nonfood items<sup>10</sup> (including the other food items) was estimated for rural and urban areas separately by incorporating the variations among the regional level estimates (see third and fourth columns of Table A.1). Then the average minimum per capita subsistence level of expenditure was estimated for rural and urban areas (last two columns of Table A.1). Ultimately, Rs 2.0 per capita per day was estimated as the minimum (at 1976/77 prices) subsistence level of expenditure at the national level, since during that time 96 percent of the country's population was in the rural areas. Thus, the national level poverty line turned out to be NRs 2.0 per day, NRs 60.0 per month, or NRs 720.0 per year.

<sup>8</sup> Estimated by the Food Research Laboratory of HMG as well as by the Food and Agriculture Organisation.

<sup>9</sup> Consumption of 605 grams of cereals, on average, would provide 2042 calories and 60 grams of pulses 214 calories, making together 2256 calories per capita a day.

<sup>10</sup> Lowest average is based on the average expenditure made by mostly landless, marginal, and small-farm category households in rural areas, and expenditure made by the minimum income group (<Rs 4000 annual) in urban areas. The other food items were species and condiments; vegetables and fruits; milk and milk products; meat, eggs, and fish; edible oil and *ghee*; sweetening items; and tea and beverages. Nonfood items were clothing and footwear, education and health, fuel and light etc.

**TABLE A.1**  
**FOOD, NONFOOD, AND FINAL POVERTY LINE BY REGION AND RURAL/URBAN AREA, 1976/77**

REGION	EXPENDITURE TO MEET 2256 CALORIES <sup>11</sup>	LOWEST AVERAGE ACTUAL DAILY EXPENDITURE ON FOOD AND NONFOOD ITEMS		TOTAL DAILY REQUIREMENT FOR SUBSISTENCE LEVEL OF EXPENDITURE	
		RURAL	URBAN	RURAL	URBAN
Eastern	1.21	0.65	0.32	1.86	1.53
Central	1.18	0.67	0.39	1.85	1.57
Western	1.50	0.76	0.45	2.21	1.95
Far Western	1.41	0.70	0.27	2.11	1.68
All Nepal	1.32	0.70	0.36	2.02	1.68

Source: NPC (1978, 111).

## Incidence of Poverty

NPC provided the estimates of poor based on both minimum subsistence consumption approach and minimum subsistence income approach, which are summarized in the Table A.2 by rural/urban area.

**TABLE A.2**  
**POVERTY INCIDENCE BY ESTIMATION APPROACH, 1976/77 (PERCENT)**

ESTIMATION APPROACH	RURAL	URBAN	ALL NEPAL
Minimum Subsistence Consumption	32.1	20.0	31.5
Minimum Subsistence Income	37.2	17.0	36.2

Source: NPC (1978, 117).

The two approaches yield two different estimates of poverty. For example, the incidence of poverty under the minimum subsistence consumption approach was 31.5 percent, while that under the minimum subsistence income approach was 36.2 percent. *The estimates based on the minimum subsistence income approach were taken as official estimates of poverty by NPC.*

## POVERTY ESTIMATION METHODOLOGY OF NEPAL RASTRA BANK

According to the Multipurpose Household Budget Survey report, the poverty lines are essentially the Basic Needs Incomes (BNIs) fixed by the NPC in 1985/86 with some adjustments. The BNI fixed by the NPC is described below.

<sup>11</sup> Average cost price of 605 grams of cereals and 60 grams of pulses.



## Food Poverty Line

First, in view of the variations in altitude among the geographical regions, the minimum daily calorie requirements for the hill/mountain and the terai region were fixed at 2340 and 2140 respectively. The national average was fixed at 2250 calories. NPC presumed that the targeted group of population could fulfill the minimum calorie requirement largely through the consumption of cereals, pulses and potatoes. Second, based on the average retail prices of the food items, the expenditure required for the intake of 2340 calories and 2140 calories per person per day in the hill/mountain and the terai region correspondingly turned out to be Rs 3.86 and Rs 3.06 at 1985/86 prices.

## Final Poverty Line

Based on the assumption that the targeted group of households spends 65 percent of their consumption expenditure on food and 35 percent on other necessities, the total BNI per person per day were estimated at Rs 5.94 for the hill/mountain region and Rs 4.71 for the terai region at 1985/86 prices.

Comparing the urban Consumer Price Indices (CPIs) of 1984/85 with those of 1985/86, it was found that the 1985/86 CPIs were higher than those of 1984/85 by a factor of 11 percent in the hills, and 12.3 percent in the terai. The regional BNIs per person per year at 1985/86 prices were deflated by the respective CPI factors in order to get the regional BNIs at 1984/85 (survey year) prices. On this basis, the average BNI per person per year at 1984/85 prices was Rs 1930 for the hill/mountain region, Rs 1508 for the terai region, NRs 1741 for all Nepal. The whole estimation scheme of BNI and poverty line is presented in Table A3.

**TABLE A.3**  
**SUMMARY OF BNI ESTIMATION SCHEME, AND POVERTY LINE, 1984/85**

	TERAI	HILL/MOUNTAIN	NEPAL
Minimum daily calorie required per person per day	2140	2340	2250
Expenditure required to intake minimum calorie/person/day	3.06	3.86	3.50*
Expenditure required for other items of daily necessities	1.65	2.08	1.89*
BNI per person per day at 1985/86 prices	4.71	5.94	5.39*
BNI per person per year at 1985/86 prices	1719	2168	1967*
BNI per person per year at 1984/85 prices or poverty lines	1508	1930	1741*

Notes: \* Weighted average: weights are 0.447 for the terai and 0.553 for the hill/mountain.  
BNI means basic needs income.

Source: NRB (1988, 134-5).

## Incidence of Poverty

The minimum subsistence income approach has been used to define poor. The incidence of poverty by regions, including rural/urban area, is summarized in Table A.4.

**TABLE A4**  
**INCIDENCE OF POVERTY, 1984/85**

RURAL	URBAN	NEPAL	RURAL TERAI	RURAL HILL	RURAL MOUNTAIN	URBAN TERAI	URBAN HILL
43.1	19.2	41.4*	35.4	52.7	44.1	24.1	14.5

Note: \* Weighted average: weights are 0.9306 for rural and 0.0694 for urban area.  
Source: NRB (1988, 134-5).

## POVERTY ESTIMATION METHODOLOGY OF CENTRAL BUREAU OF STATISTICS

Details on calorie requirement of the Nepali population were not readily available. Figures for the Indian population have been used (Gopalan, Sastri, and Balasubramanian 1976) for estimating poverty line by CBS.

### Food Poverty Line

Based on the NLSS data, a “representative” Nepali household is built up from the average of each gender/age combination per household in the population as a whole. The sum of these averages yields the average household size in Nepal of 5.68. For such a representative household, the per capita requirement turns out to be 2124 kcals per day (see Table A5). It has been assumed that the activity levels of adult males and females are moderate. Persons who cannot meet even moderate activity level requirements are clearly deprived.

Having settled on a nutritional norm of 2124 kcals per person per day, the next step in setting the food poverty line was to specify the basket of foods that will be expected to yield the nutritional norm. It was decided to identify those food items that were consumed by Nepali households in the second to fifth decile of the per capita consumption distribution. A consumption basket was constructed comprising the average quantity consumed for each of the 37 food items included in the NLSS for which information on quantity consumed was available. On average, these 37 food items represent 85 percent of the total food spending. This basket yielded 1736 kcals per day per person. To ensure that the food basket identified yielded 1805 kcals (85 percent of 2124 kcals), all quantities were uniformly scaled up by the ratio of 1805/1736 (Table A6).

**TABLE A5**  
**RECOMMENDED CALORIE INTAKE**

GROUP	PARTICULARS	RECOMMENDED CALORIES (kcal/day)	COMPOSITION OF AVERAGE NEPALI HOUSEHOLD	CALORIES PER HOUSEHOLD
Man	Sedentary work	2400	—	—
	Moderate work	2800	1.31	3668
	Heavy work	3900	—	—
Woman	Sedentary work	1900	—	—
	Moderate work	2200	1.47	3234
	Heavy work	3000	—	—
	Pregnancy	+300	—	—
	Lactation	+700	—	—
Infants	0-12 months	n/a	0.15	n/a
Children	1-3 years	1200	0.45	540
	4-6 years	1500	0.57	855
	7-9 years	1800	0.49	882
	10-12 years	2100	0.48	1008
Adolescents	Boys: 13-15 years	2500	0.20	500
	Girls: 13-15 years	2200	0.19	418
	Boys: 16-18 years	3000	0.18	540
	Girls: 16-18 years	2200	0.19	418
Total			5.68	12063
	Recommended Per Capita Calorie Consumption (= 12063/5.68)			2124

Source: CBS (1998, 32).

**TABLE A6**  
**FOOD BASKET COMPOSITION FOR THE NEPAL 1996 POVERTY LINE**

FOOD ITEM	GRAMS (OR MLS) PER DAY	EDIBLE SHARE	CALORIES/GRAM	TOTAL CALORIES
Fine rice	26.15	1.00	3.49	91.25
Coarse rice	217.3	1.00	3.45	749.6
Beaten rice	3.472	1.00	3.46	12.01
Maize	58.55	1.00	3.42	200.2
Maize flour	40.07	1.00	3.42	137.0
Wheat flour	91.77	1.00	3.41	312.9
Millet	35.57	0.79	3.31	93.00
Black pulse	1.903	1.00	3.47	6.603
Masoor	8.172	1.00	3.43	28.03
Rahar	1.020	1.00	3.35	3.418
Gram	0.720	1.00	3.60	2.593
Eggs	0.487	1.00	1.73	0.843
Milk	30.77	1.00	0.67	20.62
Baby milk	0.010	1.00	4.96	0.050
Curd	1.212	1.00	0.60	20.62
Ghee	1.174	1.00	9.00	0.050
Vegetable oil	0.221	1.00	9.00	1.994
Mustard	7.350	1.00	9.00	66.15
Potatoes	28.88	0.85	0.97	23.81
Onions	5.842	0.95	0.50	2.775
Cauliflower	4.063	0.70	0.30	0.853
Tomatoes	2.410	0.98	0.23	0.543
Bananas	3.704	0.71	1.16	3.051
Citrus fruit	0.846	0.67	0.48	0.272
Mangoes	4.989	0.74	0.74	2.732
Apples	0.374	0.90	0.59	0.198
Pineapple	0.096	0.60	0.46	0.026
Papaya	1.697	0.75	0.35	0.445
Fish	1.717	0.78	0.97	1.299
Mutton	1.640	1.00	1.94	3.181
Buffalo	1.789	1.00	0.86	1.539
Chicken	1.083	1.00	1.09	1.180
Salt	13.31	1.00	0.00	0.000
Sugar	3.547	1.00	3.98	14.11
Gur	0.773	1.00	3.98	3.076
Sweets	1.911	1.00	3.19	6.095
Tea	0.253	1.00	0.00	0.000
				1812.116

Source: CBS (1998, 33).

As prices vary across the country, the cost of the food basket was calculated on the basis of the prices prevailing in a reference area—the Eastern and the Central terai. This means that in calculating the regional price cost of the food basket, average prices prevailing in the reference area were used (the spatial price index that was computed based on the survey data had also taken rural east Terai as the base case; i.e., all consumption expenditures were adjusted so as to make the purchasing power of one rupee in the respective region comparable to that of one rupee in the reference area). The food poverty line (total cost of purchasing the food basket) amounted to NRs 2637 per person per annum (in real prices in the sense of “corrected for spatial rather than temporal price differences”).

## Final Poverty Line

How to add to the food poverty line a component that represents the amount needed to purchase essential nonfood items? One may have several approaches to resolve this issue. The approach adopted by CBS was to calculate empirically from the NLSS data how much, on average, those households that were spending on food the amount needed to meet their minimum food requirements were spending on nonfood items.

The food poverty line was based on a subset of total food expenditures. The average nonfood share was derived not as an average difference between total expenditures and total food expenditure around the food poverty line, but rather as the average difference between total expenditures and expenditures on the 37 food items for which quantity information was available. The average nonfood share was calculated following a simple nonparametric technique where median per capita total expenditure was calculated for those households who had per capita food expenditures on the 37 items included in the basket within a small interval (of +/- one percent) around the food poverty line. Successively larger intervals were selected (a total of five times so that the largest interval was plus or minus five percent) and then a simple average was taken of the five observations of median per capita total expenditure around the food poverty line. The food poverty line was then simply scaled up by this average amount to yield a final poverty line. The final poverty line was calculated to be NRs 4404 per person per annum in real<sup>12</sup> prices.

## Incidence of Poverty

In order to have a meaningful comparison between the per capita consumption and the poverty line (real), one must have a mechanism to convert nominal per capita consumption into the real one (here the terms “nominal” and “real” have been used with respect to spatial rather than temporal price differences). Based on the NLSS data, CBS constructed Laspeyres regional price index (see details in CBS 1998) of the six regions assuming rural Eastern and Central terai as the base region.

CBS adopted the minimum subsistence consumption approach to define poor (“an individual is poor if his/her real per capita consumption level falls below the poverty line”). Based on this definition, CBS has calculated the three measures of poverty: incidence of poverty, poverty gap, and squared poverty gap.

The incidence of poverty by regions, including by rural/urban area, is summarized in Table A7.

<sup>12</sup> In the sense of “corrected for spatial rather than temporal price differences.”

**TABLE A7**  
**INCIDENCE OF POVERTY, 1995/96**

RURAL	URBAN	NEPAL	TERAI	HILL	MOUNTAIN	URBAN KATHMANDU VALLEY	OTHER URBAN
23	44	42	42	41	56	4	34

Source: CBS (1998, 35).

## REFERENCES

- Asra, A., and S. Francisco, 2001. "Poverty Line: Eight Countries' Experiences and the Issue of Specificity and Consistency." Paper presented at the Asia and Pacific Forum on Poverty: Reforming Policies and Institutions for Poverty Reduction sponsored by the Asian Development Bank, Manila, Philippines.
- Bhalla, S., 2000. "Growth and Poverty in India—Myth and Reality." Available: <http://www.oxusresearch.com>.
- CBS, 1996a. *Nepal Living Standards Survey Report, Volume I*. Central Bureau of Statistics, Kathmandu, Nepal.
- \_\_\_\_\_, 1996b. *Nepal Living Standards Survey Report, Volume II*. Central Bureau of Statistics, Kathmandu, Nepal.
- \_\_\_\_\_, 1998. "Poverty in Nepal Today." *Tathakna Gatibidhi (Four Monthly Statistical Bulletin)*. Central Bureau of Statistics, Kathmandu, Nepal.
- Chhetry, D., 2002. "Understanding Rural Poverty in Nepal." In C. Edmonds and S. Medina, eds., *Defining an Agenda for Poverty Reduction, Proceedings of the First Asia and Pacific Forum on Poverty, Volume 1*. Asian Development Bank, Manila, Philippines.
- Deaton A., 2001. "Counting the World's Poor: Problems and Possible Solutions." *Research Observer* 16(2):125-47.
- Gopalan, C., B. V. Rama Sastri, and S. C. Balasubramanian, 1976. *Nutritive Value of Indian Foods*. National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
- MoH, 1993. *Nepal Fertility, Family Planning and Health Survey Report*. Nepal Family Planning and Maternal Child Health Division, Planning Research and Evaluation Section, Ministry of Health, Kathmandu, Nepal.
- \_\_\_\_\_, 1997. *Nepal Family Health Survey 1996*. Family Health Division, Department of Health Service, Ministry of Health, Kathmandu, Nepal.
- NPC, 1978. *Employment, Income Distribution and Consumption Patterns in Nepal*. National Planning Commission.
- NRB, 1988. *Multipurpose Household Budget Survey*. Nepal Rastra Bank, Kathmandu, Nepal.
- Sen, A., 1996. "Radical Needs and Moderate Reforms." In J. Dreze and A. Sen, eds., *Indian Development Selected Regional Perspectives*. Delhi: Oxford University Press for UNU/WIDER.
- Shrestha, K., 1995. Mortality Levels, Trends and Differentials. Population Monograph of Nepal, Central Bureau of Statistics, Kathmandu, Nepal.

## PUBLICATIONS FROM THE ECONOMICS AND RESEARCH DEPARTMENT

### ERD WORKING PAPER SERIES (WPS)

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

- |   |   |
|---|---|
| <p>No. 1 Capitalizing on Globalization<br/>—<i>Barry Eichengreen, January 2002</i></p> <p>No. 2 Policy-based Lending and Poverty Reduction: An Overview of Processes, Assessment and Options<br/>—<i>Richard Bolt and Manabu Fujimura, January 2002</i></p> <p>No. 3 The Automotive Supply Chain: Global Trends and Asian Perspectives<br/>—<i>Francisco Veloso and Rajiv Kumar, January 2002</i></p> <p>No. 4 International Competitiveness of Asian Firms: An Analytical Framework<br/>—<i>Rajiv Kumar and Doren Chadee, February 2002</i></p> <p>No. 5 The International Competitiveness of Asian Economies in the Apparel Commodity Chain<br/>—<i>Gary Gereffi, February 2002</i></p> <p>No. 6 Monetary and Financial Cooperation in East Asia—The Chiang Mai Initiative and Beyond<br/>—<i>Pradumna B. Rana, February 2002</i></p> <p>No. 7 Probing Beneath Cross-national Averages: Poverty, Inequality, and Growth in the Philippines<br/>—<i>Arsenio M. Balisacan and Ernesto M. Pernia, March 2002</i></p> <p>No. 8 Poverty, Growth, and Inequality in Thailand<br/>—<i>Anil B. Deolalikar, April 2002</i></p> <p>No. 9 Microfinance in Northeast Thailand: Who Benefits and How Much?<br/>—<i>Brett E. Coleman, April 2002</i></p> <p>No. 10 Poverty Reduction and the Role of Institutions in Developing Asia<br/>—<i>Anil B. Deolalikar, Alex B. Brillantes, Jr., Raghav Gaiha, Ernesto M. Pernia, Mary Racelis with the assistance of Marita Concepcion Castro-Guevara, Liza L. Lim, Pilipinas F. Quising, May 2002</i></p> <p>No. 11 The European Social Model: Lessons for Developing Countries<br/>—<i>Assar Lindbeck, May 2002</i></p> <p>No. 12 Costs and Benefits of a Common Currency for ASEAN<br/>—<i>Srinivasa Madhur, May 2002</i></p> <p>No. 13 Monetary Cooperation in East Asia: A Survey<br/>—<i>Raul Fabella, May 2002</i></p> <p>No. 14 Toward A Political Economy Approach to Policy-based Lending<br/>—<i>George Abonyi, May 2002</i></p> <p>No. 15 A Framework for Establishing Priorities in a Country Poverty Reduction Strategy<br/>—<i>Ron Duncan and Steve Pollard, June 2002</i></p> | <p>No. 16 The Role of Infrastructure in Land-use Dynamics and Rice Production in Viet Nam's Mekong River Delta<br/>—<i>Christopher Edmonds, July 2002</i></p> <p>No. 17 Effect of Decentralization Strategy on Macroeconomic Stability in Thailand<br/>—<i>Kanokpan Lao-Araya, August 2002</i></p> <p>No. 18 Poverty and Patterns of Growth<br/>—<i>Rana Hasan and M. G. Quibria, August 2002</i></p> <p>No. 19 Why are Some Countries Richer than Others? A Reassessment of Mankiw-Romer-Weil's Test of the Neoclassical Growth Model<br/>—<i>Jesus Felipe and John McCombie, August 2002</i></p> <p>No. 20 Modernization and Son Preference in People's Republic of China<br/>—<i>Robin Burgess and Juzhong Zhuang, September 2002</i></p> <p>No. 21 The Doha Agenda and Development: A View from the Uruguay Round<br/>—<i>J. Michael Finger, September 2002</i></p> <p>No. 22 Conceptual Issues in the Role of Education Decentralization in Promoting Effective Schooling in Asian Developing Countries<br/>—<i>Jere R. Behrman, Anil B. Deolalikar, and Lee-Ying Son, September 2002</i></p> <p>No. 23 Promoting Effective Schooling through Education Decentralization in Bangladesh, Indonesia, and Philippines<br/>—<i>Jere R. Behrman, Anil B. Deolalikar, and Lee-Ying Son, September 2002</i></p> <p>No. 24 Financial Opening under the WTO Agreement in Selected Asian Countries: Progress and Issues<br/>—<i>Yun-Hwan Kim, September 2002</i></p> <p>No. 25 Revisiting Growth and Poverty Reduction in Indonesia: What Do Subnational Data Show?<br/>—<i>Arsenio M. Balisacan, Ernesto M. Pernia, and Abuzar Asra, October 2002</i></p> <p>No. 26 Causes of the 1997 Asian Financial Crisis: What Can an Early Warning System Model Tell Us?<br/>—<i>Juzhong Zhuang and J. Malcolm Dowling, October 2002</i></p> <p>No. 27 Digital Divide: Determinants and Policies with Special Reference to Asia<br/>—<i>M. G. Quibria, Shamsun N. Ahmed, Ted Tschang, and Mari-Len Reyes-Macasaquit, October 2002</i></p> <p>No. 28 Regional Cooperation in Asia: Long-term Progress, Recent Retrogression, and the Way Forward<br/>—<i>Ramgopal Agarwala and Brahm Prakash, October 2002</i></p> |
|---|---|

- No. 29 How can Cambodia, Lao PDR, Myanmar, and Viet Nam Cope with Revenue Lost Due to AFTA Tariff Reductions?  
—*Kanokpan Lao-Araya*  
November 2002
- No. 30 Asian Regionalism and Its Effects on Trade in the 1980s and 1990s  
—*Ramon Clarete, Christopher Edmonds, and Jessica Seddon Wallack*  
November 2002
- No. 31 New Economy and the Effects of Industrial Structures on International Equity Market Correlations  
—*Cyn-Young Park and Jaejoon Woo*  
December 2002
- No. 32 Leading Indicators of Business Cycles in Malaysia and the Philippines  
—*Wenda Zhang and Juzhong Zhuang*  
December 2002
- No. 33 Technological Spillovers from Foreign Direct Investment—A Survey  
—*Emma Xiaoqin Fan*  
December 2002
- No. 34 Economic Openness and Regional Development in the Philippines  
—*Ernesto M. Pernia and Pilipinas F. Quising*  
January 2003
- No. 35 Bond Market Development in East Asia: Issues and Challenges  
—*Raul Fabella and Srinivasa Madhur*  
January 2003
- No. 36 Environment Statistics in Central Asia: Progress and Prospects  
—*Robert Ballance and Bishnu D. Pant*  
March 2003
- No. 37 Electricity Demand in the People's Republic of China: Investment Requirement and Environmental Impact  
—*Bo Q. Lin*  
March 2003
- No. 38 Foreign Direct Investment in Developing Asia: Trends, Effects, and Likely Issues for the Forthcoming WTO Negotiations  
—*Douglas H. Brooks, Emma Xiaoqin Fan, and Lea R. Sumulong*  
April 2003
- No. 39 The Political Economy of Good Governance for Poverty Alleviation Policies  
—*Narayan Lakshman*  
April 2003
- No. 40 The Puzzle of Social Capital  
A Critical Review  
—*M. G. Quibria*  
May 2003
- No. 41 Industrial Structure, Technical Change, and the Role of Government in Development of the Electronics and Information Industry in Taipei, China  
—*Yeo Lin*  
May 2003
- No. 42 Economic Growth and Poverty Reduction in Viet Nam  
—*Arsenio M. Balisacan, Ernesto M. Pernia, and Gemma Esther B. Estrada*  
June 2003
- No. 43 Why Has Income Inequality in Thailand Increased? An Analysis Using 1975-1998 Surveys  
—*Taizo Motonishi*  
June 2003
- No. 44 Welfare Impacts of Electricity Generation Sector Reform in the Philippines  
—*Natsuko Toba*  
June 2003
- No. 45 A Review of Commitment Savings Products in Developing Countries  
—*Nava Ashraf, Nathalie Gons, Dean S. Karlan, and Wesley Yin*  
July 2003
- No. 46 Local Government Finance, Private Resources, and Local Credit Markets in Asia  
—*Roberto de Vera and Yun-Hwan Kim*  
October 2003
- No. 47 Excess Investment and Efficiency Loss During Reforms: The Case of Provincial-level Fixed-Asset Investment in People's Republic of China  
—*Duo Qin and Haiyan Song*  
October 2003
- No. 48 Is Export-led Growth Passe? Implications for Developing Asia  
—*Jesus Felipe*  
December 2003
- No. 49 Changing Bank Lending Behavior and Corporate Financing in Asia—Some Research Issues  
—*Emma Xiaoqin Fan and Akiko Terada-Hagiwara*  
December 2003
- No. 50 Is People's Republic of China's Rising Services Sector Leading to Cost Disease?  
—*Duo Qin*  
March 2004
- No. 51 Poverty Estimates in India: Some Key Issues  
—*Savita Sharma*  
May 2004
- No. 52 Restructuring and Regulatory Reform in the Power Sector: Review of Experience and Issues  
—*Peter Choynowski*  
May 2004
- No. 53 Competitiveness, Income Distribution, and Growth in the Philippines: What Does the Long-run Evidence Show?  
—*Jesus Felipe and Grace C. Sipin*  
June 2004
- No. 54 Practices of Poverty Measurement and Poverty Profile of Bangladesh  
—*Faizuddin Ahmed*  
August 2004
- No. 55 Experience of Asian Asset Management Companies: Do They Increase Moral Hazard?  
—Evidence from Thailand  
—*Akiko Terada-Hagiwara and Gloria Pasadilla*  
September 2004
- No. 56 Viet Nam: Foreign Direct Investment and Postcrisis Regional Integration  
—*Vittorio Leproux and Douglas H. Brooks*  
September 2004
- No. 57 Practices of Poverty Measurement and Poverty Profile of Nepal  
—*Devendra Chhetry*  
September 2004



## ERD TECHNICAL NOTE SERIES (TNS)

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

- |       |   |   |
|-------|---|---|
| No. 1 | Contingency Calculations for Environmental Impacts with Unknown Monetary Values<br>—David Dole<br>February 2002   | —Erik Bloom and Peter Choynowski<br>May 2003  |
| No. 2 | Integrating Risk into ADB's Economic Analysis of Projects<br>—Nigel Rayner, Anneli Lagman-Martin, and Keith Ward<br>June 2002                             | No. 7 Strengthening the Economic Analysis of Natural Resource Management Projects<br>—Keith Ward<br>September 2003  |
| No. 3 | Measuring Willingness to Pay for Electricity<br>—Peter Choynowski<br>July 2002  | No. 8 Testing Savings Product Innovations Using an Experimental Methodology<br>—Nava Ashraf, Dean S. Karlan, and Wesley Yin<br>November 2003                  |
| No. 4 | Economic Issues in the Design and Analysis of a Wastewater Treatment Project<br>—David Dole<br>July 2002  | No. 9 Setting User Charges for Public Services: Policies and Practice at the Asian Development Bank<br>—David Dole<br>December 2003                           |
| No. 5 | An Analysis and Case Study of the Role of Environmental Economics at the Asian Development Bank<br>—David Dole and Piya Abeygunawardena<br>September 2002 | No. 10 Beyond Cost Recovery: Setting User Charges for Financial, Economic, and Social Goals<br>—David Dole and Ian Bartlett<br>January 2004                   |
| No. 6 | Economic Analysis of Health Projects: A Case Study in Cambodia  | No. 11 Shadow Exchange Rates for Project Economic Analysis: Toward Improving Practice at the Asian Development Bank<br>—Anneli Lagman-Martin<br>February 2004 |

## ERD POLICY BRIEF SERIES (PBS)

(Published in-house; Available through ADB Office of External Relations; Free of charge)

- |        |  |  |
|--------|--|--|
| No. 1  | Is Growth Good Enough for the Poor?<br>—Ernesto M. Pernia, October 2001  | Philippines<br>—E. M. Pernia and P. F. Quising<br>October 2002   |
| No. 2  | India's Economic Reforms<br>What Has Been Accomplished?<br>What Remains to Be Done?<br>—Arvind Panagariya, November 2001                                       | No. 11 Implications of a US Dollar Depreciation for Asian Developing Countries<br>—Emma Fan<br>July 2002         |
| No. 3  | Unequal Benefits of Growth in Viet Nam<br>—Indu Bhushan, Erik Bloom, and Nguyen Minh Thang, January 2002   | No. 12 Dangers of Deflation<br>—D. Brooks and P. F. Quising<br>December 2002                                     |
| No. 4  | Is Volatility Built into Today's World Economy?<br>—J. Malcolm Dowling and J.P. Verbiest, February 2002  | No. 13 Infrastructure and Poverty Reduction—<br>What is the Connection?<br>—I. Ali and E. Pernia<br>January 2003 |
| No. 5  | What Else Besides Growth Matters to Poverty Reduction? Philippines<br>—Arsenio M. Balisacan and Ernesto M. Pernia, February 2002                               | No. 14 Infrastructure and Poverty Reduction—<br>Making Markets Work for the Poor<br>—Xianbin Yao<br>May 2003     |
| No. 6  | Achieving the Twin Objectives of Efficiency and Equity: Contracting Health Services in Cambodia<br>—Indu Bhushan, Sheryl Keller, and Brad Schwartz, March 2002 | No. 15 SARS: Economic Impacts and Implications<br>—Emma Xiaojin Fan<br>May 2003                                  |
| No. 7  | Causes of the 1997 Asian Financial Crisis: What Can an Early Warning System Model Tell Us?<br>—Juzhong Zhuang and Malcolm Dowling, June 2002                   | No. 16 Emerging Tax Issues: Implications of Globalization and Technology<br>—Kanokpan Lao Araya<br>May 2003      |
| No. 8  | The Role of Preferential Trading Arrangements in Asia<br>—Christopher Edmonds and Jean-Pierre Verbiest, July 2002  | No. 17 Pro-Poor Growth: What is It and Why is It Important?<br>—Ernesto M. Pernia<br>May 2003                    |
| No. 9  | The Doha Round: A Development Perspective<br>—Jean-Pierre Verbiest, Jeffrey Liang, and Lea Sumulong<br>July 2002   | No. 18 Public-Private Partnership for Competitiveness<br>—Jesus Felipe<br>June 2003                              |
| No. 10 | Is Economic Openness Good for Regional Development and Poverty Reduction? The  | No. 19 Reviving Asian Economic Growth Requires Further Reforms   |

- Ifzal Ali*  
*June 2003*
- No. 20 The Millennium Development Goals and Poverty: Are We Counting the World's Poor Right?  
—*M. G. Quibria*  
*July 2003*
- No. 21 Trade and Poverty: What are the Connections?  
—*Douglas H. Brooks*  
*July 2003*
- No. 22 Adapting Education to the Global Economy  
—*Olivier Dupriez*  
*September 2003*
- No. 23 Avian Flu: An Economic Assessment for Selected Developing Countries in Asia  
—*Jean-Pierre Verbiest and Charissa Castillo*  
*March 2004*
- No. 25 Purchasing Power Parities and the International Comparison Program in a Globalized World  
—*Bishnu Pant*  
*March 2004*
- No. 26 A Note on Dual/Multiple Exchange Rates  
—*Emma Xiaoqin Fan*  
*May 2004*
- No. 27 Inclusive Growth for Sustainable Poverty Reduction in Developing Asia: The Enabling Role of Infrastructure Development  
—*Ifzal Ali and Xianbin Yao*  
*May 2004*
- No. 28 Higher Oil Prices: Asian Perspectives and Implications for 2004-2005  
—*Cyn-Young Park*  
*June 2004*
- No. 29 Accelerating Agriculture and Rural Development for Inclusive Growth: Policy Implications for Developing Asia  
—*Richard Bolt*  
*July 2004*
- No. 30 Living with Higher Interest Rates: Is Asia Ready?  
—*Cyn-Young Park*  
*August 2004*

## SERIALS

(Co-published with Oxford University Press; Available commercially through Oxford University Press Offices, Associated Companies, and Agents)

1. Asian Development Outlook (ADO; annual)  
*\$36.00 (paperback)*
2. Key Indicators of Developing Asian and Pacific Countries (KI; annual)  
*\$35.00 (paperback)*

## JOURNAL

(Published in-house; Available commercially through ADB Office of External Relations)

1. Asian Development Review (ADR; semiannual)  
*\$5.00 per issue; \$8.00 per year (2 issues)*

## MONOGRAPH SERIES

(Published in-house; Available through ADB Office of External Relations; Free of charge)

## EDRC REPORT SERIES (ER)

- No. 1 ASEAN and the Asian Development Bank  
—*Seiji Naya, April 1982*
- No. 2 Development Issues for the Developing East and Southeast Asian Countries and International Cooperation  
—*Seiji Naya and Graham Abbott, April 1982*
- No. 3 Aid, Savings, and Growth in the Asian Region  
—*J. Malcolm Dowling and Ulrich Hiemenz, April 1982*
- No. 4 Development-oriented Foreign Investment and the Role of ADB  
—*Kiyoshi Kojima, April 1982*
- No. 5 The Multilateral Development Banks and the International Economy's Missing Public Sector  
—*John Lewis, June 1982*
- No. 6 Notes on External Debt of DMCs  
—*Evelyn Go, July 1982*
- No. 7 Grant Element in Bank Loans  
—*Dal Hyun Kim, July 1982*
- No. 8 Shadow Exchange Rates and Standard Conversion Factors in Project Evaluation  
—*Peter Warr, September 1982*
- No. 9 Small and Medium-Scale Manufacturing Establishments in ASEAN Countries: Perspectives and Policy Issues  
—*Mathias Bruch and Ulrich Hiemenz, January 1983*
- No. 10 A Note on the Third Ministerial Meeting of GATT  
—*Jungsoo Lee, January 1983*
- No. 11 Macroeconomic Forecasts for the Republic of China, Hong Kong, and Republic of Korea  
—*J.M. Dowling, January 1983*
- No. 12 ASEAN: Economic Situation and Prospects  
—*Seiji Naya, March 1983*
- No. 13 The Future Prospects for the Developing Countries of Asia  
—*Seiji Naya, March 1983*
- No. 14 Energy and Structural Change in the Asia-Pacific Region, Summary of the Thirteenth Pacific Trade and Development Conference  
—*Seiji Naya, March 1983*
- No. 15 A Survey of Empirical Studies on Demand for Electricity with Special Emphasis on Price Elasticity of Demand  
—*Wisarn Puppavesa, June 1983*
- No. 16 Determinants of Paddy Production in Indonesia: 1972-1981—A Simultaneous Equation Model Approach  
—*T.K. Jayaraman, June 1983*
- No. 17 The Philippine Economy: Economic Forecasts for 1983 and 1984  
—*J.M. Dowling, E. Go, and C.N. Castillo, June 1983*
- No. 18 Economic Forecast for Indonesia  
—*J.M. Dowling, H.Y. Kim, Y.K. Wang, and C.N. Castillo, June 1983*
- No. 19 Relative External Debt Situation of Asian Developing Countries: An Application of Ranking Method  
—*Jungsoo Lee, June 1983*
- No. 20 New Evidence on Yields, Fertilizer Application, and Prices in Asian Rice Production  
—*William James and Teresita Ramirez, July 1983*
- No. 21 Inflationary Effects of Exchange Rate Changes in Nine Asian LDCs  
—*Pradumna B. Rana and J. Malcolm Dowling, Jr., December 1983*
- No. 22 Effects of External Shocks on the Balance of Payments, Policy Responses, and Debt Problems of Asian Developing Countries  
—*Seiji Naya, December 1983*
- No. 23 Changing Trade Patterns and Policy Issues: The Prospects for East and Southeast Asian Developing Countries  
—*Seiji Naya and Ulrich Hiemenz, February 1984*
- No. 24 Small-Scale Industries in Asian Economic Development: Problems and Prospects  
—*Seiji Naya, February 1984*
- No. 25 A Study on the External Debt Indicators Applying Logit Analysis  
—*Jungsoo Lee and Clarita Barretto, February 1984*
- No. 26 Alternatives to Institutional Credit Programs in the Agricultural Sector of Low-Income Countries  
—*Jennifer Sour, March 1984*
- No. 27 Economic Scene in Asia and Its Special Features  
—*Kedar N. Kohli, November 1984*
- No. 28 The Effect of Terms of Trade Changes on the Balance of Payments and Real National Income of Asian Developing Countries  
—*Jungsoo Lee and Lutgarda Labios, January 1985*
- No. 29 Cause and Effect in the World Sugar Market: Some Empirical Findings 1951-1982  
—*Yoshihiro Iwasaki, February 1985*
- No. 30 Sources of Balance of Payments Problem in the 1970s: The Asian Experience  
—*Pradumna Rana, February 1985*
- No. 31 India's Manufactured Exports: An Analysis of Supply Sectors  
—*Ifzal Ali, February 1985*
- No. 32 Meeting Basic Human Needs in Asian Developing Countries  
—*Jungsoo Lee and Emma Banaria, March 1985*
- No. 33 The Impact of Foreign Capital Inflow on Investment and Economic Growth in Developing Asia  
—*Evelyn Go, May 1985*
- No. 34 The Climate for Energy Development in the Pacific and Asian Region: Priorities and Perspectives  
—*V.V. Desai, April 1986*
- No. 35 Impact of Appreciation of the Yen on Developing Member Countries of the Bank  
—*Jungsoo Lee, Pradumna Rana, and Ifzal Ali, May 1986*
- No. 36 Smuggling and Domestic Economic Policies in Developing Countries  
—*A.H.M.N. Chowdhury, October 1986*
- No. 37 Public Investment Criteria: Economic Internal Rate of Return and Equalizing Discount Rate  
—*Ifzal Ali, November 1986*
- No. 38 Review of the Theory of Neoclassical Political Economy: An Application to Trade Policies  
—*M.G. Quibria, December 1986*
- No. 39 Factors Influencing the Choice of Location: Local and Foreign Firms in the Philippines  
—*E.M. Pernia and A.N. Herrin, February 1987*
- No. 40 A Demographic Perspective on Developing Asia and Its Relevance to the Bank  
—*E.M. Pernia, May 1987*
- No. 41 Emerging Issues in Asia and Social Cost Benefit Analysis  
—*I. Ali, September 1988*
- No. 42 Shifting Revealed Comparative Advantage:

- Experiences of Asian and Pacific Developing Countries  
—*P.B. Rana, November 1988*
- No. 43 Agricultural Price Policy in Asia: Issues and Areas of Reforms  
—*I. Ali, November 1988*
- No. 44 Service Trade and Asian Developing Economies  
—*M.G. Quibria, October 1989*
- No. 45 A Review of the Economic Analysis of Power Projects in Asia and Identification of Areas of Improvement  
—*I. Ali, November 1989*
- No. 46 Growth Perspective and Challenges for Asia: Areas for Policy Review and Research  
—*I. Ali, November 1989*
- No. 47 An Approach to Estimating the Poverty Alleviation Impact of an Agricultural Project  
—*I. Ali, January 1990*
- No. 48 Economic Growth Performance of Indonesia, the Philippines, and Thailand: The Human Resource Dimension  
—*E.M. Pernia, January 1990*
- No. 49 Foreign Exchange and Fiscal Impact of a Project: A Methodological Framework for Estimation  
—*I. Ali, February 1990*
- No. 50 Public Investment Criteria: Financial and Economic Internal Rates of Return  
—*I. Ali, April 1990*
- No. 51 Evaluation of Water Supply Projects: An Economic Framework  
—*Arlene M. Tadle, June 1990*
- No. 52 Interrelationship Between Shadow Prices, Project Investment, and Policy Reforms: An Analytical Framework  
—*I. Ali, November 1990*
- No. 53 Issues in Assessing the Impact of Project and Sector Adjustment Lending  
—*I. Ali, December 1990*
- No. 54 Some Aspects of Urbanization and the Environment in Southeast Asia  
—*Ernesto M. Pernia, January 1991*
- No. 55 Financial Sector and Economic Development: A Survey  
—*Jungsoo Lee, September 1991*
- No. 56 A Framework for Justifying Bank-Assisted Education Projects in Asia: A Review of the Socioeconomic Analysis and Identification of Areas of Improvement  
—*Etienne Van De Walle, February 1992*
- No. 57 Medium-term Growth-Stabilization Relationship in Asian Developing Countries and Some Policy Considerations  
—*Yun-Hwan Kim, February 1993*
- No. 58 Urbanization, Population Distribution, and Economic Development in Asia  
—*Ernesto M. Pernia, February 1993*
- No. 59 The Need for Fiscal Consolidation in Nepal: The Results of a Simulation  
—*Filippo di Mauro and Ronald Antonio Butiong, July 1993*
- No. 60 A Computable General Equilibrium Model of Nepal  
—*Timothy Buehrer and Filippo di Mauro, October 1993*
- No. 61 The Role of Government in Export Expansion in the Republic of Korea: A Revisit  
—*Yun-Hwan Kim, February 1994*
- No. 62 Rural Reforms, Structural Change, and Agricultural Growth in the People's Republic of China  
—*Bo Lin, August 1994*
- No. 63 Incentives and Regulation for Pollution Abatement with an Application to Waste Water Treatment  
—*Sudipto Mundle, U. Shankar, and Shekhar Mehta, October 1995*
- No. 64 Saving Transitions in Southeast Asia  
—*Frank Harrigan, February 1996*
- No. 65 Total Factor Productivity Growth in East Asia: A Critical Survey  
—*Jesus Felipe, September 1997*
- No. 66 Foreign Direct Investment in Pakistan: Policy Issues and Operational Implications  
—*Ashfaq H. Khan and Yun-Hwan Kim, July 1999*
- No. 67 Fiscal Policy, Income Distribution and Growth  
—*Sailesh K. Jha, November 1999*

### ECONOMIC STAFF PAPERS (ES)

- No. 1 International Reserves: Factors Determining Needs and Adequacy  
—*Evelyn Go, May 1981*
- No. 2 Domestic Savings in Selected Developing Asian Countries  
—*Basil Moore, assisted by A.H.M. Nuruddin Chowdhury, September 1981*
- No. 3 Changes in Consumption, Imports and Exports of Oil Since 1973: A Preliminary Survey of the Developing Member Countries of the Asian Development Bank  
—*Dal Hyun Kim and Graham Abbott, September 1981*
- No. 4 By-Passed Areas, Regional Inequalities, and Development Policies in Selected Southeast Asian Countries  
—*William James, October 1981*
- No. 5 Asian Agriculture and Economic Development  
—*William James, March 1982*
- No. 6 Inflation in Developing Member Countries: An Analysis of Recent Trends  
—*A.H.M. Nuruddin Chowdhury and J. Malcolm Dowling, March 1982*
- No. 7 Industrial Growth and Employment in Developing Asian Countries: Issues and Perspectives for the Coming Decade  
—*Ulrich Hiemenz, March 1982*
- No. 8 Petrodollar Recycling 1973-1980. Part I: Regional Adjustments and the World Economy  
—*Burnham Campbell, April 1982*
- No. 9 Developing Asia: The Importance of Domestic Policies  
—*Economics Office Staff under the direction of Seiji Naya, May 1982*
- No. 10 Financial Development and Household Savings: Issues in Domestic Resource Mobilization in Asian Developing Countries  
—*Wan-Soon Kim, July 1982*
- No. 11 Industrial Development: Role of Specialized Financial Institutions  
—*Kedar N. Kohli, August 1982*
- No. 12 Petrodollar Recycling 1973-1980. Part II: Debt Problems and an Evaluation of Suggested Remedies  
—*Burnham Campbell, September 1982*
- No. 13 Credit Rationing, Rural Savings, and Financial Policy in Developing Countries  
—*William James, September 1982*
- No. 14 Small and Medium-Scale Manufacturing

- Establishments in ASEAN Countries: Perspectives and Policy Issues  
—*Mathias Bruch and Ulrich Hiemenz, March 1983*
- No. 15 Income Distribution and Economic Growth in Developing Asian Countries  
—*J. Malcolm Dowling and David Soo, March 1983*
- No. 16 Long-Run Debt-Servicing Capacity of Asian Developing Countries: An Application of Critical Interest Rate Approach  
—*Jungsoo Lee, June 1983*
- No. 17 External Shocks, Energy Policy, and Macroeconomic Performance of Asian Developing Countries: A Policy Analysis  
—*William James, July 1983*
- No. 18 The Impact of the Current Exchange Rate System on Trade and Inflation of Selected Developing Member Countries  
—*Pradumna Rana, September 1983*
- No. 19 Asian Agriculture in Transition: Key Policy Issues  
—*William James, September 1983*
- No. 20 The Transition to an Industrial Economy in Monsoon Asia  
—*Harry T. Oshima, October 1983*
- No. 21 The Significance of Off-Farm Employment and Incomes in Post-War East Asian Growth  
—*Harry T. Oshima, January 1984*
- No. 22 Income Distribution and Poverty in Selected Asian Countries  
—*John Malcolm Dowling, Jr., November 1984*
- No. 23 ASEAN Economies and ASEAN Economic Cooperation  
—*Narongchai Akrasanee, November 1984*
- No. 24 Economic Analysis of Power Projects  
—*Nitin Desai, January 1985*
- No. 25 Exports and Economic Growth in the Asian Region  
—*Pradumna Rana, February 1985*
- No. 26 Patterns of External Financing of DMCs  
—*E. Go, May 1985*
- No. 27 Industrial Technology Development the Republic of Korea  
—*S.Y. Lo, July 1985*
- No. 28 Risk Analysis and Project Selection: A Review of Practical Issues  
—*J.K. Johnson, August 1985*
- No. 29 Rice in Indonesia: Price Policy and Comparative Advantage  
—*I. Ali, January 1986*
- No. 30 Effects of Foreign Capital Inflows on Developing Countries of Asia  
—*Jungsoo Lee, Pradumna B. Rana, and Yoshihiro Iwasaki, April 1986*
- No. 31 Economic Analysis of the Environmental Impacts of Development Projects  
—*John A. Dixon et al., EAPI, East-West Center, August 1986*
- No. 32 Science and Technology for Development: Role of the Bank  
—*Kedar N. Kohli and Ifzal Ali, November 1986*
- No. 33 Satellite Remote Sensing in the Asian and Pacific Region  
—*Mohan Sundara Rajan, December 1986*
- No. 34 Changes in the Export Patterns of Asian and Pacific Developing Countries: An Empirical Overview  
—*Pradumna B. Rana, January 1987*
- No. 35 Agricultural Price Policy in Nepal  
—*Gerald C. Nelson, March 1987*
- No. 36 Implications of Falling Primary Commodity Prices for Agricultural Strategy in the Philippines  
—*Ifzal Ali, September 1987*
- No. 37 Determining Irrigation Charges: A Framework  
—*Prabhakar B. Ghate, October 1987*
- No. 38 The Role of Fertilizer Subsidies in Agricultural Production: A Review of Select Issues  
—*M.G. Quibria, October 1987*
- No. 39 Domestic Adjustment to External Shocks in Developing Asia  
—*Jungsoo Lee, October 1987*
- No. 40 Improving Domestic Resource Mobilization through Financial Development: Indonesia  
—*Philip Erquiaga, November 1987*
- No. 41 Recent Trends and Issues on Foreign Direct Investment in Asian and Pacific Developing Countries  
—*P.B. Rana, March 1988*
- No. 42 Manufactured Exports from the Philippines: A Sector Profile and an Agenda for Reform  
—*I. Ali, September 1988*
- No. 43 A Framework for Evaluating the Economic Benefits of Power Projects  
—*I. Ali, August 1989*
- No. 44 Promotion of Manufactured Exports in Pakistan  
—*Jungsoo Lee and Yoshihiro Iwasaki, September 1989*
- No. 45 Education and Labor Markets in Indonesia: A Sector Survey  
—*Ernesto M. Pernia and David N. Wilson, September 1989*
- No. 46 Industrial Technology Capabilities and Policies in Selected ADCs  
—*Hiroshi Kakazu, June 1990*
- No. 47 Designing Strategies and Policies for Managing Structural Change in Asia  
—*Ifzal Ali, June 1990*
- No. 48 The Completion of the Single European Community Market in 1992: A Tentative Assessment of its Impact on Asian Developing Countries  
—*J.P. Verbiest and Min Tang, June 1991*
- No. 49 Economic Analysis of Investment in Power Systems  
—*Ifzal Ali, June 1991*
- No. 50 External Finance and the Role of Multilateral Financial Institutions in South Asia: Changing Patterns, Prospects, and Challenges  
—*Jungsoo Lee, November 1991*
- No. 51 The Gender and Poverty Nexus: Issues and Policies  
—*M.G. Quibria, November 1993*
- No. 52 The Role of the State in Economic Development: Theory, the East Asian Experience, and the Malaysian Case  
—*Jason Brown, December 1993*
- No. 53 The Economic Benefits of Potable Water Supply Projects to Households in Developing Countries  
—*Dale Whittington and Venkateswarlu Swarna, January 1994*
- No. 54 Growth Triangles: Conceptual Issues and Operational Problems  
—*Min Tang and Myo Thant, February 1994*
- No. 55 The Emerging Global Trading Environment and Developing Asia  
—*Arvind Panagariya, M.G. Quibria, and Narhari Rao, July 1996*
- No. 56 Aspects of Urban Water and Sanitation in the Context of Rapid Urbanization in Developing Asia  
—*Ernesto M. Pernia and Stella LF. Alabastro, September 1997*
- No. 57 Challenges for Asia's Trade and Environment  
—*Douglas H. Brooks, January 1998*
- No. 58 Economic Analysis of Health Sector Projects—A Review of Issues, Methods, and Approaches  
—*Ramesh Adhikari, Paul Gertler, and Anneli Lagman, March 1999*
- No. 59 The Asian Crisis: An Alternate View  
—*Rajiv Kumar and Bibek Debroy, July 1999*
- No. 60 Social Consequences of the Financial Crisis in Asia  
—*James C. Knowles, Ernesto M. Pernia, and Mary Racelis, November 1999*

## OCCASIONAL PAPERS (OP)

- |   |   |
|---|---|
| <p>No. 1 Poverty in the People's Republic of China: Recent Developments and Scope for Bank Assistance<br/>—<i>K.H. Moinuddin, November 1992</i></p> <p>No. 2 The Eastern Islands of Indonesia: An Overview of Development Needs and Potential<br/>—<i>Brien K. Parkinson, January 1993</i></p> <p>No. 3 Rural Institutional Finance in Bangladesh and Nepal: Review and Agenda for Reforms<br/>—<i>A.H.M.N. Chowdhury and Marcelia C. Garcia, November 1993</i></p> <p>No. 4 Fiscal Deficits and Current Account Imbalances of the South Pacific Countries: A Case Study of Vanuatu<br/>—<i>T.K. Jayaraman, December 1993</i></p> <p>No. 5 Reforms in the Transitional Economies of Asia<br/>—<i>Pradumna B. Rana, December 1993</i></p> <p>No. 6 Environmental Challenges in the People's Republic of China and Scope for Bank Assistance<br/>—<i>Elisabetta Capannelli and Omkar L. Shrestha, December 1993</i></p> <p>No. 7 Sustainable Development Environment and Poverty Nexus<br/>—<i>K.F. Jalal, December 1993</i></p> <p>No. 8 Intermediate Services and Economic Development: The Malaysian Example<br/>—<i>Sutanu Behuria and Rahul Khullar, May 1994</i></p> <p>No. 9 Interest Rate Deregulation: A Brief Survey of the Policy Issues and the Asian Experience<br/>—<i>Carlos J. Glower, July 1994</i></p> <p>No. 10 Some Aspects of Land Administration in Indonesia: Implications for Bank Operations<br/>—<i>Sutanu Behuria, July 1994</i></p> <p>No. 11 Demographic and Socioeconomic Determinants of Contraceptive Use among Urban Women in the Melanesian Countries in the South Pacific: A Case Study of Port Vila Town in Vanuatu<br/>—<i>T.K. Jayaraman, February 1995</i></p> | <p>No. 12 Managing Development through Institution Building<br/>— <i>Hilton L. Root, October 1995</i></p> <p>No. 13 Growth, Structural Change, and Optimal Poverty Interventions<br/>—<i>Shiladitya Chatterjee, November 1995</i></p> <p>No. 14 Private Investment and Macroeconomic Environment in the South Pacific Island Countries: A Cross-Country Analysis<br/>—<i>T.K. Jayaraman, October 1996</i></p> <p>No. 15 The Rural-Urban Transition in Viet Nam: Some Selected Issues<br/>—<i>Sudipto Mundle and Brian Van Arkadie, October 1997</i></p> <p>No. 16 A New Approach to Setting the Future Transport Agenda<br/>—<i>Roger Allport, Geoff Key, and Charles Melhuish, June 1998</i></p> <p>No. 17 Adjustment and Distribution: The Indian Experience<br/>—<i>Sudipto Mundle and V.B. Tulasidhar, June 1998</i></p> <p>No. 18 Tax Reforms in Viet Nam: A Selective Analysis<br/>—<i>Sudipto Mundle, December 1998</i></p> <p>No. 19 Surges and Volatility of Private Capital Flows to Asian Developing Countries: Implications for Multilateral Development Banks<br/>—<i>Pradumna B. Rana, December 1998</i></p> <p>No. 20 The Millennium Round and the Asian Economies: An Introduction<br/>—<i>Dilip K. Das, October 1999</i></p> <p>No. 21 Occupational Segregation and the Gender Earnings Gap<br/>—<i>Joseph E. Zveglic, Jr. and Yana van der Meulen Rodgers, December 1999</i></p> <p>No. 22 Information Technology: Next Locomotive of Growth?<br/>—<i>Dilip K. Das, June 2000</i></p> |
|---|---|

## STATISTICAL REPORT SERIES (SR)

- |  |   |
|--|---|
| <p>No. 1 Estimates of the Total External Debt of the Developing Member Countries of ADB: 1981-1983<br/>—<i>I.P. David, September 1984</i></p> <p>No. 2 Multivariate Statistical and Graphical Classification Techniques Applied to the Problem of Grouping Countries<br/>—<i>I.P. David and D.S. Maligalig, March 1985</i></p> <p>No. 3 Gross National Product (GNP) Measurement Issues in South Pacific Developing Member Countries of ADB<br/>—<i>S.G. Tiwari, September 1985</i></p> <p>No. 4 Estimates of Comparable Savings in Selected DMCs<br/>—<i>Hananto Sigit, December 1985</i></p> <p>No. 5 Keeping Sample Survey Design and Analysis Simple<br/>—<i>I.P. David, December 1985</i></p> <p>No. 6 External Debt Situation in Asian Developing Countries<br/>—<i>I.P. David and Jungsoo Lee, March 1986</i></p> <p>No. 7 Study of GNP Measurement Issues in the South Pacific Developing Member Countries. Part I: Existing National Accounts of SPDMCs—Analysis of Methodology and Application of SNA Concepts<br/>—<i>P. Hodgkinson, October 1986</i></p> <p>No. 8 Study of GNP Measurement Issues in the South Pacific Developing Member Countries. Part II: Factors Affecting Intercountry Comparability of Per Capita GNP<br/>—<i>P. Hodgkinson, October 1986</i></p> <p>No. 9 Survey of the External Debt Situation</p> | <p>in Asian Developing Countries, 1985<br/>—<i>Jungsoo Lee and I.P. David, April 1987</i></p> <p>No. 10 A Survey of the External Debt Situation in Asian Developing Countries, 1986<br/>—<i>Jungsoo Lee and I.P. David, April 1988</i></p> <p>No. 11 Changing Pattern of Financial Flows to Asian and Pacific Developing Countries<br/>—<i>Jungsoo Lee and I.P. David, March 1989</i></p> <p>No. 12 The State of Agricultural Statistics in Southeast Asia<br/>—<i>I.P. David, March 1989</i></p> <p>No. 13 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1987-1988<br/>—<i>Jungsoo Lee and I.P. David, July 1989</i></p> <p>No. 14 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1988-1989<br/>—<i>Jungsoo Lee, May 1990</i></p> <p>No. 15 A Survey of the External Debt Situation in Asian and Pacific Developing Countries: 1989-1992<br/>—<i>Min Tang, June 1991</i></p> <p>No. 16 Recent Trends and Prospects of External Debt Situation and Financial Flows to Asian and Pacific Developing Countries<br/>—<i>Min Tang and Aludia Pardo, June 1992</i></p> <p>No. 17 Purchasing Power Parity in Asian Developing Countries: A Co-Integration Test<br/>—<i>Min Tang and Ronald Q. Butiong, April 1994</i></p> <p>No. 18 Capital Flows to Asian and Pacific Developing Countries: Recent Trends and Future Prospects<br/>—<i>Min Tang and James Villafuerte, October 1995</i></p> |
|--|---|

## SPECIAL STUDIES, OUP (SS,Comm)

(Co-published titles; Available commercially through Oxford University Press Offices, Edward Elgar Publishing, and Palgrave MacMillan)

### FROM OXFORD UNIVERSITY PRESS:

Oxford University Press (China) Ltd  
18th Floor, Warwick House East  
Taikoo Place, 979 King's Road  
Quarry Bay, Hong Kong  
Tel (852) 2516 3222  
Fax (852) 2565 8491  
E-mail: [webmaster@oupchina.com.hk](mailto:webmaster@oupchina.com.hk)  
Web: [www.oupchina.com.hk](http://www.oupchina.com.hk)

1. Informal Finance: Some Findings from Asia  
*Prabhu Ghatte et. al., 1992*  
\$15.00 (paperback)
2. Mongolia: A Centrally Planned Economy in Transition  
*Asian Development Bank, 1992*  
\$15.00 (paperback)
3. Rural Poverty in Asia, Priority Issues and Policy Options  
*Edited by M.G. Quibria, 1994*  
\$25.00 (paperback)
4. Growth Triangles in Asia: A New Approach to Regional Economic Cooperation  
*Edited by Myo Thant, Min Tang, and Hiroshi Kakazu*  
*1st ed., 1994* \$36.00 (hardbound)  
*Revised ed., 1998* \$55.00 (hardbound)
5. Urban Poverty in Asia: A Survey of Critical Issues  
*Edited by Ernesto Pernia, 1994*  
\$18.00 (paperback)
6. Critical Issues in Asian Development: Theories, Experiences, and Policies  
*Edited by M.G. Quibria, 1995*  
\$15.00 (paperback)  
\$36.00 (hardbound)
7. Financial Sector Development in Asia  
*Edited by Shahid N. Zahid, 1995*  
\$50.00 (hardbound)
8. Financial Sector Development in Asia: Country Studies  
*Edited by Shahid N. Zahid, 1995*  
\$55.00 (hardbound)
9. Fiscal Management and Economic Reform in the People's Republic of China  
*Christine P.W. Wong, Christopher Heady, and Wing T. Woo, 1995*  
\$15.00 (paperback)
10. From Centrally Planned to Market Economies: The Asian Approach  
*Edited by Pradumna B. Rana and Naved Hamid, 1995*  
Vol. 1: Overview  
\$36.00 (hardbound)  
Vol. 2: People's Republic of China and Mongolia  
\$50.00 (hardbound)  
Vol. 3: Lao PDR, Myanmar, and Viet Nam  
\$50.00 (hardbound)
11. Current Issues in Economic Development: An Asian Perspective  
*Edited by M.G. Quibria and J. Malcolm Dowling, 1996*  
\$50.00 (hardbound)
12. The Bangladesh Economy in Transition  
*Edited by M.G. Quibria, 1997*  
\$20.00 (hardbound)
13. The Global Trading System and Developing Asia  
*Edited by Arvind Panagariya, M.G. Quibria, and Narhari Rao, 1997*  
\$55.00 (hardbound)
14. Social Sector Issues in Transitional Economies of Asia  
*Edited by Douglas H. Brooks and Myo Thant, 1998*  
\$25.00 (paperback)  
\$55.00 (hardbound)

15. Intergovernmental Fiscal Transfers in Asia: Current Practice and Challenges for the Future  
*Edited by Yun-Hwan Kim and Paul Smoke, 2003*  
\$15.00 (paperback)
16. Local Government Finance and Bond Markets  
*Edited by Yun-Hwan Kim, 2003*  
\$15.00 (paperback)

### FROM EDWARD ELGAR:

Marston Book Services Limited  
PO Box 269, Abingdon  
Oxon OX14 4YN  
United Kingdom  
Tel +44 1235 465500  
Fax +44 1235 465555  
Email: [direct.order@marston.co.uk](mailto:direct.order@marston.co.uk)  
Web: [www.marston.co.uk](http://www.marston.co.uk)

1. Reducing Poverty in Asia: Emerging Issues in Growth, Targeting, and Measurement  
*Edited by Christopher M. Edmonds, 2003*

### FROM PALGRAVE MACMILLAN:

Palgrave Macmillan Ltd  
Houndmills  
Basingstoke  
Hampshire RG21 6XS  
United Kingdom  
Tel: +44 (0)1256 329242  
Fax: +44 (0)1256 479476  
Email: [orders@palgrave.com](mailto:orders@palgrave.com)  
Web: [www.palgrave.com/home/](http://www.palgrave.com/home/)

1. Managing FDI in a Globalizing Economy  
Asian Experiences  
*Edited by Douglas H. Brooks and Hal Hill*  
2004
2. Poverty, Growth, and Institutions in Developing Asia  
*Edited by Ernesto M. Pernia and Anil B. Deolalikar,*  
2003

## SPECIAL STUDIES, ADB (SS, ADB)

(Published in-house; Available commercially through ADB Office of External Relations)

1. Rural Poverty in Developing Asia  
*Edited by M.G. Quibria*  
Vol. 1: Bangladesh, India, and Sri Lanka, 1994  
\$35.00 (paperback)  
Vol. 2: Indonesia, Republic of Korea, Philippines, and Thailand, 1996  
\$35.00 (paperback)
2. Gender Indicators of Developing Asian and Pacific Countries  
*Asian Development Bank, 1993*  
\$25.00 (paperback)
3. External Shocks and Policy Adjustments: Lessons from the Gulf Crisis  
*Edited by Naved Hamid and Shahid N. Zahid, 1995*  
\$15.00 (paperback)
4. Indonesia-Malaysia-Thailand Growth Triangle: Theory to Practice  
*Edited by Myo Thant and Min Tang, 1996*  
\$15.00 (paperback)
5. Emerging Asia: Changes and Challenges  
*Asian Development Bank, 1997*  
\$30.00 (paperback)
6. Asian Exports  
*Edited by Dilip Das, 1999*  
\$35.00 (paperback)  
\$55.00 (hardbound)
7. Development of Environment Statistics in Developing Asian and Pacific Countries  
*Asian Development Bank, 1999*  
\$30.00 (paperback)
8. Mortgage-Backed Securities Markets in Asia  
*Edited by S.Ghon Rhee & Yutaka Shimomoto, 1999*  
\$35.00 (paperback)
9. Rising to the Challenge in Asia: A Study of Financial Markets  
*Asian Development Bank*  
Vol. 1: An Overview, 2000 \$20.00 (paperback)  
Vol. 2: Special Issues, 1999 \$15.00 (paperback)  
Vol. 3: Sound Practices, 2000 \$25.00 (paperback)  
Vol. 4: People's Republic of China, 1999 \$20.00 (paperback)  
Vol. 5: India, 1999 \$30.00 (paperback)  
Vol. 6: Indonesia, 1999 \$30.00 (paperback)  
Vol. 7: Republic of Korea, 1999 \$30.00 (paperback)  
Vol. 8: Malaysia, 1999 \$20.00 (paperback)  
Vol. 9: Pakistan, 1999 \$30.00 (paperback)  
Vol. 10: Philippines, 1999 \$30.00 (paperback)  
Vol. 11: Thailand, 1999 \$30.00 (paperback)  
Vol. 12: Socialist Republic of Viet Nam, 1999 \$30.00 (paperback)
10. Corporate Governance and Finance in East Asia: A Study of Indonesia, Republic of Korea, Malaysia, Philippines and Thailand  
*J. Zhuang, David Edwards, D. Webb, & Ma. Virginita Capulong*  
Vol. 1: A Consolidated Report, 2000 \$10.00 (paperback)  
Vol. 2: Country Studies, 2001 \$15.00 (paperback)
11. Financial Management and Governance Issues  
*Asian Development Bank, 2000*  
Cambodia \$10.00 (paperback)  
People's Republic of China \$10.00 (paperback)  
Mongolia \$10.00 (paperback)  
Pakistan \$10.00 (paperback)  
Papua New Guinea \$10.00 (paperback)  
Uzbekistan \$10.00 (paperback)  
Viet Nam \$10.00 (paperback)  
Selected Developing Member Countries \$10.00 (paperback)
12. Government Bond Market Development in Asia  
*Edited by Yun-Hwan Kim, 2001*  
\$25.00 (paperback)
13. Intergovernmental Fiscal Transfers in Asia: Current Practice and Challenges for the Future  
*Edited by Paul Smoke and Yun-Hwan Kim, 2002*  
\$15.00 (paperback)
14. Guidelines for the Economic Analysis of Projects  
*Asian Development Bank, 1997*  
\$10.00 (paperback)
15. Guidelines for the Economic Analysis of Telecommunications Projects  
*Asian Development Bank, 1997*  
\$10.00 (paperback)
16. Handbook for the Economic Analysis of Water Supply Projects  
*Asian Development Bank, 1999*  
\$10.00 (hardbound)
17. Handbook for the Economic Analysis of Health Sector Projects  
*Asian Development Bank, 2000*  
\$10.00 (paperback)
18. Handbook for Integrating Poverty Impact Assessment in the Economic Analysis of Projects  
*Asian Development Bank, 2001*  
\$10.00 (paperback)
19. Handbook for Integrating Risk Analysis in the Economic Analysis of Projects  
*Asian Development Bank, 2002*  
\$10.00 (paperback)
20. Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank  
*Asian Development Bank, 2002*  
\$10.00 (paperback)
21. Handbook on Environment Statistics  
*Asian Development Bank, 2002*  
\$10.00 (hardback)
22. Defining an Agenda for Poverty Reduction, Volume 1  
*Edited by Christopher Edmonds and Sara Medina, 2002*  
\$15.00 (paperback)
23. Defining an Agenda for Poverty Reduction, Volume 2  
*Edited by Isabel Ortiz, 2002*  
\$15.00 (paperback)
24. Economic Analysis of Policy-based Operations: Key Dimensions  
*Asian Development Bank, 2003*  
\$10.00 (paperback)



## **SPECIAL STUDIES, COMPLIMENTARY (SSC)**

(Published in-house; Available through ADB Office of External Relations; Free of Charge)

1. Improving Domestic Resource Mobilization Through Financial Development: Overview *September 1985*
2. Improving Domestic Resource Mobilization Through Financial Development: Bangladesh *July 1986*
3. Improving Domestic Resource Mobilization Through Financial Development: Sri Lanka *April 1987*
4. Improving Domestic Resource Mobilization Through Financial Development: India *December 1987*
5. Financing Public Sector Development Expenditure in Selected Countries: Overview *January 1988*
6. Study of Selected Industries: A Brief Report *April 1988*
7. Financing Public Sector Development Expenditure in Selected Countries: Bangladesh *June 1988*
8. Financing Public Sector Development Expenditure in Selected Countries: India *June 1988*
9. Financing Public Sector Development Expenditure in Selected Countries: Indonesia *June 1988*
10. Financing Public Sector Development Expenditure in Selected Countries: Nepal *June 1988*
11. Financing Public Sector Development Expenditure in Selected Countries: Pakistan *June 1988*
12. Financing Public Sector Development Expenditure in Selected Countries: Philippines *June 1988*
13. Financing Public Sector Development Expenditure in Selected Countries: Thailand *June 1988*
14. Towards Regional Cooperation in South Asia: ADB/EWC Symposium on Regional Cooperation in South Asia *February 1988*
15. Evaluating Rice Market Intervention Policies: Some Asian Examples *April 1988*
16. Improving Domestic Resource Mobilization Through Financial Development: Nepal *November 1988*
17. Foreign Trade Barriers and Export Growth *September 1988*
18. The Role of Small and Medium-Scale Industries in the Industrial Development of the Philippines *April 1989*
19. The Role of Small and Medium-Scale Manufacturing Industries in Industrial Development: The Experience of Selected Asian Countries *January 1990*
20. National Accounts of Vanuatu, 1983-1987 *January 1990*
21. National Accounts of Western Samoa, 1984-1986 *February 1990*
22. Human Resource Policy and Economic Development: Selected Country Studies *July 1990*
23. Export Finance: Some Asian Examples *September 1990*
24. National Accounts of the Cook Islands, 1982-1986 *September 1990*
25. Framework for the Economic and Financial Appraisal of Urban Development Sector Projects *January 1994*
26. Framework and Criteria for the Appraisal and Socioeconomic Justification of Education Projects *January 1994*
27. Guidelines for the Economic Analysis of Telecommunications Projects *Asian Development Bank, 1997*
28. Guidelines for the Economic Analysis of Water Supply Projects *Asian Development Bank, 1998*
29. Investing in Asia *Co-published with OECD, 1997*
30. The Future of Asia in the World Economy *Co-published with OECD, 1998*
31. Financial Liberalisation in Asia: Analysis and Prospects *Co-published with OECD, 1999*
32. Sustainable Recovery in Asia: Mobilizing Resources for Development *Co-published with OECD, 2000*
33. Technology and Poverty Reduction in Asia and the Pacific *Co-published with OECD, 2001*
34. Asia and Europe *Co-published with OECD, 2002*