PAKISTAN EMPLOYMENT TRENDS 2007

SKILLS

Ministry of Labour, Manpower & Overseas Pakistanis
Labour Market Information and Analysis Unit
Government of Pakistan

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ISLAMABAD

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Executive summary

Employment and labour policies to promote opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity should be based on up-to-date and timely Labour Market Information and Analysis. The Ministry of Labour, Manpower and Overseas Pakistanis, in collaboration with the International Labour Organization and the United Nations Development Programme therefore initiated the development of a *Labour Market Information and Analysis system*, which became operational in the second half of 2006. The LMIA system aims to provide up-to-date and timely Labour Market Information and Analysis that serves as an input into the formulation and monitoring of labour and employment policies.

The LMIA system can be used to analyze labour market developments at various levels. Apart from the interplay between the labour market and the macroeconomic environment, labour market information can be used to monitor the employability of people and its relations with skills development and education. Education and skills development are crucial to improve and sustain productivity and income-earning opportunities at work. It also serves to enhance the mobility of people in the labour market and offers the potential for increased career choices. By investing in human capital through skills development, enterprises would benefit from increased productivity, which would serve to make Pakistan more competitive in an increasingly integrated global economy.

The analysis in this second issue of *Pakistan Employment Trends* identifies the need to promote greater investment in skills and training so that men and women have enhanced and equal access to productive and decent work. Through the vehicles of advocacy, knowledge development and services the LMIA system promotes the improvement of training policies and programmes in Pakistan, with special emphasis on training strategies that support the integration of groups that are disadvantaged in the labour market. The analysis clearly emphasises the need for reforms in the technical and vocational education and training system which have been initiated by the Government of Pakistan.

Based on the LMIA system, this second issue of *Pakistan Employment Trends* reviews selected indicators on skills and wages for the period 2000-2006 using mainly labour force survey data. More specifically the report analyses the educational attainment, enrolment, the technical and vocational training capacity in the country and looks at competitiveness. The acceleration of economic growth, changes in work process and technology over the years requires higher skilled workers. Without a workforce that is continuously acquiring new and improved skills, it will be difficult for Pakistan to be competitive in the globalizing world.

The review of the labour market demonstrates the need for a greater investment in education and training in Pakistan, in particular for youth and women, as the female illiteracy rate of the population ten years and above stands at 59.4 per cent, 24.4 percentage points higher than males. Overall, Pakistan's competitiveness is hampered by poor human capital. Educational attainment levels and enrolment levels are still low when compared with other countries in the region (see Table 4 and 5), even though there has been an increase since 2000. Reforms are necessary to improve literacy and basic education, and education and training investments should be closely linked to economic and employment growth strategies and programmes. Responsibility for improving the state of skills should be shared between the government, the private sector, workers and parents, as parents have a major responsibility to keep their children in school.

The analysis can be summarized as follows:

1. Labour force (15 years and above) with less than one year of education decreased from 53.3 per cent in 2000 to 46.2 per cent in 2006.
2. Female illiteracy rate of the population (10+) stands at 59.4 per cent, which is 24.4 percentage points higher than males.
3. Overall low attainment and enrolment levels in the field of education have led to skills gaps and shortage of skilled labour in the country.
4. During the period 2000 to 2006 educational attainment has improved across all levels. For example the labour force with pre-primary and primary education rose by 1.3 percentage points. The labour force with matric but below intermediate education grew from 11.4 to 12.8 per cent and educational attainment at degree level increased from 4.6 to 5.9 per cent.
5. Enrolment rates for the population aged 15 and above slightly increased between 2000 and 2006 in almost all educational attainment levels. The biggest improvement of 0.13 percentage points could be seen in the enrolment of the population (15+) with intermediate education but without degree.
6. The proportion of the labour force with formal/ vocational training declined or remained unchanged in 25 of a total of 43 provided training types. The highest decrease with -4.8 percentage points could be recorded in computer courses followed by a -3.8 decrease of people with formal/vocational training in auto mechanical courses. The largest increase is seen in electrician courses with an increase of 2.3 percentage points from 1999-2000 to 2005-2006.
7. The analysis of data demonstrates that highly skilled occupations are on the rise, which is in line with Pakistan's economic development in general and the decline of agriculture as a source of employment in particular. Highly skilled occupations accounted for 19.9 per cent of the employed in 2005-2006, with an increase of 1.8 percentage points over 1999-2000. There was 22.7 per cent increase in real wage rates in highly skilled occupations of employees between 1999-00 and 2005-06, compared to 8.1 and 11.6 per cent in skilled and unskilled occupations, respectively.

Based on the points raised, policy *implications* can be summarized as follows:

1. There is a strong need *to improve labour productivity* through education and training policies, both for new entrants to the labour market and the current labour force (46 per cent of the labour force has one year education or less).
2. To overcome the underutilization of the labour force more *women* need to be educated and trained.
3. In order to capitalize on the demographic dividend, policies are needed to specifically address the educational needs *of children aged 10-14.*

The analysis of Pakistan's skill situation in this report illustrates that, using a limited set of labour market indicators, skill relevant segments can be identified which impact the labour market and warrant investigation and policy analysis. Subsequent issues of *Pakistan Employment Trends* will increasingly integrate skill analysis with a focus on policy planning to improving education/training and employment policies. A number of recommendations in this context are part of the conclusions of this report.

Future issues of the *Pakistan Employment Trends* will cover additional indicators and information, especially at the provincial level, with the aim of better integrating labour market analysis and policies. The next report will analyse data from the 2006-2007 Labour Force Survey and will focus on labour market indicators for youth.

List of acronyms

DWCP	Decent Work Country Program
EPR	employment-to-population rate
FBS	Federal Bureau of Statistics
GDP	gross domestic product
ICLS	International Conference of Labour Statisticians
ICSE	International Classification by Status in Employment
ILC	International Labour Conference
ILO	International Labour Organization
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
ISIC	International Standard Industrial Classification
KILM	Key Indicators of the Labour Market
LMIA	Labour Market Information and Analysis
LF	labour force
LFPR	labour force participation rate
MDG	Millennium Development Goal
MLMOP	Ministry of Labour, Manpower and Overseas Pakistanis
MTDF	Medium Term Development Framework
NAVTEC	National Vocational and Technical Education Commission
NWFP	North West Frontier Province
OECD	Organisation for Economic Co-operation and Development
PSLM	Pakistan Social and Living Standards Measurement Survey
TVET	Technical and vocational education and training
UN	United Nations
UNDP	United Nations Development Programme

1. Introduction

1.1 Promoting decent employment – developing LMIA

Employment and labour policies are formulated to ensure that labour markets develop in an efficient way and generate decent work for all. The promotion of opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity is the overarching objective of the International Labour Organization (ILO), and provides an overall framework for action in economic and social development in many countries. The framework brings together multiple goals regarding rights at work, employment, social protection and social dialogue in an integrated manner.

In Pakistan, the ILO's Decent Work Country Program (DWCP) spells out a strategy and plan of action to promote the creation of decent work. In the context of the DWCP, a National Tripartite Forum on Employment and Skills was jointly organised by the Labour and Manpower Division of the Ministry of Labour, Manpower and Overseas Pakistanis (MLMOP) and the ILO in April 2006. The Forum aimed to provide a platform to examine the employment and labour market challenges facing Pakistan, and to assist the Government, Employers' and Workers' representatives in the formulation and implementation of concrete decent work policies and programs (see Ministry of Labour, Manpower and Overseas Pakistanis, 2006).

Decent work can be promoted using a range of policies, programs and activities. Examples are public works programs, legislation and regulations concerning labour utilization and working conditions, education policies and skills development programs, social security legislation and support for social dialogue between workers, employers and the government. Furthermore, macroeconomic policies including fiscal, monetary and trade policies have important effects on labour markets and can be made instrumental in achieving decent work objectives.

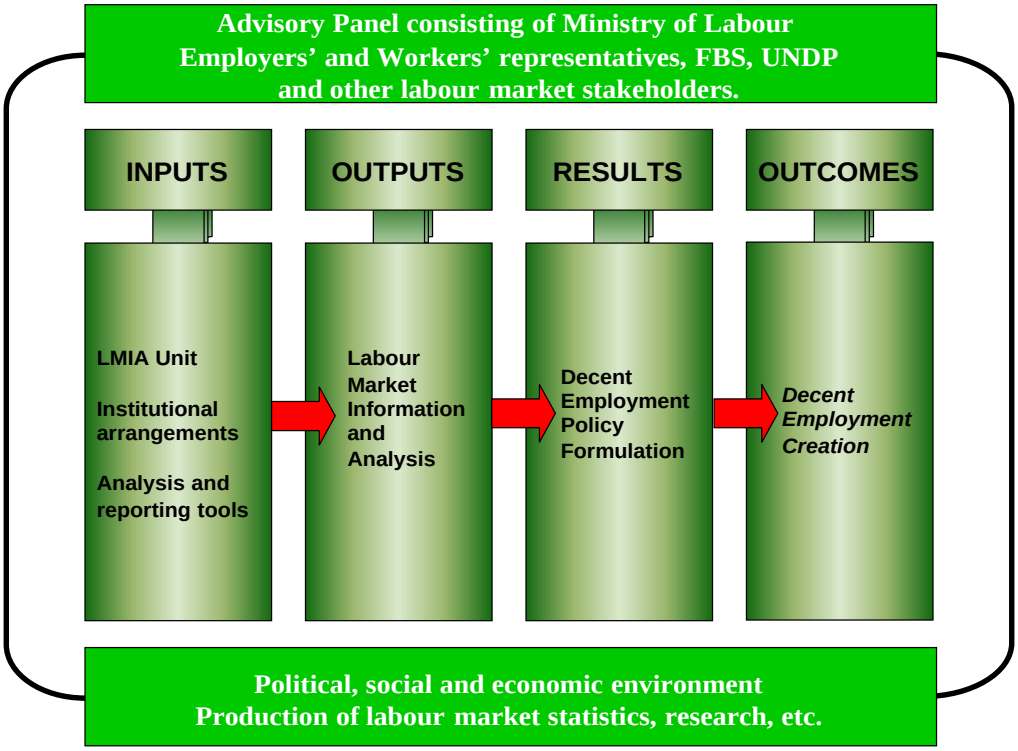
Which policies and programs should be designed and developed at a particular time depends on the state of the labour market, including the extent to which decent work is being generated or not. Labour markets are however dynamic and labour supply and demand is continuously changing in response to the economic and social environment, including the employment policy framework itself. Requirements of the world of work change in response to, for example, technological advances, industrialization, globalization, and changes in work organization. Important factors that determine shifts in labour supply are education and training policies and individual preferences.

The formulation of policies promoting decent employment in changing labour markets therefore calls for up-to-date and timely Labour Market Information and Analysis (LMIA), and monitoring current labour market developments constitutes the basis for employment and labour policy formulation. Labour market monitoring requires the use of a set of indicators to build a picture or diagnosis of the labour market that is sufficiently comprehensive to inform policy processes such as formulation, implementation, monitoring and evaluation, and ideally covers all dimensions of decent work listed before.

The role of LMIA in the promotion of decent work is illustrated in Diagram 1. The three components of the LMIA system can be seen as inputs into the production of Labour Market

Information and Analysis. LMIA, together with other inputs from the political, social and economic environment, is used to formulate decent employment policies which in turn are expected to contribute to the achievement of decent employment objectives in Pakistan.

Diagram 1. The role of LMIA in decent employment creation



The extent to which decent employment objectives are being achieved is monitored by various institutions using a range of instruments. Of particular importance are the activities of the Federal Bureau of Statistics. The LMIA Unit draws on the statistical data produced by the FBS, as well as on research produced by other institutions in Pakistan. As set out before, the Advisory Panel at the top of the diagram guides the activities of the LMIA Unit.

1.2 Developing Labour Market Information and Analysis

Over the years, Pakistan has made progress in its ability to produce up-to-date and timely Labour Market Information and Analysis. Various projects have been undertaken in this area with international assistance, which covered not only data collection, but also labour market analysis and capacity development. It is important to note that a labour force survey has been conducted for more than 40 years, which has been regularly reviewed and refined and now provides a source of quality information on labour markets in Pakistan at the national and provincial level.

Nevertheless, a number of challenges have persisted concerning labour market monitoring instruments, analysis of labour market information, and institutional coordination regarding LMIA vis-à-vis policy development. These challenges have gained importance in view of the far stronger emphasis that has recently been placed on the formulation, coordination and

monitoring of employment policies, as well as on the role of human resource development in economic and social policies in Pakistan (see e.g. Planning Commission, 2005, and Ministry of Labour, Manpower and Overseas Pakistanis, 2006).

In this context the Ministry of Labour, Manpower and Overseas Pakistanis in collaboration with the ILO and the United Nations Development Programme (UNDP) initiated the development of a *Labour Market Information and Analysis system*, which became operational in the second half of 2006. The aim of the system is to provide up-to-date and timely Labour Market Information and Analysis that serves as an input into decent employment policy formulation.

To provide this analysis, the LMIA Unit intends to produce a series of reports on the labour market entitled *Pakistan Employment Trends.* This second issue of *Pakistan Employment Trends* contains indicators on skills, which are also key indicators, several of which are part of the ILO's set of Key Labour Market Indicators (KILM). Future reports will include more indicators in line with the development of the database and the demand for information and analysis, and will also include newly collected data on selected topics. For example, the third report, scheduled for early 2008, will focus on youth employment and unemployment.

Apart from the labour market reports, activities are on-going to create and maintain a website for LMIA within the MLMOP site and to maintain the ILO Pakistan site to disseminate the outputs of the LMIA Unit. Other dissemination channels such as workshops are also planned. Together with the meetings of the Advisory Panel these channels provide important opportunities for the LMIA Unit to get feedback on the use of information and analysis.

LMIA is beginning to take hold in Punjab and Sindh as these provinces hope to establish LMIA Units in the course of 2008. Furthermore, the Provinces of Balochistan and NWFP have expressed an interest in the development of LMIA units. These Units, with support from the MLMOP LMIA unit and the UNDP/ILO project, will begin analysing the labour market at the Provincial level. This is an important step for all Provinces in advancing the knowledge base of the respective Provincial governments with regard to the labour market. Production of LMIA will go a long way to help policy makers make better informed decisions and be able to monitor and evaluate policies at the Provincial level. Capacity building of Federal and Provincial officials is continuing through the UNDP/ILO LMIA project in order to build sustainable LMIA in Pakistan and to help addressing future labour and employment challenges.

Although the initial UNDP/ILO project is scheduled to end in April 2008, a second phase has been developed into a comprehensive five year UNDP program, the MDG-driven Poverty Policy Package (MP3). The project will produce quality information and analysis which informs pro-poor, decent work and skills development policies, in collaboration with the LMIA Unit in the MLMOP, the Federal Bureau of Statistics (FBS) and skills bodies at the national and sector level (NAVTEC, SDCs, etc.). The main outputs will be the (1) Regular production of national LMIA reports; (2) Enhanced capacity of LMIA; and (3) Enhanced capacity of the FBS.

2. EMPLOYMENT TRENDS

The preceding chapters set out the approach towards the development of an effective Labour Market Information and Analysis system in Pakistan, and summarize a subset of key indicators reflecting important concepts and definitions that are used internationally to analyse labour markets.[1]

2.1 Summary of labour market developments

2.1.1 Employment policies and labour market targets

Pakistan recent macroeconomic performance has been impressive. Growth in gross domestic product (GDP) has been accelerated since the beginning of the decade (Table 1). Building on the improved macroeconomic foundation in Pakistan the Medium Term Development Framework (MTDF) for 2005-10 focuses on sustaining high economic growth rates, establishing a just and sustainable economic system for reducing poverty and achieving the Millennium Development Goals (MDGs). The overall MTDF target for poverty reduction is 21 per cent by 2010, within the framework of the MDG target of 13 per cent by 2015,
The economic strategy includes (Planning Commission, 2005):

(i) in agriculture, besides crops, development of livestock and fisheries;
(ii) in manufacturing, enhancement of the production base;
(iii) expansion of the social and physical infrastructure;
(iv) providing an enabling environment to foster local and foreign investment and enhance both public and private savings.

The MTDF discusses investment plans, sectoral development plans and assumptions and risks in detail. Central in the framework is the area of human resource development, which, together with physical infrastructure, has been identified as a key constraint in Pakistan. Sustained high economic growth rates of 7.0 percent between 2006 and 2007 (see Table 1) require greater investment in social sectors such as education and training.

Table 1. Economic growth (%)

	1990s (annual avg.)	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007
GDP growth	4.6	3.9	2.0	3.1	4.7	7.5	9.0	6.6	7.0
Agriculture	4.4	6.1	-2.2	0.1	4.1	2.4	6.5	1.6	5.0
Manufacturing	4.8	1.5	9.3	4.5	6.9	14.0	15.5	10.0	8.4
Commodity producing sector	4.6	3.0	0.8	1.4	4.2	9.3	9.5	3.4	6.0
Services sector	4.6	4.8	3.1	4.8	5.2	5.8	8.5	9.6	8.0

Source: Finance Division, 2007, *Economic Survey 2006-07*.

The MTDF estimated that 5.4 million new jobs will be generated in Pakistan between 2005-06 and 2009-10. At the same time labour force will increase by 3.4 million. Therefore labour demand will be greater than its supply. Overall employment growth is projected to increase

1 For additional information on the ILO's Key Indicators of the Labour Market please see: http://www.ilo.org/public/english/employment/strat/kilm/

from 2.8 per cent in 2005-06 to 3.3 per cent in 2009-10 and the unemployment rate will be reduced to 3.27 per cent in 2009-10.

The strategy of employment intensive economic growth particularly focuses on agriculture, livestock, industry including small and medium enterprises, telecommunications and information technology, services, housing and construction and natural resources. Employment expansion is expected to reduce the high income inequality in Pakistan (Gini coefficient 0.41 in 2002, up from 0.35 in 1988).

Apart from employment expansion policies, which include public works programs, employment policies consist of employment activation policies ('employee enhancement') and employment safety net policies ('employee protection'). Employment activation policies include training in the context of an expanding education and training system that meets the needs of the economy and fosters productivity growth. Technical and vocational training will play an enhanced role based on a new governance system and a larger coverage of the eligible population. Increasing annual training capacity to one million has been set as a medium term target. Another important element of employment activation policies consists of microfinance services for self-employment, which support people to run their own business.

2.1.2 Recent policy developments

The challenges in the field of labour market information in Pakistan have recently been reinforced by the far stronger emphasis that has been placed on the formulation, coordination and monitoring of pro-poor employment policies, as well as on the role of human resource development in economic and social policies as reflected in the government's Vision 2030, Medium Term Development Framework 2005-10, the Poverty Reduction Strategy Paper II (2007-09), the 2002 Labour Policy and other policy documents. LMIA is a necessary input for monitoring of these policies, as well as for the envisaged reforms of the technical and vocational education and training (TVET) system. Partly with a view to the demographic transition that is unfolding and partly with a view to the still abysmally low education and skill levels of the workforce, TVET has been made central pillar of human resource development policies in Pakistan. Since the publication of the first issue of *Pakistan Employment Trends* in June 2007, there have been several key policy developments in the areas of employment and skills.

Emphasis on technical and vocational education and flexible training is important for enhancing the skills of the labour force. Accordingly, the Prime Ministers' office established the National Vocational and Technical Education commission (NAVTEC) in 2006 with a view to strengthen, standardize and streamline vocational and technical education. NAVTEC is primarily a regulatory and coordinating body for skills development and establishment of national skill standards, certification and accreditation procedures.

NAVTEC has recently released a draft Vision on skills called: *Skilling Pakistan: A Vision for the National Skills Strategy, 2008 – 2012.* This consultation document highlights approaches to address the skills shortages in Pakistan and also points out the need for research. NAVTEC acknowledges that there is little systematic research conducted on skills development. The vision calls for the production of "more in-depth, systematic, multi-dimensional research". This would not only inform policy related to skills development, but also work towards designing policies and programmes that "are more holistic in understanding and effective in

implementation". In addition, the strategy specifically notes the need for disaggregated information on gender.

In August 2007, the Government released *Vision 2030*, a comprehensive strategy designed to create "A developed, industrialized, just and prosperous Pakistan through rapid and sustainable development in a resource constrained economy by developing knowledge inputs". Amongst other salient points, major challenges identified are to improve the quality and expand the delivery of education, and to place employment and employability at the centre of economic and social policies. It recognizes the need to invest in education and training as these are the foundations for a skilled and productive labour force. F
urthermore, the *Vision* points out that labour reform policies should address productivity and industrial relations issues.

2.1.3 Labour market developments

Pakistan's macroeconomic performance and renewed employment policy framework provide the basis for a move towards the achievement of decent employment objectives. The review of labour market developments in this report aims to establish to which extent this is happening, and to make recommendations on how better labour market outcomes can be achieved making optimal use of labour market information and analysis.

Examination of labour market developments since 1999-2000 using labour force survey and other data provides evidence that improvements have been achieved in opportunities for work and equity in work. As shown in Table 2, labour force participation, employment and unemployment indicators have changed in line with higher economic growth rates in recent years. The labour force participation rate has increased by 3.2 percentage points since the beginning of the decade, the employment-to-population rate increased by 3.6 percentage points and the unemployment rate decreased by 1.6 percentage points. Women benefited in particular from the improvement in labour market performance, with the female unemployment rate registering single digits for the first time, while an important part of the improvement is explained by the labour market position of the youth (aged 15 to 24). Overall, an average annual employment growth rate of more than four percent was achieved during 2000-2006, which exceeds the targeted growth rate of the MTDF for the second half of the decade (projected at around three per cent).

The record regarding other dimensions of decent employment such as productivity, security at work and dignity at work as captured in the structure of employment is less impressive, and suggests persistent labour market imbalances. The examination of hours of work, status in employment and employment in the informal economy shows that the structural change taking place in the Pakistani economy is not necessarily benefiting the bulk of workers that lack decent employment. Work in the informal economy increased from 66 per cent of the non-agricultural employment in 1999-2000 to 73 per cent in 2005-2006. During the same period, wage and salaried employment increased by not more than 1.7 percentage points of the employed, and the size of the status group of own account workers decreased by more than seven percentage points. The proportion of the employed working excessive hours declined slightly, but only because the proportion of females in total employment increased. The proportion of male workers working excessive hours rose to more than 47 per cent.

Despite recent gains in terms of employment and unemployment, the labour market indicators reviewed highlight the gender gap in labour markets in Pakistan. Women continue to be

underutilized in the economy and labour market as reflected in their overall participation as well as the distributions in terms of economic sector and status groups. Qualitative changes in employment and work prove to be much more difficult to achieve than increasing participation.

Two important areas that can either hamper or facilitate structural change in the labour market are human resource development and labour market institutions. Preliminary review of human resource development in Pakistan shows the low educational attainment of the labour force, and the huge gender gap in this area (see Chapter 3). Similarly, a review of selected labour market indicators and research points at malfunctioning of labour market institutions including legislation and regulation. Both areas warrant further investigation and improved linkage of policy objectives with labour market monitoring and evaluation.

Table 2. Selected key indicators of the labour market (%)

10+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Labour force participation rate					
Both sexes	42.8	43.3	43.7	46.0	+3.2
Males	70.4	70.3	70.6	72.0	+1.6
Females	13.7	14.4	15.9	18.9	+5.2
Employment-to-population rate					
Both sexes	39.5	39.8	40.4	43.1	+3.6
Males	66.1	65.6	66.0	68.0	+1.9
Females	11.3	12.1	13.9	17.2	+5.9
Unemployment rate					
Both sexes	7.8	8.3	7.7	6.2	-1.6
Males	6.1	6.7	6.6	5.4	-0.7
Females	17.3	16.5	12.7	9.3	-8.0
Share of industry in total employment					
Both sexes	18.0	20.8	20.3	20.7	+2.7
Males	19.5	21.7	21.4	22.1	+2.6
Females	9.0	15.6	15.0	14.9	+5.9
Share of agriculture in total employment					
Both sexes	48.4	42.1	43.0	43.4	-5.0
Males	44.4	38.2	38.1	37.2	-7.2
Females	72.9	64.6	67.3	68.9	-4.0
Share of trade in total employment					
Both sexes	13.5	14.9	14.8	14.7	+1.2
Males	2.6	1.9	1.7	2.1	-0.5
Females	15.3	17.1	17.5	17.7	+2.4
Share of wage and salaried employees in total employment					
Both sexes	35.6	39.9	37.9	37.3	+1.7
Males	36.0	40.3	39.2	40.0	+4.0
Females	33.1	37.1	31.2	25.7	-7.4
Share of the employed working 50 hours or more					
Both sexes	41.3	40.2	42.2	40.1	-1.2
Males	45.9	44.8	48.3	47.4	+1.5
Females	13.0	13.5	11.9	9.5	-3.5
Share of the employed in agriculture working 50 hours or more					
Both sexes	40.3	36.9	36.6	31.2	-9.1
Males	47.7	43.5	45.8	41.5	-6.2
Females	12.9	14.0	11.1	8.2	-4.7
Share of the employed in trade working 50 hours or more					
Both sexes	63.7	62.1	68.8	67.6	+3.9
Males	64.5	62.8	69.7	68.5	+4.0
Females	35.3	25.7	21.9	38.2	+2.9

Source: FBS, *Pakistan Labour Force Survey 2005-2006*.

2.2 Towards decent employment in Pakistan – Analysis of Key Indicators of the Labour Market

Labour Market Information and Analysis for decent employment policy formulation, monitoring and evaluation can be produced using a variety of sources of data and information. These include household surveys, establishment surveys, administrative information, national accounts and so on. Among these sources household surveys, in particular labour force surveys based on questionnaires administered at the household level, have a special position. These surveys allow for a comprehensive quantification of the labour market in terms of the labour force, employment and unemployment, disaggregated as appropriate, as well as an analysis of numerous aspects of employment and unemployment. Such a comprehensive quantification serves not only to directly analyse labour markets and inform employment and labour policies, but also provides benchmark information against which information from other sources can be assessed.

For these reasons we start the analysis with an examination of indicators which are based on labour force survey data since 2000. The indicators used in the analysis are part of the ILO's set of Key Indicators of the Labour Market which has been developed to monitor labour markets at the global, regional and country level. Additional indicators have been selected on the basis of a review of sources of labour market information in Pakistan.

Given the focus of *Pakistan Employment Trends* on employment, as well as limitations in both analytical capacity and availability of data, the current report cannot examine all dimensions of decent work. In particular, indicators and issues regarding rights at work, social protection and social dialogue will not be examined in much detail. It will nevertheless be shown that a set of selected indicators can provide important insights into the extent to which the labour market is generating decent work or not.[2]

2 For more information on decent work in Pakistan see ILO (2005) and the websites of the ILO: http://www.ilo.org and http://www.ilo.org.pk.

2.3 Population and labour force

Three widely used indicators to characterize labour markets are the labour force participation rate, the employment-to-population rate and the unemployment rate. These indicators can be used, together with other information and indicators, to assess several dimensions of decent work.

The overall population and labour force figures that have been used to calculate the indicators in Pakistan are those that were available at the time of publication of the respective national labour force survey reports (see Table 3). It should be noted that these revisions only affect the size of the population and labour force, and not the distributions presented in most of the tables that follow.

The national population at the beginning of 2006 was estimated at 155.4 million people, and the average annual growth rate of the population during 2000-2006 was around 2.2 per cent. Most of the population is concentrated in Punjab and Sindh, while Balochistan is by far the least populated province. Around two thirds of the population is living in rural areas.

Table 3. Population and labour force (millions)

Pakistan	**1999-2000**	**2001-2002**	**2003-2004**	**2005-2006**	**Change 1999-2000 to 2005-2006**
Population	136.0	145.8	148.7	155.4	+19.4
Urban	43.0	47.4	49.7	52.1	+9.1
Rural	93.0	98.4	99.0	103.3	+10.3
Population 10+	92.1	99.6	103.4	108.8	+16.7
Punjab	57.1	58.3	59.3	61.9	+4.8
Sindh	19.7	23.3	25.7	27.0	+7.3
NWFP	11.7	13.6	13.6	14.9	+3.2
Balochistan	3.6	4.3	4.8	5.0	+1.4
Labour force 10+	39.4	43.1	45.2	50.1	+10.7
Punjab	25.8	27.0	27.8	30.3	+4.5
Sindh	7.7	9.4	10.4	11.6	+3.9
NWFP	4.5	4.9	5.0	5.9	+1.4
Balochistan	1.4	1.7	1.9	2.3	+0.9

Source: FBS, various years, *Pakistan Labour Force Survey*.

3 STATE OF SKILLS IN PAKISTAN

3.1 Definitions and methods

Overall, knowledge and skills are drivers of economic growth and social development since higher levels of educational attainment propel innovation and productivity and increase levels of entrepreneurship, therefore improving the economic context of decent work. Furthermore, education and training are increasingly important components of competitiveness, providing access to new knowledge and imparting training in new work processes and technologies.

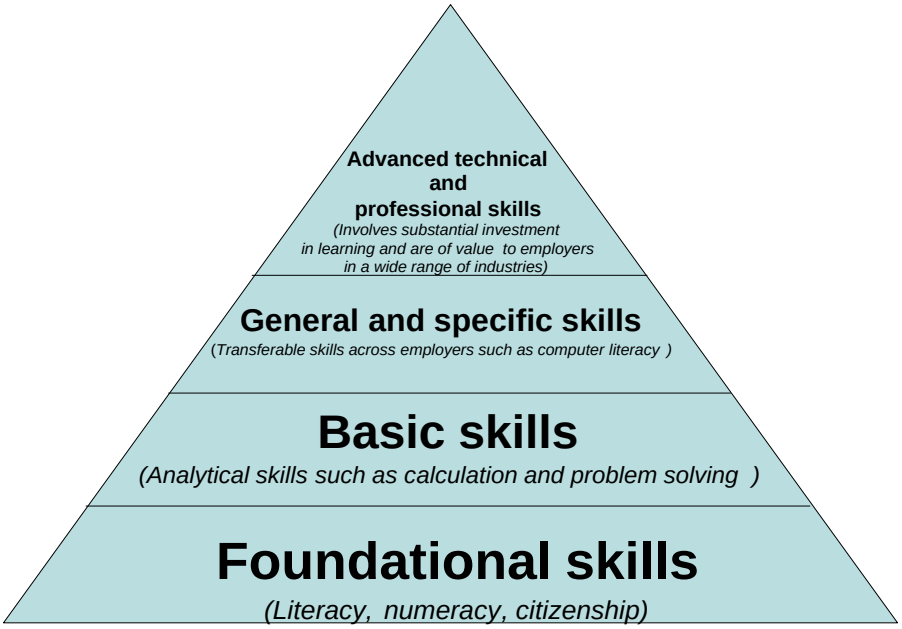
For an individual, skills and competencies help identify capacities to make use of income generating opportunities and to adjust to changes in the labour market. A key to employability is being adaptable and possessing the skills and knowledge for improved performance in changing labour markets. Furthermore, training in citizenships skills, including workers' rights, empowers the disadvantaged to access education, training, decent jobs, and seek prospects for entrepreneurship.

As regards organizations, the entrepreneurial and managerial skills of workers help determine the ability to generate and exploit opportunities and to invest in skills of their workforce. The capacity to promote a culture of workplace learning and to facilitate knowledge-sharing between workers, helps determine the employability of workers within an organization. Skills particular to an enterprise, combined with organizational knowledge are essential for an organizations' ability to innovate and prosper (Foss, 2003).

Overall training encompasses the "full continuum of education, skills formation processes and training activities" (ILO, 1998). Diagram 2 identifies four levels of competencies and suggests that foundational and basic skills are mandatory and should be accessible to all. These address social rights and are the foundation of a productive labour force, as they concern primary and secondary education. The more general and specific skills address training to meet occupational standards and are met through vocational and technical schools as well as training institutes and apprenticeships among others. The advanced technical and professional skills involve substantial investment and are often specific to occupations, but can be transferable to a range of jobs.

It is important to analyze this full continuum of skills formation, and not limit the analysis to particular groups. Before turning to this analysis, we briefly discuss Pakistan's ranking in global competitiveness as well as the sources of information on skills in Pakistan.

Diagram 2. Skills Pyramid



Source: Based on ILO (1998, pp. 58 -59).

3.2 Skills and competitiveness

The World Economic Forum publishes the *Global Competitive Index* annually. The Index looks at a range of factors contributing to productivity and competitiveness, and not one of them by itself can ensure competitiveness. The Forum has set out twelve pillars to rank countries and it defines competitiveness "as a set of institutions, policies, and factors that determine the level of productivity of a country". It is interesting to point out that four of the twelve pillars[3] are directly linked to skills. These are health and primary education, higher education and training, business sophistication and innovation. Indirect pillars are technological readiness, as this measures how a country implements existing technologies to improve productivity, and labour market efficiency.

Referring to the *Global Competitive Index*, Pakistan's primary areas for improvement are in human capital. Out of 131 countries analyzed in 2007, Pakistan is ranked at number 92, and placed third in the South Asia (see Table 4). Concerning education and training and the labour market, Pakistan fared poor when compared to the rest of the world, but as regards business efficiency and innovation, Pakistan scored fairly well with a rank of 79 and 69 respectively.

The health and primary education pillar is important since a healthy and educated labour force is essential for development, while the lack of basic skills severely limits employability and, wages. Moreover, workers are much less able to adapt to new production methods and technology. In addition, the lack of basic education in the workforce restrains companies from growing. In this category Pakistan weighs in at number 115, the lowest in the region. The fifth pillar of higher education and training considers the quality of the educational system

3 Twelve pillars of the GCI are: Institutions, Infrastructure, Macroeconomic stability, Health and primary education, Higher education and training, Goods Market efficiency, Labour market efficiency, Financial market sophistication, Technological readiness, Market size, Business sophistication and Innovation.

along with enrolment rates in secondary and tertiary education. It is important that the labour force be able to adapt to changing environments in a globalizing economy. Pakistan was rated number 116 in this area.

The ability of business leaders to run an efficient operation has a major impact on productivity. Management skills are required for a high score on the eighth pillar, business sophistication. For the ninth pillar on innovation, Pakistan ranked 69th, and is third in the region. This pillar looks at business investment in research and development, high quality scientific research institutions, collaboration in research between universities and business, and protection of intellectual property.

As regards the efficiency of the labour market, issues highlighted in the Forum's report, such as cooperation in industrial relations, flexibility of wage determination, rigidity of employment, hiring and firing practices, and firing costs can be related to private sector skills investment. In order to develop a competitive work force, stability for workers must be balanced with some flexibility for enterprises in adjusting their workers to meet new demands. It is important that the labour regulatory system provides this balance to encourage employer's investment in training and workers' participation (Amjad, 2007).

Table 4. Global Competitive Index rankings - South Asia 2007-08

Countries	**GCI 2007- 2008**
Bangladesh	107
India	48
Nepal	114
Pakistan	92
Sri Lanka	70

Source*: World Employment Forum Global Competitive Index 2007-2008*.

Table 5. Global Competitive Index pillars - South Asia 2007-08

Countries	**4th pillar: Health and primary education**	**5th pillar: Higher education and training**	**7th pillar: Labour market efficiency**	**9th pillar: Technological readiness**	**11th pillar: Business sophistication**	**12th pillar: Innovation**
Bangladesh	105	126	76	125	102	117
India	101	55	96	62	26	28
Nepal	107	118	122	115	113	123
Pakistan	115	116	113	89	79	69
Sri Lanka	51	77	118	88	51	40

Source: *World Employment Forum Global Competitive Index 2007-2008.*

3.3 LMIA and skills

Skills are the most important determinants of a country's capacity to compete in world markets and to make use of technological advances (ILO, 2006). Labour market information and analysis helps us to understand the demand for skills and the supply of skills in the economy, and to inform skills development policies. There are many tools that can be used to make assessments of demand and supply (see e.g. Government of South Africa, 2003)

(1) labour market analysis (e.g. analysis of educational attainment, shifts in sectoral and occupational distributions, changes in wages and earnings)
(2) economic sector level skills assessments (demand and supply, quantitative and qualitative)
(3) specialized studies (e.g. tracer studies, econometric studies, policy evaluations)

All tools should be used in conjunction with stakeholder consultations, not only to validate the results of the analysis but also to establish mechanisms for policy development and implementation based on adequate information. In this context, the Advisory Panel (Chapter 1 and Diagram 1) has an important function in disseminating results and highlighting areas in which LMIA is needed. It is also important that the information has a broad coverage of skills development modalities, and in particular covers public and private provision, as well as enterprise-based skills development. Labour market information should also include indicators capturing the outcome or impact of skills development efforts in the economy (Sparreboom, 2004).

In Pakistan, the labour force survey is underutilized and more can be done to use this source to generate labour market information for skills development. More analysis is needed in particular of sectoral changes in employment, shifts in the occupational distribution, and changes in employment status, and these topics are addressed in Pakistan Employment Trends. However, establishment-based data on occupations, wages and earnings are not widely available and economic sector level skills assessments and more specialized studies, such as tracer studies, are hardly available at all.

Considering this situation, it is difficult to assess Pakistan's skills needs in sufficient depth, and to accurately gauge the extent to which the demand for skills is met. The dearth of information also hampers evidence based skills policy making and the reform process of TVET reforms that has been started. However, based on information from labour force surveys and other sources of information a number of trends can be analyzed that are important in the context of skills development policies and reforms.

3.4 Supply of skills

We can assess the state of education and training in the labour force with reference to the four levels in the pyramid (Diagram 2). Such an analysis can start with the educational attainment of the labour force, as attainment statistics are the best available indicators of skills to date. But attainment levels alone do not measure skills. It is the quality of skills attained in a formal education and training system that is important and can impact on economic growth.

There are complementarities between what is commonly viewed as 'education' and 'training', and one is the ability to acquire skills more effectively. The higher the level of education a person has the more likely they can further improve their employability by acquiring

additional skills through training. Unfortunately the average educational attainment of the labour force in Pakistan is very low. In 1999-2000, more than half of the labour force was illiterate (Table 6), and less than five per cent had attained a university degree.

Table 6. Population and illiteracy (millions)

Pakistan	1999-2000	2001-2002	2003-2004	2005-2006
Population	136.0	145.8	148.7	155.4
Urban	43.0	47.4	49.7	52.1
Rural	93.0	98.4	99.0	103.3
Illiterate Population 10+	49.2	49.8	50.0	51.1
Urban	10.0	11.1	11.2	11.7
Rural	39.2	38.7	38.8	39.4
Illiterate Population 10+	49.2	49.8	50.0	51.1
Males	19.4	19.5	19.1	19.4
Females	29.9	30.3	30.9	31.6

Since 2000, educational attainment levels have improved across all levels. Regardless of this progress, low attainment and enrolment levels have led to skills gaps and shortages, and will continue doing so. The large proportion of people with hardly any formal education is of grave concern, although it is slightly declining. Low educational attainment is associated with low productivity and income levels. Furthermore, illiteracy impedes the trainability of the labour force, and therefore hinders the capacity of the labour market to adapt to change in the short term. This hindrance can be reinforced if, as some research indicates, employers are less likely to provide training to their workers in countries in which the quality of education is poor (Colombano and Krkoska, 2006).

There is also a colossal gap between the educational attainment levels of men and women, as the illiteracy level is much higher for females, and proportions of several education levels in the male labour force are double the proportions in the female labour force. Female illiteracy rate of the population 10 years and above is at 59.4 per cent, 24.4 percentage points higher than their male counterparts. This ranks Pakistan among the 14 nations where the female illiteracy rate is more than 20 percentage points higher than that of males. The others include nine African countries, Afghanistan, India, Nepal and Yemen (ILO, 2007).

When looking at skills supply, the skills of the unemployed are of importance as this is the pool of workers which are readily available to help meet demand (Table 8). The high share of highly educated unemployed persons could indicate a lack of sufficient professional and high-level technical jobs. Another variable that could be impacting this ratio in a positive way is that many qualified jobseekers might be accepting employment below their skill level, or underemployment.

It is interesting to note that the levels of education of unemployed females are relatively high. When looking at the unemployment rates by education level (Table 9), women have seen a significant decline in levels below intermediate, but only a minor drop in the rate at degree level since 1999. There are several possible explanations for this. One explanation, as reflected in employment by status and employment by sector indicators, points at labour market segregation along gender lines, which is confirmed by research on the occupational

distribution of the employed disaggregated by sex (e.g. Nasir, 2005). Therefore, barriers may prevent women from obtaining employment in high skilled jobs for which they are qualified at (PET, 2007).

Another explanation for the relatively high educational attainment levels of female unemployed is a mismatch between the skills required and those supplied. Indicators regarding the (pre employment) educational attainment of the labour force are not sufficient to assess the extent to which the education and training system provides the skills that are required by the economy. Continuing economic and technological change have led to a situation in which the bulk of human capital is now acquired, not only through initial education and training, but increasingly through adult education and enterprise or individual worker training, within the perspective of lifelong learning and career management.

Table 7. Educational attainment of the labour force (%)

Labour force 15+	**1999-2000**	**2001-2002**	**2003-2004**	**2005-2006**	**Change 1999-2000 to 2005-2006 (percentage point)**
Less than one year of education					
Both sexes	53.3	48.1	47.2	46.2	-7.1
Males	48.1	43.8	41.7	40.0	-8.1
Females	80.6	71.3	72.7	71.8	-8.8
Pre primary education					
Both sexes	2.0	3.5	3.7	3.3	+1.3
Males	2.2	3.9	4.2	3.7	+1.5
Females	0.6	1.2	1.4	1.6	+1.0
Primary but below middle					
Both sexes	14.2	14.9	14.7	15.5	+1.3
Males	16	16.3	16.3	17.1	+1.1
Females	5.0	7.6	7.4	9.0	+4.0
Middle but below matric					
Both sexes	10.4	11.2	11.1	11.5	+1.1
Males	11.8	12.5	12.7	13.4	+1.6
Females	2.8	4.2	3.4	3.4	+0.6
Matric but below intermediate					
Both sexes	11.4	12.3	12.6	12.8	+1.4
Males	12.5	13.3	13.9	14.5	+2.0
Females	5.2	6.9	6.5	6.1	+0.9
Intermediate but below degree					
Both sexes	4.1	4.6	4.7	4.8	+0.7
Males	4.5	4.7	5.0	5.3	+0.8
Females	2.4	4.1	3.1	2.9	+0.5
Degree					
Both sexes	4.6	5.3	6.0	5.9	+1.3
Males	4.9	5.4	6.1	6.1	+1.2
Females	3.4	4.7	5.5	5.1	+1.7
All education levels					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table 8. Educational attainment of the unemployed (%)

Unemployment 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Less than one year of education					
Both sexes	46.0	42.5	38.5	41.9	-4.1
Males	34.1	31.9	28.1	31.7	-2.4
Females	68.3	64.2	62.2	64.6	-3.7
Pre primary education					
Both sexes	1.7	3.2	3.8	2.8	+1.1
Males	2.2	4.3	4.8	3.4	+1.2
Females	0.8	0.9	1.4	1.6	+0.8
Primary but below middle					
Both sexes	13.9	14.1	12.6	15.2	+1.3
Males	16.2	16.7	14.0	17.9	+1.7
Females	9.6	8.8	9.4	9.1	-0.5
Middle but below matric					
Both sexes	14.7	13.3	13.2	10.9	-3.8
Males	19.3	17.0	17.2	14.0	-5.3
Females	6.2	5.9	4.1	3.8	-2.4
Matric but below intermediate					
Both sexes	14.3	15.3	17.8	16.0	+1.7
Males	17.3	17.5	21.0	19.1	+1.8
Females	8.8	10.6	10.5	9.3	+0.5
Intermediate but below degree					
Both sexes	5.0	5.9	7.0	6.4	+1.4
Males	5.9	6.2	7.8	7.0	+1.1
Females	3.4	5.1	5.2	5.0	+1.6
Degree					
Both sexes	4.3	5.8	7.2	6.8	+2.5
Males	5.0	6.4	7.1	6.9	+1.9
Females	2.9	4.4	7.3	6.6	+3.7
All education levels					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table 9. Unemployment rate, by educational attainment and sex (%)

Unemployment rate 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Less than one year of education					
Both sexes	6.2	6.9	6.0	5.5	-0.7
Males	3.9	4.5	4.2	4.1	+0.2
Females	13.4	14.8	11.1	8.7	-4.7
Pre primary education					
Both sexes	6.3	7.2	7.4	5.2	-1.1
Males	5.6	6.8	7.1	9.7	+4.1
Females	19.3	13.3	12.4	4.8	-14.5
Primary but below middle					
Both sexes	7.0	7.4	6.3	6.0	-1
Males	5.6	6.4	5.3	9.8	+4.2
Females	30.3	19.0	16.5	5.5	-24.8
Middle but below matric					
Both sexes	10.1	9.3	8.8	5.8	-4.3
Males	9.1	8.4	8.5	5.5	-3.6
Females	34.5	23.1	15.4	10.5	-24
Matric but below intermediate					
Both sexes	9.0	9.7	10.4	7.6	-1.4
Males	7.7	8.2	9.4	6.9	-0.8
Females	27.0	25.3	20.9	14.6	-12.4
Intermediate but below degree					
Both sexes	8.7	10.0	11.2	8.1	-0.6
Males	7.3	8.3	9.8	6.9	-0.4
Females	22.6	20.3	22.0	16.5	-6.1
Degree					
Both sexes	6.7	8.5	8.8	7.0	+0.3
Males	5.7	7.4	7.2	5.9	+0.2
Females	13.6	15.3	17.1	12.5	-1.1

Source: FBS, various years, *Pakistan Labour Force Survey.*

3.5 Enrolment

Globally, when we consider the issue of skills and employability, younger adults are often more likely to exit unemployment than older adults. It has also been recognized that older adults with higher skills often find it easier to obtain employment than those with lower skills. Unfortunately enrolment rates outlined in Table 10 for the population aged 15 and above have only slightly increased over the years and this is cause for concern for the state of skills in the labour force in the years to come. This large group of people with little education presents a major challenge for the labour force and decent employment in Pakistan, as they usually become unemployed, part of the working poor or work in vulnerable jobs.

The Pakistan Social and Living Standards Measurement Survey's chapter on education also looked at literacy and outlined the enrolment situation in more detail. It noted the correlation between literacy and age, as younger people had much higher literacy levels. However, it also pointed to the low enrolment levels and noted the dropout rate from primary school as a major problem, as roughly 21.6 per cent of children in primary school drop out before completing.

Although this has declined by about 7 percentage points since 2001, it is still a very high rate. Most often parents explained the reason for their child leaving as a lack of motivation. This is cause for alarm and reasons for the lack of motivation must be analysed so as to make appropriate adjustments and keep children in school. However, the reason most cited in rural NWFP and Balochistan was that the parents did not allow their children to continue. Further analysis of the labour force and education in these areas is warranted.

Table 10. Enrolment of population, by educational attainment and sex (%)

Enrolment rate 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Less than one year of education					
Both sexes	0.00	0.00	0.00	0.00	0.00
Males	0.00	0.00	0.00	0.00	0.00
Females	0.00	0.00	0.00	0.00	0.00
Pre primary education					
Both sexes	0.00	0.00	0.00	0.00	0.00
Males	0.00	0.00	0.00	0.00	0.00
Females	0.00	0.00	0.00	0.00	0.00
Primary but below middle					
Both sexes	0.89	0.87	1.07	1.08	+0.09
Males	0.53	0.55	0.66	0.67	+0.04
Females	0.36	0.32	0.41	0.41	+0.05
Middle but below matric					
Both sexes	3.22	3.24	3.18	3.34	+0.12
Males	2.09	2.16	1.98	2.09	0.00
Females	1.13	1.08	1.21	1.25	+0.12
Matric but below intermediate					
Both sexes	2.39	2.37	2.51	2.31	-0.08
Males	1.52	1.53	1.51	1.33	-0.19
Females	0.86	0.85	1.00	0.98	+0.12
Intermediate but below degree					
Both sexes	1.20	1.06	0.50	1.33	+0.13
Males	0.70	0.70	0.30	0.77	+0.07
Females	0.50	0.37	0.20	0.56	+0.06
Degree					
Both sexes	0.34	0.31	0.46	0.42	+0.08
Males	0.23	0.20	0.28	0.23	0.00
Females	0.14	0.11	0.18	0.19	+0.05

Source: FBS, various years, Pakistan Labour Force Survey.

3.6 Formal vocational training of the labour force

Although improving education is an integral component of skills development in the country, another element is to improve the skills of the existing labour force. Changes in technology, the emergence of global markets for products and services, international competition, the emphasis on attracting foreign direct investment, new forms of business organisation and production and new environmental challenges have created a demand for new, diversified, sectoral relevant skills and knowledge in existing labour markets. Continuously upgrading

workers' skills through vocational and on-the-job training is vital in order to meet these demands created by change.

Table 11. Distribution of the labour force with formal/vocational training by type of training (%)

Type of Training (10+)	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Draftsman	1.3	2.1	1.5	2.2	0.9
Civil Engineering Technology	2.8	3.8	2.1	3.0	0.2
Electrical Engineering Technology	2.3	1.5	1.6	2.6	0.3
Mechanical Engineering Technology	1.8	1.9	1.0	3.0	1.2
Laboratory Technician	1.0	1.0	0.7	0.6	-0.4
Metallurgy Mining Technology	0.4	-	0.0	-	-0.4
Auto & Farm Machinery	1.5	1.3	1.2	0.8	-0.7
Foundry Technology	0.3	-	-	-	-0.3
X-Ray Technicians	0.3	0.1	0.1	0.3	0.0
Diploma in Design	0.0	0.2	-	0.7	0.7
Diploma in Arts	0.3	0.2	0.3	0.3	0.0
Architect Technology	0.4	-	0.0	0.5	0.1
Textile Technology	0.9	0.6	0.5	1.1	0.2
Garment Making	5.5	4.4	6.8	3.8	-1.7
Leather Work	0.6	0.3	0.7	0.2	-0.4
Wood Work	0.7	0.7	0.2	0.2	-0.5
Refrigeration and Air Conditioning	0.5	1.3	1.2	2.4	1.9
Diploma in Radio and T.V.	1.5	1.9	0.8	0.6	-0.9
Electrician	6.7	6.1	7.0	9.0	2.3
Ceramics Technology	0.2	0.3	-	-	-0.2
Dispenser Course	3.3	2.2	1.8	3.7	0.4
Polishing and Soldering	0.1	-	0.2	0.1	0.0
Interior Decoration	-	-	-	-	-
Typing and Shorthand Course	3.1	2.4	1.6	1.9	-1.2
Cooking Course	0.3	0.6	0.5	0.1	-0.2
Turner Course	1.9	0.8	0.3	0.3	-1.6
General Nursing Course	0.3	1.5	0.8	1.4	1.1
Welding Course	2.7	2.0	2.3	1.6	-1.1
Midwifery Course	0.8	1.2	0.5	0.5	-0.3
L.H.V Course	0.8	0.4	0.7	0.8	0.0
Embroidery and Knitting Course	4.6	2.4	9.9	4.8	0.2
Silma Tilla	0.2	0.2	0.3	0.6	0.4
Flower Making Course	0.2	-	-	0.1	-0.1
Plumbing and Pipe Fitting	1.5	1.6	0.9	0.7	-0.8
Weaving Course	2.0	1.6	2.6	1.0	-1.0
Pattern Making Course	0.1	0.5	-	0.2	0.1
Livestock and Poultry Farming Course	-	0.0	0.1	0.1	-
Carpentry	1.8	4.6	3.6	1.6	-0.2
Auto Mechanical Course	5.9	6.7	4.6	2.1	-3.8
Driving Course	13.1	12.8	14.9	12.4	-0.7
Mason	2.6	1.0	2.5	0.9	-1.7
Computer Course	25.8	12.9	13.0	21.0	-4.8
Others	-	16.9	13.0	12.9	-
Total	100	100	100	100	

In comparison with other South Asian countries, Pakistan has fallen behind in this area. The urgent demand for TVET improvements is reflected in a decreasing number of the labour force with formal/vocational training from 1999/2000 to 2005/2006. Table 11 shows that the number of people with formal/vocational training declined or remained unchanged in 25 of a total of 43 provided training types. The highest decreases with -4.8 percentage points could be recorded in computer courses followed by a -3.8 decrease of people with formal/vocational training in auto mechanical courses. The largest increase is seen in electrician courses with an increase of 2.3 percentage points from 1999/2000 to 2005/2006.

The distribution of the labour force with formal/vocational training by major occupational group (Table 12) shows a similar trend. Analysing all occupations, people with occupations in craft business had the most significant reduction in formal/vocational training with -12.9 percentage points followed by a -3.0 percentage point drop in agricultural occupations.

Another interesting observation can be seen that circumstantiates the importance of improving skills in Pakistan is demonstrated below. Workers who are already skilled in one's trade are more likely to improve their skills through formal/vocational training courses. Technicians are leading all major occupations by attending formal/vocational training with an 8.0 percentage point increase from 1999/2000 to 2005/2006 followed by clerks with plus 2.5 percentage points.

Table 12. Distribution of the labour force with formal/vocational training by major occupational group(%)

Occupations (15+)	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Legislators	8.8	9.7	9.6	13.1	4.3
Professionals	6.8	7.4	3.5	5.1	-1.8
Technicians	14.7	19.7	13.0	22.6	8.0
Clerk	2.8	3.2	3.3	5.4	2.5
Service	2.1	2.1	2.5	4.1	2.1
Agriculture	8.4	5.4	6.6	5.3	-3.0
Craft	33.9	26.3	37.3	20.9	-13.0
Plant	11.5	14.5	9.7	12.9	1.4
Elementary Occupations	2.5	3.1	4.4	2.4	-0.1
Unclassified	8.6	8.6	10.2	8.2	-0.4
Total	100	100	100	100	

Source: FBS, various years, Pakistan Labour Force Survey.

3.7 Occupations and wages

The overall employment pattern is in accordance with the shift in employment from agriculture to industry and services sectors, which was highlighted in the first issue of *Pakistan Employment Trends.* The largest decrease occurred in the major group skilled agricultural and fishery workers, which declined by 4.2 percentage points between 1999-2000 and 2005-2006 (Table13). By dividing major groups into three aggregates, 'highly skilled'

(major groups 1-3), 'skilled' (major groups 4-8) and 'unskilled' (major group 9), it can be seen that the structural change in the Pakistani economy is accompanied by a slight shift in occupations toward the highly skilled occupational groups. High skilled occupations accounted for 19.9 per cent of the employed in 2005-2006, an increase of 1.8 percentage points over 1999-2000.

Nominal and real wages can be analysed to compare trends across major groups of occupations, as a diverging trend of particular major groups may well signal skill shortages. Figure shows that highly skilled occupations increasingly demand a premium in the labour market. Wage rates of skilled and unskilled occupations do not keep up with the increases for highly skilled occupations. Growth in the major group legislators, senior officials and managers reflects to an important extent developments in the economic sector wholesale and retail trade, restaurants and hotels. More than 80 per cent of managers are in the trade sector in 2005-2006 (83.5 per cent).

It is generally established that wages for individual occupations provide much more interesting and insightful material for analysis than do broad averages covering many, or all, occupations within an industry (ILO, 2007, KILM 16). To some extent, such an analysis can be undertaken using labour force survey data, which provides in Pakistan only wage information for the status group of employees. It can be seen that for all employees within the major group professionals, a shift occurred away from teaching professionals towards the other three sub-major groups, and in particular towards the sub-major group 'other professionals' as indicate in Table 15. Other professionals include business professionals (including accountants), legal professionals (including lawyers) and social science and related professionals (including economists), among other minor groups. Within the major group Technicians and associate professionals, the shift was in part opposite to that in professionals (Table16). Although the sub-major group physical and engineering associate professionals increased (similar to professionals), teaching and associate professionals increased and other professionals decreased (by 4.5 per cent). The expansion of the sub-major group of teaching and associate professionals can be linked to the steady expansion of education and training facilities. Teaching and associate professionals make up more than half of all technicians and associate professionals (55 per cent in 2005-2006).

Taking professional and associate professionals in teaching together, this group of occupations slightly grew as a proportion of all professionals and associate professionals (from 45.9 in 1999-2000 to 46.6 per cent in 2005-2006). In other words, almost half of the highly skilled occupations (outside management etc.) are in teaching. The high proportion of teachers among high skilled occupations is reflected in the distribution of major groups 2 and 3 by economic sector. As seen in Table 17 more than 80 per cent of these occupational groups can be found in community, social and personal services, which include both public and private education and training institutions. Increases can also be found in finance, a skill-intensive sector of the economy, and manufacturing. Both of these sectors showed increases in the economy (Table A7 and Table 9 in PET 1). On the other hand Table 17 shows significantly, that there is a limited use of highly skilled professionals and technicians outside the service sector.

By assessing the occupational/wage distribution of those employed, the role of education and training can help determine labour market vulnerability. Table 14 demonstrates that highly skilled occupations are on the rise and this is in line with the decline of agriculture in the total share of employment. Figure 1 shows that the increase in real wages of highly skilled

professions was much more profound than skilled and un-skilled positions, as there was a 22.7 per cent increase in real wage rates in highly skilled occupations between 1999-00 and 2005-06 compared to 8.1 and 11.6 per cent in skilled in unskilled occupations. Should continued economic growth require additional highly skilled positions, this trend will most likely continue.

However, much depends on the skill sets, as seen in Figure 2. The average real wage of highest paid major sub group (Physical, mathematical and engineering professionals) is 2.8 times higher than the lowest paid sub-major group. This correlation points out that skills shortages drive up wage rates in the sectors in which these skills are needed. Considering the higher unemployment levels for those with degrees in Table 8, this is interesting. It may indicate that some of those are pursuing degrees in sectors and occupations where employment is not growing.

Table 13. Employment by major occupational groups (%)

Employed 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Legislators, senior officials and managers					
Both sexes	11.5	11.9	12.1	12.7	+1.2
Males	13.0	13.6	14.2	15.2	+2.2
Females	2.4	2.0	1.5	2.3	-0.1
Professionals					
Both sexes	2.3	2.2	2.1	1.8	-0.5
Males	2.3	2.1	2.1	1.9	-0.4
Females	2.4	2.6	2.0	1.3	-1.1
Technician and associate professionals					
Both sexes	4.3	4.9	5.1	5.4	+1.1
Males	4.0	4.1	4.3	4.7	+0.7
Females	6.5	10.2	9.5	8.6	+2.1
Clerks					
Both sexes	1.6	1.8	1.7	1.5	-0.1
Males	1.9	2.0	2.0	1.8	-0.1
Females	0.2	0.4	0.3	0.4	+0.2
Service workers and shop and market sales workers					
Both sexes	4.3	5.6	5.0	5.1	+0.8
Males	4.9	6.3	5.9	6.1	+1.2
Females	0.3	1.3	0.8	0.8	+0.5
Skilled agricultural and fishery workers					
Both sexes	41.8	35.1	36.6	37.6	-4.2
Males	39.2	33.2	33.5	32.5	-6.7
Females	57.6	46.2	52.2	59.4	+1.8
Craft and related trades workers					
Both sexes	14.9	16.1	15.9	16.0	+1.1
Males	15.8	16.4	16.2	16.3	+0.5
Females	9.1	14.1	14.3	14.7	+5.6
Plant and machine operators and assemblers					
Both sexes	3.4	4.1	3.9	4.4	+1.0
Males	3.9	4.7	4.7	5.4	+1.5
Females	0.2	0.2	0.1	0.3	+0.1
Elementary occupations					
Both sexes	15.9	18.2	17.6	15.5	-0.4
Males	15.0	17.5	17.2	16.3	+1.3
Females	21.3	23.0	19.3	12.2	-9.1
All major occupational groups					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table 14. Employment by aggregated major occupational groups (%)

Employed 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Highly skilled (major groups 1-3)					
Both sexes	18.1	19.1	19.3	19.9	+1.8
Males	19.3	19.8	20.6	21.7	+2.4
Females	11.2	14.8	13.0	12.1	+0.9
Skilled (major groups 4-7)					
Both sexes	66.0	62.7	63.1	64.6	-1.4
Males	65.7	62.8	62.2	62.0	-3.7
Females	67.5	62.1	67.7	75.7	+8.2
Unskilled (major group 8)					
Both sexes	15.9	18.2	17.6	15.5	-0.4
Males	15.0	17.5	17.2	16.3	+1.3
Females	21.3	23.0	19.3	12.2	-9.1
All					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Figure 1. Wages of employees by aggregated major occupational groups

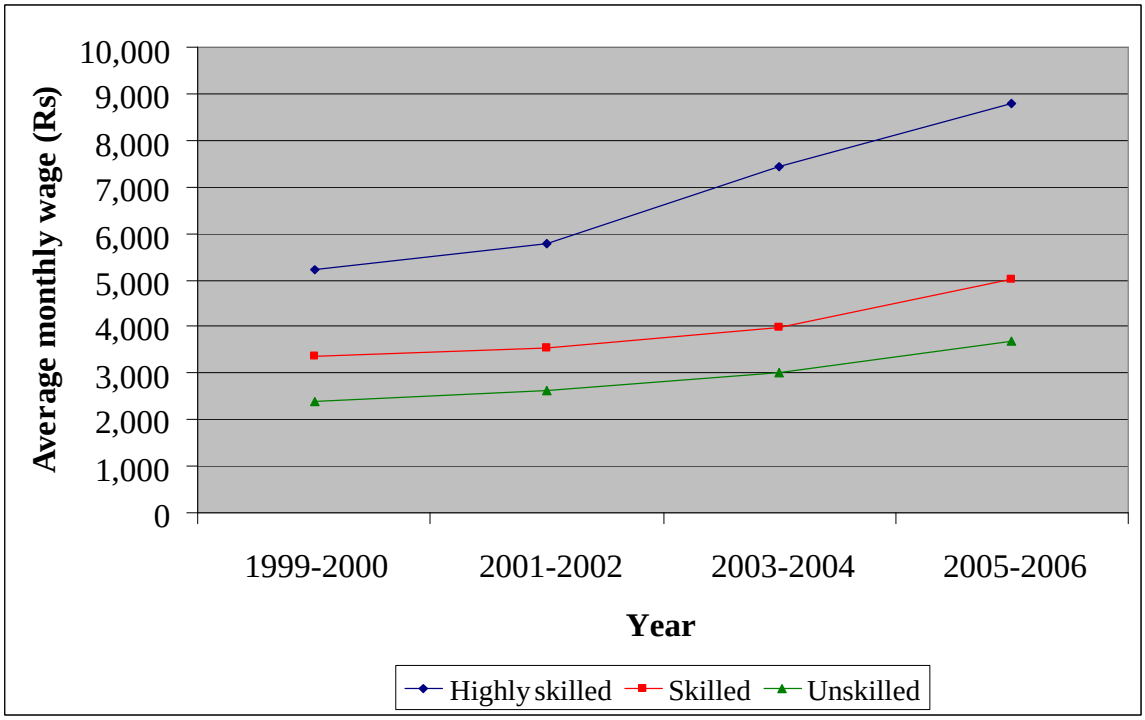


Table 15. Professionals by sub-major group (%)

Employed 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Physical, mathematical and engineering science professionals					
Both sexes	6.4	8.3	10.2	9.1	+2.7
Males	7.6	9.9	11.8	10.5	+2.9
Females	0.0	0.5	1.3	0.3	+0.3
Life science and health professionals					
Both sexes	8.8	11.6	11.0	12.1	+3.3
Males	9.2	10.8	10.4	10.6	+1.4
Females	6.5	15.1	14.0	21.4	+14.9
Teaching professionals					
Both sexes	40.1	34.4	33.2	20.8	-19.3
Males	32.1	27.3	25.5	15.3	-16.8
Females	86.1	68.5	74.1	55.7	-30.4
Other professionals					
Both sexes	44.7	45.7	45.6	57.9	+13.2
Males	51.2	52.0	52.2	63.6	+12.4
Females	7.4	15.9	10.6	22.6	+15.2
All sub-major groups					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Figure 2. Wages of professionals (employees) by sub-major group

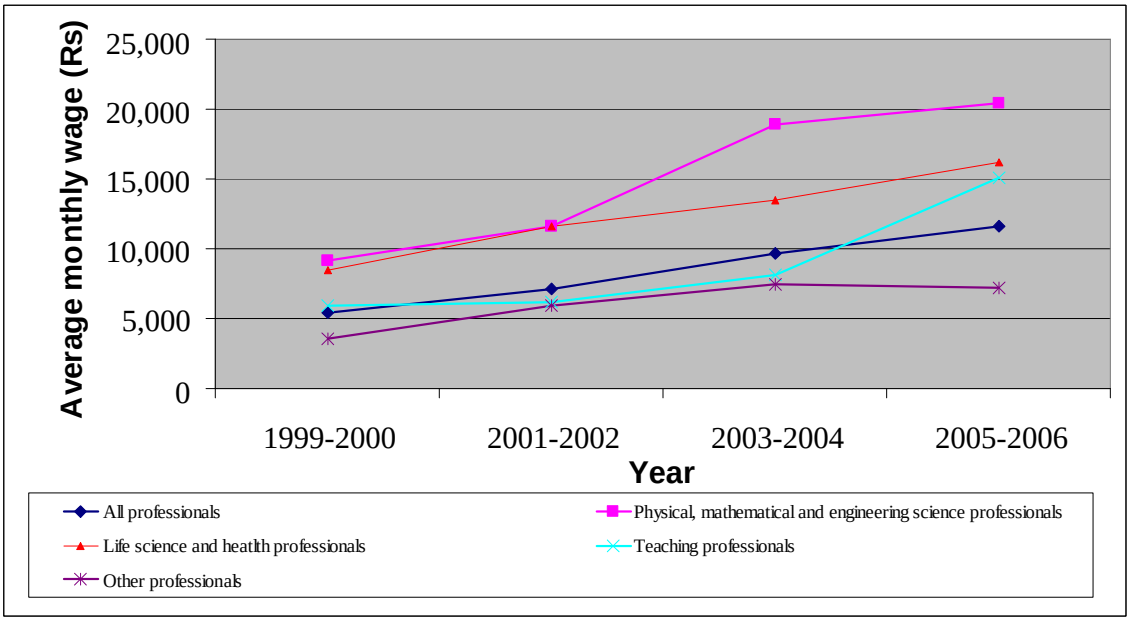


Table 16. Technicians and associate professionals by sub-major group (%)

Employed 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Physical and engineering science associate professionals					
Both sexes	8.0	8.5	10.8	9.3	+1.3
Males	9.8	11.5	15.1	12.3	+2.5
Females	1.7	1.2	0.9	2.2	+0.5
Life science and health associate professionals					
Both sexes	20.2	17.3	17.3	17.5	-2.7
Males	20.1	15.7	16.0	16.9	-3.2
Females	20.9	21.1	20.3	18.8	-2.1
Teaching associate professionals					
Both sexes	49.0	55.3	49.5	55.0	+6.0
Males	42.0	46.6	37.5	45.0	+3.0
Females	74.8	76.1	77.2	78.5	+3.7
Other associate professionals					
Both sexes	22.7	18.9	22.4	18.2	-4.5
Males	28.2	26.1	31.4	25.8	-2.4
Females	2.6	1.6	1.6	0.4	-2.2
All sub-major groups					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Figure 3. Wages of technicians and associate professionals (employees) by sub-major group

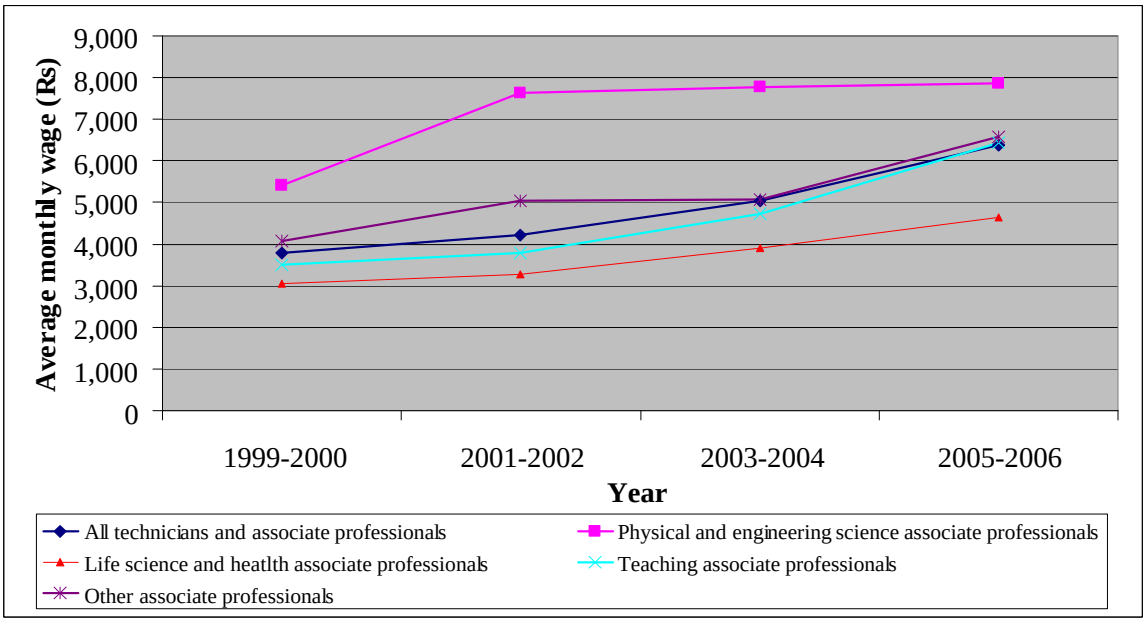


Table 17. Employment of professionals and technicians by economic sector (%)

Employed 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Agriculture, forestry, hunting and fishing					
Both sexes	0.9	0.5	0.5	0.4	-0.5
Males	1.1	0.7	0.7	0.5	-0.6
Females	0.0	0.0	0.0	0.0	0.0
Mining and quarrying					
Both sexes	0.0	0.2	0.1	0.1	+0.1
Males	0.0	0.2	0.1	0.1	+0.1
Females	0.0	0.1	0.1	0.0	0.0
Manufacturing					
Both sexes	4.2	5.1	6.6	5.9	+1.7
Males	5.0	6.6	8.7	7.7	+2.7
Females	0.4	0.8	0.5	0.7	+0.3
Electricity, gas and water					
Both sexes	1.5	1.7	1.3	0.9	-0.6
Males	1.9	2.1	1.7	1.2	-0.7
Females	0.0	0.6	0.4	0.0	0.0
Construction					
Both sexes	1.1	0.7	0.7	0.7	-0.4
Males	1.4	1.0	0.9	1.0	-0.4
Females	0.0	0.0	0.0	0.0	0.0
Wholesale and retail trade, restaurants and hotels					
Both sexes	2.0	1.8	2.5	1.9	-0.1
Males	2.4	2.3	3.4	2.4	0.0
Females	0.2	0.2	0.0	0.6	+0.4
Transport, storage and communication					
Both sexes	3.1	2.7	3.6	2.5	-0.6
Males	3.5	3.5	4.9	3.3	-0.2
Females	1.0	0.5	0.1	0.3	-0.7
Financing, insurance, real estate and business services					
Both sexes	4.2	5.6	7.5	6.9	+2.7
Males	5.0	7.4	10.0	9.1	+4.1
Females	0.7	0.5	0.3	0.6	-0.1
Community, social and personal services					
Both sexes	83.1	81.7	76.9	80.6	-2.5
Males	79.7	76.4	69.3	74.5	-5.2
Females	97.6	97.2	98.6	97.7	+0.1
All activities					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

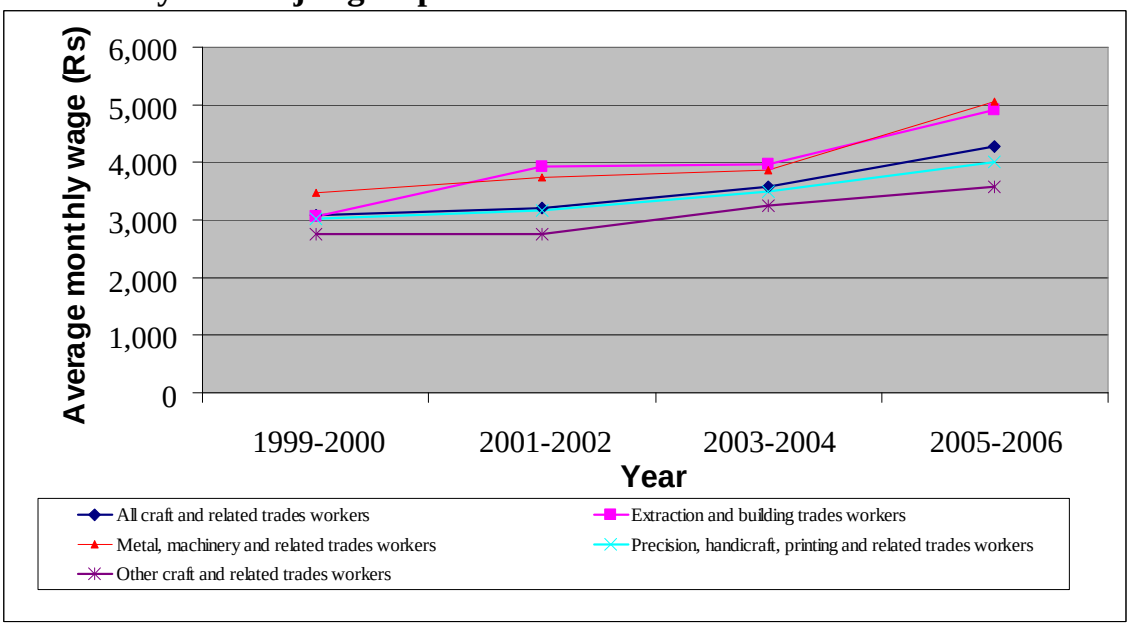
Source: FBS, various years, *Pakistan Labour Force Survey*.

Table 18. Craft and related trades workers by sub-major group (%)

Employed 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Extraction and building trades workers					
Both sexes	22.0	15.3	18.0	19.8	-2.2
Males	23.7	17.1	20.0	23.1	-0.6
Females	4.5	2.5	6.2	4.3	-0.2
Metal, machinery and related trades workers					
Both sexes	23.9	24.4	26.6	23.4	-0.5
Males	26.0	27.6	31.1	28.0	+2.0
Females	2.2	2.3	0.6	1.3	-0.9
Precision, handicraft, printing and related trades workers					
Both sexes	8.0	6.9	5.5	6.1	-1.9
Males	8.2	7.0	5.7	6.2	-2.0
Females	6.6	6.0	4.2	5.3	-1.3
Other craft and related trades workers					
Both sexes	46.0	53.4	49.9	50.8	+4.8
Males	42.1	48.4	43.1	42.7	+0.6
Females	86.7	89.2	89.1	89.0	+2.3
All sub-major groups					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Figure 4. Wages of craft and related trades workers (employees) by sub-major group



4. CONCLUSIONS

Previous chapters set out the approach towards the development of an effective Labour Market Information and Analysis system in Pakistan, analysed the information captured to date and looked at the state of skills. Building on this analysis, this chapter examines a range of policy issues in the context of the development of a comprehensive labour market information policy concerning skills in Pakistan.

4.1 Conclusions on skill development

Human resource policies of the government should be in line with requirements of the economy and economic programmes, including literacy programmes and skills development. To improve the capacity of people to attain decent work, which is conceptualized as consisting of six dimensions that cover opportunities for work, work in conditions of freedom, productive work, equity in work, security at work and dignity at work, the development of skills through appropriate education and training is a fundamental requirement. Furthermore, a prerequisite for sustained economic growth and development is sufficient investment in education and training.

It is recognized that education, training and lifelong learning contribute significantly to promoting the interests of individuals, organizations, the economy and society as a whole. The ILO's most recent instrument pertaining to skills development is the Recommendation concerning Human Resources Development: Education, Training and Lifelong Learning, 2004, (No.195). It points out that education and pre-employment training includes compulsory basic education which incorporates basic knowledge, literacy and numeracy skills, as well as the appropriate use of information and communication technology. It is important for government policies to address these issues simultaneously with other policies concerning TVET and tertiary education.

Taking this and the pyramid in Diagram 2 on page 12 into consideration, the high illiteracy rate is a major concern, as Pakistan faces enormous challenges in developing the knowledge and skills of its people to reach the level of ability in order to participate in such advanced education and training. In terms of skills reforms, this implies that a major effort should be made to upgrade the skills of the existing labour force to reduce vulnerability and increase possibilities to attain decent work. This report clearly demonstrates the timeliness of the envisaged reforms of the education and training system.

The capacity of the Government to design and implement coherent policies, which address the demand side of the economy, are fundamental to maximizing the potential of the labour force. This is of particular concern if the country seeks to increase participation in the global market. Well designed finance, investment, migration, technology and trade policies help establish economic and employment growth. Consistent macroeconomic policies would help to increase the level of confidence in the economy and, in combination with economic growth, serve to increase incentives for workers and employers to invest in improving skills through training. Furthermore, in order to develop a competitive work force, it is important that the labour regulatory system provides a balance between stability for workers and flexibility for enterprises in adjusting their work force to meet new demands.

Comprehensive strategies combining the expertise of various Ministries within the government should be developed to tackle this menacing situation. As regards vocational training, a strategy; *Skilling Pakistan: A Vision for the National Skills Strategy, 2008 – 2012,* has been developed and is being vetted by stakeholders of relevant Ministries, Provincial departments, Skills Development Councils and other training implementers. However, this is not sufficient to address the overall problem of providing quality basic education for all, improving the literacy rate, and getting young people to stay in school. Successful structural transitions in countries such as Croatia and Latvia were most likely attributed to an increase in educational attainment; however low levels are hampering the transformations in many less developed economies (ILO, 2007, Chapter 1b).

4.2 Labour Market Information and Analysis for skills development

One issue resonating in Pakistan is the lack of understanding of skills needs. Although certain trends can be analyzed based on labour force surveys, more and better data collection mechanisms to specifically inform skills policies and TVET reforms need to be developed, such as establishment enquiries to ascertain skills needs through sector level surveys. Additional sources of information on job vacancies and skills needs would also complement these surveys. By using these different sources of information, skills requirements in selected industries can be analyzed in the context of planning frameworks at the sector level. With these studies, policy-makers will be able to make informed decisions regarding skills and TVET reforms, in order to help enable Pakistan develop a skilled workforce to be competitive in the global marketplace. Equally important is the development of appropriate mechanisms to ensure that the analytical results are reviewed, and adequate action is taken.

Another method of assessing skills supply is through tracer studies. Tracer studies 'trace' students from education and training institutions after they have finished, and follow up to see what they are doing. It is helpful to see if they are employed, unemployed, entered into more training or left the labour force. It is a widely used tool to investigate the effectiveness and relevance of courses and a useful tool for policy making. Over time, policy makers can see which courses are effective and which need to be changed in order to make students more employable. This could be a method to assess why so many people with degrees are unemployed, whilst wages for some highly skilled occupations are increasing, signifying a shortage.

LMIA is a necessary input to reforms of the technical and vocational education and training (TVET) system, partly with a view to the demographic transition that is unfolding and partly with a view to the still abysmally low education and skill levels of the workforce. To carry out NAVTEC's *Vision*, the MLMOP and the FBS should assume the responsibility of overseeing the research arm of the implementation as expertise currently exists in this area. In addition, the second phase of the UNDP/ILO LMIA project will support the development of labour market information for skills development through the development of data collection mechanisms at the sector level, both nationally, in collaboration with the National Vocational and Technical Education Commission (NAVTEC), and at the sector level, in collaboration with Skills Development Councils (SDCs) or other appropriate bodies involved in data collection. In this regard, the ILO will work with the FBS in order to develop and carry out skills related enquiries mentioned above over the next five years.

Box -ILO policy recommendations for LMIA concerning skills

1. Members should develop their national capacity, as well as facilitate and assist in developing that of the social partners, to analyse trends in labour markets and human resources development and training.

2. Members should:
(a) collect information, disaggregated by gender, age, and other specific socioeconomic characteristics, on educational levels, qualifications, training activities, and employment and incomes, especially when organizing regular surveys of the population, so that trends can be established and comparative analysis undertaken to guide policy development;
(b) establish databases and quantitative and qualitative indicators, disaggregated by gender, age and other characteristics, on the national training system and gather data on training in the private sector, taking into account the impact of data collection on enterprises;
(c) collect information on competencies and emerging trends in the labour market from a variety of sources, including longitudinal studies, and not confined to traditional occupational classifications.

3. Members should, in consultation with the social partners, and taking into account the impact of data collection on enterprises, support and facilitate research on human resources development and training, which could include:
(a) learning and training methodologies, including the use of information and communication technology in training;
(b) skills recognition and qualifications frameworks;
(c) policies, strategies and frameworks for human resources development and training;
(d) investment in training, as well as the effectiveness and impact of training;
(e) identifying, measuring and forecasting the trends in supply and demand for competencies and qualifications in the labour market;
(f) identifying and overcoming barriers to accessing training and education;
(g) identifying and overcoming gender bias in the assessment of competencies;
(h) preparing, publishing and disseminating reports and documentation on policies, surveys and available data.

4. Members should use the information obtained through research to guide
planning, implementation and evaluation of programmes.

Source, ILO Recommendation concerning Human Resources Development: *Education, Training and Lifelong Learning, 2004, (No.195).*

It is important to bear in mind that the LMIA Unit and project are guided by an *Advisory Panel* chaired by the Secretary of Labour, in which all labour market stakeholders are represented.[4] The Advisory Panel enables the LMIA Unit to effectively bridge the gap between data collection and labour market analysis on the one hand, and decent employment and other policy formulation on the other. The Panel reviews the outputs and activities of the Unit on a regular basis and fosters linkages between data collection, analysis and policy development at the national and provincial levels. In this way the Panel ensures continued policy relevance, ownership and sustainability of the LMIA Unit.

3 Stakeholders include the FBS, Provincial Departments of Labour, Skills Development Councils, the National Vocational and Technical Education Commission, Workers' and Employers' representatives, as well as the UNDP.

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Annex tables

Table A1. Economic growth (%)

	1990s (annual avg.)	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 - 2006	2006 - 2007
GDP growth	4.6	3.9	2.0	3.1	4.7	7.5	9.0	6.6	7.0
Agriculture	4.4	6.1	-2.2	0.1	4.1	2.4	6.5	1.6	5.0
Manufacturing	4.8	1.5	9.3	4.5	6.9	14.0	15.5	10.0	8.4
Commodity producing sector	4.6	3.0	0.8	1.4	4.2	9.3	9.5	3.4	6.0
Services sector	4.6	4.8	3.1	4.8	5.2	5.8	8.5	9.6	8.0

Source: Finance Division, 2007, *Economic Survey 2006-07*.

Table A2. Population and labour force (millions)

Pakistan	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006
Population	136.0	145.8	148.7	155.4	+19.4
Urban	43.0	47.4	49.7	52.1	+9.1
Rural	93.0	98.4	99.0	103.3	+10.3
Population 10+	92.1	99.6	103.4	108.8	+16.7
Punjab	57.1	58.3	59.3	61.9	+4.8
Sindh	19.7	23.3	25.7	27.0	+7.3
NWFP	11.7	13.6	13.6	14.9	+3.2
Balochistan	3.6	4.3	4.8	5.0	+1.4
Labour force 10+	39.4	43.1	45.2	50.1	+10.7
Punjab	25.8	27.0	27.8	30.3	+4.5
Sindh	7.7	9.4	10.4	11.6	+3.9
NWFP	4.5	4.9	5.0	5.9	+1.4
Balochistan	1.4	1.7	1.9	2.3	+0.9

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A3. Labour force participation rate (%)

Pakistan	**1999-2000**	**2001-2002**	**2003-2004**	**2005-2006**	**Change 1999-2000 to 2005-2006 (percentage point)**
National - both sexes					
10+	42.8	43.3	43.7	46.0	+3.2
15+	50.4	50.5	50.7	53.0	+2.6
National – males					
10+	70.4	70.3	70.6	72.0	+1.6
15+	83.2	82.7	82.7	84.0	+0.8
National – females					
10+	13.7	14.4	15.9	18.9	+5.2
15+	16.3	16.2	18.0	21.1	+4.8
Urban (10+)					
Both sexes	38.1	39.9	39.2	40.7	+2.6
Males	65.0	66.9	67.1	68.7	+3.7
Females	8.8	10.0	9.4	10.6	+1.8
Rural (10+)					
Both sexes	45.1	45.2	46.2	48.9	+3.8
Males	73.1	72.2	72.6	73.8	+0.7
Females	16.1	16.8	19.5	23.4	+7.3
Provincial - both sexes (10+)					
Punjab	45.1	46.3	47.0	48.9	+3.8
Sindh	39.1	40.5	40.5	42.9	+3.8
NWFP	38.7	36.4	37.2	39.7	+1.0
Balochistan	39.2	40.2	40.0	45.2	+6.0
Provincial - males (10+)					
Punjab	72.7	71.6	71.8	72.6	-0.1
Sindh	67.0	70.4	70.8	72.7	+5.7
NWFP	65.4	65.2	65.7	68.0	+2.6
Balochistan	69.0	68.0	68.1	71.5	+2.5
Provincial - females (10+)					
Punjab	16.8	19.9	21.8	24.9	+8.1
Sindh	6.9	6.1	6.6	9.1	+2.2
NWFP	12.1	7.2	10.2	13.0	+0.9
Balochistan	5.1	6.0	7.6	12.6	+7.5
South Asia (15+)	**2000**	**2002**	**2004**		
Both sexes	60.2	60.2	60.0		
Males	83.3	82.8	82.2		
Females	35.9	36.3	36.8		
East Asia (15+)	**2000**	**2002**	**2004**		
Both sexes	76.9	76.0	75.0		
Males	83.7	82.9	82.0		
Females	69.8	68.8	67.7		

Source: FBS, various years, *Pakistan Labour Force Survey.*

Table A4. Employment-to-population rate (%)

Pakistan	**1999-2000**	**2001-2002**	**2003-2004**	**2005-2006**	**Change 1999-2000 to 2005-2006 (percentage point)**
National - both sexes					
10+	39.5	39.8	40.4	43.2	+3.7
15+	46.8	46.5	47.0	49.7	+2.9
National – males					
10+	66.1	65.6	66.0	68.1	+2.0
15+	78.6	77.6	77.6	79.6	+1.0
National – females					
10+	11.3	12.1	13.9	17.2	+5.9
15+	13.7	13.6	15.6	19.0	+5.3
Urban (10+)					
Both sexes	34.4	36.0	35.4	37.5	+3.1
Males	60.2	61.7	61.5	63.9	+3.7
Females	6.2	7.6	7.6	8.9	+2.7
Rural (10+)					
Both sexes	42.0	41.8	43.1	46.3	+4.3
Males	69.1	67.8	68.5	70.4	+1.3
Females	13.8	14.4	17.3	21.6	+7.8
Provincial - both sexes (10+)					
Punjab	41.3	42.4	43.5	46.0	+4.7
Sindh	37.8	38.4	38.1	41.0	+3.2
NWFP	34.1	31.6	32.4	35.0	+0.9
Balochistan	36.4	37.1	36.7	43.8	+7.4
Provincial - males (10+)					
Punjab	67.6	66.6	67.0	68.4	+0.8
Sindh	65.5	67.6	67.4	69.8	+4.3
NWFP	60.0	58.0	59.0	62.5	+2.5
Balochistan	65.6	64.2	63.8	69.6	+4.0
Provincial – females (10+)					
Punjab	14.2	17.1	19.7	23.2	+9.0
Sindh	6.0	4.9	5.3	8.4	+2.4
NWFP	8.3	4.9	7.2	9.2	+0.9
Balochistan	2.9	3.8	5.5	11.8	+8.9
South Asia (15+)	**2000**	**2002**	**2004**		
Both sexes	57.5	57.4	57.2		
Males	79.8	79.2	78.5		
Females	34.1	34.5	34.8		
East Asia (15+)	**2000**	**2002**	**2004**		
Both sexes	73.9	73.1	72.3		
Males	80.0	79.3	78.6		
Females	67.6	66.7	65.7		

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A5. Unemployment rate (%)

Pakistan	**1999-2000**	**2001-2002**	**2003-2004**	**2005-2006**	**Change 1999-2000 to 2005-2006 (percentage point)**
National - both sexes					
10+	7.8	8.3	7.7	6.2	-1.6
15+	7.2	7.8	7.4	6.1	-1.1
National – males					
10+	6.1	6.7	6.6	5.4	-0.7
15+	5.5	6.2	6.2	5.2	-0.3
National – females					
10+	17.3	16.5	12.7	9.3	-8.0
15+	15.8	16.4	12.9	9.6	-6.2
Urban (10+)					
Both sexes	9.9	9.8	9.7	8.0	-1.9
Males	7.5	7.9	8.4	6.9	-0.6
Females	29.6	24.2	19.8	15.7	-13.9
Rural (10+)					
Both sexes	6.9	7.6	6.7	5.4	-1.5
Males	5.4	6.1	5.6	4.6	-0.8
Females	14.0	14.1	10.9	7.7	-6.3
Provincial - both sexes (10+)					
Punjab	8.5	8.5	7.4	6.0	-2.5
Sindh	3.2	5.1	6.0	4.4	+1.2
NWFP	12.0	13.1	12.9	11.8	-0.2
Balochistan	7.1	7.8	8.2	3.2	-3.9
Provincial - males (10+)					
Punjab	7.0	7.0	6.7	5.7	-1.3
Sindh	2.2	4.0	4.8	4.0	+1.8
NWFP	8.4	11.0	10.1	8.2	-0.2
Balochistan	4.9	5.6	6.3	2.7	-2.2
Provincial – females (10+)					
Punjab	15.3	14.4	9.6	6.9	-8.4
Sindh	13.7	19.8	19.6	8.2	-5.5
NWFP	31.4	32.1	29.4	29.6	-1.8
Balochistan	42.2	37.4	27.7	6.5	-35.7
South Asia (15+)	**2000**	**2002**	**2004**		
Both sexes	4.5	4.6	4.8		
Males	4.3	4.3	4.5		
Females	5.0	5.1	5.2		
East Asia (15+)	**2000**	**2002**	**2004**		
Both sexes	3.9	3.8	3.6		
Males	4.5	4.4	4.2		
Females	3.1	3.1	2.9		

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A6. Youth unemployment rate (%)

	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point, except (1))
LFPR - both sexes					
15-24	40.5	43.4	43.6	45.9	+5.4
25+	55.3	54.2	54.6	56.8	+1.5
LFPR – males					
15-24	69.3	70.2	70.5	72.2	+2.9
25+	90.1	89.4	89.4	90.5	+0.4
LFPR – females					
15-24	10.2	14.8	16.1	18.6	+8.4
25+	19.2	17.0	19.0	22.4	+3.2
Unemployment rate - both sexes					
(a) 15-24	13.3	13.4	11.7	8.6	-4.7
(b) 25+	4.9	5.5	5.5	5.0	+0.1
Unemployment rate - males					
(a) 15-24	11.1	12.0	11.0	8.4	-2.7
(b) 25+	3.4	3.8	4.2	3.8	+0.4
Unemployment rate - females					
(a) 15-24	29.3	20.5	14.9	9.6	-19.7
(b) 25+	12.2	14.5	12.0	9.7	-2.5
(1) Ratio youth unemployment rate to adult unemployment rate [(a)/(b)]					
Both sexes	2.7	2.5	2.1	1.7	-1.0
Males	2.0	3.1	2.6	2.2	+0.2
Females	1.9	1.4	1.2	1.0	-0.9
(2) Youth unemployment as a proportion of total unemployment					
Both sexes	49.9	51.1	48.0	43.6	-6.3
Males	55.9	56.9	53.0	49.2	-6.7
Females	38.6	39.3	36.5	31.1	-7.5
(3) Youth unemployment as a proportion of the youth population					
Both sexes	5.4	8.4	5.1	4.0	-1.4
Males	7.7	5.8	7.7	6.1	-1.6
Females	3.0	3.0	2.4	1.8	-1.2

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A7. Structure of the economy and employment (%)

Employed 10+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Agriculture, forestry, hunting and fishing					
Share in the economy	25.9	24.1	22.9	21.6	-4.3
Share in employment	48.4	42.1	43.0	43.4	-5.0
Mining and quarrying					
Share in the economy	2.3	2.4	2.6	2.6	+0.3
Share in employment	0.1	0.1	0.1	0.1	0.0
Manufacturing					
Share in the economy	14.7	15.9	17.3	18.2	+3.5
Share in employment	11.5	13.8	13.7	13.8	+2.3
Electricity, gas and water					
Share in the economy	3.9	3.0	3.7	3.0	-0.9
Share in employment	0.7	0.8	0.7	0.7	0.0
Construction					
Share in the economy	2.5	2.4	2.0	2.2	-0.3
Share in employment	5.8	6.1	5.8	6.1	0.3
Wholesale and retail trade, restaurants and hotels					
Share in the economy	17.5	17.8	18.2	19.2	+1.7
Share in employment	13.5	14.9	14.8	14.7	+1.2
Transport, storage and communication					
Share in the economy	11.3	11.4	10.9	10.5	-0.8
Share in employment	5.0	5.9	5.7	5.7	+0.7
Financing, insurance, real estate and business services					
Share in the economy	3.7	3.5	3.4	4.6	+0.9
Share in employment	0.8	0.9	1.1	1.1	+0.3
Community, social and personal services					
Share in employment	14.2	15.5	15.0	14.4	+0.2
Ownership of dwellings					
Share in the economy	3.1	3.2	3.0	2.8	-0.3
Public administration and defence					
Share in the economy	6.2	6.4	6.3	5.8	-0.4
Other services					
Share in the economy	9.0	9.8	9.7	9.5	+0.5
All activities					
Share in the economy	100.0	100.0	100.0	100.0	
Share in employment	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*, and Finance Division, 2006, *Economic Survey 2005-06.*

Table A8. Employment by sector (%)

Employed 10+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Agriculture					
Both sexes	48.4	42.1	43.0	43.4	-5.0
Males	44.4	38.2	38.1	37.2	-7.2
Females	72.9	64.6	67.3	68.9	-4.0
Industry					
Both sexes	18.0	20.8	20.3	20.7	+2.7
Males	19.5	21.7	21.4	22.1	+2.6
Females	9.0	15.6	15.0	14.9	+5.9
Services					
Both sexes	33.5	37.1	36.6	35.9	+2.4
Males	36.1	40.1	40.5	40.6	+4.5
Females	18.1	19.8	17.6	16.2	-1.9
All sectors					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A9. Status in employment (%)

Employed 10+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Employees					
Both sexes	35.6	39.9	37.9	37.3	+1.7
Males	36.0	40.3	39.2	40.1	+3.9
Females	33.1	37.1	31.2	25.7	-7.4
Employers					
Both sexes	0.8	0.8	0.9	0.9	+0.1
Males	0.9	0.9	1.0	1.1	+0.2
Females	0.1	0.3	0.1	0.1	0.0
Own-account workers					
Both sexes	42.2	38.5	37.1	35.0	-7.2
Males	46.4	42.4	41.4	39.8	-6.6
Females	16.6	15.7	15.9	15.0	-1.6
Contributing family workers					
Both sexes	21.4	20.8	24.2	26.9	+5.5
Males	16.7	16.4	18.3	19.1	+2.4
Females	50.1	46.9	52.8	59.2	+9.1
All status groups					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A10. Employment in the informal economy (%)

Employed 10+	Share of employment in the formal economy in total employment in each economic sector (1)	Share of wage and salaried employment in total employment in each economic sector (2)	Difference (1)-(2)
Agriculture, forestry, hunting and fishing	Excluded		
Mining and quarrying	56.0	93.6	-37.6
Manufacturing	36.4	66.6	-30.2
Electricity, gas and water	97.9	99.4	-1.5
Construction	7.3	91.8	-84.5
Wholesale and retail trade, restaurants and hotels	3.0	20.8	-17.8
Transport, storage and communication	20.4	60.3	-39.9
Financing, insurance, real estate and business services	46.2	56.7	-10.5
Community, social and personal services	49.0	73.4	-24.4
All economic sectors	27.1	58.8	-31.7

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A11. Educational attainment of the labour force (%)

Labour force 15+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Less than one year of education					
Both sexes	53.3	48.1	47.2	46.2	-7.1
Males	48.1	43.8	41.7	40.0	-8.1
Females	80.6	71.3	72.7	71.8	-8.8
Pre primary education					
Both sexes	2.0	3.5	3.7	3.3	+1.3
Males	2.2	3.9	4.2	3.7	+1.5
Females	0.6	1.2	1.4	1.6	+1.0
Primary but below middle					
Both sexes	14.2	14.9	14.7	15.5	+1.3
Males	16	16.3	16.3	17.1	+1.1
Females	5.0	7.6	7.4	9.0	+4.0
Middle but below matric					
Both sexes	10.4	11.2	11.1	11.5	+1.1
Males	11.8	12.5	12.7	13.4	+1.6
Females	2.8	4.2	3.4	3.4	+0.6
Matric but below intermediate					
Both sexes	11.4	12.3	12.6	12.8	+1.4
Males	12.5	13.3	13.9	14.5	+2.0
Females	5.2	6.9	6.5	6.1	+0.9
Intermediate but below degree					
Both sexes	4.1	4.6	4.7	4.8	+0.7
Males	4.5	4.7	5.0	5.3	+0.8
Females	2.4	4.1	3.1	2.9	+0.5
Degree					
Both sexes	4.6	5.3	6.0	5.9	+1.3
Males	4.9	5.4	6.1	6.1	+1.2
Females	3.4	4.7	5.5	5.1	+1.7
All education levels					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A12. Distribution of the labour force with formal/vocational training by major occupational group(%)

Occupations (10+)	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Legislators	8.7	9.7	9.4	13.1	4.3
Professionals	6.8	7.3	3.4	5.1	-1.7
Technicians	14.6	19.5	12.8	22.6	8.0
Clerk	2.8	3.2	3.2	5.3	2.5
Service	2.1	2.1	2.7	4.1	2.1
Agriculture	8.3	5.3	6.4	5.3	-3.0
Craft	33.8	26.7	37.7	20.9	-12.9
Plant	11.4	14.4	9.5	12.9	1.5
Elementary Occupations	2.4	3.2	4.5	2.4	-0.1
Unclassified	9.2	8.6	10.4	8.4	-0.8
Total	100	100	100	100	

Source: FBS, various years, Pakistan Labour Force Survey.

Table A13. Participation and education of the population aged 10-14

	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Labour force participation rate (%)					
Both sexes	10.9	12.0	12.8	15.2	+4.3
Males	18.3	17.2	18.4	20.7	+2.4
Females	2.8	6.3	6.7	9.2	+6.4
Employed (millions)					
Both sexes	1.5	1.9	2.1	2.8	+1.3 million
Males	1.4	1.4	1.6	2.0	+0.6 million
Females	0.1	0.4	0.5	0.8	+0.7 million
Employment sector: agriculture (%)					
Both sexes	63.3	63.2	65.6	70.8	+7.5
Males	65.5	62.1	62.0	66.7	+1.2
Females	33.3	66.4	75.8	80.6	+47.3
Employment status: contributing family worker (%)					
Both sexes	63.6	61.4	65.0	74.5	+10.9
Males	63.9	63.2	63.6	71.8	+7.9
Females	59.8	55.7	69.0	81.2	+21.4
Employed with less than one year formal education (%)					
Both sexes	74.7	80.2	82.8	77.4	+2.7
Males	73.7	79.6	80.0	73.2	-0.5
Females	88.2	82.1	90.8	87.3	-0.9

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A14. Non-enrolment rate of the population aged 5-14 (%)

	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Both sexes	41.3	40.1	37.6	36.7	-4.6
Males	33.3	33.4	31.2	30.9	-2.4
Females	50.1	47.6	44.7	43.1	-7.0

Source: FBS, various years, *Pakistan Labour Force Survey*.

Table A15. Hours of work (%)

Employed 10+	1999-2000	2001-2002	2003-2004	2005-2006	Change 1999-2000 to 2005-2006 (percentage point)
Fewer than 20 hours					
Both sexes	2.3	2.8	2.6	3.9	+1.6
Males	1.4	1.7	1.4	2.0	+0.6
Females	7.4	9.3	8.7	11.6	+4.2
20-29 hours					
Both sexes	6.6	6.3	6.6	7.5	+0.9
Males	3.8	3.8	3.3	3.8	+0.0
Females	23.5	20.7	22.9	22.8	-0.7
30-34 hours					
Both sexes	4.9	4.4	4.9	4.1	-0.8
Males	3.9	3.4	3.2	3.0	-0.9
Females	11.0	10.2	13.2	8.3	-2.7
35-39 hours					
Both sexes	10.0	10.0	10.0	11.9	+1.9
Males	8.5	8.6	8.3	9.0	+0.5
Females	19.2	18.4	17.9	24.2	+5.0
40-44 hours					
Both sexes	14.7	15.6	13.4	13.4	-1.3
Males	14.4	15.1	13.0	12.9	-1.5
Females	16.5	18.4	15.8	15.3	-1.2
45-49 hours					
Both sexes	20.2	20.7	20.3	19.2	-1.0
Males	22.0	22.6	22.5	21.9	-0.1
Females	9.2	9.4	9.6	8.3	-0.9
50-59 hours					
Both sexes	20.2	20.6	20.9	17.7	-2.5
Males	22.1	22.5	23.4	20.4	-1.7
Females	8.5	9.7	8.4	6.3	-2.2
Greater than 59					
Both sexes	21.1	19.6	21.3	22.4	+1.3
Males	23.8	22.3	24.9	27.0	+3.2
Females	4.5	3.8	3.5	3.2	-1.3
All hours					
Both sexes	100.0	100.0	100.0	100.0	
Males	100.0	100.0	100.0	100.0	
Females	100.0	100.0	100.0	100.0	

Source: FBS, various years, *Pakistan Labour Force Survey*.