

# Changes in Informal Employment

Evidence from Asian Productivity Organization Member Countries

Sachiko Kazekami



ASIAN PRODUCTIVITY ORGANIZATION



ASIAN PRODUCTIVITY ORGANIZATION

### Asian Productivity Organization Working Paper Series

No. 1 April 2011

## Changes in Informal Employment: Evidence from APO Member Countries

Sachiko Kazekami

© 2011, Asian Productivity Organization April 2011 ISSN 2185-5390

All rights reserved. No part of this work, including the figures, tables, and charts, may be reproduced or used in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, or taping, or information storage and retrieval systems, without the expressed written permission of the Asian Productivity Organization.

The views expressed in this paper are those of the author and do not necessarily reflect the views or policies of the Asian Productivity Organization.

Asian Productivity Organization Dai-ichi Seimei Bldg. 2F 1-2-10 Hirakawacho, Chiyoda-ku, Tokyo 102-0093, Japan

The APO Working Paper Series is a forum for the early dissemination of ongoing and recently completed research and policy studies. This may be research undertaken by the APO Secretariat or on its behalf. The series is meant to enhance greater understanding of important economic development and productivity issues in the APO region, promote policy dialogue among stakeholders, and facilitate reforms and development management.

The APO Working Paper Series is made available on the APO website. Papers may subsequently be revised for publication in professional journals or books.

### Contents

| Figures  | iv   |  |  |  |  |  |
|--|------|--|--|--|--|--|
| Tables   | vii  |  |  |  |  |  |
| Abbreviations  | viii |  |  |  |  |  |
| Contributors   | ix   |  |  |  |  |  |
| Overview   | xi   |  |  |  |  |  |
| 1 Introduction: Historical Overview of Research on Informal Employment |      |  |  |  |  |  |
| 2 What Is Informal Employment and How Does It Change?                  |      |  |  |  |  |  |
| 2.1 Framework of Analysis  |      |  |  |  |  |  |
| 2.2 Various Aspects of Informal Employment                             | 7    |  |  |  |  |  |
| 2.2.1 Gender, Education and Region                                     | 7    |  |  |  |  |  |
| 2.2.2 Income Difference between Informal and Formal Employment         | 14   |  |  |  |  |  |
| 2.2.3 Changes in Their Working Status                                  | 20   |  |  |  |  |  |
| 2.3 Conclusion   | 23   |  |  |  |  |  |
| 3 Effect of Industry Composition on Informal Employment                | 25   |  |  |  |  |  |
| 3.1 Framework of Analysis  | 25   |  |  |  |  |  |
| 3.2 Break Down of Changes in Industrial Structure Dynamics             | 26   |  |  |  |  |  |
| 3.2.1 Changes in Industrialization                                     | 26   |  |  |  |  |  |
| 3.2.2 Changes between and within Industry                              |      |  |  |  |  |  |
| 3.3 Conclusion   |      |  |  |  |  |  |
| 4 Human Capital and Informal Employment                                | 37   |  |  |  |  |  |
| 4.1 Framework of Analysis  | 37   |  |  |  |  |  |
| 4.2 Jobs Training and Education  | 40   |  |  |  |  |  |
| 4.2.1 Effects  | 40   |  |  |  |  |  |
| 4.2.2 Opportunities  | 43   |  |  |  |  |  |
| 4.2.3 Realities  | 56   |  |  |  |  |  |
| 4.3 Conclusion   | 75   |  |  |  |  |  |
| Appendix 1: Time Coverage  |      |  |  |  |  |  |
| Appendix 2: Number of Employees according to Employment Category       |      |  |  |  |  |  |
| Appendix 3: Data Sources   | 81   |  |  |  |  |  |
| References   |      |  |  |  |  |  |

### Figures

| 1.1a Trends in Informal Employment: Bangladesh, by Gender                    | 9  |
|--|----|
| 1.1b Trends in Informal Employment: Bangladesh, by Education                 | 9  |
| 1.2a Trends in Informal Employment: Malaysia, by Gender                      | 10 |
| 1.2b Trends in Informal Employment: Malaysia, by Education                   | 10 |
| 1.3a Trends in Informal Employment: Philippines, by Gender                   | 11 |
| 1.4a Trends in Informal Employment: ROK, by Gender                           | 11 |
| 1.4b Trends in Informal Employment: ROK, by Education                        | 12 |
| 1.5a Trends in Informal Employment: India, by Gender                         | 12 |
| 1.5b Trends in Informal Employment: India, by Education                      | 13 |
| 1.6a Trends in Informal Employment: Sri Lanka, by Gender                     | 13 |
| 1.6b Trends in Informal Employment: Sri Lanka, by Education                  | 14 |
| 2.1 Differences in Monthly Earnings: Bangladesh, 2007                        | 17 |
| 2.2 Differences in Monthly Earnings: Nepal, 2007                             | 17 |
| 2.3 Differences in Monthly Earnings: ROK, 2007                               | 18 |
| 2.4a Differences in Monthly Earnings and Income Differences: Sri Lanka, by   |    |
| Registered Status, 2007  | 18 |
| 2.4b Differences in Monthly Earnings: Sri Lanka, by Firm Size status, 2007   | 19 |
| 2.4c Differences in Monthly Earnings: Sri Lanka by Regional Status, 2007     | 19 |
| 2.4d Differences in Monthly Earnings: Sri Lanka Trend, 2006–2008             | 20 |
| 3.1 Trends by Two Indicators: Bangladesh                                     | 21 |
| 3.2 Trends by Two Indicators: Nepal  | 22 |
| 3.3 Trends by Two Indicators: Philippines                                    | 22 |
| 3.4 Trends by Two Indicators: Sri Lanka                                      | 23 |
| 4.1 Informal Employment and GNI per Capita                                   | 29 |
| 4.2 Informal Employment and GDP per Capita                                   | 29 |
| 4.3 Informal Employment and Industrialization                                | 30 |
| 5 Change in Informal Employment by Manufacturing Ratio Represented by the    |    |
| Self-Employed or Unregistered Employees                                      | 30 |
| 6 Informal Employment and Rate of Manufacturing Value Added Output in        |    |
| GDP  | 31 |
| by Various Indicators  |    |
| 7.1a Dissatisfied with Job because of No Training Opportunities by Status in |    |
| Fiji, 2004–5   | 44 |
|  |    |

| 7.1b Rate of Dissatisfied Persons by Each Status in Fiji, 2004–5             | 45 |
|--|----|
| 7.2a Share of Workers Receiving Training: 15–19-Year Old Males in India,     |    |
| 2004-5   | 47 |
| 7.2b Share of Workers Receiving Training: 15–19 Year Old Females in India,   |    |
| 2004-5   | 47 |
| 7.2c Share of Training Receiving/ Received Workers in Unorganized or         |    |
| Organized Sector by Status, Both Genders in India, 2004–05                   | 48 |
| 7.3 Share of OJT Receiving Workers in the ROK, 2007                          | 49 |
| 7.4 Share of Training Participants in Total Employees by Training Schemes in |    |
| Malaysia, 2007   | 50 |
| 8.1 Gross Enrolment Ratio: Male, 2005  | 53 |
| 8.2 Gross Enrolment Ratio: Female, 2005                                      | 53 |
| 9.1a Education of Employee: Male, 2005                                       | 54 |
| 9.1b Education of Self-employed: Male, 2005                                  | 54 |
| 9.2a Education of Employee: Female, 2005                                     | 55 |
| 9.2b Education of Self-employed-Female, 2005                                 | 55 |
| 10.1a Share of Employment in Total Workers and Share of Training Receiving   |    |
| Workers in Total Training Receiving Workers: Bangladesh, 2005                | 58 |
| 10.1b Share of Employment in Total Workers and Share of Taking Training      |    |
| Workers in Total Taking Training Workers: Bangladesh, 2005                   | 58 |
| 10.2a Share of Employment in Total Workers and Share of Taking Training      |    |
| Workers in Total Taking Training Workers: India, 2005                        | 59 |
| 10.2b Share of Employment in Total Workers and Share of Taking Training      |    |
| Workers in Total Taking Training Workers: India, 2005                        | 59 |
| 10.3a Share of Employment in Total Workers and Share of Taking Training      |    |
| Workers in Total Taking Training Workers: ROK, 2007                          | 60 |
| 10.3b Share of Employment in Total Workers and Share of Taking Training      |    |
| Workers in Total Taking Training Workers: ROK, 2007                          | 60 |
| 10.4a Share of Employment in Total Workers and Share of Taking Training      |    |
| Workers in Total Taking Training Workers: Nepal, 2007                        | 61 |
|  |    |

| 10.4b Share of Employment in Total Workers and Share of Taking Training     |    |
|---|----|
| Workers in Total Taking Training Workers: Nepal, 2007                       | 61 |
| 10.5a Share of Employment in Total Workers and Share of Taking Training     |    |
| Workers in Total Taking Training Workers: Pakistan, 2007                    | 62 |
| 10.6a Share of Employment in Total Workers and Share of Taking Training     |    |
| Workers in Total Taking Training Workers: Sri Lanka, 2007                   | 62 |
| 10.6b Share of Employment in Total Workers and Share of Taking Training     |    |
| Workers in Total Taking Training Workers: Sri Lanka, 2007                   | 63 |
| 11.1 Taking Training Ratio in Each Industry and Self-employed Ratio in Each |    |
| Industry: Bangladesh, 2005  | 64 |
| 11.2 Taking Training Ratio in Each Industry and Self-employed Ratio in Each |    |
| Industry: India, 2005   | 64 |
| 11.3 Taking Training Ratio in Each Industry and Self-employed Ratio in Each |    |
| Industry: ROK, 2007   | 65 |
| 11.4 Taking Training Ratio in Each Industry and Self-employed Ratio in Each |    |
| Industry: Nepal, 2007   | 65 |
| 11.5 Taking Training Ratio in Each Industry and Self-employed Ratio in Each |    |
| Industry: Sri Lanka, 2008   | 66 |
| 12 Implementing Agency/Labor Force, in Thousands                            | 70 |
| 13.1 Percentage of Education Budget to GDP                                  | 72 |
| 13.2 Percentage of Education Budget to National Budget                      | 73 |
| 14.1 Public Expenditure per Pupil as a Percentage of GDP Per Capita         | 73 |
| 14.2 Public Expenditure per Pupil as a Percentage of GDP per Capita and GDP |    |
| per Capita  | 74 |
| 14.3 Public Expenditure per Pupil as a Percentage of GDP per Capita and     |    |
| Percentage of Self-employed in Total Employment                             | 74 |
| 15 Number of Educational Institutions                                       | 75 |

### Tables

| 1 ILO Informal Employment Matrix                                   |    |  |  |  |
|--|----|--|--|--|
| 2 Informal Employment Changes Between and Within Industry          |    |  |  |  |
| 3 Education Effect on Economic Growth                              |    |  |  |  |
| 4 Education Effect on the Informal Employment Share                |    |  |  |  |
| 5 Number of Unemployed Persons Not Able to Obtain Formal Technical |    |  |  |  |
| Training in Sri Lanka, by Reason                                   | 50 |  |  |  |
| 6 Number of Unemployed to Have Received Training, by Previous      |    |  |  |  |
| Working Status and Main Activities in Sri Lanka                    | 51 |  |  |  |
| 7 Training Implementing Agency                                     |    |  |  |  |
| 8 Training Implementing Agency in Bangladesh and India             |    |  |  |  |

### Abbreviations

| GDP    | Gross Domestic Product                                       |
|--------|--|
| GNI    | Gross National Income  |
| FNPF   | Fiji National Provident Fund                                 |
| ILO    | International Labor Organization                             |
| OECD   | Organisation for Economic Co-operation and Development       |
| Off-JT | Off-the-Job Training   |
| OJT    | On-the-Job Training  |
| PREALC | Programa Regional del Empleo para América Latina y el Caribe |
| SNA    | System of National Accounts                                  |
| SOC    | Social Overhead Capital                                      |
| TFP    | Total Factor Productivity                                    |
|        |  |

### Contributors

#### Author

### Ms. Sachiko KAZEKAMI

Assistant Professor in Economics Department of Economics, Chukyo University 101-2 Yagotohonmachi, Showa-ku, Nagoya, Aichi, Japan 466-8666

#### Asian Productivity Organization

#### Ms. Yasuko ASANO

Program Officer Research and Planning Department Asian Productivity Organization 1-2-10 Hirakawa-cho, Chiyoda-ku, Tokyo, Japan 102-0093

### National Experts

Bangladesh

### Mr. Md. Nurul ISLAM

Director Bangladesh Bureau of Statistics Industry and Labour Wing Parishankhan Bhaban, E-27/A Agargaon Dhaka 1207

### Fiji

### Ms. Nilima Usharani LAL

Divisional Manager Economic Statistics Division Fiji Islands Bureau of Statistics P.O. Box 2221, Government Buildings Suva

#### India

### Mr. S.V. Ramana MURTHY

Director National Accounts Division Central Statistical Organisation Ministry of Statistics and Programme Implementation Government of India 4<sup>th</sup> Floor, Sardar Patel Bhawan, Parliament Street New Delhi 110001

### Republic of Korea

### Dr. Insook JEONG

Director Employment Statistics Division Korea National Statistical Office Government Complex III, 920 Dunsan-dong, Seo-gu Daejon 302-701

#### Malaysia

### Ms. Nazaria BAHARUDIN Director Manpower and Social Statistics Division Department of Statistics Malaysia Block C6, Complex C, Federal Government Administrative Centre Putrajaya

### Mongolia

### Mr. Lkhagvajargal BAASANTSEREN

Senior Economist Macro Economic Statistics Department National Statistical Office of Mongolia Government Building Ⅲ, Baga toiruu-44 Ulaanbaatar 20a

### Nepal

### Mr. Jishnu Mohan BHATTARAI Statistical Officer

Central Bureau of Statistics Thapathali Kathmandu

### Pakistan

### Mr. Khalil AHMED

Statistical Officer Federal Bureau of Statistics Statelife Building No. 5, Blue Area, China Chowk Islamabad

### Philippines

### Ms. Vivian Rembulat ILARINA Division Chief National Statistical Coordination Board 2nd Floor, Midland Buendia Building

403 Senator Gil Puyat Avenue Makati City 1200

#### Sri Lanka

### Mr. W.W.M.A.S.PREMAKUMARA

Director Statistics–Sample Surveys Sample Surveys Division Department of Census and Statistics 8<sup>th</sup> Floor, Unity Plaza Bldg. Colombo 04

#### Vietnam

### Mr. Truong LE

Official/Statistician General Statistics Office GSO Building, No. 2 Hoang Van Thu Street, Ba Dinh District Hanoi

### Overview

Informal employment, which includes street vendors, unregistered workers, people who make things at home, and so on, accounts for a large number of people in the workforce. The economic activity of workers engaged in informal employment, or in other words Gross Domestic Product (GDP) per worker, is as significant to the national economies of Asian countries as in other regions of the world. In regard to economic activity engaged in informal employment, the quality of labor is an important aspect<sup>1</sup> because it plays a roll in determining labor's performance for the reason that informal employment has little capital in most cases. This paper, therefore, focuses particularly on the labor aspect of the informal sector.

In this report, informal employment refers to "employees who work at formal or informal enterprises informally" as well as "the self-employed who work informally." On the other hand, the informal sector refers to a "place or industry of informal economic activity." Hence, this report defines informal employment as people who work at informal enterprises or work on their own informally, not including employees who work at formal enterprises informally.

This report also examines changes in the qualitative nature of informal employment alongside economic development in which informal employment has existed, and how informal employment can change future economic growth. In other words, a purpose of the report is to observe the details of the dynamics of informal employment and their effect on future economic growth.

In doing so, this report first tries to understand the realities of informal employment including the changes in time series by key aspects such as gender, region, education, income and working status by country. Second, the report looks at the aspect of industry structure and the dynamics of industry structure in relation to informal employment. When considering industry structure, industrialization is focused as it sometimes prompts reform of one's working status. Moreover, this report breaks down the changes of informal employment by industry and attempts to understand the source of the increase in informal employment, namely whether the increase is predicated on the expansion of industry with a

<sup>&</sup>lt;sup>1</sup> The advancement of labor quality means the improvement of productivity in countries where informal employment is important.

higher informal employment share or on the expansion of informal employment within each industry. Finally, the report analyzes how human capital investment, such as opportunities of education and job training to informal employment, can impact economic growth or the scale of informal employment, as well as the reality of education and training.

The data used for analyses in this paper were originally provided by national experts from Asian Productivity Organization (APO) member countries. An initial meeting on this project was held from 1 to 3 December 2008 in Sri Lanka, followed by a second coordination meeting in Cambodia from 26 to 28 October 2009. Both meetings discussed the various aspects of informal employment, its changes in relation to economic development, and training and education. Based on the data and analyses, the main findings are summarized as below.

- It was evident from the data that informal employment in Asian countries tends to be composed of males and those with low education. Informal employment is on the increase in some countries (e.g., Bangladesh and India) and decreasing in others (e.g., the Republic of Korea (ROK) and Malaysia, although here there has been a recent increase), while remaining at the status quo in others (e.g., Philippines). It was also observed that the working status of those in informal employment has been changing from self-employed to employees (i.e., individuals who work at formal or informal firms informally) in the time series data.
- The extent of informal employment has a strong correlation with industrialization rather than economic development, as represented by Gross National Income (GNI) or GDP per capita. Its size increases when industrialization is at its early stage before trending downwards. Changes in the percentage of those in informal employment is largely present in the manufacturing sector, followed by other sectors such as agriculture, wholesale, other community, social and private services, hotels and restaurants, and the activities of private households as employers.
- As to the effect of human capital investment, it can be said that the higher

**OVERVIEW** 

share of secondary and tertiary graduated employees within total employment prompts economic growth. On the other hand, increasing investment in secondary education reduces informal employment.

- Looking at the differences in human capital investment between formal and informal employment, job training or education opportunities for informal employment is less than that of formal employment, but it is not zero. In countries of a higher economic level, more training is conducted in major industries with many workers. According to the data, training mainly is run well in public and technical industries like manufacturing; education; transport, storage and communications; and public administration and defense. In contrast, wholesale and retail trade and construction are not training-intensive industries.
- A common characteristic of a training-intensive industry is a large share of employees, rather than self-employed workers.
- The larger a country's higher education budget, the more economic growth it experiences. Likewise, the lower a country's economic level, the more it invests in human capital.

This report is composed of the following chapters. The introduction provides an overview of research in informal employment over different decades. It also outlines how previous studies have captured informal employment, and our research came up with our interpretation of informal employment. Chapter two shows the realities of informal employment by various aspects. Chapter three examines the changes of informal employment affected by industrial aspects. Chapter four then analyzes informal employment from the human capital aspect.

## 1. Introduction: Historical Overview of Research on Informal Employment

The discussion of informal employment is very important because it accounts for a large proportion of GDP and extensive job creation in developing countries. Many studies have analyzed informal employment in terms of volume. Informal employment was for the first time highlighted by the so-called *Kenya Report*<sup>2</sup> in 1972 (ILO 1972). In this early period of research on informal employment, it was thought mainly that only low-wage workers engaged in informal employment, which involved jobs that fall outside the formal sector.

This paper notes the basic theory in Lewis (1954) and Harris and Todaro (1970). Lewis posited that the surplus of laborers in rural areas results in an unlimited move of laborers to urban areas. Subsequently, Harris and Todaro argued that such migration occurs even if laborers cannot find a job in an urban area so long as their expected wage in an urban area is higher than that of the rural area. In other words, should some laborers who have migrated from rural to urban areas cannot find a formal job, they can survive on informal employment.

In the 1980s, the International Labour Organization (ILO) convened meetings on the concept of informal employment. A general consensus was reached on how to understand the phenomenon of informal employment and this resulted in the ILO-PREALC (Programa Regional del Empleo para América Latina y el Caribe) approach. The approach provides that only low-skilled or poorly educated people of any gender and age can be involved in informal employment. The surplus labor supply caused by industrialization or urban migration results in informal employment. The ILO-PREALC approach recognizes that there are two main categories of informal employment: jobs taken as a means of earning subsidence and jobs taken in an economic recession or by structural reform failure.

<sup>&</sup>lt;sup>2</sup> Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya, published by the International Labour Organization in 1972 is commonly called the Kenya Report.

In the 1990s, the image of the informal sector became rather positive. It came to be viewed as a sector that created jobs and that it was not only for low-wage earners. Tannen (1991) as well as Koo and Smith (1983) argued that dualism—high-income earners and low-income earners—exists in informal employment. The competition between economic activities carried out by those in the formal and informal sectors became a problem. On the one hand, those in informal employment were at a disadvantage because they could not use public infrastructure, obtain government aid, or participate in job training. On the other hand, the informal sector took advantage of their ability to evade taxes and minimum wage laws to minimize costs. In the 1990s, globalization led governments to support large companies. Small and medium-size enterprises (SMEs), regardless of being formal or informal, did not receive such national support, thus putting them in a generally unfavorable competitive position in the market. In 1993, the Fifteenth International Conference of Labour Statisticians (ILO 2002) proposed that value added generated by informal employment activities should be included in GDP, although had been no practice until that time to account within GDP calculations for the economic activities of informal employees.

In the 2000s, a renewed emphasis was placed on formalization rather than the economic potential of the informal sector as in the 1990s (Platteau and Gaspart 2003, Platteau 2004). Provided that the lower tier of informal employment is associated with low income and poverty, some argue that formalization plays a role in reducing poverty (de Soto 1989 and 2003, Nugent and Swaminathan 2006).

Research on informal employment in recent years has progressed to an analysis of its effects and characteristics. The purposes of this report are to observe the details of the dynamics of informal employment, analyze their changes by industry structure aspects and consider their effect for future economic growth. It is important to clarify how informal employment has been captured and how this research measures it. Many researchers often use the data on the self-employed as a

INTRODUCTION

substitute for informal employment, because it is difficult to obtain data on informal employees who work at formal enterprise informally. OECD (2009) confirmed that self-employment data are a suitable substitute for informal employment data, and therefore decided to use the former in its analyses. OECD (2009) argues that employment in the informal sector can be estimated but those who work informally in the formal sector cannot be estimated because these data have only been captured in recent years and, since that is not enough, they substitute data for the self-employed for those in informal employment. However, Balassa (1964) (in Maloney's (2004) paper) and Pieper (2000) argued that the number of self-employed decreases with industrialization. Because self-employment was substituted for informal employment, corresponding decreases in informal employment were inevitable. Therefore, in order to capture the size of informal employment by statistical data, it is a sensitive issue as to which measurement is used for analyzing the size of informal employment. It is also important to pay attention to whether the measurement chosen for the analysis is affected by the factor of economic development.

Around the time of the *Kenya Report*, which widely introduced the issue of informal employment to the world, informal employment was captured by a residual method, that is, informal employment equaled the labor force minus formal employment and unemployment. In the *Kenya Report*, informal employment was measured by the number of people who were not recorded as being employed. The report also presented seven criteria for an informal sector to develop: (1) ease of entry, (2) reliance on indigenous resources, (3) family ownership of enterprises, (4) small scale of operation, (5) labor-intensive and adapted technology, (6) skills acquired outside the formal school system, and (7) unregulated and competitive markets.

After the report, direct measurement based on the observation of informal employment was emphasized. At the same time, researchers attempted to come up with common perceptions and international definitions of informal employment. It is considered that the ILO conference in 1993 reached a consensus. According to the consensus, in general, informal employment was categorized as per the ILO Informal Employment Matrix (see Table 1). Two main types of informal employment were defined: workers whose activities are informal (mainly those who are self-employed, work alone or work with a family member) and workers employed informally by formal enterprises.

| Production<br>unit by type     | Jobs by status in employment |        |           |        |                                   |             |        |                                       |        |
|--------------------------------|------------------------------|--------|-----------|--------|-----------------------------------|-------------|--------|---------------------------------------|--------|
|                                | Own-account workers          |        | Employers |        | Contributing<br>family<br>workers | g Employees |        | Members of producers'<br>cooperatives |        |
|                                | Informal                     | Formal | Informal  | Formal | Informal                          | hformal     | Formal | Informal                              | Formal |
| Formal sector<br>enterprises   |                              |        |           |        | 1                                 | 2           |        |                                       |        |
| Informal sector<br>enterprises | 3                            |        | 4         |        | 5                                 | 6           | 7      | 8                                     |        |
| Households                     | 9                            |        |           |        |                                   | 10          |        |                                       |        |

Table 1 ILO Informal Employment Matrix

Dark grey cells refer to jobs that, by definition, do not exist in the type of production unit in question. Light grey cells refer to formal jobs. Un-shaded cells represent the various types of informal jobs.

Source: LO. 2002. Decent Work and Informal Economy .

Recently, as of 2009, the ILO recommended that some questionnaires pertaining to informal employment be added to the Labor Force Survey (LFS) conducted by each country. However, these data from the LFS are not yet available. Therefore, research for this report used currently available national data within the national accounts and the LFS from respective countries. At the coordination meeting preceding this report, we listed the indicators to cover the ILO Matrix, that is the self-employed, unregistered employees, those not contract employees, employees of small scale firms with fewer than 10 workers, the unregistered self-employed, self-employed operated small scale firms and self-employed who do not hire workers (own-account workers), and unskilled workers. For example, informal employment "indicated by the self-employed" covers the numbers 3, 4, 5, 8 and 9 in the matrix of Table 1. Informal employment "indicated by unregistered employees" covers the numbers 1, 2, 6, 7 and 10 in the matrix. National experts of APO member countries tried to collect these data. As a result, data on the self-employed were used as a substitute for informal employment, like in previous research, because this

INTRODUCTION

indicator provides the broadest coverage in the APO member countries, although it does not actually capture the entire scope of informal employment. So, other indicators such as the unregistered and firm size (fewer than 10 workers) were also used to get as close as possible to the real informal employment number.

### 2 What Is Informal Employment and How Does It Change?

#### 2.1 Framework of Analysis

For this report, we have set out to observe informal employment within APO member countries. As found by Chong, Galdo and Saavedra (2008), who examined informal employment by gender, education and age in a time series, the number of male and middle age informal sector workers can increase as a result of labor market reform. This report would thus like to examine data from APO member countries from the perspective of gender, region and education. For this analysis, we consider the self-employed to be an informal employment index, like in previous papers.

Some researchers argue that income dualism exists even in informal employment. Maloney (2004) and the OECD (2009) have found this: an upper tier that voluntarily joins the ranks of the informally employed and has a high income, and a lower tier that becomes informally employed involuntarily and has a low income. Maloney (2004) points to the social security system as a cause of the voluntary movement by workers to the informal sector. Workers who do not feel that social security has a real benefit for them tend to enter the informal sector voluntarily.<sup>3</sup>

Case studies like Tannen's (1991) of Brazil and Koo and Smith's (1983) of the Philippines in 1968 support the fact that dualism exists in informal employment. Arias and Khamis (2008) argue that there is no distinction between the incomes of formal employees and those of the informal self-employed, but that informal employees earn less than formal employees. They also state that some workers move from the formal sector to being self-employed in the informal sector to seek a wage premium. As such, this report attempts to verify income dualism mainly from the point that informal employment generates as much income for workers as formal employment using data collected from APO member countries. Finally,

<sup>&</sup>lt;sup>3</sup> In this case, the social security system covers only formal employment by tacit agreement. This depends, though, on the definition of informal employment. In a few cases, the definition of informal employment involves the socially disadvantaged, and the criteria for determining this category of people is their eligibility in the social security system. Of course, when this definition of informal employment is used, it is possible that informal employment can be covered by the social security system.

following the previous chapter's discussion on the index of informal employment, this report compares the volume of informal employment using more indexes in a time series.

2.2 Various Aspects of Informal Employment

2.2.1 Gender, Education and Region

Figure 1 shows the volume of informal employment by gender, education and region in a time series. Bangladesh in Figure 1.1a indicates that the number of workers engaged in informal employment (not the informal employment share to the total labor force) increased more for males than females, especially after 1989. In addition to this phenomenon, the number of workers engaged in informal employment in rural areas increased more than in urban area after 1989 (see Figure 1.1b). Overall, informal employment is higher for males than females, more in rural areas than in urban areas, and informal employment increased prominently from 1980 to 2006.

For Malaysia, in Figure 1.2a, the percentage of informal employment in the labor force decreased from 1982 to 2002, and increased in recent years. Additional figures show the share of male/female informal employment represented by self-employed to total male/female employment (Figures 1.2a, 1.3a, 1.4a, 1.5a, 1.6a), and the share of informal employment per level of education (primary, secondary or tertiary in most cases) to the total labor force (Figures 1.2b, 1.4b, 1.5b, 1.6b).

The decrease in informal employment in Malaysia was caused by workers who graduated at primary school as shown in Figure 1.2b. However, in other education levels, informal employment for those to have graduated from secondary school increased and the share of the labor force is almost the same between the informal employment for those to have graduated from primary and secondary school nowadays. Informal employment for those to have graduated from a tertiary level of education also slightly increased. The share of informal employment is higher in males than females in Malaysia. Figure 1.3a, which looks at the Philippines, also shows that the share of informal employment in males is much more than that of females, differing from our hypothesis that females tend to enter informal employment more easily, but that the female population might tend to drop among family workers or the non-labor force. Figure 1.4a describing the ROK shows the decrease of informal employment for both genders, but the male decrease is more rapid than that of females. Figure 1.4b shows that informal employment for those to have graduated from secondary and primary schools decreased in the ROK, but that informal employment for those to have graduated from tertiary school increased.

The informal employment ratio of males is higher than that of females in the ROK, like in other countries. In India, both male and female informal employment exceeds half of each labor force as shown in Figure 1.5a, and the female informal employment ratio is higher than that of males, unlike in other previous countries. The same phenomenon is found in Sri Lanka as described in Figure 1.6a. Figure 1.5b shows that in India, informal employment of every education level increases except for illiterate people. In Sri Lanka, workers to have graduated from secondary school dominate the informal employment as shown in Figure 1.6b.





















2.2.2 Income Difference between Informal and Formal Employment

Next, the report compares incomes by working status within the same country and verifies whether workers in informal employment can earn as much as in formal employment, and verifies income dualism within informal employment.

Figure 2.1 is reclassification of *Key Indicators from Wage Survey-2007* in Bangladesh into 15 industries based on ISIC Rev.3.1. This wage survey covered 202 occupations in 37 industry groups including 44 informal occupations classified by the Bangladesh Bureau of Statistics as informal occupations. It should be noted, however, that the criteria of formal or informal based on occupation by the Bangladesh Bureau of Statistics, can differs from our criteria. The key indicators report the monthly earnings for formal and daily wages for informal employment. They note "salary means the amount of take that paid workers receive in cash or kind (including for food, housing and clothing) before any deduction for pensions, taxes or social security, and on the other hand daily wage means the amount of taka that one receives in cash and non-cash remuneration for one day of labor" (*Key*  *Indicators from Wage Survey–2007*). The data on how many days the daily worker is employed per month cannot be obtained. Hence, informal earnings are calculated by multiplying 25 days by the daily wage data. Therefore, there may be a possibility of some over and under estimation.

In Bangladesh, the wage for formal employment in the transport sector is higher than that of informal employment, but in other sectors—hotels and restaurants, wholesale and land retail trade and manufacturing—the earnings are approximately the same. The difference in the transport sector might come from the high competition in informal employment in the transport sector because of relatively easy entry into the sector by informal workers. It is possible that informal employment earns almost the same salary as formal employees in Bangladesh. On the other hand, the earnings are different between formal and informal employees in Nepal. Figure 2.2 shows that in every sector the wages for informal employees (substituted by self-employment data) are lower than the wages for formal employees.

Figure 2.3 shows the wage of formal employees and informal employees in the ROK represented by the data on those working at firms with fewer than 10 employees. The monthly wage of informal sector workers in agricultural and mining/manufacturing is less than those of the formal sector. On the other hand, the monthly wage of informal sector workers in Social Overhead Capital (SOC) and other services is higher than those of the formal sector.

The abovementioned three figures used different substitution data to represent informal employment. Figure 2.4 compares wages between formal employment and informal employment using various substitutions (unregistered or registered, working in firms with fewer or more than 10 employees, and rural or urban as reference) in Sri Lanka. Figures 2.4a to 2.4c show that the differences between formal wages and the wages of informal employees substituted by registered status and firm size are greater than the differences between rural and urban wages. Figure 2.4a shows that formal employees earn much more than informal employees in Sri Lanka in education sector especially sectors, and in transport sector like in the case of Bangladesh. The wage difference between formal and informal employees in Sri Lanka is not so great in the manufacturing sector. Figure 2.4b shows the same trend as the Figure 2.4a and confirms that the wage difference between formal and informal employees in the financial intermediation as well as the health and social work sectors are substantial. Figure 2.4c indicates that urban workers earn more than rural workers without education and fishing workers. Figure 2.4d shows earnings trend from 2006 to 2008. It suggests that the wages of unregistered agricultural workers in Sri Lanka are higher than that of registered agricultural workers every year. The differences between them diminish in the wholesale and personal service sectors.

From the above data, informal employment in Bangladesh seems not only to be created by poverty but also includes voluntary entries. Workers in informal employment are already earning as much as those in formal employment at the relatively early stages of the country's economic development. According to Figures 4 and 14.2, Bangladesh does not have a high level of GNI or GDP per capita. On the other hand, the differences between formal and informal earnings in Sri Lanka and the ROK, which are richer countries than Bangladesh, is great. It is, however, still to note that the Bangladesh data may be caused by the definition of informal employment based on the occupation provided by the Bangladesh Bureau of Statistics. In interpreting and comparing the findings, the report may need more precise data.















#### 2.2.3 Changes in Their Working Status

This section attempts to measure informal employment by different indicators. There are various indicators to measure informal employment such as the self-employed, unregistered workers, non-contract workers, and so on. Using data on the self-employed is common substitute for informal employment as it is rather easy to collect. However, the self-employed do not represent informal employment perfectly. In this section, informal employment is gleaned from two indicators: the self-employed and unregistered employees (using firm size for the ROK), for observing their changes over time.

Figure 3.1 is the time trend for informal employment for Bangladesh. Informal employment measured by both indicators tends to increase, while, the one measured by unregistered employee data increases more rapidly than that measured by the self-employed data from1996 to 2003. Figure 3.2 attempts to observe the same for Nepal. Informal employment measured by the self-employed decreases, and by contrast, unregistered employees increase, although their share in the total labor force is small. Figure 3.3 for the Philippines demonstrates that informal employment measured by the self-employed is stagnant. In the Philippines, the share of

unregistered employees exceeds the self-employed, unlike in Bangladesh, Nepal and Sri Lanka. Figure 3.4 describes the case in Sri Lanka and shows that the informal employment substituted by the self-employed dominates that substituted by unregistered employees, and that there is no dramatic change in this trend over the three years.

These figures show that the time trend can vary depending on which indicator is used. Informal employment changes by itself. For example, Maloney (1999) argues that industrialization helps define the working status of people from the self-employed to employees. The observation made in this section is just based on time series data; a more detailed analysis is made in the next section.






22



#### 2.3 Conclusion

This section observes the nature of informal employment itself: who they are and how they change. There is a general perception that informal employment in Asia is comprised of mainly males, and those with low education. As has been observed in the preceding sections, informal employment tends to be trending upwards in Bangladesh and India, while in contrast it is on the decrease in the ROK and Malaysia (though it begun to increase recently in Malaysia), and it is stagnant in Philippines.

When analyzing the income of informal employees, we need to mention that there was a data limitation issue. As much as the available data is being used, the trend shows that there is not much difference in the income between informal employees and formal employees in Bangladesh, while there are income gaps between informal and formal employees in Nepal. The differences diminish in the wholesale sector of Sri Lanka. Furthermore, the working status of informal employees also changes. In many countries, unregistered employees increase more rapidly than the self-employed or move in an opposite direction. These trends are observed over a time series.

# 3. Effect of Industry Composition on Informal Employment

#### 3.1 Framework of Analysis

This section attempts to observe the dynamic trend of informal employment alongside economic development by using cross-country data. The report uses GNI per capita and GDP per capita as an index of economic development. However, the indicators of economic levels alone are not sufficient to understand changes of informal employment? Hence, the report analyzes the changes of informal employment using one of the economic development sources, namely industrialization. To date, many researchers have discussed whether informal employment grows or diminishes with economic development, although no clear answer has been found. Reasons behind this puzzle might be the fact that researchers have only focused on economic level without paying attention to why such economic levels could be achieved or the factor of economic structure sometimes deciding the working status as proposed by Maloney (1999).

This section also observes industry structure rather than changes besides industrialization. We break down the change of informal employment *between* and *within* industries. The *between* effect is the informal employment changes caused by industry structure changes when the informal employment rate is fixed at the current rate. The *within* effect is the informal employment change within industry when the industry structure is fixed at the previous time period. Following is a formula:

$$\frac{\tilde{L}}{L} = \sum_{j=1}^{J} a_j \frac{\tilde{L}_j}{L_j}$$
(3-1)

L denotes total employment,  $\tilde{L}$  is informal employment, and  $\tilde{L}_j$  is informal employment in the sector j where j=1...,J. Then, informality rate;  $\frac{\tilde{L}}{L}$  can be represented

by (3-1). Where  $a_j = \frac{L_j}{L}$  represents the share of employment in the j sector. Thus,

changes in the informality rate between period t and t+1 can be expressed as

$$\frac{\tilde{L}_{t+1}-\tilde{L}_{t}}{L_{t}}=\Delta\frac{\tilde{L}}{L_{t}}=\sum_{j=1}^{J}\Delta\left(a_{j}\frac{\tilde{L_{j}}}{L_{j}}\right)$$

$$=\sum_{j=1}^{I} \left( \Delta a_j \frac{\tilde{L}_j}{L} + a_j \Delta \frac{\tilde{L}_j}{L_j} + \varepsilon \right)$$
(3-2)

The first term in (3-2) represents the between effect, and the second term represents the within effect, while the third term  $\varepsilon$  is the residual representing interaction for the between and within effects.

#### 3.2 Break Down of Changes in Industrial Structure Dynamic

#### 3.2.1 Changes with Industrialization

The relationship between informal employment and GNI/GDP per capita is observed as in previous research. Figure 4.1 suggests the relationship between the volume of informal employment and GNI per capita, and Figure 4.2 suggests that with GDP per capita. Here, self-employed data substitutes informal employment.<sup>4</sup> The more GNI per capita—or GDP per capita—there is, the less informal employment exists, but relation is not so strong.

Figure 4.3 shows the relationship between informal employment and the rate of manufacturing value added output in GDP rather than GNI or GDP per capita. The ROK and Malaysia are remarkable in this regard. Malaysia has less informal employment than the ROK despite less GNI per capita than the ROK, as seen in Figure 4.1. In Figure 4.3, Malaysia has a higher rate of industry value added output in GDP than does the ROK, and has less informal employment than the ROK. The

<sup>&</sup>lt;sup>4</sup> The data for Bangladesh in Figure 4 is unregistered employees or employers not self-employed like the others.

relation between informal employment and economic indicators becomes clearer. Moreover, GNI per capita in the ROK increased during our research period even though the rate of industry value added output in the GDP did not change. During this period, the volume of the informal sector also did not change substantially—there was a slight reduction—as evidenced by the nearly vertical graph for the ROK in Figure 4.1. In Figure 4.3, the data plots remain the same for both the rate of industry and informal employment.

Another remarkable point is found, namely that the relation between industrialization and informal employment seems to be in the shape of a dogleg. In other words, in the early phases of industrialization, informal employment expands, first in Mongolia, Pakistan, Sri Lanka, Vietnam, and the Philippines, and then, as in the case where more industrial sectors develop, informal employment decreases in the order of the ROK, Malaysia and Fiji.

The share of informal employment correlates with industrialization more than with economic development. Maloney (1999) argues that industrialization can change the working status of informal employment from the self-employed to employees. The previous section 2.2.3 above already confirms this trend by the data measured by two indicators. This section further explores the volume of informal employment and how it correlates with industrialization, using not only the data on the self-employed but also other indicators.

The longitudinal axis of Figure 5 is the rate of manufacturing value added output in the total GDP and the horizontal axis is the percentage of informal employment over the total labor force. Figure 5 shows the relationship between informal employment and industrialization and is based on the two indicators of informal employment, namely the self-employed and unregistered employees. The  $\blacklozenge$  mark plots informal employment indicated by the self-employed, while the  $\times$  plots informal employment indicated by unregistered employees.

When the share of manufacturing value added output in the GDP is higher than 20%, there are more unregistered employees than the self-employed (see Figure 5; e.g., Philippines, Vietnam). In contrast, when the share is less than 20%, there are more self-employed employees than unregistered employees (see Figure 5; e.g., Nepal, Bangladesh, Sri Lanka). This evidence suggests that the share of self-employed in the informal sector decreases with industrialization.

Figure 6 shows the relation between the share of manufacturing value added output in the total GDP and informal employment using more indicators than used in the Figure 5. Figure 6 instead uses the following indicators: (1) self-employed (blue), (2) unregistered employees (orange), (3) unregistered employees plus unregistered self-employed (green), (4) employees with under 10 workers (pink), (5) self-employed with fewer than 10 workers (red), and (6) unskilled employees (dark green). As the number of unregistered employees increases with industrialization, the number of unskilled employees also increases (see orange and dark green). However, the number of unregistered employees plus unregistered self-employed seems to decrease with industrialization, while it should be noted that the sample size is very small for this comparison (see green). Looking at the number of employees of small-scale enterprises with fewer than 10 workers (see pink), this number seems to augment at a low industrialization level and it seems to decrease at a high industrialization level. On the other hand, the number of self-employed of enterprises with fewer than 10 workers seems to decrease (see red) with industrialization. If the number of self-employed is constant, increasing the number of employees in small scale means an expansion of self-employed firms (of course, after that, the number of small-scale employee will decrease if such a firm expands to more than 10 employees). However, Figure 6 does not show these points clearly.

Section 3.2.1 focuses on discussing the changes of informal employment with industrialization as one source of economic growth. However, how does informal employment fluctuate in relation to other industry movement? In other words, how does informal employment change when the other industry structure changes?



\*Informal employment ratio in the labor force.



\*Informal employment ratio in the labor force.



\*Rate of manufacturing value added output in the GDP.







Note: Measured by blue: self-employed, orange: unregistered employees, green: unregistered employees plus unregistered selfemployed, pink: employees with fewer than 10 workers, red: self-employed with fewer than 10 workers, dark green: unskilled employees.

### 3.2.2 Changes between and within Industry

Table 2 indicates the break down of informal employment. The between means that informal employment changes caused by industry structure changes when the informal employment rate is assumed to be the same rate with the current rate. The negative effect, for example, -2.123 for the agriculture sector of India in Table 2, means that informal employment falls because the agriculture sector itself diminishes in India. The within means that informal employment changes within industry when the industry structure is fixed in previous time period. The 3.838 for the agriculture sector of India in Table 2 shows that the percentage of informal employment in the sector augments if the importance of agriculture does not change during the estimation period. As the result, 1.715 in the total effect-which means the *between* effect plus *within* effect—in the agriculture sector of India means that informal employment in the sector augments because the percentage of informal employment is higher than at the previous time and this effect dominates the effect of the size of the agriculture sector which itself was diminished during the estimation period. One of findings in Table 2 is that the within effect is larger than the *between* effect in most cases.

#### Table 2 Informal Employment Changes Between and Within Industry

|  | Bangladesh (1991-2006) |        |         | India   | India (2000-2005) |        |  |
|--|------------------------|--------|---------|---------|-------------------|--------|--|
|  | Between                | Within | Total   | Between | Within            | Total  |  |
| Agriculture, hunting and forestry                    | -16.236                | 29.828 | 13.592  | -2.123  | 3.838             | 1.715  |  |
| Fishing  |                        |        |         | 0.004   | 0.007             | 0.011  |  |
| Mining and quarrying                                 | 0.038                  | -0.095 | -0.056  | 0.002   | -0.003            | 0.000  |  |
| Manufacturing  | -0.310                 | 3.922  | 3.612   | 0.569   | 0.128             | 0.697  |  |
| Electricity, gas and water supply                    | 0.019                  | 0.007  | 0.027   | 0.000   | 0.003             | 0.003  |  |
| Construction   | 1.717                  | -1.016 | 0.701   | 0.230   | 0.012             | 0.241  |  |
| Wholesale and retail trade; repair of motor vehicles | 8.154                  | 1.153  | 9.307   | 0.193   | 0.234             | 0.427  |  |
| Hotels and restaurants                               |                        |        |         | 0.103   | -0.015            | 0.088  |  |
| Transport, storage and communications                | 3.761                  | -1.256 | 2.504   | 0.155   | 0.256             | 0.410  |  |
| Financial intermediation                             | 0.322                  | 0.032  | 0.354   | 0.026   | 0.046             | 0.072  |  |
| Real estate, renting and business activities         |                        |        |         | 0.176   | -0.010            | 0.167  |  |
| Public administration and defence; compulsory        |                        |        |         | -0.004  | 0.002             | -0.001 |  |
| Education  |                        |        |         | 0.059   | 0.050             | 0.109  |  |
| Health and social work                               |                        |        |         | 0.027   | 0.012             | 0.039  |  |
| Other community, social and personal services        | 1.287                  | -0.428 | 0.859   | -0.474  | 0.470             | -0.004 |  |
| Activities of private households as employers        |                        |        |         | 0.000   | 0.000             | 0.000  |  |
| Extraterritorial organizations and bodies            |                        |        |         | 0.000   | 0.000             | 0.000  |  |
| ADD: M. Corporate service                            |                        |        |         |         |                   |        |  |
| ADD: Q. Entertainnment, culture and sports           |                        |        |         |         |                   |        |  |
| Total  |                        |        | 30.900* |         |                   | 3.974  |  |

\* The value is not equivalent between this and without decomposition because renew of industry classification. Bangladesh: Including fishing in agriculture, hunting and forestry, and including real estate and business survice in financial

intermediations.

|  | Nepal (2002-2007) |        |        | Philippir | Philippines (2003-2007) |        |  |
|--|-------------------|--------|--------|-----------|-------------------------|--------|--|
|  | Between           | Within | Total  | Between   | Within                  | Total  |  |
| Agriculture, hunting and forestry                    | -0.598            | -0.568 | -1.166 | -0.252    | -0.347                  | -0.599 |  |
| Fishing  | -0.001            | -0.001 | -0.001 | 0.007     | 0.083                   | 0.091  |  |
| Mining and quarrying                                 | 0.002             | -0.003 | -0.001 | 0.020     | 0.012                   | 0.032  |  |
| Manufacturing  | 0.058             | -0.171 | -0.112 | -0.105    | -0.159                  | -0.264 |  |
| Electricity, gas and water supply                    | -0.005            | -0.021 | -0.025 | 0.001     | 0.000                   | 0.001  |  |
| Construction   | 0.011             | -0.015 | -0.004 | -0.023    | -0.111                  | -0.133 |  |
| Wholesale and retail trade; repair of motor vehicles | -0.116            | -0.054 | -0.169 | 0.033     | -0.312                  | -0.279 |  |
| Hotels and restaurants                               | 0.003             | -0.021 | -0.018 | 0.051     | -0.036                  | 0.015  |  |
| Transport, storage and communications                | 0.013             | -0.020 | -0.007 | 0.079     | 0.148                   | 0.227  |  |
| Financial intermediation                             | 0.002             | -0.002 | -0.001 | 0.008     | 0.008                   | 0.017  |  |
| Real estate, renting and business activities         | 0.003             | -0.005 | -0.002 | 0.087     | -0.023                  | 0.065  |  |
| Public administration and defence; compulsory        | 0.010             | -0.015 | -0.004 | 0.000     | 0.000                   | 0.000  |  |
| Education  | 0.007             | -0.011 | -0.003 | 0.001     | 0.008                   | 0.009  |  |
| Health and social work                               | 0.003             | -0.004 | -0.001 | -0.005    | -0.017                  | -0.022 |  |
| Other community, social and personal services        | 0.007             | -0.011 | -0.004 | -0.173    | -0.021                  | -0.195 |  |
| Activities of private households as employers        | 0.007             | -0.010 | -0.003 | 0.000     | -0.047                  | -0.047 |  |
| Extraterritorial organizations and bodies            | 0.003             | -0.004 | -0.001 | 0.000     | 0.000                   | 0.000  |  |
| ADD: M. Corporate service                            |                   |        |        |           |                         |        |  |
| ADD: Q. Entertainnment, culture and sports           |                   |        |        |           |                         |        |  |
| Total  |                   |        | -1.524 |           |                         | -1.081 |  |

| Table 2 Informal Employment Changes Between and Within Industry (Continue) |                 |        |        |         |             |        |  |
|--|-----------------|--------|--------|---------|-------------|--------|--|
|  | ROK (2002-2007) |        |        | Malay   | sia (2002-2 | 2007)  |  |
|  | Between         | Within | Total  | Between | Within      | Total  |  |
| Agriculture, hunting and forestry  | -1.041          | -0.229 | -1.270 | 0.101   | 0.255       | 0.355  |  |
| Fishing  | -0.046          | -0.008 | -0.054 | 0.011   | 0.084       | 0.095  |  |
| Mining and quarrying   | 0.000           | -0.010 | -0.010 | 0.002   | 0.004       | 0.006  |  |
| Manufacturing  | -0.217          | -0.298 | -0.514 | -0.206  | 0.236       | 0.030  |  |
| Electricity, gas and water supply  | 0.002           | 0.003  | 0.005  | 0.000   | -0.002      | -0.001 |  |
| Construction   | -0.028          | -0.017 | -0.045 | -0.179  | 0.759       | 0.581  |  |
| Wholesale and retail trade; repair of motor vehicles                       | -0.887          | -0.910 | -1.797 | 0.122   | 0.065       | 0.187  |  |
| Hotels and restaurants   | -0.153          | -0.137 | -0.290 | 0.170   | 0.084       | 0.254  |  |
| Transport, storage and communications                                      | 0.034           | 0.335  | 0.369  | -0.016  | 0.025       | 0.009  |  |
| Financial intermediation   | 0.005           | -0.058 | -0.053 | 0.010   | -0.001      | 0.009  |  |
| Real estate, renting and business activities                               | 0.091           | 0.020  | 0.111  | 0.095   | 0.022       | 0.117  |  |
| Public administration and defence; compulsory                              | 0.000           | 0.000  | 0.000  | -0.001  | -0.004      | -0.005 |  |
| Education  | 0.212           | 0.145  | 0.357  | 0.015   | -0.026      | -0.010 |  |
| Health and social work   | 0.055           | -0.072 | -0.016 | 0.021   | -0.018      | 0.003  |  |
| Other community, social and personal services                              | 0.499           | 0.221  | 0.720  | 0.105   | 0.108       | 0.213  |  |
| Activities of private households as employers                              | -0.008          | -0.263 | -0.271 | -0.055  | 0.365       | 0.310  |  |
| Extraterritorial organizations and bodies                                  | 0.000           | 0.000  | 0.000  |         |             |        |  |
| ADD: M. Corporate service  | 0.193           | -0.300 | -0.107 |         |             |        |  |
| ADD: Q. Entertainnment, culture and sports                                 | 0.086           | -0.135 | -0.050 |         |             |        |  |
| Total  |                 |        | -2.914 |         |             | 2.152  |  |

|  | Sri Lanka (2006-2008) |        |         |  |
|--|-----------------------|--------|---------|--|
|  | Between               | Within | Total   |  |
| Agriculture, hunting and forestry                    | 0.535                 | -0.262 | 0.274   |  |
| Fishing  | 0.034                 | -0.046 | -0.012  |  |
| Mining and quarrying                                 | 0.024                 | 0.054  | 0.078   |  |
| Manufacturing  | -0.026                | 0.173  | 0.147   |  |
| Electricity, gas and water supply                    | 0.000                 | 0.000  | 0.000   |  |
| Construction   | -0.060                | 0.360  | 0.299   |  |
| Wholesale and retail trade; repair of motor vehicles | -0.259                | -0.177 | -0.436  |  |
| Hotels and restaurants                               | -0.126                | -0.184 | -0.311  |  |
| Transport, storage and communications                | -0.055                | -0.028 | -0.083  |  |
| Financial intermediation                             | 0.000                 | 0.000  | 0.000   |  |
| Real estate, renting and business activities         | 0.006                 | -0.157 | -0.151  |  |
| Public administration and defence; compulsory        | 0.000                 | 0.000  | 0.000   |  |
| Education  | 0.015                 | -0.117 | -0.102  |  |
| Health and social work                               | 0.000                 | -0.118 | -0.118  |  |
| Other community, social and personal services        | 0.029                 | -0.050 | -0.020  |  |
| Activities of private households as employers        |                       |        |         |  |
| Extraterritorial organizations and bodies            |                       |        |         |  |
| ADD: M. Corporate service                            |                       |        |         |  |
| ADD: Q. Entertainnment, culture and sports           |                       |        |         |  |
| Total  |                       |        | -0 435* |  |

# \* The value is not equivalent between this and without decomposition because renew of industry classification.

For those countries with a high level of economic activity, such as the ROK and Malaysia, the between effect in the manufacturing sectors shows a negative effect, -0.127 in the ROK and -0.206 in Malaysia. In fact, the share of the manufacturing sector workers in the national economies of these countries diminishes in the observed periods. In the ROK, the *within* effect is also negative, -0.298. The informal

employment of the manufacturing sector falls because the manufacturing sector itself in the national economy diminishes, but also formality in this sector develops. Developing formality is consistence with Figure 4.3, in the previous section, which indicates the reduction of informal employment in the ROK. When this report looks at other industries, the reduction of informal employment is substantially caused by a reduction in the importance of the whole economy and developing formality in the agriculture and wholesale sectors; -1.270 (-1.041 and -0.229) of total effect in the agriculture sector and -1.797 (-0.887 and -0.910) of the same effect in the wholesale sector. Therefore, formality is not developed only in the manufacturing sector but also in the wholesale sector, which is the service sector. However, both the *between* and *within* effects are positive in sectors such as the other community, social and private service sector; as indicated in the value of 0.499 in the between effect and 0.221 in the within effect. In fact, the share of this sector is expanding in the total economy, and developed informality within this sector although it is the service sector. As explained in the previous section 2.2.2, we can presume easy entry into the transport sector informally because of the large income differential between formal and informal employees of the transport sector in Bangladesh, Nepal and Sri Lanka. When the report looks at Table 2, in the ROK, the transport sector contributes to an expansion of informal employment; the *between* effect is 0.034 and the *within* effect is 0.335.

In Malaysia, informality is developed in the manufacturing sector in contrast to the ROK, and total effect is positive. In the country, the informal sector has been expanding recently, as shown in Figure 1.2a. The large contributors of informality are agriculture, 0.355 in total effect, and service sectors like the activities of private households as employers, 0.310; other community, social and personal services, 0.213; and hotels and restaurants, 0.254. The transport sector in Malaysia also has a positive impact on the expansion of informal employment just like in the ROK case. The differences in the trend of formality between the ROK and Malaysia, while both countries have a negative effect in the *between* effect in manufactures, is the trend of the service sector. This sector substantially contributes to the expansion of informal employment in Malaysia rather than the ROK.

Developing countries such as India, Bangladesh and Sri Lanka have a positive *within* effect in the manufacturing sector; 0.128, 3.922 and 0.173, respectively. In addition, the share of manufacturing workers in national economy increases in these three countries. The *between* effect is positive, 0.569 in India, and the *within* effect dominates even if

#### EFFECT OF INDUSTRY COMPOSITION ON INFORMAL EMPLOYMENT

the between effects are negative in Bangladesh and Sri Lanka. Hence, informal employment in manufacturing increases in these countries.

The increasing share of workers and progressing informality in the manufacturing sector of India substantially contributes to expanding informal employment in relation to total employment. In addition to the manufacturing sector, the agriculture, wholesale and transport sectors cause an increase in informal employment. Informality is developing in these sectors, and the share of workers in the total economy also increases in the wholesale and transport sector.

The wholesale sector in Bangladesh contributes to an expansion of informal employment, the formality is developed and the share of wholesale workers in the national economy increases; the *between* effect is 8.154 and the *within* effect is 1.153. Looking at the transport sector, easy entry into this sector can be assumed because of the large income difference between the informal and formal sectors. For the transport sector in Bangladesh, informality is not developed within the sector; -1.256, and yet, the share of the transport sector in the total national employment increases; 3.761, and the total effect contributes to the increase of informal employment; 2.504.

In Sri Lanka, the wholesale sector contributes to diminishing informal employment; the *between* effect is -0.259 and the *within* effect is -0.177. The next contributor is the hotel sector and both effects for this sector are negative; -0.126 in the *between* effect and -0.184 in the *within* effect. The total effect of the hotel sector is -0.311. The almost same scale but opposite impact is affected by the construction sector in Sri Lanka; 0.299 in total effect. The informality is developing within the sector.

In Nepal, the agriculture, manufacturing and wholesale sectors contribute to diminishing informal employment. Meanwhile, in the Philippines, the manufacturing sector has a negative impact; -0.264 in the total effect, but the transport sector has a positive impact and this scale is almost the same as the manufacturing sector's impact; 0.227 in the total effect. The service sectors such as the wholesale, activities of private households as employers and other community, social and personal service sectors contribute to diminishing informal employment.

#### 3.3 Conclusion

This section focuses on the trend of informal employment by looking at the industry structure. Our research finds that the size of informal employment substantially correlates with industrialization rather than economic development represented by GNI or GDP per capita. Informal employment increases with industrialization at the early stage of economic development, and then it decreases. The results also demonstrate that informal employment is represented by indicators other than the self-employed because industrialization might bring changes of working status. As a result, unregistered employees increase with industrialization as self-employment decreases. Moreover, this research attempted to break down the changes of informal employment. Sectors such as agriculture, wholesale, other community, social and private services, hotels and restaurants, and activities of private households as employers mainly affect diminishing or expanding informal employment. Both in the ROK and Malaysia, where the economic development level is higher than other project target countries, the manufacturing sector has a negative impact on the scale of informal employment, but the difference in the informal employment trend between these two countries is the trend in the service sector. Also, it is assumed that there is an ease of entry into the transport sector as an informal worker because the income difference between the formal and informal sectors is large, and the transport sector has a positive impact on expanding informal employment in countries in fact.

# 4 Human Capital and Informal Employment

#### 4.1 Framework of Analysis

In the previous two chapters, the report investigated informal employment, namely its characteristics and how it changes. The decline of informal employment is already under way in some countries, but the trend of increasing informal employment continues in other countries. One of the causes that affect economic growth is human capital. Human investment determines the quality of human capital, and human capital determines productivity and economic growth in the future. The difference in human capital affects economic growth even if the current productivity is the same level.

First of all, this report observes the effect of human investment on our research region. Education and training exist as human investment, and we look at the education effect for which sufficient data exist. The following is the estimation methods of the education effect. The report notes Wolff (2000), who estimates the education effect among OECD countries. Below is the report's formula used, which consists of APO member countries added to OECD countries.

$$\label{eq:gdpw07/RGDPW80} \begin{split} &\ln(\text{RGDPW07/RGDPW80})/28 = \alpha_0 + \alpha_1 \text{Relative RGDPW0} + \alpha_2 \text{INVERATE} + \alpha_3 \text{RDGDP} + \\ &\alpha_4 \text{Scondempl} + \alpha_5 \text{Informal} + \mu \end{split}$$

(4-1)

*RGDPWt* is GDP per worker in year *t*, measured in current US\$. Relative *RGDPW0* is the *RGDPW* level of the country relative to the *RGDPW* level of the United States in 1980. INVERATE is Investment share of Real Gross Domestic Product per Capita averaged over the regression period. This report gathered these data from the Penn World Table Mark 6.3. *RDGDP* is the ratio of R&D gross expenditures to GDP, averaged over the regression period (UNESCO 2010a). *Scondempl* is a logarithm of the ratio of secondary school graduate workers to employment. *Informal* is the self-employed share to employment. Data are provided by APO member country national experts.; 2005 data are used because they can be compared among the

member countries for that year. As a result, 2005 OECD country data, provided by ILO Laborsta, are also used. Wolff (2000) uses the enrolment ration to estimate the education effect, and he uses 1965 data for the estimation period 1950 to 1990. Our estimation uses the education record of people who have already started jobs; we do not need to wait until the education effect is visible. Hence, we use the data as much as in the recent estimation period. Also, this report does not make the difference because the report follows Wolff (2000) and the report cannot obtain more than multiple years' data. If education affects economic growth, the coefficient a4 is positive.

This report also investigates the education effect for reducing informal employment. Following Maloney (1999), the report estimates using the formula below. Maloney argued that industrial value added and social security are two of the causes determining the scale of informal employment. Hence, his regress self-employment share by the logarithm of industrial value added per industrial worker, social security taxes as a share of the wage by worker, an index of employment protection, real interest rate, duration of unemployment benefit, share of 16–20 years old persons to the working population and a Latin dummy (Maloney use the data of OECD countries and Latin American countries). This report uses an education variable instead of a social security or unemployment benefit variable as in Maloney (1999).

$$Informal = \beta_0 + \beta_1 ln \_manu + \beta_2 ln \_manu2 + \beta_3 EXS + \beta_4 Inflation + \eta$$

(4-2)

Informal is the same in (4-1), the self-employed share to employment. Data is provided by the national experts for APO member countries and the ILO Laborsta for OECD countries. *ln\_manu* is the share of manufacturing value added in GDP%, and *ln\_manu2* is square of *ln\_manu*. These sources are the *APO Productivity Databook* and the OECD's *World Development Indicators*. EXS is public expenditures to secondary education per pupil as a percentage of GDP per capita in 2006 (UNESCO 2010a). Inflation is average consumer prices as measured by the International Monetary Fund (IMF). We use the bootstrap method for this estimation, and if education affects informal employment reduction, coefficient 63\_ is negative. If we are going to anticipate the results, education contributes to increasing economic growth and reduces informal employment.

Hence, second, we investigate the opportunities of human investment to informal employment in participating APO member countries. We estimate the opportunity of job training, how many people receive an education and which education level the people obtain. With respect to job training, it can be divided into On-the-Job Training (OJT) and Off-the-Job Training (Off-JT). The difference between them according to one definition is whether the employee receives training at the place of work while doing the actual job. By another definition, the difference between OJT and Off-JT is the relationship between the trainee and firm; as such, OJT is training in employment. Our meeting examines these definitions and many countries based on the latter definition, not including Pakistan. However, the data that we use in this chapter are not divided between OJT and Off-JT, not including the ROK which collects its data based on first definition.

And then, we observe the realities of job training and education. We look at job training by industry because we analyze the dynamic of informal employment from industry aspects in the previous section, and we would like to use the same point of view. We investigate whether in richer countries, training runs more in the industries where many people work, the training-intensive industries as an Asian trend and the specialty of these industries. Moreover, we look at training and education from the supply side, namely budget and implementing agency. We compare the education expenditure and GDP or volume of informal employment.

In addition, at the end of this section, we explain gross enrolment ratio (GER). We take this data from UNESCO (2010a), which determines the gross enrolment ratio as follows.

$$GER_{h}^{t} = \frac{E_{h}^{t}}{P_{h}^{t}} \times 100$$
(4-3)

*GER* is the gross enrolment ratio at the level of education by school year *t*, while  $E_h^t$  is enrolment at the level of education *h* in school year *t*, and  $P_h^t$  is the population in the age group that officially corresponds to the level of education *h* in school year *t*.

According to UNESCO, the interplate gross enrolment ratio is defined as follows.

A high GER generally indicates a high degree of participation, whether the pupils belong to the official age group or not. A GER value approaching or exceeding 100 percent indicates that a country is, in principle, able to accommodate all of its school-age population, but it does not indicate the proportion already enrolled. The achievement of a GER of 100 percent is therefore a necessary but not sufficient condition for enrolling all eligible children in school. When the GER exceeds 90 percent for a particular level of education, the aggregate number of places for pupils is approaching the number required for universal access of the official age group. However, this is a meaningful interpretation only if one can expect the under-aged and over-aged enrolments to decline in the future to free places for pupils from the expected age group. (UNESCO 2010b)

In addition, UNESCO argues that the limitation of gross enrolment ratio is as follows.

GER can exceed 100 percent due to the inclusion of over-aged and under-aged pupils/students because of early or late entrants, and grade repetition. In this case, a rigorous interpretation of GER needs additional information to assess the extent of repetition, late entrants, etc. (UNESCO 2010b).

4.2 Job Training and Education

#### 4.2.1 Effects

Finally, how much does job training or education affect economic growth or contribute to reducing informal employment? Table 3 is the result of (4-1). We propose the result of estimation excluding the APO dummy variable because that variable is not significant.

As well as Wolff (2000), who estimates the educational effect to the economic growth of OECD countries, each country's economic level relative to the U.S. in 1980 (Wolff uses the level in 1950) has a negative impact on economic growth: -0.00016 in column (1) and -0.00025, -0.00024 in column (2), (3) in Table 3. If the economic level in 1980 increases 1 (U.S. economic level=100), economic growth decreases about 0.00024 percentage points. Investment increases economic growth but its significance is not clear.

|                 | (1)         |           | 1        | (2)   |           |          | (3)            |           |
|-----------------|-------------|-----------|----------|-------|-----------|----------|----------------|-----------|
|                 | (1)         |           |          | (4)   |           |          | $(\mathbf{J})$ |           |
|                 | Coef.       | Std. Err. | Coef.    |       | Std. Err. | Coef.    |                | Std. Err. |
| Relative RGDPW0 | -0.00016 ** | 0.00007   | -0.00025 | ***   | 0.00005   | -0.00024 | ***            | 0.00006   |
| INVERATE        | 0.00051 *   | 0.00029   | 0.00043  | #     | 0.00026   | 0.00050  |                | 0.00032   |
| RDGDP           | -0.00018    | 0.00233   |          |       |           |          |                |           |
| Scondempl       |             |           | 0.01087  | *     | 0.00532   | 0.01029  | *              | 0.00578   |
| Informal        |             |           |          |       |           | 0.00003  |                | 0.00007   |
| Constant        | 0.04814 *** | 0.00689   | 0.00879  |       | 0.02191   | 0.00872  |                | 0.02298   |
| Sample          | 32          |           |          | 25    |           |          | 24             |           |
| AdjR-squared    | 0.186       | 9         | (        | 0.458 | 34        | C        | .417           | 4         |

| Table 3 Education Effect on Economic Growth |
|---|
| Dependent variable = ln(RGDPW07/RGDPW80)/28 |

RGDPWt: GDP per capita in year t, measured in US\$ in current price. Source: Penn World Table Mark 6.3. Relative RGDPW0: RGDPW level of the country relative to the RGDPW level of the U.S. in 1980 (U.S.=100).

INVERATE: Investment share of real Gross Domestic Product per capita averaged over the regression period(%). Source: Penn World Table Mark 6.3.

RDGDP: Ratio of R&D gross expenditure to GDP averaged over the regression period (%). Source: UNESCO.

Scondempl: logarithm of the raio of secondary and tertiary school graduated worker to employment(%).

Informal: Self-employed share to employment(%). Source: National Expert for APO countries and ILO laborsta.

\* significant at the 1% level, \*\* at 5% level, \* at 10% level . ( # at 15% level.)

In our estimation, the report uses the logarithm of the ratio of secondary and tertiary school graduate workers to employment instead of the enrolment ratio of secondary school. The ratio of secondary and tertiary school graduate workers is significant and the coefficient is 0.011 in column (2) and 0.01 in column (3) in Table 3. This means that the increase of 1 percentage point for the ratio of secondary and tertiary school graduate workers augments 0.01 percentage points in economic growth. The coefficient of column (3) is the amount regressed (4-1) with the explanation of the self-employed share to employment—substitution of informal share: informal. The coefficient of *informal* is positive but not significant.

As a result, we can confirm the positive education effect to economic growth even including Asian countries. Next, we estimate the education effect to the scale of informal employment. Table 4 is the result (4-2) of the estimated bootstrap method. In this estimation, the public expenditures to secondary education per pupil as a percentage of GDP per capita is used for estimating the education effect. The result is about -0.8 and -0.9; -0.76417 of EXS in column (1) and -0.89675 in column (2). The informal share is substituted by the ratio of self-employed to total employment as well as Table 3. Increasing expenditures for secondary education diminishes the share of informal employment, but the coefficient is insignificant.

Regarding column (1), the more manufacturing value added is augmented, the more the informal share decreases, although at an insignificant level. Included in the square of manufacturing value added in column (2), the manufacturing value added is positive and the square of manufacturing value added is negative, but insignificant. This means that the more manufacturing value added is increased, the more the informal share increases at the first stage; and then the more manufacturing value added increases, the less the informal share increases. This result is consistent with the observation in Chapter 3, section 3.2.1.

At the above estimation, it is possible that the education investment is endogenous; in other words, the more education investment increases, the more manufacturing value added increases. However, we did not examine the endogenous test to the education expenditure variable because the coefficient is insignificant.

|              | (*       | 1)        | (2       | )         |  |
|--------------|----------|-----------|----------|-----------|--|
|              | Coef.    | Std. Err. | Coef.    | Std. Err. |  |
| manu         | -0.73322 | 0.83803   | 0.80197  | 6.02673   |  |
| manu2        |          |           | -0.04356 | 0.18036   |  |
| EXS          | -0.76417 | 0.70791   | -0.89675 | 0.99517   |  |
| inflation    | 2.70130  | 3.77874   | 2.56908  | 4.11309   |  |
| Constant     | 44.57542 | 33.88784  | 36.07077 | 52.76300  |  |
| sample       | 24       |           | 24       |           |  |
| AdjR-squared | 0.0      | 672       | 0.0      | 23        |  |

# Table 4 Education Effect on the Informal Employment ShareDependent variable=Informal, Bootstrap

Informal: Self-employed share to employment(%). Source: National Expert for APO countries and LO laborsta for OECD countries.

manu: Share of manufacturing value added in GDP(%). Source: APO Data book and World Development Indicators.

manu2: Square of manu

EXS: Public expenditure to secondary education per pupil as a % of GDP per capita in 2006. Source:UNESCO

inflation: Aaverage consumer prices. Source IMF.

\* significant at the 1% level, \*\* at 5% level, \* at 10% level .

## 4.2.2 Opportunities

How often or what probability of job training or education does informal employment have? Let us observe job training and education by employment status. We look at these opportunities by each country because we do not have the data which measured the same standard for international comparison. First, let us asset the job training opportunity.

Job Training Opportunity

## 1. Fiji

Figure 7.1a is the ratio of dissatisfaction with one's job due to a lack of job training

opportunities by employment status provided by the "2004–2005 Employment and Unemployment Survey. The number responses totaled 1,247, with wage earners, family workers and community workers comprising the highest volume of dissatisfied workers caused by a lack of training. However, while wage workers had the highest percentage in employment, the volume of dissatisfied workers is generally important.

Figure 7.1b is the percentage of dissatisfied workers by employment status. When we look at this, the overwhelming proportion of dissatisfied workers caused by a lack of job training is in the community workers category. Next is family workers. Wage workers is high in volume for all responses, but the percentage of dissatisfied workers among wages worker is low. Few people within the self-employed category are dissatisfied with their jobs due to a lack of training; by contrast, when job training falls beneath the level of employees, many are dissatisfied with their jobs.





#### 2. India

Figure 7.2a is the percentage of those receiving or to have received job training (formal or non-formal training) by workplace (organized/unorganized) among Indian males, 15–19 years old. Formal training indicates training that is curriculum specific, and provided at institutions or by experts within a firm. Informal training indicates training involves master-disciple relationship and its material/monetary investment is often low. Regarding Figure 7.2a, about 10 percent of workers at organized workplaces received (or are receiving) formal training, while only one-fifth of unorganized workers do. On the other hand, the percentage of those who received (or are receiving) non-formal training workers is higher in unorganized workplaces than in organized ones.

Figure 7.2b shows the same figure for females. Like with males, the percentage of those to have received (or are receiving) formal training in organized workplaces is higher than those in unorganized ones. Among organized workers, female workers who received (or are receiving) formal training is higher than for males. This can be

interpreted as there being more competition among female workers and only higher skilled workers as compared to males who enter organized workplaces—Figure 7.2b includes those receiving training if this report assumes that these people are few in number<sup>5</sup>—rather female workers have more opportunity to receive formal job training.

Figure 7.2c is classified in more detail than the previous figures. Figure 7.2c indicates the percentage of workers by employment status to have received (or are receiving) formal or no formal training. Overall, each employment status in organized workplaces has a higher rate than in unorganized workplaces. Especially, we should pay attention to formal training in organized workplaces. The percentage is quite different for regular and casual workers. For Figures 7.2a to 7.2c, the most to have received formal training in organized workplaces is regular workers. These data are only for young workers; this report cannot conclude that there are fewer job-training opportunities in unorganized workplaces, but less formal training received workers at the current time work in unorganized workplaces.

<sup>&</sup>lt;sup>5</sup>The number of people who received or receiving formal training is 4.3 millions in organized and unorganized workplaces. Of this number, 1.2 million workers are "receiving" training.







#### 3. ROK, Malaysia, Sri Lanka

Figure 7.3 is the percentage of OJT receiving workers by firm scale in the ROK. Regarding this figure, we cannot find any difference between genders, and more than 30 percent of workers take job training at firms with 10 or more employees while the rate is less than 10 percent at firms with fewer than 10 employees. Figure 7.4 indicates the percentage of job training program participants out of total employees in Malaysia. Under the SBL Scheme (Training Assistance Scheme, in both English and the Bahasa Malaysia national language; Training Assistance Scheme), employers are allowed to identify their own training needs and to implement their training programs to retrain and upgrade their employees' skills in line with their operational and business requirements. The SBL-KHAS Scheme (Special Training Assistance Scheme) eligible to be offered under this scheme is public and the in-house programs are conducted by training providers who are registered with PSMB (Human Resources Development Fund, which is the coordinating agency for the schemes). To fulfill the needs of employers who wish to conduct in-house training programs, the course contents can be customized to cater to individual employers' needs. The PROLUS Scheme (Approved Training Programme) publicly being offered consists of Management/Administrative Skills, Craft/Technical Skills, Computerrelated Skills and Productivity-related Skills, and the PERLA Scheme (an acronym for Perjanjian Latihan) is an extension of the PROLUS Scheme. Most people participate in SBL, and every program is participated in at large-scale firms more often than at small-scale firms. For Sri Lanka, the data concerning job training opportunities cannot be obtained but the following data was obtained—reasons of not receiving job training for the unemployed and previous employment status of those receiving job training among the unemployed in Sri Lanka. Not only did the reasons include financial difficulties but also certain people thought such job training was not of relative importance for a job. Table 6 shows the previous status of job training among those receiving unemployment. More than half of the people were working, many of whom were clerks or crafts and related workers.





Note: The value for the fewer than 10 workers is multiplied 100. In this figure, denominator is total employment, not the each categorized number like figure 7.2 and 7.3.

| Reason  |        |        |        |
|---|--------|--------|--------|
| Reason  | 2006   | 2007   | 2008   |
|   |        |        |        |
| Thinks that the higher education (s)he received is adequate for a job | 60562  | 62390  | 66809  |
| Didn't realize the imporatance of such training for a job             | 120716 | 94297  | 83917  |
| Financial diffculties to get appropriate formal training              | 63074  | 58092  | 41528  |
| Non-available projects or training institutions within the area       | 37667  | 21234  | 19695  |
| No confidence in the training institutions available in the area      | *      | *      | *      |
| Receiving training at present   | 21920  | 22646  | 19221  |
| Others  | 58160  | 62671  | 41828  |
| Total   | 364317 | 322693 | 275187 |
| * Delieble setimentes un evelleble                                    |        |        |        |

Table 5 Number of Unemployed Persons Not Able to Obtain Formal Technical Training in Sri Lanka, by Reason

\* Reliable estimates unavailable.

|  | 2006   | 2007   | 2008   |
|--|--------|--------|--------|
| Working total                              | 47909  | 38357  | 45869  |
| Professionals                              | 5289   | *      | *      |
| Technical and associate professionals      | 5031   | 5556   | 6943   |
| Clerks                                     | 8174   | 8440   | 10481  |
| Proprietors and managers of enterprises    | *      | *      | *      |
| Sales and service workers                  | 5931   | *      | *      |
| Skilled agricultural and fishery workers   | *      | *      | *      |
| Crafts and related workers                 | 14317  | 9702   | 9185   |
| Plant and machine operators and assemblers | *      | *      | *      |
| Elementary occupations                     | *      | *      | *      |
| Unidentified                               | *      | *      | *      |
| Not working                                | 81214  | 85971  | 65693  |
| Total                                      | 129122 | 124328 | 111562 |

Table 6 Number of Unemployed to Have Received Training, by Previous Working Status and Main Activities in Sri Lanka

\* Reliable estimates unavailable.

As observed above, community workers, casual workers, unorganized firm workers and small-scale firms have limited job training opportunities. If this working status is captured in the informal employment characteristics, informal employment has limited job training opportunities. However, the job training opportunities of these workers, namely, community workers, casual workers, unorganized sector workers and small-scale firm workers, are not zero. Even among formal workers, fewer than half take job training in the above countries. We cannot observe the phenomenon that the most formal workers take job training while few informal workers do. Next, let us assess the education opportunity of informal employment.

## **Education Opportunity**

Figure 8 shows the gross enrollment ratio for each education level, namely pre-primary, primary, secondary, and upper secondary in 2005 (2001 for Vietnam, and 2004 for secondary and upper secondary in Sri Lanka), provided by UNESCO (2010c). Figure 8.1 shows the gross enrolment ratio for males while Figure 8.2 is for females. We need more information to conduct a precise analysis because some

countries exceed 100 percent of the gross enrolment ratio (see section 4.1, where UNESCO's explanation of the limitation of gross enrolment ratio is detailed). Although we should pay attention to data characteristics, in every country with the exception of Pakistan females, almost all children go to primary school (see section 4.1 where UNESCO says 90% is the particular level of education line under correct data). Concerning secondary school, more than 80 percent of children in Fiji, the ROK, Mongolia, Philippines and Sri Lanka go to the school, while the figure is less than 60 percent in India (males), Malaysia and Vietnam, and less than 40% in Bangladesh, India (female), Nepal and Pakistan.

Rather, presented in Figure 9 is the education level of those already in the workforce. The data do not show the education level of those currently in school. Figure 9 represents the situation in six of the 11 APO member countries for which we could obtain data. It is the graduate record by employment status including self-employed, for which we use informal employment substitution. Figures 9.1a and 9.1b are for males (Vietnam data include both genders), and the percentage of higher graduate record is more important in employees than the self-employed. Especially, in Mongolia and the ROK, whose gross enrolment ratios for secondary school are more than 80 percent, the percentages of secondary education are high for the self-employed.

Figures 9.2a and 9.2b are for females. As with males, the final graduate record of employees is higher than for the self-employed. There are no differences by employment status between males and females. However, the females' final graduate record is higher than males in both employees and the self-employed in Mongolia, for which the gross enrolment of females in all education levels is higher than males. Also, the percentage of primary school record of females is higher than males in employees and the self-employed in India, where about 60 percent of male children go to secondary school while more than 40 percent of female children go to secondary school.



Note: Viet Nam=2001, Secondary and upper secondary schools of Sri Lanka=2004



Note: Viet Nam=2001, Secondary and upper secondary schools of Sri Lanka=2004

53









#### 4.2.3 Realities

In the previous section, we understand that the job training opportunities for informal employment are not nil and almost all children at least go to primary school. In this section, this report looks at the realities of job training and education when people have these opportunities. The report observes the realities regardless of formal and informal employment.

#### Realities of Job Training

1. Training receiving portion and working portion by industry

Figure 10 considers workers who take job training during one year or a certain period in the survey year. The vertical axis indicates the value of job training receiving workers in each industry divided by the total job training receiving workers. The horizontal axis indicates the percentage of each industry employment in total employment. The point placed above the 45 degree line in the figure indicates that the percentage of job training receiving workers in each industry is higher than the percentage of total workers. In the other words, this is a training-intensive industry. In Figures 10.1a to 10.6b, "a" indicates all industries in each country and "b" is an expended figure excluding high proportion industries.

First, the higher a country's economic level, the higher the proportion of training supplied by large industries. Regarding the ROK, in Figure 10.3a, manufacturing which is a large industry, falls a little bit beneath the 45-degree line. The percentage of employment in agriculture, often a large industry in other countries, is small in the ROK. The training runs at not so low a proportion in large industries.

Figure 10.2a in India indicates manufacturing as the next large industry after agriculture that supplies training on an appropriate basis. This Indian figure is targeted at only 15–29 year olds. In Bangladesh, Nepal and Sri Lanka, the percentage of employment in agricultural is especially important, and Figure 10.1a in Bangladesh shows that wholesales as the next large industry after agricultural is not a training-intensive industry. Also, Figure 10.4b in Nepal shows that wholesale and manufacturing, which are next large industries after agricultural, are not training-intensive industries.

Second, which industry is a high training-intensive industry over other countries? In most countries, the following are the industries that are placed above 45-degree line: manufacturing, education, transport, storage and communications, public administration and defense and other community, social and personal services. Manufacturing places above the 45-degree line in almost all countries, with the exception being Nepal, and education does that in all. In financial intermediation, health and social work, which are small industries (i.e., relatively few people work in these industries), training is in effect at a high ratio. Thus, public or technical industries are training-intensive industries, while on the other hand, wholesale and retail trade or construction are not training-intensive industries. Additionally, manufacturing and wholesales are key contributors in changes of informal employment in the previous section in section 3.2.2.

What is the difference between training-intensive industries and non trainingintensive industries? We observe this point next.








59













62



2. Self-employed ratio and ratio of training receiving workers in each industry

In Figure 11, the vertical axis is the ratio of training receiving workers in each industry and the horizontal axis is the self-employed ratio in each industry. Looking at Figures 11.1 to 11.5, as in the previous section, education, transport, storage and communications, financial intermediation, and health and social work are intensive training receiving industries. These industries place upward in the figures of this section. In the ROK, Sri Lanka and Nepal, industries which have a smaller proportion of self-employed—higher proportion of employees—job training is more in effect clearly. This is consistent that wage earners, regular workers or large scale firms' workers take training much more than other working status people as shown in Figure 7.











3. The number of training implementing agencies

Tables 7 and 8 show the number of job training providers and capacity (some countries indicate enrolment persons instead of capacity). It should be carefully noted that the covered institutions are different among countries. Fiji reports only high education institutions. On the other hand, Bangladesh and India report them excluding education institutions. Hence, these countries' data are underestimations. Figure 12 indicates the number of training institutions per 1,000 persons of the labor force. The ROK, Mongolia, Sri Lanka and Pakistan have small numbers of training institutions. At the same time, private training implementing agencies are developed in the ROK, Mongolia and Pakistan, as seen in Table 7. However, once again, the over/under estimation in Figure 12 should be noted.

Table 8 is the number of training agencies by training area as well as proper authorities in Bangladesh and India. In Bangladesh, there are many training institutions in the agricultural area, nursing and teachers. In India, authorities concerning labor, health and MSEs have many providers, but otherwise rural development and textiles have many training institutions. Concerning education institutions, we look at them below.

|  |                               | ROK, 2  | 2008  | Mongolia, 2007/08  | Nepal, 2007                            |   | Fiji, 2008                   |  |   |
|--|-------------------------------|---|---|--------------------|--|---|------------------------------|--|---|
|  |                               |   | Number of<br>training<br>implementing<br>agency | Total<br>capacity* | Number of training implementing agency | Number of<br>training<br>implementing<br>agency | capacity<br>per one<br>class |  | Number of<br>training<br>implementing<br>agency |
|  |                               | Nation  |   |                    |  | 18  | 30                           |  |   |
|  | Public sector                 | Local public<br>authorities                               |   |                    | 23                                     | 75  | 30                           |  |   |
|  |                               | Semi-public<br>sector                                     |   |                    |  | 10  | 30                           |  |   |
| ~  |                               | University,<br>graduate                                   | 390   | 767224             | 10                                     | 621   | 30-40                        | Technical and vocational<br>secondaryeducation | 66  |
| g agenc  | Education institution         | school,junior<br>colleges                                 |   | -                  | -                                      |   |                              | Higher education                               | 26  |
| plementin                                      |                               | Special training<br>school                                | 87  | 16348              | 13                                     | 230**   | 40                           | Special school education                       | 17  |
| E  |                               | Public servant  |   |                    |  | 0   |                              |  |   |
|  | Private sector                | Employer's<br>association(e.g.<br>chamber of<br>commerce) | 71  |                    | 10                                     | 341   | 20                           |  |   |
|  |                               | Private<br>enterprise                                     |   |                    |  | 550   | 10-30                        |  |   |
| Total  |                               | 548   | 783572  | 56                 | 1615                                   |   |                              | 109  |   |
|  | Labor force(Thousand          | ds)   | 23433   |                    | 779                                    | 11804   |                              |  | 320   |
| Implementing agencyLabor force in<br>Thousands |                               |   | 0.023   |                    | 0.072                                  | 0.137   |                              |  | 0.340   |
| *Car   | acitynumber of nersons per or | ne training impleme                                       | ting agency, num                                | her offraining     |  | **Technical and                                 | ocational train              | ing school in the country                      |   |

Table 7 Training Implementing Agency

\* Capacitynumber of persons per one training implementing agency\_number of training

implementing agency.

Data provided by National Experts

#### Table 7 Training Implementing Agency (Continue)

|  |                      |   | SriLanka,   | Pakistan,2005                                   |                   |                          |   | Philippines,2000/01 |       |                     |   |   |
|--|----------------------|---|---|---|-------------------|--------------------------|---|---------------------|-------|---------------------|---|---|
|  |                      |   |   | Number of<br>training<br>implementing<br>agency | No:of<br>trainees |                          | Number of<br>training<br>implementing<br>agency | Employ<br>ment      |       |                     |   | Number of<br>training<br>implementing<br>agency |
|  |                      | Nation  | Department Technical<br>Education and Training<br>Vocational Training Authority<br>of Sri Lanka | 38<br>232                                       | 32000<br>28000    | Polytechnic<br>Institute | 80  | 39290               |       | School<br>based     | TESDA_ TVIs<br>HEIs/State Universities and<br>Colleges (SUCs) | 59<br>130                                       |
| Public sector Local public                     |                      | Local public  | National Apprenticeship and<br>Industrial Training Authority                                    | 49  | 20000             | Monotechnic              | 26  | 4702                | blic  |                     | Dep.ED Schools  | 92  |
|  |                      | authorities   | National Institute of Technical<br>Education of Sri Lanka                                       | 1   | 2450              | Institute                | 20  | 4102                | Ρu    |                     | TESDARTC/PTCs   | 63  |
|  | Semi-public          |   | National Institute of Business<br>Management  | 3   |                   | Vocational               | 810   | 59760               |       | Non school<br>based | Local Government Units<br>(LGUs)                              | 693   |
|  | l                    | 360.01  | Graphic (INGRIN)  | 1   |                   | I ISULIE                 | 2   |                     |       |                     | Others  | 227   |
| 2  |                      | University,<br>graduate                                   |   |   |                   |                          |   |                     |       |                     | Technical Vocational<br>Institutions (TVIs)                   | 776   |
| Education institution colleges                 |                      | school,junior<br>colleges                                 | -   |   |                   |                          |   |                     |       | School<br>based     | Higher Educational  | 618   |
| olementir                                      | l                    | Special training school                                   |   |   |                   |                          |   |                     |       |                     | Institutions (HEIs)   |   |
| Ē  |                      | Public servant  |   |   |                   | Polytechnic<br>Institute | 71  | 16473               | ivate |                     | IndustryBased   | 328   |
|  | Private sector       | Employer's<br>association(e.g.<br>chamber of<br>commerce) |   |   |                   | Monotechnic<br>Institute | 23  | 1221                | P     | Non school based    | NGO-Based   | 137   |
|  |                      | Private<br>enterprise                                     |   |   |                   | Vocational<br>Institute  | 2049  | 117241              |       |                     | Others  | 22  |
| Total  |                      |   | 324   | 82450   |                   | 3059                     | 238687  |                     |       |                     | 3145  |   |
|  | Labor force(Thousand | ds)   |   | 7175  |                   |                          | 46952   |                     |       |                     |   | 31553   |
| Implementing agencyLabor force in<br>Thousands |                      |   |   | 0.045   |                   |                          | 0.065   |                     |       |                     |   | 0.100   |
|  |                      |   |   |   |                   |                          |   |                     | 1     |                     |   |   |

Data provided by National Experts.

Technical Education and Skills Development Authority (TESDA), \_\_\_\_ Regional Training Center (RTC), Provincial Training Center (PTC)

|   |            |                                       | Ban   | gladesh, 2 | 2005 |       |           |       | India, 2009   |   |   |  |
|---|------------|---------------------------------------|-------|------------|------|-------|-----------|-------|---|---|---|--|
|   | Management | Number of<br>training<br>implementing |       | Teachers   | -    |       | Enrolment |       | Ministry/department/<br>organisation  | Number of training<br>implementing agency                       | Presenttraining<br>capacityper annum<br>(IN LAKH) |  |
|   |            | agency                                | Total | Female     | Male | Total | Female    | Male  | National skill development corporation  | -   | -   |  |
| Agricultural training                             | Public     | 12                                    | 112   | 5          | 107  | 7103  | 1403      | 5700  | Labour & employment   | 33000   | 12 .00  |  |
| institute   | Private    | 47                                    | 150   | 18         | 132  | 7285  | 430       | 6855  | Tourism   | 38  | 0.17  |  |
|   | Tota/      | 59                                    | 262   | 23         | 239  | 14388 | 1833      | 12555 | lextiles<br>Trapapart   | 277   | 0.15  |  |
|   | Private    | - 39<br>- 5                           | 232   | 109        | 73   | 515   | 3100      | 104   | Tribal affaire  | 63  | 0.02  |  |
| Nursing training<br>institute                     | Total      | 44                                    | 261   | 183        | 78   | 3839  | 3658      | 181   | Rural development<br>(RUDSETI), infrastructure<br>leasing & financial services<br>limited | 156   | 5.48  |  |
| Primarytraining<br>institute                      | Public     | 54                                    | 517   | 179        | 338  | 13025 | 5176      | 7849  | Women & child welfare   | 68  | 17.5  |  |
| Technical teachers<br>training college            | Public     | 1                                     | 15    | 2          | 13   | 72    | 22        | 50    | Agriculture   | 72  | 19.81   |  |
| Teachers training college                         | Public     | 14                                    | 247   | 74         | 173  | 6518  | 2885      | 3633  | HRD higher education<br>HRD Vocational education  | 10,000(Voc.schls)<br>(Engg Collegs 2297<br>Polytechnics 1675)   | 19.60<br>14.00                                    |  |
|   | Private    | 85                                    | 988   | 220        | 768  | 11638 | 4352      | 7286  | Deptofheawindustry  | *   | *   |  |
|   | Tota/      | 99                                    | 1235  | 294        | 941  | 18156 | 7237      | 10919 | Urban development   | 34  | 0.013   |  |
| Vocational teachers<br>training college           | Public     | 1                                     | 6     | 1          |      | 120   |           |       | Department of information<br>technology   | 1000 (Affiliated centres) +7 CDAC                               | 1.37  |  |
| Secondaryteachers<br>training institute           | Public     | 5                                     | 66    | 19         | 47   | 542   | 46        | 496   | Food processing<br>industries   | 34  | 0.1   |  |
| Madrasah teachers<br>training institute           | Public     | 1                                     | 17    | 2          | 15   | 959   |           |       | Construction industry<br>development council<br>(under planning<br>commission)            | 147   | 4.64  |  |
|   |            |                                       |       |            |      |       |           |       | Health & familywelfare  | 3802  | 1.35  |  |
|   |            |                                       |       |            |      |       |           |       | Micro small medium<br>enterprise  | 356   | 2.92  |  |
|   |            |                                       |       |            |      |       |           |       | Social justice & empowerment  | Through NGOs & others   | 50  |  |
|   |            |                                       |       |            |      |       |           |       | Overseas indian affairs   | In partnership with<br>MSME/state<br>Government/CII/NGO<br>etc. | 0.13  |  |
|   |            |                                       |       |            |      |       |           |       | Finance-insurance/banking   | *   |   |  |
|   |            |                                       |       |            |      |       |           |       | Consumer attairs  | *   |   |  |
|   |            |                                       |       |            |      |       |           |       | Others (power, petroleum  | NA  |   |  |
| total   | +          | 209                                   |       |            |      |       |           |       | eic.)   | 52026   |   |  |
| Labor<br>force(Thousands)                         |            | 47357                                 |       |            |      |       |           |       |   | 468634  |   |  |
| Implementing<br>agencyLabor force in<br>Thousands |            | 0.004                                 |       |            |      |       |           |       |   | 0.111   |   |  |
| 1   | 1          |                                       | 1     |            |      |       |           |       | 1   |   |   |  |

#### Table 8 Training Implementing Agency in Bangladesh and India

provided byNational Experts.

t \*Apresentihese ministries are not directly involved in pre-employment training activities.



#### **Realities of Education**

In section 4.2.2, we understand that almost all children go to primary school. In this section, let us look at the realities of education, merely from the supply side.

#### 1. Education expenditure

Figure 13.1 shows the share of education budget to GDP, and Figure 13.2 indicates the share of the education budget to the national budget. We should pay attention that we do not use the same standard to which area is included in the education budget. Especially, Mongolia data is used to the budget set of the Minister of Education, Culture and Science. About Malaysia, we use the data of 6 MP (marshal plan) in 1991–2000 and 7 MP in 1996–2005.

Regarding these figures, we do not find a clear relationship between the share of education budget to GDP or national budget and enrolment ratio in Figure 8. We find that the increasing employment graduated secondary and tertiary school augment the economic growth in section 4.2.1. The increasing of the education budget is not enough for economic growth.

Moreover, let us compare the public expenditure per pupil as a percentage of GDP per capita by education level among APO member countries. Figure 14.1 is the figure using data provided by UNESCO (2006).<sup>6</sup> Regarding this figure, public expenditures per pupil as a percentage of GDP per capita for tertiary education is higher than that of primary or secondary, with the exception being the ROK, the Philippines and Mongolia. There is no difference between the public expenditure per pupil as a percentage of GDP per capita for primary and that for secondary although Bangladesh, India, Mongolia and the Philippines whose economic levels relative to low expenses are a little bit smaller than that of other countries.

On one hand, differences of education expenditures come from different policies, while on the other, the share of education expenditures decreases in rich countries if the basic necessary amount is the same among countries, or lower economic level countries invest in education more. Hence, Figure 14.2 indicates the share of education expenditures to GDP of Figure 14.1 and GDP per capita in 2007 measured in current US dollars. In the ROK, Malaysia and Fiji, the share of education expenditures is high and GDP per capita is also high. It is the same finding as that of the estimation in Table 3 in section 4.2.1. However, comparing among Nepal, the Philippines and Bangladesh, the less a country's GDP per capita, the more the share of education expenditures. In other words, these countries invest in human capital and have possibilities of economic growth in the future.

Moreover, Figure 14.3 uses the ratio of self-employed to total employment instead of GDP per capita in Figure 14.2. In section 4.2.1, we estimate the effect of secondary education expenditures to the scale of informal employment controlled by some explanation variables. Here, let us just compare values in figures. In the ROK,

<sup>&</sup>lt;sup>6</sup> Bangladesh, India and the ROK in 2006 data, the Philippines in 2005, Fiji and Mongolia (primary/secondary) in 2004, Mongolia (tertiary) in 2003 and Vietnam in 2008.

Malaysia and Fiji, education expenditures are more, and there are fewer self-employed individuals. The GDP per capita of these countries is high as seen in Figure 14.2. Once again, it is possible to repeat that these countries have fewer self-employed caused by a high economic level. Additionally, we do not find different results even if we included private expenditures, although we do not show the figure.











### 2. Number of education institutions

Figure 15 shows the number of educational institution by level. In almost all countries, the number of existing institutions is in the order of primary school first,

followed by secondary school and then tertiary school. However, the proportion of tertiary schools is higher in India and Pakistan rather than in other countries. The proportion of secondary schools is higher than primary schools in Sri Lanka. Regarding the gross enrolment ratio in Figure 8, the secondary and tertiary ratio is important in Sri Lanka. However, this phenomenon does not appear in Pakistan and India.



#### 4.3 Conclusion

In this chapter, we analyze the relationship between job training or education and informal employment. First, we confirm the effect of education to economic growth and the informal employment share. As a result, augmentation of 1 percent secondary and tertiary graduated employment to total employment results in an increase of 0.01 percentage points in economic growth. Increasing investment to secondary education reduces informal employment. Also, increasing manufacturing valued added increases informal employment at the first stage but decreases it at the second stage. However, these variables are insignificant, so we do not check the origin of education variable, and we do not estimate the education effect using an instrument variable.

The job training or education opportunities of informal employment are fewer than those of formal employment. However, the opportunity is not zero. Hence, we observed the case when education or job training runs regardless of formal or informal employment.

The higher the economic level of a country, the more training is supplied in industries where large numbers of people work. Training runs well in public and technical industries like manufacturing and education, transport, storage and communications, and public administration and defense. In contrast, wholesale and retail trade and construction are not training-intensive industries. There is a positive relationship between the ratio of training receiving workers to total workers and the ratio of employees to total employment. This is consistent to employees having more training opportunities than the self-employed.

About education providers, the number of existing institutions is in the order of primary schools first, followed by secondary schools and then tertiary schools. The higher an education budget a country has, the more its economic growth. Yet, also for those countries whose economic level is lower, they invest more in human capital for the future.

# Appendix 1: Time Coverage

| Country Name | Year | Country Name | Year |
|--------------|------|--------------|------|
| Bangladesh   | 1982 | Malaysia     | 1982 |
|              | 1983 |              | 1983 |
|              | 1984 |              | 1984 |
|              | 1985 |              | 1985 |
|              | 1989 |              | 1986 |
|              | 1990 |              | 1987 |
|              | 1995 |              | 1988 |
|              | 1999 |              | 1989 |
|              | 2002 |              | 1990 |
|              | 2005 |              | 1992 |
| Fiji         | 2004 |              | 1993 |
| India        | 2000 |              | 1995 |
|              | 2005 |              | 1996 |
| ROK          | 2000 |              | 1997 |
|              | 2001 |              | 1998 |
|              | 2002 |              | 1999 |
|              | 2003 |              | 2000 |
|              | 2004 |              | 2001 |
|              | 2005 |              | 2002 |
|              | 2006 |              | 2003 |
|              | 2007 |              | 2004 |
|              | 2008 |              | 2005 |
| Mongolia     | 2006 |              | 2006 |
| Nepal        | 1998 |              | 2007 |
|              | 1999 | Sri Lanka    | 2006 |
|              | 2000 |              | 2007 |
|              | 2001 |              | 2008 |
|              | 2002 | Viet Nam     | 2006 |
|              | 2003 |              | 2007 |
|              | 2004 |              |      |
|              | 2005 |              |      |
|              | 2006 |              |      |
|              | 2007 |              |      |
|              | 2008 |              |      |
| Pakistan     | 2006 |              |      |
|              | 2007 |              |      |
| Philippines  | 2003 |              |      |
|              | 2004 |              |      |
|              | 2005 |              |      |
|              | 2006 |              |      |
|              | 2007 |              |      |

Appendix 2: Number of Employees according to Employment Category

| Country               | Voor | Self-em | ployed (the | ousands)       | Unreg | istered employ | ee (thousands) | No contract for employee (thousands)    |               |        |  |
|-----------------------|------|---------|-------------|----------------|-------|----------------|----------------|---|---------------|--------|--|
| Country               | Iear | Total   | Male        | Female         | Total | Male           | Female         | Total                                   | Male          | Female |  |
| Bangladesh            | 1982 | n.a.    | n.a.        | n.a.           | 20172 | 15916          | 4256           | n.a.                                    | n.a.          | n.a.   |  |
| 0                     | 1983 | n.a.    | n.a.        | n.a.           | 20766 | 16301          | 4465           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1984 | n.a.    | n.a.        | n.a.           | 21601 | 16892          | 4709           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1985 | n.a.    | n.a.        | n.a.           | 22220 | 17332          | 4888           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1989 | n.a.    | n.a.        | n.a.           | 23245 | 17992          | 5253           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1990 | n.a.    | n.a.        | n.a.           | 26241 | 20206          | 6035           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1995 | 37904   | 20200       | 17703          | 28214 | 21443          | 6771           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1999 | 35645   | 19309       | 16336          | 31283 | 23462          | 7821           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2002 | 36839   | 28748       | 8091           | 35076 | 26101          | 8975           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2005 | 40243   | 30484       | 9759           | 37149 | 27486          | 9663           | n.a.                                    | n.a.          | n.a.   |  |
| Fiji                  | 2004 | 78      | 59          | 19             | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
| India                 | 2000 | 208215  | 139949      | 68265<br>00410 | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
| DOK 8                 | 2005 | 5864    | 4181        | 1683           | n.a.  | n.a.           | n.a.           | 1/15/4<br>p.o                           | 119380<br>n.o | J2J88  |  |
| KOK "                 | 2000 | 6051    | 4298        | 1753           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2002 | 6190    | 4404        | 1786           | n a   | n a            | n a            | n a                                     | n a           | n a    |  |
|                       | 2003 | 6043    | 4424        | 1618           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2004 | 6110    | 4369        | 1740           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2005 | 6172    | 4366        | 1807           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2006 | 6135    | 4307        | 1828           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2007 | 6049    | 4228        | 1821           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2008 | 5970    | 4195        | 1776           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
| Malaysia              | 1982 | 1160    | 843         | 317            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1983 | 1243    | 883         | 360            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1984 | 1130    | 819         | 311            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1985 | 1190    | 864         | 326            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1986 | 1308    | 963         | 345            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1987 | 1280    | 944         | 336            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1988 | 1377    | 1022        | 356            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1989 | 1324    | 995         | 329            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1990 | 1384    | 1013        | 371            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1992 | 1277    | 943<br>1097 | 334            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1005 | 1207    | 1027        | 324<br>941     | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1996 | 1514    | 1125        | 390            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 1997 | 1450    | 1074        | 376            | n a   | n a            | n a            | n a                                     | n a           | n a    |  |
|                       | 1998 | 1522    | 1170        | 351            | n a   | n a            | n a            | n a                                     | n a           | n a    |  |
|                       | 1999 | 1489    | 1132        | 357            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2000 | 1586    | 1203        | 383            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2001 | 1515    | 1125        | 390            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2002 | 1480    | 1070        | 410            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2003 | 1536    | 1120        | 417            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2004 | 1678    | 1236        | 442            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2005 | 1672    | 1256        | 415            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2006 | 1733    | 1319        | 414            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2007 | 1831    | 1357        | 475            | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
| (                     | 1    | Solf-or | nloved (the | ueande)        | Unrog | istored employ | oo (thousands) | No contract for omployoe (the second o) |               |        |  |
| Country               | Year | Total   | Male        | Female         | Total | Male           | Female         | Total                                   | Male          | Femal  |  |
| Mongolia              | 2006 | 193     | 109         | 84             | no    | na             | n e            | no                                      | na            | no     |  |
| Nopal                 | 1998 | 7990    | 3618        | 4370           | 903   | 639            | 264            | n.a.                                    | n.a.          | n.a.   |  |
| ropai                 | 1999 | 7224    | 3629        | 3596           | 950   | 588            | 362            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2000 | 7412    | 3691        | 3720           | 982   | 605            | 377            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2001 | 7072    | 3494        | 3578           | 2122  | 1607           | 515            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2002 | 7788    | 3817        | 3968           | 1044  | 833            | 211            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2003 | 7962    | 3876        | 4087           | 1074  | 855            | 219            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2004 | 8130    | 3932        | 4205           | 1104  | 876            | 228            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2005 | 8293    | 3986        | 4315           | 1132  | 897            | 236            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2006 | 8440    | 4035        | 4421           | 1160  | 916            | 244            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2007 | 8572    | 4080        | 4519           | 1186  | 936            | 251            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2008 | 8572    | 4080        | 4519           | 1212  | 896            | 315            | n.a.                                    | n.a.          | n.a.   |  |
| Pakistan <sup>b</sup> | 2006 | n.a.    | n.a.        | n.a.           | n.a.  | n.a.           | n.a.           | n.a.                                    | n.a.          | n.a.   |  |
| Philippiness          | 2003 | 11517   | 7682        | 3835           | 12001 | 7070           | 4826           | na.                                     | n a           | n a    |  |
| r muppines -          | 2004 | 11630   | 7817        | 3816           | 13015 | 7922           | 5089           | n a                                     | n.a.          | n.a.   |  |
|                       | 2005 | 12157   | 8151        | 4000           | 13741 | 8047           | 5712           | n a                                     | n.a.          | n.a.   |  |
|                       | 2006 | 11923   | 8035        | 3890           | 14459 | 8502           | 5954           | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2007 | 12292   | 8288        | 4000           | 15014 | 8816           | 6194           | n.a.                                    | n.a.          | n.a.   |  |
| Sri Lanka             | 2006 | 3156    | 2027        | 1128           | 749   | 543            | 206            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2007 | 3065    | 1992        | 1073           | 801   | 590            | 211            | n.a.                                    | n.a.          | n.a.   |  |
|                       | 2008 | 3155    | 2017        | 1138           | 715   | 522            | 193            | n.a.                                    | n.a.          | n.a.   |  |
| Viet Nam              | 2006 | 22965   | 10543       | 12422          | 31317 | 15405          | 15911          | 35526                                   | 17775         | 17752  |  |
|                       | 2007 | 24685   | 11333       | 13352          | 33662 | 16559          | 17103          | 38187                                   | 19106         | 19081  |  |

Source: ILO and APO member country national experts. a: Excludes self-employed workers who hire more than 10 employee from self-employed data in the report. b: Pakistan data are reported as a percent. This report uses informal data according to estimates from the percentage data.

#### NUMBER OF EMPLOYEES ACCORDING TO EMPLOYMENT CATEGORY

|                          | 1    |                                     |            |                    |             | 1 10 10     |                       | 37.111                     | 1 10/1       | 1.)      |
|--------------------------|------|-------------------------------------|------------|--------------------|-------------|-------------|-----------------------|----------------------------|--------------|----------|
| Country                  | Voar | Fewer than 10 employees (thousands) |            |                    | Fewer t     | han 10 self | -employed (thousands) | Not nired self (thousands) |              |          |
| country                  | icai | Total                               | Male       | Female             | Total       | Male        | Female                | Total                      | Male         | Femal    |
| Bangladesh               | 1982 | na                                  | na         | na                 | no          | na          | n e                   | n 0                        | na           | no       |
| Dunghadoon               | 1983 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1984 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1985 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1080 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1000 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1005 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1000 | 11.a.                               | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1999 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2002 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
| 17                       | 2005 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
| Fiji                     | 2004 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
| India                    | 2000 | 160404                              | 110141     | 50262              | 206763      | 138742      | 68022                 | 120645                     | 99980        | 20665    |
| -                        | 2005 | 161478                              | 110692     | 50786              | 255971      | 165901      | 90071                 | 143461                     | 118556       | 24905    |
| ROK                      | 2000 | 5147                                | n.a.       | n.a.               | 5720        | n.a.        | n.a.                  | 4407                       | n.a.         | n.a.     |
|                          | 2001 | 5285                                | n.a.       | n.a.               | 5892        | n.a.        | n.a.                  | 4497                       | n.a.         | n.a.     |
|                          | 2002 | 5554                                | n.a.       | n.a.               | 6018        | n.a.        | n.a.                  | 4574                       | n.a.         | n.a.     |
|                          | 2003 | 5260                                | n.a.       | n.a.               | 5834        | n.a.        | n.a.                  | 4413                       | n.a.         | n.a.     |
|                          | 2004 | 5392                                | n.a.       | n.a.               | 5911        | n.a.        | n.a.                  | 4431                       | n.a.         | n.a.     |
|                          | 2005 | 5548                                | n.a.       | n.a.               | 5978        | n.a.        | n.a.                  | 4508                       | n.a.         | n.a.     |
|                          | 2006 | 5770                                | n.a.       | n.a.               | 5956        | n.a.        | n.a.                  | 4503                       | n.a.         | n.a.     |
|                          | 2007 | 5956                                | n.a.       | n.a.               | 5902        | n.a.        | n.a.                  | 4487                       | n.a.         | n.a.     |
|                          | 2008 | 6005                                | n.a.       | n.a.               | 5815        | n.a.        | n.a.                  | 4443                       | n.a.         | n.a.     |
| Malavsia                 | 1982 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1983 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1984 | na                                  | n a        | n a                | na          | na          | n 9                   | na                         | n a          | n a      |
|                          | 1985 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n o          | n.a.     |
|                          | 1986 | n.a.                                | n.a.       | 11.a.<br>n.o.      | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1087 | 11.a.                               | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1907 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1988 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1989 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1990 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1992 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1993 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1995 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1996 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1997 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1998 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 1999 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2000 | na                                  | na         | na                 | na          | na          | na                    | na                         | na           | na       |
|                          | 2001 | na                                  | n a        | n a                | na          | na          | n 9                   | na                         | n a          | n a      |
|                          | 2002 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n o          | n.a.     |
|                          | 2002 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2003 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2004 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2005 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2006 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2007 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
| -                        | 1    | <b>D</b> (1                         | 10         | . (1 1)            | <b>D</b> (1 | 10 10       |                       | N. (1)                     | 1 10/11      | 1)       |
| Country                  | Year | rewert                              | nan 10 emp | loyees (thousands) | rewert.     | nan 10 seif | employed (thousands)  | Not hir                    | ea seir (tho | Jusands) |
|                          |      | Total                               | Male       | Female             | Total       | Male        | Female                | Total                      | Male         | Femal    |
| Mongolia                 | 2006 | 58                                  | 25         | 33                 | 177         | 101         | 76                    | n.a.                       | n.a.         | n.a.     |
| Nepal                    | 1998 | 1305                                | 992        | 313                | 6847        | 3081        | 3765                  | 6833                       | 3081         | 3751     |
|                          | 1999 | 1373                                | 1191       | 182                | 7230        | 3701        | 3529                  | 7191                       | 3701         | 3490     |
|                          | 2000 | 1418                                | 1225       | 194                | 7468        | 3806        | 3662                  | 7429                       | 3806         | 3623     |
|                          | 2001 | 2253                                | 1747       | 506                | 6567        | 3234        | 3333                  | 6547                       | 3234         | 3313     |
|                          | 2002 | 1508                                | 1293       | 215                | 7939        | 4018        | 3921                  | 7900                       | 4018         | 3882     |
|                          | 2003 | 1552                                | 1327       | 225                | 8169        | 4124        | 4046                  | 8129                       | 4124         | 4006     |
|                          | 2004 | 1595                                | 1359       | 236                | 8393        | 4224        | 4169                  | 8353                       | 4224         | 4129     |
|                          | 2005 | 1636                                | 1391       | 245                | 8610        | 4324        | 4286                  | 8569                       | 4324         | 4245     |
|                          | 2006 | 1676                                | 1492       | 254                | 8818        | 4418        | 4400                  | 8776                       | 4418         | 4358     |
|                          | 2007 | 1714                                | 1459       | 269                | 9010        | 4511        | 4508                  | 8977                       | 4511         | 4466     |
|                          | 2007 | 1751                                | 1369       | 202                | 0911        | 4601        | 1500                  | 9160                       | 4601         | 1400     |
| Pakistan                 | 2008 | 1101                                | 1000       |                    | 0411        | -1001       | 1007                  | 5105                       | 4001         | 4400     |
| 1 akistan                | 2000 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2007 | n.a.                                | n.a.       | n.a.               | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
| Philippines <sup>c</sup> | 2003 | 12001                               | 7121       | 4879               | 11517       | 7682        | 3835                  | 10873                      | 7182         | 3691     |
|                          | 2004 | 16072                               | 9634       | 6434               | 11630       | 7817        | 3816                  | 10065                      | 6544         | 3524     |
|                          | 2005 | 16477                               | 9570       | 6909               | 12157       | 8151        | 4000                  | 10667                      | 6965         | 3702     |
|                          | 2006 | 16568                               | 9688       | 6876               | 11923       | 8035        | 3890                  | 10451                      | 6863         | 3588     |
|                          | 2007 | 16745                               | 9795       | 6946               | 12292       | 8288        | 4000                  | 10873                      | 7182         | 3691     |
| Sri Lanka                | 2006 | 1752                                | 1338       | 414                | 3128        | 2006        | 1122                  | n.a.                       | n.a.         | n.a.     |
|                          | 2007 | 1781                                | 1384       | 397                | 3037        | 1970        | 1067                  | n.a.                       | n.a.         | n.a.     |
|                          | 2008 | 1679                                | 1289       | 390                | 3125        | 1991        | 1133                  | n.a.                       | n.a.         | n.a.     |
| Viet Nam                 | 2006 | 34566                               | 17136      | 17431              | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |
|                          | 2007 | 37155                               | 18419      | 18736              | n.a.        | n.a.        | n.a.                  | n.a.                       | n.a.         | n.a.     |

Source: ILO and APO member country national experts. c: In the Phillipines, fewer than 20 employees or fewer than 20 self-employed.

| Country               | Unskilled employees (thousands) No FNPF <sup>d</sup> ILO, labor force (thousands) |             | iousands)    | WDI, GNI per capita, Atlas | Manufacturing        | GDP per capita (PPP at |              |              |                            |                         |                                    |
|-----------------------|---|-------------|--------------|----------------------------|----------------------|------------------------|--------------|--------------|----------------------------|-------------------------|------------------------------------|
| Country               | iear  | Total       | Male         | Female                     | Total                | Total                  | Male         | Female       | method (current US\$)      | in GDP (%) <sup>e</sup> | Current Prices), US\$ <sup>e</sup> |
| Bangladesh            | 1982  | n.a.        | n.a.         | n.a.                       | n.a.                 | n.a.                   | n.a.         | n.a.         | n.a.                       | 13                      | 346                                |
| 0                     | 1983  | n.a.        | n.a.         | n.a.                       | n.a.                 | 27976                  | 25547        | 2429         | 200                        | 14                      | 365                                |
|                       | 1984  | n.a.        | n.a.         | n.a.                       | n.a.                 | 28977                  | 26430        | 2547         | 200                        | 14                      | 389                                |
|                       | 1985  | n.a.        | n.a.         | n.a.                       | n.a.                 | 30563                  | 27447        | 3116         | 220                        | 14                      | 404                                |
|                       | 1989  | n.a.        | n.a.         | n.a.                       | n.a.                 | 50147                  | 29386        | 20761        | 260                        | 12                      | 470                                |
|                       | 1990  | n.a.        | n.a.         | n.a.                       | n.a.                 | 50159                  | 30443        | 19716        | 280                        | 13                      | 505                                |
|                       | 1995  | n.a.        | n.a.         | n.a.                       | n.a.                 | 54597                  | 33765        | 20832        | 320                        | 15                      | 634                                |
|                       | 1999  | n.a.        | n.a.         | n.a.                       | n.a.                 | 51764                  | 32369        | 19395        | 360                        | 15                      | 758                                |
|                       | 2002  | n.a.        | n.a.         | n.a.                       | n.a.                 | 44322                  | 34478        | 9844         | 370                        | 15                      | 888                                |
| T1                    | 2005  | n.a.        | n.a.         | n.a.                       | n.a.                 | 47337                  | 30080        | 11277        | 440                        | 10                      | 1074                               |
| Fiji                  | 2004  | n.a.        | n.a.         | n.a.                       | 179                  | 320                    | 223          | 97           | 3060                       | 13                      | 4263                               |
| India                 | 2000  | 175843      | 124635       | 51208                      | n.a.                 | 406068                 | 280853       | 125215       | 440                        | 14                      | 1425                               |
| POV                   | 2005  | 10425       | 130980       | 02886                      | n.a.                 | 468634                 | 19997        | 152054       | 630                        | 15                      | 1974                               |
| NOK                   | 2000  | 10435       | 6030         | 4439                       | n.a.                 | 21150                  | 12581        | 8001         | 10580                      | 21                      | 16140                              |
|                       | 2001  | 11025       | 6260         | 4557                       | n.a.                 | 21372                  | 12001        | 9225         | 11280                      | 23                      | 18228                              |
|                       | 2002  | 11125       | 6374         | 4751                       | n a                  | 22139                  | 13031        | 9108         | 12060                      | 24                      | 18579                              |
|                       | 2003  | 11454       | 6475         | 4979                       | n a                  | 22557                  | 13193        | 9364         | 14030                      | 24                      | 19966                              |
|                       | 2005  | 11612       | 6536         | 5076                       | n a                  | 22856                  | 13330        | 9526         | 15880                      | 26                      | 20810                              |
|                       | 2006  | 11733       | 6602         | 5131                       | n.a.                 | 23151                  | 13444        | 9706         | 17730                      | 25                      | 22484                              |
|                       | 2007  | 11941       | 6680         | 5261                       | n.a.                 | 23433                  | 13607        | 9826         | 19690                      | n.a.                    | n.a.                               |
|                       | 2008  | 12094       | 6809         | 5285                       | n.a.                 | n.a.                   | n.a.         | n.a.         | n.a.                       | n.a.                    | n.a.                               |
| Malaysia              | 1982  | n.a.        | n.a.         | n.a.                       | n.a.                 | 5249                   | 3465         | 1783.6       | 1900                       | n.a.                    | 2913                               |
|                       | 1983  | n.a.        | n.a.         | n.a.                       | n.a.                 | 5457                   | 3570         | 1886.5       | 1830                       | n.a.                    | 3157                               |
|                       | 1984  | n.a.        | n.a.         | n.a.                       | n.a.                 | 5567                   | 3663         | 1904.1       | 1980                       | n.a.                    | 3412                               |
|                       | 1985  | n.a.        | n.a.         | n.a.                       | n.a.                 | 5653                   | 3701         | 1952.8       | 1940                       | n.a.                    | 3382                               |
|                       | 1986  | n.a.        | n.a.         | n.a.                       | n.a.                 | 5760                   | 3754         | 2006.6       | 1890                       | n.a.                    | 3399                               |
|                       | 1987  | n.a.        | n.a.         | n.a.                       | n.a.                 | 5984<br>6176           | 3868         | 2115.9       | 1970                       | 20                      | 3641                               |
|                       | 1988  | n.a.        | n.a.         | n.a.                       | n.a.                 | 6176                   | 3996<br>4155 | 2179.8       | 2150                       | 22                      | 4021                               |
|                       | 1989  | n.a.        | n.a.         | n.a.                       | n.a.                 | 6685                   | 4155         | 2235.5       | 2230                       | 24 24                   | 4422 4868                          |
|                       | 1992  | n.a.        | n.a.         | na.                        | n.a.                 | 7048                   | 4554         | 2493.5       | 2870                       | 26                      | 5831                               |
|                       | 1993  | n.a.        | n.a.         | n.a.                       | n.a.                 | 7383                   | 4854         | 2529.6       | 3220                       | 26                      | 6391                               |
|                       | 1995  | n.a.        | n.a.         | n.a.                       | n.a.                 | 7645                   | 5057         | 2588.4       | 4030                       | 26                      | 7593                               |
|                       | 1996  | n.a.        | n.a.         | n.a.                       | n.a.                 | 8400                   | 5514         | 2885         | 4480                       | 28                      | 8298                               |
|                       | 1997  | n.a.        | n.a.         | n.a.                       | n.a.                 | 8569                   | 5658         | 2922.5       | 4600                       | 28                      | 8828                               |
|                       | 1998  | n.a.        | n.a.         | n.a.                       | n.a.                 | 8600                   | 5719         | 2880.7       | 3630                       | 29                      | 8065                               |
|                       | 1999  | n.a.        | n.a.         | n.a.                       | n.a.                 | 8838                   | 5851         | 2986.6       | 3370                       | 31                      | 8479                               |
|                       | 2000  | n.a.        | n.a.         | n.a.                       | n.a.                 | 9322                   | 6086         | 3235.5       | 3390                       | 32                      | 9220                               |
|                       | 2001  | n.a.        | n.a.         | n.a.                       | n.a.                 | 9357                   | 6056         | 3301.1       | 3410                       | 31                      | 9272                               |
|                       | 2002  | n.a.        | n.a.         | n.a.                       | n.a.                 | 9543                   | 6142         | 3400.8       | 3550                       | 31                      | 9640                               |
|                       | 2003  | n.a.        | n.a.         | n.a.                       | n.a.                 | 9870                   | 6324         | 3546.1       | 3900                       | 32                      | 10197                              |
|                       | 2004  | n.a.        | n.a.         | n.a.                       | n.a.                 | 9980                   | 6390         | 3589.1       | 4060                       | 32                      | 10439                              |
|                       | 2005  | n.a.        | n.a.         | n.a.                       | n.a.                 | 10275                  | 6619         | 3656.8       | 5690                       | 31                      | 11908                              |
|                       | 2000  | n.a.        | n.a.         | n.a.                       | n.a.                 | 10538                  | 6747         | 3791         | 6540                       | na                      | n a                                |
|                       |   | ma.         | ma.          |                            |                      |                        |              |              |                            |                         |                                    |
| Country               | Veen  | Unskill     | ed employee  | es (thousands)             | No FNPF <sup>d</sup> | ILO, lab               | or force (th | ousands)     | WDI, GNI per capita, Atlas | Manufacturing           | GDP per capita (PPP at             |
| Country               | iear  | Total       | Male         | Female                     | Total                | Total                  | Male         | Female       | method (current US\$)      | in GDP (%) <sup>e</sup> | Current Prices), US\$ <sup>e</sup> |
| Mongolia <sup>f</sup> | 2006  | 175         | 97           | 78                         | n.a.                 | 779                    | 421          | 359          | 1000                       | 6                       | 2892                               |
| Nepal <sup>g</sup>    | 1998  | 33          | 19           | 14                         | n.a.                 | 17454                  | 8353         | 9096         | 210                        | 9                       | 896                                |
| -                     | 1999  | 35          | 23           | 13                         | n.a.                 | 9628                   | 5492         | 4136         | 210                        | 9                       | 901                                |
|                       | 2000  | 36          | 23           | 13                         | n.a.                 | 9919                   | 5635         | 4284         | 220                        | 9                       | 935                                |
|                       | 2001  | 36          | 24           | 12                         | n.a.                 | 9503                   | 5378         | 4125         | 230                        | 8                       | 877                                |
|                       | 2002  | 38          | 25           | 14                         | n.a.                 | 10504                  | 5922         | 4577         | 230                        | 8                       | 899                                |
|                       | 2003  | 39          | 25           | 15                         | n.a.                 | 10785                  | 6063         | 4718         | 250                        | 8                       | 950                                |
|                       | 2004  | 40          | 26           | 10                         | n.a.                 | 11060                  | 6197<br>6997 | 4857         | 270                        | 8                       | 1005                               |
|                       | 2000  | 41          | 21           | 10                         | n.a.                 | 11576                  | 6449         | 4980         | 300                        | 7                       | 1000                               |
|                       | 2000  | 42          | 28           | 16                         | n.a.                 | 11804                  | 6565         | 5226         | 350                        | ne (                    | 1104<br>n 9                        |
|                       | 2008  | 44          | 28           | 17                         | n.a.                 | 11804                  | 6565         | 5226         | n.a.                       | n.a.                    | n.a.                               |
| Pakistan              | 2006  | na          | n.a          | n.a                        | n a                  | 46952                  | 37808        | 9144         | 800                        | 18                      | 2382                               |
|                       | 2007  | n.a.        | n.a.         | n.a.                       | n.a.                 | 47651                  | 38118        | 9533         | 870                        | n.a.                    | n.a.                               |
| Philippines           | 2003  | 16114       | 9936         | 6179                       | n.a.                 | 31553                  | 19498        | 12055        | 1070                       | 23                      | 2636                               |
|                       | 2004  | 17359       | 10835        | 6524                       | n.a.                 | 31741                  | 19836        | 11905        | 1180                       | 23                      | 2827                               |
|                       | 2005  | 17780       | 10794        | 5731                       | n.a.                 | 32875                  | 20205        | 12670        | 1270                       | 23                      | 2996                               |
|                       | 2006  | 18038       | 11012        | 7026                       | n.a.                 | 32886                  | 20289        | 12596        | 1390                       | 23                      | 3198                               |
|                       | 2007  | 18368       | 11207        | 7161                       | n.a.                 | 33672                  | 20754        | 12918        | 1620                       | n.a.                    | n.a.                               |
| Sri Lanka             | 2006  | 3195        | 2172         | 1022                       | n.a.                 | 7105                   | 4611         | 2495         | 1350                       | 19                      | 3914                               |
|                       | 2007  | 3210        | 2237         | 973                        | n.a.                 | 7042                   | 4653         | 2389         | 1540                       | n.a.                    | n.a.                               |
| \$7: . t. \$T         | 2008  | 3196        | 2200         | 995                        | n.a.                 | 7175                   | 4663         | 2511         | n.a.                       | n.a.                    | n.a.                               |
| viet Nam              | 2006  | 32670       | 15535        | 17135                      | n.a.                 | 65866                  | 32260        | 33606        | 700                        | 21                      | 2376                               |
| Source: ILO an        | 2007<br>d APO -   | 30117       | 16699        | 18418                      | n.a.                 | 10799                  | 34676        | 36123        | 790                        | n.a.                    | n.a.                               |
| d: FNPF refere        | to Fiji ?   | National P  | rovident Fu  | nd                         |                      |                        |              |              |                            |                         |                                    |
| e: Source is AP       | O Produ   | ictivity Do | ta Book 200  |                            |                      |                        |              |              |                            |                         |                                    |
| f. ILO Labor Fo       | orce data   | a in 2000   | 100h 200     | ····                       |                      |                        |              |              |                            |                         |                                    |
| g: ILO labor for      | rce data  | are not re  | ported in Ne | epal. Here. the d          | ata are estimat      | ed using the           | number of    | self-employe | ed plus employee data fro  | m national ex           | perts.                             |
| -                     |   |             | -            |                            |                      | 0                      |              |              |                            |                         | -                                  |

# Appendix 3: Data Source

| Figure 1.1a         Labour Force Survey           Figure1.12         Labour Force Survey           Figure1.12.         Labour Force Survey           Figure1.23         Labour Force Survey           Figure1.24         Labour Force Survey           Figure1.25         Labour Force Survey           Figure1.26         Labour Force Survey           Figure1.26         Labour Force Survey           Figure1.26         Labour Force Survey           Figure1.26         Labour Force Survey           Figure1.27         National Sample Survey's 55th (1999 – 2000) and 61st (2004 – 05) Round, Employment & Unemployment Survey           Figure2.16         Labour Force Survey           Figure2.1         Wage Survey 2007, Rangladesh Bureau of Statistics           Figure2.2         Nepal Labor Force Survey (EASP) August Supplementary Survey, Korea National Statistical Office           Figure2.2.4         Labour Force Survey           Figure2.4         Labour Force Survey           Figure3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-game3.1           Figure3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-game3.1           Figure4.3         Labour Force Survey 1998 (XE estimated)           Figure5.3         Labour Force Survey <td< th=""><th>Name of Figure/Table</th><th>Sources</th></td<>   | Name of Figure/Table | Sources  |
|--|----------------------|--|
| Figure1.1b         Labour Force Survey           Figure1.2a         Labour Force Survey           Figure1.2a         Labour Force Survey           Figure1.3a         Labour Force Survey           Figure1.4a         Labour Force Survey           Figure1.4a         Labour Force Survey           Figure1.5a         National Sample Survey's 55th (1999–2000) and 61st (2004–05) Round, Employment &           Figure1.5a         Unemployemnt Survey's 55th (1999–2000) and 61st (2004–05) Round, Employment &           Figure1.6a         Labour Force Survey           Figure1.7b         Wate Survey's 55th (1999–2000) and 61st (2004–05) Round, Employment &           Figure2.1         Wage Survey's 007(Bangladesh Bureneu of Statistics           Figure2.2         Nepal Labor Force Survey           Figure2.3         Economically Active Population Survey (EASP) August Supplementary Survey, Korea National Statistica Office           Figure2.4         Labour Force Survey           Figure2.5         Labour Force Survey           Figure3.1         Unregistered employment data by Labor Force Survey           Figure3.2         Nepal Labor Force Survey           Figure3.1         Labour Force Survey           Figure3.2         Nepal Labor Force Survey           Figure3.1         Labour Force Survey           Figure3.1   | Figure 1.1a          | Labour Force Survey  |
| Figure 1.2a         Labour Force Survey           Figure 1.3a         Labour Force Survey           Figure 1.4a         Labour Force Survey           Figure 1.5a         Labour Force Survey           Figure 1.5a         National Sample Survey's 5th (1999-2000) and 61st (2004-05) Bound, Employment & Unemployment & | Figure1.1b           | Labour Force Survey  |
| Figure 1.2b         Labour Force Survey           Figure 1.3a         Labour Force Survey           Figure 1.4b         Labour Force Survey           Figure 1.4b         Labour Force Survey           Figure 1.5a         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment & Unemployment Survey           Figure 1.5b         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment & Unemployment Survey           Figure 1.6a         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labour Force Survey           Figure 2.3         Statistical Office           Figure 2.4a         Labour Force Survey           Figure 2.4a         Labour Force Survey           Figure 2.4a         Labour Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey           Figure 3.2         Negal Labour Force Survey           Figure 3.1         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 4.2         GIP per capita by AOP roductivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5.         Manufa  | Figure1.2a           | Labour Force Survey  |
| Figure 1.3a         Labour Force Survey           Figure 1.4a         Labour Force Survey           Figure 1.5a         Labour Force Survey           Figure 1.5a         National Sample Surveys 5th (1999–2000) and 61st (2004–05) Round, Employment &<br>Unemployemnt Survey           Figure 1.5b         National Sample Survey           Figure 1.6a         Labour Force Survey           Figure 1.6b         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey           Figure 2.3         Statistical Office           Figure 2.4         Labour Force Survey           Figure 3.1         Enophyment data by LO Laborstat           Figure 3.4         Labour Force Survey           Figure 3.1         Labour Force Survey           Figure 4.1         GN per capita by AD Porductivity Data Book 2009 and Informal Employment by LFS           Figure 4.1         GN per capita by AD Porductivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity   | Figure1.2b           | Labour Force Survey  |
| Figure 1.4a         Labour Force Survey           Figure 1.4b         Labour Force Survey           Figure 1.5a         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment & Unemployement Survey           Figure 1.6b         Labour Force Survey           Figure 1.6b         Labour Force Survey           Figure 1.6b         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey, 2007/08           Figure 2.4         Labour Force Survey, 2007/08           Figure 2.4         Labour Force Survey, 2007/08           Figure 2.4         Labour Force Survey           Figure 2.4         Labour Force Survey           Figure 3.2         Nepal Labor Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey           Figure 3.2         Nepal Labor Force Survey           Figure 3.1         Labour Force Survey           Figure 4.1         CDN per capita by APO Productivity Data Book 2009 and Informal Employment by LPS           Figure 5.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LPS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LPS           <   | Figure1.3a           | Labour Force Survey  |
| Particle         Labour Force Survey           Figure 1.5a         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment &<br>Unemployemnt Survey           Figure 1.6b         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment &<br>Unemployemnt Survey           Figure 1.6a         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-<br>employment data by ILO Laborstat           Figure 3.1         Labour Force Survey           Figure 4.2         GDP force Survey           Figure 4.3         Labour Force Survey           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 7.1a         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 7.1   | Figure1 4a           | Labour Force Survey  |
| Figure 1.0         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment & Unemployment Survey           Figure 1.5         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment & Unemployment Survey           Figure 1.6         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey           Figure 2.3         Economically Active Population Survy (EASP) August Supplementary Survey, Korea National Statistical Office           Figure 2.4         Labour Force Survey           Figure 2.4         Labour Force Survey           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-employment data by I.O Laborstat           Figure 3.2         Nepal Labor Force Survey           Figure 3.3         Labour Force Survey           Figure 4.3         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS <t< td=""><td>Figure1.4h</td><td>Labour Force Survey</td></t<>  | Figure1.4h           | Labour Force Survey  |
| Figure 1.5.a         Unemployeemit Survey         Sourvey         Sourvey         Sourvey           Figure 1.6b         National Sample Survey         Sourvey         Sourvey         Sourvey           Figure 1.6b         Labour Force Survey         Figure 1.6b         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nopal Labor Force Survey         Figure 2.4           Figure 2.4         Labour Force Survey         Figure 2.4           Figure 2.4         Labour Force Survey         Figure 2.4           Figure 2.4         Labour Force Survey         Figure 2.4           Figure 3.1         Unregistered employment data by Lobor Force Survey from National Expert and Self-omployment data by LO Laborstat           Figure 3.1         Nepal Labor Force Survey         Figure 3.4           Figure 3.2         Labour Force Survey         Figure 3.4           Figure 4.2         GDP per capita by APO Fonductivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Labour Force Survey         Figure 4.2           GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 5.           Figure 5.         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS   | 1 iguie1.40          | National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round Employment &                                  |
| Figure 1.5b         National Sample Survey's 55th (1999—2000) and 61st (2004—05) Round, Employment & Unemployement Survey           Figure 1.6a         Labour Force Survey           Figure 1.6b         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.3         Statistical Office           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-omployment data by ILO Laborstat           Figure 3.1         Unregistered employment data by Labor Force Survey from National Employment by LFS           Figure 3.1         Mapal Labor Force Survey           Figure 4.1         GND per capita by (World Development Indicarbs (WDD) and Informal Employment by LFS           Figure 4.3         Labor Force Survey           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's   | Figure1.5a           | Unemployemnt Survey  |
| Figure 1.00         Unemployement Survey           Figure 1.6b         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.3         Economically Active Population Survy (EASP) August Supplementary Survey, Korea National<br>Statistical Office           Figure 2.4         Labour Force Survey           Figure 2.4         Labour Force Survey           Figure 3.1         Economically Active Population Survey           Figure 3.1         employment data by ILO Laborstat           Figure 3.1         employment data by ILO Laborstat           Figure 3.2         Nepal Labor Force Survey           Figure 3.3         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 3.1         GDP per capita by (World Development Indicatorsb (WDD and Informal Employment by LFS           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.2         National Sample Survey's 61st Round, 2004–05. Employment & Unemplo   | T. 1 M               | National Sample Survey's 55th (1999–2000) and 61st (2004–05) Round, Employment &                                 |
| Figure 1.6a         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey, 2007/08           Figure 2.3         Economically Active Population Survy (EASP) August Supplementary Survey, Korea National Statistical Office           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Lob Laborstat           Figure 3.2         Nepal Labor Force Survey, 1998 (NE estimated)           Figure 3.3         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 4.2         GDP per capita by CMod Development Indicatorsh (WDI) and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey  | Figure1.5b           | Unemployemnt Survey  |
| Figure 1.6b         Labour Force Survey           Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey 2007/08           Figure 2.3         Economically Active Population Survy (EASP) August Supplementary Survey, Korea National<br>Statistical Office           Figure 2.4a         Labour Force Survey           Figure 2.4b         Labour Force Survey           Figure 2.4c         Labour Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-<br>employment data by ILO Laborstat           Figure 3.2         Nepal Labor Force Survey           Figure 3.3         Labour Force Survey           Figure 4.1         GNIP per capita by (World Development Indicatorsb (WDI) and Informal Employment by LFS           Figure 4.3         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Mandacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05. Employment & Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05. Employment & Unemployment Survey   | Figure1.6a           | Labour Force Survey  |
| Figure 2.1         Wage Survey 2007, Bangladesh Bureau of Statistics           Figure 2.2         Nepal Labor Force Survey.2007/08           Figure 2.3         Economically Active Population Survey (EASP) August Supplementary Survey, Korea National Statistical Office           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Lob Laborstat           Figure 3.2         Nepal Labor Force Survey           Figure 3.4         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 4.1         GN1 per capita by CModd Development Indicatorsb (WDD and Informal Employment by LFS           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         Z004 2005 Employment and Unemployment Survey           Figure 7.1a         Z004 2005 Employment and Unemployment Survey           Figure 7.2b         National Sample Survey's 61st Round, 2004-05. Employmen   | Figure1.6b           | Labour Force Survey  |
| Figure 2.2         Nepal Labor Force Survey.2007/08           Figure 2.3         Economically Active Population Survy (EASP) August Supplementary Survey, Korea National<br>Statistical Office           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Lo Laborstat           Figure 3.2         Nepal Labor Force Survey. 198 (NE estimated)           Figure 3.3         Labor Force Survey           Figure 4.1         GNI per capita by AOP Orductivity Data Book 2009 and Informal Employment by LFS           Figure 4.2         GDP per capita by AOP Orductivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2         National Sample Survey's 61st Round, 200405. Employment & Unemployment Survey           Figure 7.2         National Sample Survey's 61st Round, 200405. Employment & Unemployment Survey           Figure 7.2         National Sample Survey's 61st Round, 200405. Employment &   | Figure2.1            | Wage Survey 2007, Bangladesh Bureau of Statistics  |
| Figure 2.3         Economically Active Population Survy (EASP) August Supplementary Survey, Korea National<br>Statistical Office           Figure 2.4a         Labour Force Survey           Figure 2.4b         Labour Force Survey           Figure 2.4c         Labour Force Survey           Figure 2.4d         Labour Force Survey           Figure 3.1         employment data by ILO Laborstat           Figure 3.2         Nepal Labor Force Survey           Figure 3.3         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 3.4         Labour Force Survey           Figure 4.2         GDP per capita by World Development Indicatorsb (WDI) and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05. Employment & Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05. Employment & Unemployment Survey           Figure 7.3         Labour Force Survey           Figure 7.4  | Figure2.2            | Nepal Labor Force Survey,2007/08   |
| Figure 2.4         Statistical Office           Figure 2.4         Labour Force Survey           Figure 3.1         Unregistered employment data by Lobor Force Survey from National Expert and Self-<br>employment data by ILO Laborstat           Figure 3.2         Nepal Labor Force Survey           Figure 3.3         Labour Force Survey           Figure 4.1         GN per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05. Employment & Unemployment Survey           Figure 7.3         Labour Force Survey           Figure 8.1         UNESCO Data Base           Figure 8.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.2a  | Figure 2 3           | Economically Active Population Survy (EASP) August Supplementary Survey, Korea National                          |
| Figure 2.4a       Labour Force Survey         Figure 2.4e       Labour Force Survey         Figure 2.4e       Labour Force Survey         Figure 2.4e       Labour Force Survey         Figure 3.1       Unregistered employment data by Llobor Force Survey from National Expert and Self-<br>employment data by LLO Laborstat         Figure 3.2       Nepal Labor Force Survey         Figure 3.3       Labour Force Survey         Figure 4.1       GN1 per capita by World Development Indicatorsh (WDD) and Informal Employment by LFS         Figure 4.2       GDP per capita by WOrld Development Indicatorsh (WDD) and Informal Employment by LFS         Figure 5       Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 6       Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 7.1a       2004-2005 Employment and Unemployment Survey         Figure 7.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.3       Labour Force Survey in each country         Figure 8.1       UNESCO Data Base         Figure 9.1a       Labour Force Survey in each country         Figure 9.1a       Labour Force Survey in each country   | Figure2.5            | Statistical Office   |
| Figure 2.4b         Labour Force Survey           Figure 2.4c         Labour Force Survey           Figure 3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-<br>employment data by ILO Laborstat           Figure 3.2         Nepal Labor Force Survey.           Figure 3.4         Labor Force Survey           Figure 3.4         Labor Force Survey           Figure 4.1         GNI per capita by (World Development Indicatorsb (WDD) and Informal Employment by LFS           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 200405, Employment & Unemployment Survey           Figure 7.2         National Sample Survey's 61st Round, 200405, Employment & Unemployment Survey           Figure 7.4         Human Resources Development Fund           Figure 8.1         UNESCO Data Base           Figure 9.1         Labour Force Survey           Figure  | Figure2.4a           | Labour Force Survey  |
| Figure2.4c         Labour Force Survey           Figure2.4d         Labour Force Survey           Figure3.1         Unregistered employment data by Lobor Force Survey from National Expert and Self-<br>employment data by ILO Laborstat           Figure3.2         Nepal Labor Force Survey, 1998 (NE estimated)           Figure3.3         Labor Force Survey           Figure4.1         GNI per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure7.1a         2004-2005 Employment and Unemployment Survey           Figure7.2a         National Sample Survey's 61st Round, 200405, Employment & Unemployment Survey           Figure7.2b         National Sample Survey's 61st Round, 200405, Employment & Unemployment Survey           Figure7.3         Labour Force Survey           Figure8.1         UNESCO Data Base           Figure9.1a         Labour Force Survey in each country           Figure9.1a         Labour Force Survey           Figure9.1a         Labour Force Survey           Figure9.1a  | Figure2.4b           | Labour Force Survey  |
| Figure 2.4d         Labour Force Survey           Figure 3.1         Unregistered employment data by Lo Laborstat           Figure 3.2         Nepal Labor Force Survey         1998 (NE estimated)           Figure 3.3         Labor Force Survey         1998 (NE estimated)           Figure 3.4         Labor Force Survey         1998 (NE estimated)           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004 2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004—05, Employment & Unemployment Survey           Figure 7.2c         National Sample Survey's 61st Round, 2004—05, Employment & Unemployment Survey           Figure 8.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.1a         Labour Force Survey in each country           Figure 9.2a         Labour Force Survey in each country           Figure 9.1a         Labour Force Survey in each country   | Figure2.4c           | Labour Force Survey  |
| Figure 3.1         Unregistered employment data by Labor Force Survey from National Expert and Self-<br>employment data by ILO Laborstat           Figure 3.2         Nepal Labor Force Survey         Figure 3.3           Labour Force Survey         Figure 3.4           Labour Force Survey         Figure 4.1           GN per capita by (World Development Indicatorsb (WDI) and Informal Employment by LFS           Figure 4.2         GDP per capita by (World Development and Book 2009 and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.1b         2004-2005 Employment and Unemployment Survey           Figure 7.2c         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2c         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.4         Human Resources Development Fund           Figure 9.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.1b         Labour Force Survey in each country           Figure 9.1a         Labour Force Survey in each c  | Figure2.4d           | Labour Force Survey  |
| Figure 3.2         Nepal Labor Force Survey, 1998 (NE estimated)           Figure 3.3         Labor Force Survey, 1998 (NE estimated)           Figure 3.4         Labour Force Survey           Figure 4.1         GNI per capita by (World Development Indicatorsb (WDI) and Informal Employment by LFS           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 200405, Employment & Unemployment Survey           Figure 7.2b         National Sample Survey's 61st Round, 200405, Employment & Unemployment Survey           Figure 7.4         Human Resources Development Fund           Figure 8.1         UNESCO Data Base           Figure 9.1         Labour Force Survey in each country           Figure 9.2a         Labour Force Survey in each country           Figure 10.1a   | Figure3.1            | Unregistered employment data by Labor Force Survey from National Expert and Self-                                |
| Ingenesize         Interpretation           Figure3.3         Labor Force Survey           Figure3.4         Labor Force Survey           Figure4.1         GNI per capita by (World Development Indicatorsb (WDI) and Informal Employment by LFS           Figure 4.2         GDP per capita by (World Development Indicatorsb (WDI) and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure7.1a         2004-2005 Employment by LFS           Figure7.1a         2004-2005 Employment and Unemployment Survey           Figure7.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure7.2b         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure7.2c         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure7.3         Labour Force Survey           Figure8.1         UNESCO Data Base           Figure9.2         UNESCO Data Base           Figure9.2         Labour Force Survey in each country           Figure9.2         Labour Force Survey in each country           Figure10.1a         Labour Force Survey in each country<  | Figuro 3.2           | Nopel Labor Force Survey 1008 (NF estimated)   |
| Figure 3.4         Labour Force Survey           Figure 4.1         GNI per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 7.1a         2004*2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 200405. Employment & Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 200405. Employment & Unemployment Survey           Figure 7.3         Labour Force Survey           Figure 7.4         Human Resources Development Fund           Figure 8.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.2a         Labour Force Survey in each country           Figure 9.2b         Labour Force Survey is each country           Figure 9.1a         Labour Force Survey is each country           Figure 10.1a         Labour Force Survey   | Figure3.3            | Labor Force Survey   |
| Figure 4.1       GNI per capita by (World Development Indicatorsb (WDD) and Informal Employment by LFS         Figure 4.2       GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 4.3       Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 5       Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 6       Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 7.1a       2004-2005 Employment and Unemployment Survey         Figure 7.1a       2004-2005 Employment and Unemployment Survey         Figure 7.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.2b       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.3       Labour Force Survey         Figure 8.1       UNESCO Data Base         Figure 9.1a       Labour Force Survey in each country         Figure 9.2a       Labour Force Survey in each country         Figure 9.2a       Labour Force Survey is each country         Figure 10.1a       Labour Force Survey is each country         Figure 9.2b       Labour Force Survey is each country         Figure 10.2a       National Sample Survey's 61st Round, 2004-05, Employment &  | Figure3.4            | Labour Force Survey  |
| Figure 4.2         GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS           Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 7.1a         2004-2005 Employment add ded output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2c         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2c         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.3         Labour Force Survey           Figure 8.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.1a         Labour Force Survey in each country           Figure 10.1a         Labour Force Survey           Figure 10.1a         Labour Force Survey           Figure 10.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployemt Survey           Figure 10.1a         Labour Force Survey in each country           Figure 10.1a         <  | Figure 4.1           | GNI per capita by (World Development Indicatorsb (WDI) and Informal Employmnet by LFS                            |
| Figure 4.3         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2b         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.3         Labour Force Survey           Figure 7.4         Human Resources Development Fund           Figure 8.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.1a         Labour Force Survey in each country           Figure 9.2b         Labour Force Survey in each country           Figure 10.1a         Labour Force Survey in each country           Figure 10.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey           Figure 10.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey           Figure 10.1a         Labour For  | Figure 4.2           | GDP per capita by APO Productivity Data Book 2009 and Informal Employment by LFS                                 |
| Figure 5         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 6         Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.1a         2004-2005 Employment and Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.2         National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey           Figure 7.4         Human Resources Development Fund           Figure 8.1         UNESCO Data Base           Figure 9.1a         Labour Force Survey in each country           Figure 9.2a         Labour Force Survey in each country           Figure 9.2b         Labour Force Survey           Figure 10.1a         Labour Force Survey           Figure 10.2a         National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey           Figure 10.2b         National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey           Figure 10.3b         Labour Force S   | Figure 4.3           | Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFS |
| Figure 5       Informal Employment by LFS         Figure 6       Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and Informal Employment by LFS         Figure 7.1a       2004-2005 Employment and Unemployment Survey         Figure 7.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.2b       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.2c       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.2       National Sample Survey's 61st Round, 2004-05, Employment & Unemployment Survey         Figure 7.4       Human Resources Development Fund         Figure 8.1       UNESCO Data Base         Figure 9.1a       Labour Force Survey in each country         Figure 9.1a       Labour Force Survey in each country         Figure 9.2a       Labour Force Survey in each country         Figure 10.1a       Labour Force Survey         Figure 10.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure 10.3a       Labour Force Survey         Fig   |                      | Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and                               |
| Figure 6Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and<br>Informal Employment by LFSFigure7.1a2004-2005 Employment and Unemployment SurveyFigure7.1b2004-2005 Employment and Unemployment SurveyFigure7.2aNational Sample Survey's 61st Round, 200405, Employment & Unemployment SurveyFigure7.2bNational Sample Survey's 61st Round, 200405, Employment & Unemployment SurveyFigure7.2cNational Sample Survey's 61st Round, 200405, Employment & Unemployment SurveyFigure7.3Labour Force SurveyFigure7.4Human Resources Development FundFigure8.1UNESCO Data BaseFigure9.1aLabour Force Survey in each countryFigure9.2aLabour Force Survey in each countryFigure9.2bLabour Force Survey in each countryFigure9.2bLabour Force Survey in each countryFigure10.1aLabour Force Survey in each countryFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3aLabour Force SurveyFigure10.4aNepal Labor Force SurveyFigure10.3bLabour Force Survey, 2007-08Figure10.4aNepal Labor Force Survey, 2007-08Figure10.5aLabour Force Survey, 2007-08Figure10.6aLabour Force SurveyFigure10.6aLabour Force Survey   | Figure5              | Informal Employment by LFS   |
| Figure 7.1aInformal Employment by LFSFigure 7.1a2004-2005 Employment and Unemployment SurveyFigure 7.1b2004-2005 Employment and Unemployment SurveyFigure 7.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployment SurveyFigure 7.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployment SurveyFigure 7.2cNational Sample Survey's 61st Round, 2004-05, Employment & Unemployment SurveyFigure 7.3Labour Force SurveyFigure 7.4Human Resources Development FundFigure 8.1UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force Survey, 2007-08Figure 10.4aNepal Labor Force Survey, 2007-08Figure 10.5aLabour Force Survey, 2007-08Figure 10.6aLabour Force Survey <tr <td="">Figure</tr>   | Figure 6             | Manufacturing value added output in the GDP by APO Productivity Data Book 2009 and                               |
|  |                      |  |
| Figure7.1a2004-2005Employment and Unemployment SurveyFigure7.1b2004-2005Employment and Unemployment SurveyFigure7.2aNational Sample Survey's 61st Round, 200405, Employment & Unemployment SurveyFigure7.2bNational Sample Survey's 61st Round, 200405, Employment & Unemployment SurveyFigure7.2cNational Sample Survey's 61st Round, 200405, Employment & Unemployment SurveyFigure7.3Labour Force SurveyFigure7.4Human Resources Development FundFigure8.1UNESCO Data BaseFigure9.1aLabour Force Survey in each countryFigure9.1aLabour Force Survey in each countryFigure9.2aLabour Force Survey in each countryFigure9.2bLabour Force Survey in each countryFigure10.1aLabour Force Survey in each countryFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure9.2bLabour Force Survey in each countryFigure9.2aLabour Force Survey is 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.1aLabour Force SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3bLabour Force SurveyFigure10.3bLabour Force Survey, 200708Figure10.4aNe   | Tigure o             | Informal Employment by LFS   |
| Figure 7.1b2004-2005Figure 7.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployment SurveyFigure 7.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployment SurveyFigure 7.2cNational Sample Survey's 61st Round, 2004-05, Employment & Unemployment SurveyFigure 7.3Labour Force SurveyFigure 7.4Human Resources Development FundFigure 8.1UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.1aLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force Survey in each countryFigure 10.1aLabour Force Survey is each countryFigure 10.1aLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.1bLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3aLabour Force Survey, 2007-08Figure 10.3bLabour Force Survey, 2007-08Figure 10.4aNepal Labor Force Survey, 2007-08Figure 10.5aLabour Force Survey, 2007-08Figure 10.6aLabour Force SurveyFigure 10.6aLabour Force Survey <td>Figrure7.1a</td> <td>2004-2005 Employment and Unemployment Survey</td>  | Figrure7.1a          | 2004-2005 Employment and Unemployment Survey   |
| Figure7.2bNational Sample Survey's 61st Round, 2004—05, Employment & Unemployment SurveyFigure7.2bNational Sample Survey's 61st Round, 2004—05, Employment & Unemployment SurveyFigure7.2cNational Sample Survey's 61st Round, 2004—05, Employment & Unemployment SurveyFigure7.3Labour Force SurveyFigure7.4Human Resources Development FundFigure8.1UNESCO Data BaseFigure9.1aLabour Force Survey in each countryFigure9.1aLabour Force Survey in each countryFigure9.2aLabour Force Survey in each countryFigure9.2bLabour Force Survey in each countryFigure10.1aLabour Force SurveyFigure10.1aLabour Force SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3aLabour Force SurveyFigure10.3aLabour Force SurveyFigure10.3bLabour Force Survey, 2007—08Figure10.4aNepal Labor Force Survey, 2007—08Figure10.5aLabour Force SurveyFigure10.6aLabour Force Survey   | Figure7.1b           | 2004-2005 Employment and Unemployment Survey   |
| Figure 7.2cNational Sample Survey's 61st Round, 2004—05, Employment & Unemployment SurveyFigure 7.3Labour Force SurveyFigure 7.4Human Resources Development FundFigure 8.1UNESCO Data BaseFigure 8.2UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force Survey, 2007—08Figure 10.4aNepal Labor Force Survey, 2007—08Figure 10.5aLabour Force SurveyFigure 10.6aLabour Force Survey   | Figure 7.2a          | National Sample Survey's 61st Round, 2004–05, Employment & Unemployment Survey                                   |
| Figure 7.3Labour Force SurveyFigure 7.4Human Resources Development FundFigure 7.4Human Resources Development FundFigure 8.1UNESCO Data BaseFigure 8.2UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.1bLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force Survey in each countryFigure 10.1aLabour Force SurveyFigure 10.1bLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force SurveyFigure 10.4aNepal Labor Force Survey, 2007-08Figure 10.4bNepal Labor Force Survey, 2007-08Figure 10.5aLabour Force Survey, 2007-08Figure 10.6aLabour Force SurveyFigure 10.6aLabour Force Survey   | Figure7 2c           | National Sample Survey's 61st Round, 2004—05, Employment & Unemployment Survey                                   |
| Figure 7.4Human Resources Development FundFigure 8.1UNESCO Data BaseFigure 8.2UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.1bLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force SurveyFigure 10.1aLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force Survey, 2007-08Figure 10.4aNepal Labor Force Survey, 2007-08Figure 10.4aNepal Labor Force Survey, 2007-08Figure 10.5aLabour Force SurveyFigure 10.6aLabour Force Survey  | Figure7 3            | Labour Force Survey  |
| Figure 1.1Finance Forces Development FundFigure 8.1UNESCO Data BaseFigure 8.2UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.1bLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force SurveyFigure 10.1aLabour Force SurveyFigure 10.1bLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force Survey, 2007—08Figure 10.4aNepal Labor Force Survey, 2007—08Figure 10.5aLabour Force SurveyFigure 10.6aLabour Force Survey  | Figure 7.4           | Human Resources Development Fund   |
| Figure 8.2UNESCO Data BaseFigure 8.2UNESCO Data BaseFigure 9.1aLabour Force Survey in each countryFigure 9.1bLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force SurveyFigure 10.1bLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force Survey, 2007-08Figure 10.4aNepal Labor Force Survey, 2007-08Figure 10.5aLabour Force SurveyFigure 10.5aLabour Force SurveyFigure 10.6aLabour Force Survey  | Figure 8.1           | INFSCO Data Base   |
| Figure0.2DNESCO Data baseFigure0.1aLabour Force Survey in each countryFigure0.1bLabour Force Survey in each countryFigure0.2aLabour Force Survey in each countryFigure10.1aLabour Force SurveyFigure10.1bLabour Force SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3aLabour Force SurveyFigure10.3bLabour Force Survey, 2007-08Figure10.4aNepal Labor Force Survey, 2007-08Figure10.5aLabour Force SurveyFigure10.6aLabour Force Survey  | Figure 8.2           | UNESCO Data Base   |
| Figure 9.1aLabour Force Survey in each countryFigure 9.1bLabour Force Survey in each countryFigure 9.2aLabour Force Survey in each countryFigure 9.2bLabour Force Survey in each countryFigure 10.1aLabour Force SurveyFigure 10.1bLabour Force SurveyFigure 10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure 10.3aLabour Force SurveyFigure 10.3bLabour Force Survey, 2007-08Figure 10.4aNepal Labor Force Survey, 2007-08Figure 10.5aLabour Force SurveyFigure 10.6aLabour Force Survey   | Figureo.2            | Lehan Franz Gummen in each counter   |
| Figure9.1bLabour Force Survey in each countryFigure9.2aLabour Force Survey in each countryFigure9.2bLabour Force Survey in each countryFigure10.1aLabour Force SurveyFigure10.1bLabour Force SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3aLabour Force SurveyFigure10.3bLabour Force Survey, 2007-08Figure10.4aNepal Labor Force Survey, 2007-08Figure10.5aLabour Force SurveyFigure10.6aLabour Force Survey   | Figure9.1a           | Labour Force Survey in each country  |
| Figure9.2aLabour Force Survey in each countryFigure9.2bLabour Force Survey in each countryFigure10.1aLabour Force SurveyFigure10.1bLabour Force SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3aLabour Force SurveyFigure10.3bLabour Force SurveyFigure10.4aNepal Labor Force Survey, 2007-08Figure10.5aLabour Force SurveyFigure10.6aLabour Force SurveyFigure10.6aLabour Force Survey   | Figure9.1b           | Labour Force Survey in each country  |
| Figure9.2bLabour Force Survey in each countryFigure10.1aLabour Force SurveyFigure10.1bLabour Force SurveyFigure10.2aNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.2bNational Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt SurveyFigure10.3aLabour Force SurveyFigure10.3bLabour Force SurveyFigure10.4aNepal Labor Force Survey, 2007-08Figure10.5aLabour Force Survey, 2007-08Figure10.5aLabour Force SurveyFigure10.6aLabour Force SurveyFigure10.6bLabour Force Survey   | Figure9.2a           | Labour Force Survey in each country  |
| Figure10.1a       Labour Force Survey         Figure10.1b       Labour Force Survey         Figure10.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure10.2b       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure10.3a       Labour Force Survey         Figure10.3b       Labour Force Survey         Figure10.4a       Nepal Labor Force Survey, 2007—08         Figure10.5a       Labour Force Survey, 2007—08         Figure10.5a       Labour Force Survey         Figure10.6a       Labour Force Survey   | Figure9.2b           | Labour Force Survey in each country  |
| Figure10.1b       Labour Force Survey         Figure10.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure10.2b       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure10.3a       Labour Force Survey         Figure10.3b       Labour Force Survey         Figure10.4a       Nepal Labor Force Survey, 2007—08         Figure10.5a       Labour Force Survey, 2007—08         Figure10.5a       Labour Force Survey, 2007—08         Figure10.6a       Labour Force Survey         Figure10.6a       Labour Force Survey  | Figure10.1a          | Labour Force Survey  |
| Figure10.2a       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure10.2b       National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey         Figure10.3a       Labour Force Survey         Figure10.3b       Labour Force Survey         Figure10.4a       Nepal Labor Force Survey, 2007—08         Figure10.4b       Nepal Labor Force Survey, 2007—08         Figure10.5a       Labour Force Survey, 2007—08         Figure10.6a       Labour Force Survey         Figure10.6a       Labour Force Survey   | Figure10.1b          | Labour Force Survey  |
| Figure10.2b     National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey       Figure10.3a     Labour Force Survey       Figure10.3b     Labour Force Survey, 2007—08       Figure10.4a     Nepal Labor Force Survey, 2007—08       Figure10.5a     Labour Force Survey, 2007—08       Figure10.5a     Labour Force Survey, 2007—08       Figure10.6a     Labour Force Survey       Figure10.6a     Labour Force Survey  | Figure10.2a          | National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey                                   |
| Figure 10.3a     Labour Force Survey       Figure 10.3b     Labour Force Survey       Figure 10.4a     Nepal Labor Force Survey, 2007—08       Figure 10.4b     Nepal Labor Force Survey, 2007—08       Figure 10.5a     Labour Force Survey, 2007—08       Figure 10.6a     Labour Force Survey       Figure 10.6b     Labour Force Survey  | Figure10.2b          | National Sample Survey's 61st Round, 2004-05, Employment & Unemployemnt Survey                                   |
| Figure 10.3b     Labour Force Survey       Figure 10.4a     Nepal Labor Force Survey, 2007—08       Figure 10.4b     Nepal Labor Force Survey, 2007—08       Figure 10.5a     Labour Force Survey, 2007—08       Figure 10.6a     Labour Force Survey       Figure 10.6a     Labour Force Survey   | Figure10.3a          | Labour Force Survey  |
| Figure 10.4a     Nepal Labor Force Survey, 2007—08       Figure 10.4b     Nepal Labor Force Survey, 2007—08       Figure 10.5a     Labour Force Survey, 2007—08       Figure 10.6a     Labour Force Survey       Figure 10.6b     Labour Force Survey  | Figure10.3b          | Labour Force Survey  |
| Figure10.4b     Nepal Labor Force Survey, 2007–08       Figure10.5a     Labour Force Survey,2007–08       Figure10.6a     Labour Force Survey       Figure10.6b     Labour Force Survey  | Figure10.4a          | Nepal Labor Force Survey, 2007–08  |
| Figure 10.5a     Labour Force Survey.2007—08       Figure 10.6a     Labour Force Survey       Figure 10.6b     Labour Force Survey   | Figure10.4b          | Nepal Labor Force Survey, 2007–08  |
| Figure10.6a     Labour Force Survey       Figure10.6b     Labour Force Survey  | Figure10.5a          | Labour Force Survey,2007—08  |
| Figure 10.6b Labour Force Survey   | Figure10.6a          | Labour Force Survey  |
|  | Figure10.6b          | Labour Force Survey  |

**APPENDIX 3** 

| Figure11.1  | Labour Force Survey   |  |  |  |  |  |  |  |  |
|-------------|---|--|--|--|--|--|--|--|--|
| Figure11.2  | National Sample Survey's 61st Round, 2004—05, Employment & Unemployemnt Survey  |  |  |  |  |  |  |  |  |
| Figure11.3  | Labour Force Survey   |  |  |  |  |  |  |  |  |
| Figure11.4  | Nepal Labor Force Survey,2007/08  |  |  |  |  |  |  |  |  |
| Figure11.5  | Labour Force Survey   |  |  |  |  |  |  |  |  |
| Figure12    | See data source of Table7 and 8   |  |  |  |  |  |  |  |  |
|             | Yearly Budget Book in the Ministry of Finance , Bangladesh Educational Statistics   |  |  |  |  |  |  |  |  |
|             | Budgetary expenditure on education- Analysis of Budgetary expenditure of Centre and<br>States,Reserve Bank of India, Analysis of State Finances and Central and State Governments<br>budgets  |  |  |  |  |  |  |  |  |
| Figure13.1/ | the Education Ministry  |  |  |  |  |  |  |  |  |
| Figrue13.2  | Malaysia Plan, GDP by APO Data book 2009 and Budget by WDI  |  |  |  |  |  |  |  |  |
|             | Bugdet set of Minister of Education, Culture and Science  |  |  |  |  |  |  |  |  |
|             | Redbook of Nepal published by Ministry of Finance   |  |  |  |  |  |  |  |  |
|             | Provincial and Federal Budget Documents ,Ministry of education  |  |  |  |  |  |  |  |  |
|             | (Estimated)NATIONAL STATISTICAL COORDINATION BOARD/Commission on Audit  |  |  |  |  |  |  |  |  |
| Figure14.1  | UNESCO Data Base  |  |  |  |  |  |  |  |  |
| Fgiure14.2  | UNESCO Data Base and LFS in each country  |  |  |  |  |  |  |  |  |
| Figure14.3  | UNESCO Data Base and LFS in each country  |  |  |  |  |  |  |  |  |
|             | Manpower profile, India year book 2005, IAMR  |  |  |  |  |  |  |  |  |
|             | Bangladesh Bureau of Educational Information and Statistics   |  |  |  |  |  |  |  |  |
|             | The list of all establishments in the Business Register (BR) maintained by the FIBOS. The BR<br>is kept updated on the basis of information supplied to the Bureau of Statistics by the Fiji<br>Islands Revenue and Customs Authority, Fiji National Provident Fund, Registrar of<br>Companies, Ministry of Education and the City and Town Councils.   |  |  |  |  |  |  |  |  |
| Figure 15   | Statistical Yearbook of Education ,by the Ministry of Education   |  |  |  |  |  |  |  |  |
| 1 iguiero   | Economic surveys and School level educational statistics of Nepal published by Department of education, Ministry of education and sports  |  |  |  |  |  |  |  |  |
|             | Annual Pakistan Education Statistics Reports, AEPAM, Islamabad/Economic Survey of<br>Pakistan, 2006-07./'Census of Private Education Institution 1999-2000', Federal Bureau of<br>Statistics, Ibd./website of HEC, Islamabad (www.hec.gov.pk)   |  |  |  |  |  |  |  |  |
|             | School Census, Department of Census and Statistics, Statistical Abstract, Sri Lanka   |  |  |  |  |  |  |  |  |
|             | Mongolian Statistical Yearbook 2005-2008  |  |  |  |  |  |  |  |  |
| Table1      | ILO,"Decent Work and Informal Economy", 2002  |  |  |  |  |  |  |  |  |
| Table2      | Labour Force Survey in each country   |  |  |  |  |  |  |  |  |
| Table3      | data source of each variable is indicated in table  |  |  |  |  |  |  |  |  |
| Table4      | data source of each variable is indicated in table  |  |  |  |  |  |  |  |  |
| Table5      | Labour Force Survey   |  |  |  |  |  |  |  |  |
| Table6      | Labour Force Survey   |  |  |  |  |  |  |  |  |
|             | the vocational training database maintained by the Ministry of Labor.   |  |  |  |  |  |  |  |  |
|             | Ministry of Education, Culture and Science of Mongolia  |  |  |  |  |  |  |  |  |
| Table7      | MoF(a), 2008, Red Book, Ministry of Finance, Nepal/ MOF(b), 2008, Economic Survey, Ministry<br>of Finance/CTEVT, 2008, Council for Technical Education and Vocation Training, Nepal and it's<br>affiliated institution/Nepal Chamber of Commerce: Foreigh Employment Association,<br>Nepal/Company Registered Office, Kathmandu, Nepal/(Various website) It includes the Private<br>institution such as Nepal Telecom training center where government have 95 share. |  |  |  |  |  |  |  |  |
|             | The list of all establishments in the Business Register (BR) maintained by the FIBOS. The BR is kept updated on the basis of information supplied to the Bureau of Statistics by the Fiji Islands Revenue and Customs Authority, Fiji National Provident Fund, Registrar of Companies, Ministry of Education and the City and Town Councils.  |  |  |  |  |  |  |  |  |
|             | Sri Lanka: Ministry of finance and planing, Budget estimate   |  |  |  |  |  |  |  |  |
|             | 'National Education Census, 2005', AEPAM, Ministry of Education, Islamabad.   |  |  |  |  |  |  |  |  |
|             | TVET Situationer Report or TVET Programs Monitoring or TVET Factbook  |  |  |  |  |  |  |  |  |
| Table8      | Bangladesh Bureau of Educational Information and Statistics   |  |  |  |  |  |  |  |  |
| 100100      | India: http://labour.gov.in/policy/NationalSkillDevelopmentPolicyMar09.pdf, pp44  |  |  |  |  |  |  |  |  |

### References

- APO. 2009. APO Productivity Databook 2009. Tokyo: APO.
- Arias, O. and M. Khamis. 2008. "Comparative Advantage, Segmentation and Informal Earnings: A Marginal Treatment Effects Approach." IZA Discussion Papers, 3916.
- Bekkers, Hans and Wim Stoffers. 1995. "Measuring Informal Sector Employment in Pakistan: Testing a New Methodology." *International Labour Review*, **134**.
- Chong, Galdo and Saavedra. 2008. "Informality and Productivity in the Labor Market in Peru." *Journal of Economic Policy Reform*, **11(4)**.
- Edward N. Wolff. 2000. "Productivity Convergence among OECD Countries: The Postwar Experience." *International Productivity Monitor*, Fall, **1**.
- Harris, J. R. and M. Todaro. 1970. "Migration, Unemployment and Development: A Two-Sector Analysis." American Economic review, 60.
- Henley, Andrew, G. Reza Arabsheibani and Francisco G. Carneiro. 2009. "On Defining and Measuring the Informal Sector: Evidence from Brazil." World Development 37 (5): 992–1003.
- ILO. 1972. Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya.
- International Labour Office. 2002. *Decent Work and the Informal economy*, Sixth Item on the Agenda, Geneva.
- Jutting, J. and J. de Laiglesia. 2009. Is Informal Normal? OECD.
- Kazekami, Sachiko. 2006. "Does the Labor Market Segment? Formal and Informal Sector in Tanzania" (Roudou-shijyou wa Bunndann Shiteirunoka? Tanizania no Fomaru Infomaru, in Japanese). The Report Anthology of the 36<sup>th</sup> National Convention (Zenkoku Takai Kennkyuu Houkoku Syu, in Japanese). Japan Society Human Resource Management, pp. 449–56.
- ------. 2007. "The Social Security System and the Importance of the Informal Sector" (Syakaihosyou-seido to Infomaru Sekuta no Ookisa, in Japanese) The Report Anthology of the 37<sup>th</sup> National Convention (Zenkoku Takai Kennkyuu Houkoku Syu, in Japanese). Japan Society Human Resource Management, pp. 331–7.

Koo, Hagen and Peter C Smith. 1983. "Migration, the Urban Informal Sector, and

Earnings in the Philippines." Social Quarterly, 24(2): pp.219–232

- Lehmann, H. and N. Pignatti. 2008. "Informal Employment Relationships and Labor Market Segmentation in Transition Economies: Evidence from Ukraine." ESCIRRU Working Paper 3.
- Lewis, W. A. 1954. "Economic Development with Unlimited Supplies of Labour." *The Manchester School* **22**: pp. 139–191.
- Maloney, William F. 1999. "Does Informality Imply Segmentation in Urban Labor Markets? Evidence from Sectoral Transitions in Mexico." The World Bank Economic Review 13(2): pp. 275–302.
- -----. 1999. "Self-Employment and Labor Turnover, Cross-Country Evidence." *Policy Research Working Paper, 2102.* World Bank.
- -----. 2004. Informality Revisited. *World Development* 32 (7): pp. 1159–78.
- Nugent, Keffrey B. and Shailender Swaminathan. 2006. "Voluntary Contributions to Informal Activities Producing Public Goods: Can These Be Induced by Government and Other Formal Sector Agents? Some Evidence from Indonesian Posyandus." In *Linking the Formal and Informal Economy*. Edited by Basudeb Guha-Khasnobis, Ravi Kanbur and Elinor Ostrom. New York: Oxford University Press.

OECDE. 2009. Is Informal Normal?

- Pagé, C. and M. Stampini. 2007. "No Education, No Good Job? Evidence on the Relationship between Education and Labor Market Segmentation." IZA Discussion Paper, 3187.
- Pieper, U. 2000. "Deindustrialisation and the Social and Economic Sustainability Nexus in Developing Countries: Cross-Country Evidence on Productivity and Employment." *The Journal of Development Studies* 26(4): pp. 66–99.
- Platteau, P. and F. Gaspart. 2003. "The Risk of Resource Misappropriation in Community-Driven Development." World Development 31 (10): pp. 1687–703.
- Development." *Development and Change* **35 (2)**: pp. 223–46.
- de Soto, H. 1989. The Other Path: The Economic Answer to Terrorism. New York: Basic Books.

-----. 2003. The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. New York: Basic Books.

Tannen, B. 1991. "Labor Markets in Northeast Brazil: Does the Dual Market Model Apply?" *Economic Development and Cultural Change* **39 (3)**.

UNESCO. 2006.

http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=1 43&IF\_Language=eng. Accessed on 31 July 2010.

UNESCO. 2010a.

http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=143&

IF\_Language=eng. Accessed 5 August 2010.

UNESCO. 2010b.

http://www.uis.unesco.org/glossary/Term.aspx?name=Gross%20enrolment%20 ratio%20(GER)&lang=en. Accessed 31 July 2010.

UNESCO. 2010c.

http://stats.uis.unesco.org/unesco/TableViewer/document.aspx?ReportId=1 43&IF\_Language=eng. Accessed 31 July 2010.