





# EMPLOYMENT CHALLENGES IN NEPAL: TRENDS, CHARACTERISTICS AND POLICY OPTIONS FOR INCLUSIVE GROWTH AND DEVELOPMENT

Dilli Raj Khanal, PhD<sup>1</sup>

## EXECUTIVE SUMMARY

Productive employment and decent work are now recognised as prerequisites to enhancing inclusive growth and sustainable development. As a critical source of income, productive employment empowers people, provides social security and strengthens social cohesion. Therefore, full and productive employment and decent work for all—including women and young people—were included in the Millennium Development Goals (MDGs) of 2005. In Nepal, a similar emphasis is apparent in recent plans, policies and programmes.

The present study aims to examine employment challenges in Nepal from an inclusive growth perspective and derive some important policy lessons. For that purpose, apart from examining employment and labour market characteristics, policies and programmes, a rigorous decomposition analysis was conducted to identify the linkages between employment and growth, focusing on productive employment dimensions. The study also assesses the labour demand aspects of industrial development to explore the prospect of raising productive capacity for higher value added employment and decent work.

A quick review shows that despite the declining population growth rate in recent years, the high labour force participation rate, including a high female participation rate, has resulted in a largely youth-driven working population in Nepal. The rapid growth of the urban population, largely due to the marked rise in rural migration, is an added demographic characteristic. Such phenomena have added extra pressures to the labour market in Nepal.

Apparently, unemployment remains low in Nepal at the rate of 2.2 per cent. But very high underemployment, in the form of self-employment without wages in general and exclusionary practices against women and other deprived socio-economic groups in terms of both job and wages, are common in the labour market in Nepal. The lack of elementary education and skills training, particularly among the female workforce, has deepened labour market vulnerability. The total economically underutilised population stands at almost 30 per cent, with 49.9 per cent from urban areas and 26.9 per cent from rural locations. Within the informal sector, which makes up 96.2 per cent of all employment, the ratio of self-employment to total employment is about 61.2 per cent. The ratio of female paid employment to male paid employment is low by 23.7 per cent. More worryingly, female employment accounts for hardly 3.5 per cent of total employment within the non-agriculture sector. Similarly, female workers earn only 60 per cent of the wages paid to male workers.

Adverse labour market conditions have resulted in very high labour mobility and migration, both internal and external, in search of jobs and employment opportunities. In 2008, 44 per cent of all households had at least one absentee member in a family with about 29 per cent being out-migrants. Recent estimates

---

<sup>1</sup> Dr. Khanal, a former member of the Parliament and National Planning Commission, Nepal, is the Founder Chairman of the Institute for Policy Research and Development (IPRAD). Economist Dr. Prakash Shreshtha contributed to the study and his contribution is highly acknowledged.

from unofficial records show that in 2011-12 more than 3 million Nepalese citizens had been abroad for employment purposes. Survey data additionally reveal that out of the 55.8 per cent of households receiving remittances, only 19.6 per cent receive remittances from within Nepal and the rest receive payments from India (19.6 per cent) and other countries (69.1 per cent). Therefore, the pressures on the domestic labour market have eased off primarily due to the massive outflow of workers. Such an outflow has contributed to augment remittances inflows enormously overtime with contributions to, among others, people's livelihood, social development and poverty reduction. The labour market conditions abroad, however, reveal that the situation is very adverse from the view of decent employment.

In order to bring about reforms in the labour market and to strengthen labour market institutions, the Labour Act and Trade Union Act were introduced in 1992 and 1993 respectively. However, the Labour Law 1992 covers only those firms and enterprises that employ 10 or more workers and hence exclude the informal labour market. In the act, workers' rights and security, as well as various regulatory measures, are provisioned. The act, however, by restricting the hiring and firing rights of employers, has been continuously criticised for being labourfriendly but adverse to investment. Although market distortions caused by syndicate and carteling systems are equally apparent, the labour law includes rigid rules that confine it to the organised sector. This has restricted the law's ability to reduce labour market segregation and vulnerability, induce labour market formalisation, enhance decent employment and raise the productivity of labour force in general and female workers in particular.

Such trends are becoming pervasive despite the prioritisation of employment generation by plans, policies and programmes. A quick review shows that the plans have set growth-led productive employment targets despite the focus on private investment in industry; infrastructure and tertiary sector activities follow conventional approaches without the strong backing of concrete sectoral growth strategies and accompanying policies and programmes in a consistent way. Largely, underemployment and the interlinked informal labour market problems are overlooked.

As an offshoot to this, programmes such as Youth Self-Employment initiated in 2008 and Karnali One Family One Employment initiated in 2006 have failed to accomplish the intended goals. Labour intensive public works programmes implemented in different forms are less focused, and taxation and other policies often encourage capital intensive techniques. Various sector-specific and micro-level skills and enterprise development, training and income generation programmes, which focus on the deprived, including women and those in conflict-affected areas, are thinly implemented and lack wider coverage and effectiveness. Although access to education, health and financial services has increased steadily overtime, progress has largely been exclusionary and has disproportionately affected the employability and income generating capability of the poor and disadvantaged.

In addition to GDP growth, employment elasticity and labour productivity patterns, decomposition analysis, which examines employment, productivity and demographic effects on growth, provides more insights on why there is a lack of productive employment in Nepal.

In parallel, with a decelerated average growth rate in sectors such as manufacturing, trade, restaurants and hotel perceived as high employment generating sectors, employment elasticity reduced to 0.18 (2001-2011) from 0.60 (1991-2001). The negative elasticity of the manufacturing (4.85), electricity, gas and water (1.83), and the restaurant and hotel (1.43) sectors, with some positive but low or moderate elasticity in sectors like agriculture (0.25), construction (0.47), community (0.63) and transport services (0.74), show that there are hardly any dynamic lead sectors which can be considered as both, growth and employment enhancing.

Productivity trends also exhibit a similar pattern. Unlike the positive correlation observed between labour productivity and change in employment share during 1991-2001, which had resulted from some growth-enhancing structural change, the relationship became negative in 2001-2011 due to the relative

loss of employment in sectors like manufacturing, trade, restaurant and electricity. The decomposition analysis also shows that during 1991-2001, changes in both, employment and labour productivity played a key role in the growth process. During 2001-2011, however, declining employment contributed to an increase in labour productivity and thereby growth to some extent. The increased ratio of working age population together with some shift toward capital intensity played a positive role as well.

Quantitative analysis examining each sector's contribution to the level of employment growth and rate changes further reveals that during 1991-2001 the rate of change in employment growth was higher (4.5 per cent) as against growth in levels (2.7 per cent). However, during 2001-2011, the employment rate change declined by 10.5 percentage points as against growth in employment levels by 0.6 per cent. The results thus show that with employment becoming precarious in recent years, people have been compelled to seek foreign employment. The application of the Shapley method reveals that inter-sectoral labour relocation was one of the key causes for the increase in total output per worker during 1991-2001. But during 2001-2011, the inter-sectoral shift had a reversal effect on productivity growth, indicating that labour was moving from highly productive non-agricultural sectors to agriculture, or was opting to remain unemployed or seek foreign employment.

A detailed analysis of the manufacturing surveys of 1997, 2002 and 2007 shows that along with a steady deceleration in the number of manufacturing industries overtime, the overall value added growth rate has also declined mainly due to a decrease in the output of industries such as textiles, apparel and leather. However, despite variations, overall productivity growth has remained positive due to some industries performing well. In the elasticity front, industries such as saw mills and furniture have reported low elasticity, and industries such as apparel, leather, paper, rubber and plastic, metal and electrical have moderately high elasticity. More interestingly, employment elasticity computed for two the periods reveals that generally more workers are employed in traditional and low productive industries rather than in modern and high productive industries. Nonetheless, unlike the trade-off arguments, the overall correlation between labour productivity and changes in employment share indicate that they can move in the same positive direction. Industries like chemical and rubber and plastic have reported positive results despite the negative correlation exhibited by many other industries.

In summary, the findings of both qualitative and quantitative analysis indicate that there is a need for a development paradigm shift in Nepal that is grounded in transformational strategic approaches for enhancing decent work led inclusive growth, which would be key for shared benefits and improved living standards spread more evenly across various social groups. It is also necessary for new macroeconomic policies to take into account social aspects and focus on enhancing the productive ability of the excluded in general and women and youth in particular.

More comprehensive and focused private sector development policies and programmes will be required to attract private investment in potentially productive areas. The manufacturing sector should be revived through intra-firm and inter-industry restructuring. From the employment perspective, a focus on micro, small and medium enterprises will be equally necessary, along with a focus on women's entrepreneurship development.

Policies should also work toward labour market formalisation and increasing the share of decent employment, with a particular focus on women's employment. In addition to increased flexibility in the labour market, social security, including conditional cash transfers, can help mitigate the effects on the poorest households. A minimum employment guarantee scheme, which aims to ensure productive employment for all, with a focus on the deprived including women and youth, accompanied by more effective targeted employment programmes, is essential, particularly for raising productivity in the informal sector. Keeping in mind that international migration is crucial to Nepal's overall development including poverty reduction, higher growth and sustainable development, it is necessary to ensure that

the various problems linked to decent employment are addressed in a coordinated way internationally as well as regionally.

## I. INTRODUCTION

### 1.1 General Background

Work plays a fundamental role in people's lives. Being a critical source of income, it empowers people, gives them a sense of purpose and strengthens social cohesion. Decent and stable work provides security to individuals and their family members. Labour is often the only available asset among the poor. Enhancing the employable capacity of workers on the one hand, and working rights and opportunities on the other, strengthens equitable social relations and structures essential for inclusive growth and sustainable development. Though the features, processes and means of decent work and productive employment have been interpreted differently, it has become a buzzword today globally and has been recognised as a critical ingredient of growth and development.<sup>2</sup>

As the main features of decent work include increased employment, improved working conditions and social protection based on fundamental principles and workers' rights, they are considered to be instrumental for enhancing factor productivity and social inclusion. The decent work principle also recognises informal employment as a challenge in both developing and low income countries from the standpoint of improving livelihood conditions. It is worth noting that in 2005, the UN added a new target—achieving full and productive employment and decent work for all including women and young people—under the eradication of extreme poverty and hunger MDG.

The irony, however, is that despite the increased focus on productive employment in recent years, unemployment and underemployment have emerged as the biggest problems today (ILO, 2013). The global economic downturn after the Great Recession of 2008 was followed by sluggish but job-less recovery, which has added toward the difficulty of addressing such a pressing problem. On the one hand, employment-led growth in poor countries has been characterised by widespread underemployment, survivalist activities, and persistent poverty, and on the other, the performance of growth led employment has proved to be unsatisfactory, since the link between growth and productive employment creation has weakened sharply (Duncan, 2011).

Based on a number of country case studies, there is a growing realisation that job creation is necessary for boosting living standards, raising productivity and fostering social cohesion, leading to a country's overall development (WB, 2012). It has also been conceded that job creation and inclusive growth are imperatives that resonate today in every country in the world - be it small, large, advanced, emerging, developing, post-conflict or resource rich (IMF, 2013). In the context of the least developed countries (LDCs), the primary challenge has not been unemployment per se, but rather the lack of inclusive growth and productive employment in sufficient volume to help the working poor. This has remained a major impediment to achieving the UN MDGs and setting the LDCs on a sustainable development path (UNCTAD, 2013). Thus, there is increased pressure to make productive employment a central policy objective, rather than see it as a by-product of the growth processes that aim to reduce poverty and foster equitable, inclusive and sustainable development.<sup>3</sup>

Amidst this background, the eight goal of the Sustainable Development Goals (SDGs) set for 2015-2030 is more explicit, focused and comprehensive. It aims to promote sustained, inclusive and sustainable

---

<sup>2</sup>The ILO has advocated for this for several years. For details see ILO (2001 and 2002). See IHD (2014) for a detailed account of labour market inequality issues from the inequality standpoint in the context of India and Brazil.

<sup>3</sup>For more details on these arguments see, among others, ILO (2011), UN/UNDP/ILO (2012) and UNCTAD (2013).

economic growth through full and productive employment and decent work for all. Equally importantly, it sets two explicit targets for accomplishing such a specific goal. The third target of the SDGs focuses on the need for promoting development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation and encourage the formalisation and growth of micro, small- and medium enterprises through various processes including access to financial services. Similarly, the fifth target states that full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value has to be achieved by 2030.

In Nepal too, employment has received some priority. In 2005, a new labour and employment policy was introduced. But the biggest breakthrough in this area took place after sweeping political change in 2006. Inclusive growth and development have now become buzzwords in Nepal. With a more inclusive and participatory democratic system in place, reducing unemployment, poverty and inequality were the specific objectives laid down in the first Three Year Interim Plan (NPC, 2007). Employment and poverty reduction oriented sustainable and broad-based growth were the main goals set in the next Three Year Plan (NPC, 2010). The current Three Year Plan (2013-2016) more ambitiously aims to upgrade Nepal from being a least developed to a developing country by 2022. Like the first two plans, it also focuses on inclusive, broad-based and sustainable economic growth (NPC, 2013). Apparently, in conformity with these plans, policies and programmes focus on both, growth and employment.

Nepal has also implemented broad strategies as part of efforts to explore the means to accomplish the SDGs by 2030. The next periodic plan, which is to be launched in the next fiscal year (2016-2017) will be crucial toward that end.

Nepal's drive toward economic liberalisation that began in the early 1990s has been strongly focussed on augmenting growth and promoting employment. Needless to add that based on simple tariff and openness criteria, Nepal stands as one of the most liberalised countries in the South Asian region today (GoN, 2004; Khanal *et al.*, 2012). In service sector liberalisation, Nepal is ahead of many other South Asian countries (Khanal, 2012). Increased efforts have been made to mobilise private investment for tapping into Nepal's development potentials. The New Industrial Policy 2010, for instance, prioritises promotion of private investment, both domestic and foreign, for accelerating industrialisation in Nepal (Mol, 2010). Many facilities, including tax concessions and rebates, are provisioned in it. Additional facilities are granted to domestic resource based industries, with extra facilities granted to industries established in remote areas. The Foreign Investment and Technology Transfer Act 1991 amended twice - in 1996 and 2005 - aims to create a favourable environment for foreign investors. To promote large scale investment, a high level investment board under the chairmanship of the prime minister was established in 2010.

The Labour Act, introduced in 1992, envisages healthy industrial relations and provides job security to labourers in the organised sector with added provisions for the right to form associations and bargain collectively. Various institutional reforms in the labour market were provisioned in the act, in order to correct anomalies or distortions in the labour market and enhance employment and labour productivity. Along with the deepening of problems in the labour market and in the employment front, the debate on interrelated issues has intensified in recent years.

Unlike many other South Asian countries, Nepal has performed poorly on both growth and employment fronts. Growth in the last 35 years (1975-2010) has been merely 4 per cent on average, with agricultural and non-agricultural sectors growing at a rate of 2.5 and 5.6 per cent respectively (Khanal *et al.*, 2012). During the last three years (2010-2013), the growth rate has remained almost the same, with further deceleration in the growth of the non-agricultural sector at 4.8 per cent on average (NPC, 2013). A closer review of the period after liberalisation, bifurcated into 1990-2000 and 2001-2010, indicates that in addition to the downward trend in the average growth rate, large variations have been observed in

sectoral growth performance. The performance of the employment sector has been even poorer, more so in recent years. Unlike the growth of employment at a rate of 2.7 per cent during the period of 1981 to 1991, such a growth rate has decelerated to just 0.66 per cent during the period 2001-2011 (CBS, 2012).

As reported by the labour force survey (CBS, 2009), the labour force participation rate was relatively high at 83.4 per cent, with 86.8 per cent and 67.3 per cent recorded in rural and urban areas respectively in 2008. Compared to the relatively lower female participation rate in urban areas at 58.5 per cent, the female participation rate in rural areas remained fairly high at about 80.1 per cent in 2008 (CBS, 2009). The high participation rate has been confirmed by recent NLSS data (CBS, 2011). Despite the slowdown in the population growth rate from 2.1 per cent in 1991-2001 to 1.35 per cent in 2001-2011, the share of working age population (i.e., 15 to 59 years) has gone up to 57 per cent from 54 per cent during the same period. Similarly, the share of youth population (15 to 39 years)<sup>4</sup> constitutes around 40.43 per cent of the total population, with 4 to 4.5 lakhs of new labour entering the labour market additionally each year. Another phenomenon is the rapid growth of urbanisation at 5 per cent per annum, which is the highest in the South Asian region. The share of urban population reached 17 per cent in 2011 from 13 per cent in 2001 (CBS, 2012).

Despite the tremendous need for decent work and employment generation, sectoral employment patterns show an opposite structural shift. For instance, during 2001-2011, the share of agricultural sector employment increased to 66.67 per cent from 65.7 per cent. On the other hand, there was only a marginal decrease in the output share of this sector from 38 per cent (2001) to 35 per cent (2011). In sectors like electricity, employment growth fell by as much as 16.0 per cent on average annually, despite output growth of 4.3 per cent during the same period. The employment share of the manufacturing and trade sectors also decreased to 3.7 and 1.3 per cent per annum, as against 0.40 and 0.7 per cent growth in output respectively. The employment share of real estate and finance declined during the same period, despite some rise in the output share. The only sector which registered relatively higher employment growth was the transportation sector. In this sector, compared to output growth of 4.6 per cent, growth in employment was 4.3 per cent per annum over 2001 to 2011.

A positive development, however, is partly found in the wage front. Nepal Living Standard Survey (NLSS) data show that during the period 1995 to 2010, there was a sharp rise in wages with a rapid increase in agricultural wages compared to non-agricultural wages. The wages in the agricultural sector rose by 4.25 times as against the 3.55-fold increase in the later (CBS, 2011). Interestingly, consumer prices rose by 2.9 times during this period (NRB, 2013), indicating some real wage increments. The Doing Business Survey also indicates that the minimum wages of workers aged 19 years increased to US\$ 75.9 per month in 2014 from almost US \$30 in 2008 (World Bank, 2014). The NLSS data for 2010-11 also points out that there is no longer a large gap between agricultural and non-agricultural wage rates. As the survey indicates, the urban wage rate compared to the rural wage rate is higher by only 8 per cent in the agricultural sector and by 28 per cent in the non-agricultural sector. But a larger gap between the male and female wage rate has been reported by the survey, with the male wage rate being higher by 37 per cent in the agricultural sector and by 51 per cent in the non-agricultural sector (CBS, 2011).

If underemployment and informal employment had been lower, these increments in the wages would have contributed very positively to the upliftment of the living conditions of the working poor. The ground reality, however, is very different. The Labour Force Survey 2008, for instance, shows that the share of informal employment is very high in Nepal. In the agricultural sector, its share is as high as 99.7 per cent. Even in the non-agricultural sector, it is 86.4 per cent. Out of this, only 39.7 per cent are paid employees. Among the rest, 36.5 per cent are self-employed without regular pay and 19.8 per cent are family members. Relatively, more female workers are engaged in the informal sector (91 per cent)

---

<sup>4</sup> In Nepal people in the age group of 15 to 39 are defined as youths.

compared to male workers (83.8 per cent). Amidst such a phenomenon, the share of underemployment and disguised unemployment is extremely high. Among the employed, 32 per cent work less than 40 hours in a week. Out of the 30 per cent of total economically active population classified as underutilised, 49.9 per cent comes from the urban areas and 26.9 per cent from the rural areas (CBS, 2009). The high participation rate together with very high underemployment conditions have compelled more than 1,500 youths to leave the country (other than India) every day in search of jobs abroad (MoF, 2015).

Thus, a quick review of overall performance in terms of output and employment in light of plan objectives, changed priorities and policy developments depicts that, compared to many other countries of South Asia, Nepal faces deep problems. This is a very critical area considering Nepal's endeavours towards inclusive growth and sustainable development.

Moreover, the devastating earthquake of 2015 has posed added challenges for reviving the economy from the standpoint of augmenting both growth and employment. Nearly 9,000 people lost their lives in the earthquake and over 505,577 private houses were destroyed. More than 3 million people were severely affected, and in total, almost 8 million people were affected in one way or the other by the earthquake. The Post Disaster Needs Assessment (PDNA) of the National Planning Commission stated that the loss and damage totalled about Rs. 717 billion, comprising productive assets and wealth losses of Rs. 513 billion, personal income losses of Rs. 17 billion, and income and revenue foregone or losses of Rs. 187 billion. In all, more than two dozen sectors were badly affected and an additional 0.7 million people were pushed below the poverty line. According to the report, there was a huge requirement for resources for the reconstruction and rebuilding of the economy (NPC, 2015).

## **1.2 Rationale of the Study**

One of the earliest insights revealed by the literature on economic development is that development brings about structural change. Studies point that the countries that have managed to pull out of poverty and have acquired wealth are those that have succeeded in expanding beyond agriculture and other traditional products. Citing the experience of East and South East Asian countries, they add that when labour and other resources move from agriculture into modern economic activities, both productivity and income rise and expand rapidly overtime, leading to structural transformation and sustainable growth and development (McMillan and Rodrik, 2011). One of the key characteristics of structural transformation are changes in the sectoral composition of output and employment, with the manufacturing sector playing a leading role in driving economic growth.

Following Kuznets (1973), it is commonly held that the process of economic growth is typically accompanied by changes in economic structure, which in turn leads to a shift from agricultural to non-agricultural sectors and subsequently from industry to services, as well as a shift from self-employment to wage employment in more formal sectors. The Lewisian Model additionally shows that employment growth in modern industries facilitates the shift of surplus labour from traditional sectors like agriculture to more dynamic high productivity sectors with resultant productivity growth in the less dynamic sectors too (Lewis, 1954).

But it is worth noting that the structural change that was expected to accompany neo-liberalism led financialisation preceded by trade liberalisation and globalisation has not taken place across developing and low income countries. Despite the sharp decline in the share of agriculture output over the years, no commensurate reduction in employment in this sector has taken place in most of these countries. This has been marked by exacerbated informal employment, casual work contracts and vulnerable self-

employment accompanied by low or declining real wages leading to persistence or even a rise in the share of working poor.<sup>5</sup>

A recent study on structural change and productivity growth shows that the bulk of the difference between Asia's recent growth, on the one hand, and Latin America's and Africa's, on the other, is explained by variations in the contribution made by structural change to overall labour productivity. The most striking finding of this study is that in many Latin American and Sub-Saharan African countries, broad patterns of structural change have served to reduce rather than increase economic growth since 1990 (McMillan and Rodrik, 2011).

Many recent studies have broadly concluded that the pattern of growth taking place in most of developing countries has been detrimental to enhancing employment-led inclusive growth and development.<sup>6</sup> Conversely, the structure of the labour market and labour market institutions have equally affected development patterns and growth outcomes in many countries. The labour market institutions associated with regulations governing individual and collective employment relations and unemployment protection, have generally been found to affect overall and sectoral growth patterns. Poor and segmented labour markets, characterised by large informal sectors with high levels of self-employment or underemployment, which in turn affect working conditions and wages, have also affected labour productivity and growth markedly. Similarly, labour market policies not only affect the dynamics and characteristics of labour supply and the quantity and quality of the jobs created, but also the efficiency of job placement, contracting processes and the living conditions and prospects of the unemployed (Weller, 2009, ILO; 2008 and 2011). However, despite such causal relationships, very few studies have examined the relations, for instance, between economic growth, employment, and poverty reduction in a broad framework even at the global level.<sup>7</sup>

In the Nepalese context, a few studies have attempted to examine employment, growth and labour-related issues in one way or the other following simple descriptive or quantitative approaches. A study, while examining the growth, investment and employment nexus, found that very low employment elasticity (0.363) together with declining labour productivity in the services sector specially after 2000 contributed to the overall deceleration in labour productivity (Khanal, 2007). An ADB study, after assessing Nepal's critical development constraints, pointed out that a lack of productive employment opportunities is the biggest impediment to inclusiveness in economic growth (ADB, 2009). One of the problems pointed out by the study relates to labour law. The study points out that labour rigidity has discouraged investment, including investment in new technology, diversification of products and the hiring of more skilled workers. A Youth Survey of Nepal by British Council (2010) shows that about 40.75 per cent of youth lack income earning opportunities. A review of NLSS data shows that despite the increased productive abilities of youth through enhanced access to education, health and drinking water facilities overtime, no commensurate employment opportunities in the labour market have been made available to them, reinforcing the theory that serious anomalies are persisting or manifesting in the labour market (CBS, 2011). Assuming that wage level above the international extreme poverty line (i.e. \$1.25 per day) is equivalent to productive employment, a study finds that the share of working poor in Nepal is more than 50 per cent (Duncan, 2010). A study by Islam (2012) further shows that raising worker productivity is a major issue in addressing the challenge of employment in Nepal. It suggests that unless more employment-intensive sectors that offer prospects of faster growth are prioritised, trade-offs between productivity and employment growth may manifest.

---

<sup>5</sup> A closer review in the context of LDCs is found in ILO (2011). For a critical review on India based on both theory and practice, see Ghosh (2013).

<sup>6</sup> See Duncan (2011), Kucera and Roncolato (2013), Islam (2013) and UNCTAD (2013), among others.

<sup>7</sup> Some of the studies following this broad framework and covering demographic, employment and productivity effects include Gutierrez *et al.* (2007), Hull (2009) and ILO (2012). Gutierrez *et al.* (2007) attempts to identify the determinants of productivity as well.

Some studies point out that labour market rigidity and poor industrial relations adversely affect labour productivity growth and employment generation in Nepal (ADB, 2009; World Bank, 2012). However, the opinions of employers and trade unions on the root causes and ramifications differ (*New Business Age*, 2012). The chief problems encountered in industrial relations include politicization of workers issues, limited dialogue and inter-union rivalry, difficulty in establishing an official trade union, weak labour institutions and lack of implementation capability (Nepal, Acharya and Neupane, 2013). Another study based on the World Bank Doing Business indicators points out the need for eliminating the conflicting provisions in the law, decreasing the agencies dealing with businesses, implementing a clear policy orientation and strengthening institutions for a well-functioning market (Adhikari *et al.*, 2013). Still more comprehensive in-depth studies are yet to be carried out in the interrelated areas.

The United Nations Conference on Trade and Development Report (2013) provides a perspective on employment status and problems from the standpoint of productive employment (UNCTAD, 2013). It points out that the number of young people of working age in Nepal is currently increasing by 550,000 a year,<sup>8</sup> and by 2020 it will climb to 633,000 a year. It adds that economic growth in LDCs such as Nepal has not been inclusive, and its contribution to poverty reduction has been limited because not enough 'quality' jobs have been generated - that is, jobs offering higher wages and better working conditions - especially for young people. Employment in vulnerable circumstances without formal work arrangements, decent working conditions and adequate social security is cited for this. One of the primary causes for this is that the current process of structural change in LDCs like Nepal cannot provide the surplus population released from agriculture productive employment elsewhere.

Thus, based on a review of the earlier studies and general trends, it is found that the labour market in Nepal is characterised by a rapidly growing labour force, high levels of underemployment largely driven by the informal labour market, low productivity levels and a high working poor population amidst excess supply of unskilled workers in the labour market. In Nepal's context the problems have compounded because of very slow growth and structural rigidity in both economic and employment fronts. These underscore the need for more rigorous analysis to identify policy options from the standpoint of enhancing productive employment, a prerequisite for inclusive growth and development.

### **1.3 Objectives of the Study**

The main objective of the study is to examine employment challenges in Nepal and arrive at some policy options from the standpoint of enhancing productive employment for inclusive growth and development. The specific objectives are:

1. Assess the key characteristics of employment and labour market conditions in Nepal,
2. Review major employment and labour market policies and programmes,
3. Undertake an empirical analysis to identify the linkages between employment and growth patterns, taking structural transformation into special account, with a focus on productive employment aspects,
4. Analyse the labour demand aspects of industrial development with a focus on the prospect of raising productive capacity for higher value added employment and decent work, and
5. Draw some important policy implications.

### **1.4 Methodology and Data Sources**

Both descriptive and quantitative methodological approaches have been followed in the study. The descriptive approach includes a thorough review of the characteristics of employment in Nepal and

---

<sup>8</sup>Although these numbers seem to be on the higher side compared to the official estimates which show 0.4 to 0.45 million adding in the labour market annually, they indicate the severity of the problem.

labour market conditions as well as the various policies and programmes carried out to augment employment directly or indirectly. Using quantitative analysis, employment, productivity and the demographic effect on growth have been assessed exhaustively, apart from estimating traditional employment elasticity and labour productivity ratios taking time intervals into special account. A separate quantitative analysis, which studies elasticity and productivity, has been used to identify high value added or growth-enhancing manufacturing industries from the point of view of productive employment. This includes the use of correlation analysis to gauge the relationship between employment and productivity.

Population censuses, various survey reports and published secondary data are the main data and information sources. Various earlier studies have also been used for the study purposes.

### **1.5 Structure of the Report**

This introductory chapter is followed by a review of employment characteristics and labour market conditions in Nepal in the next chapter. In the Chapter 3, labour market policies and other ongoing policies and programmes directed toward promoting employment have been critically reviewed. Quantitative assessments on the linkage between employment and the growth pattern based on, among others, decomposition analysis have been made in Chapter 4. Chapter 5 is devoted to examining the prospect of high value added and decent employment-led industrialisation based on manufacturing survey data from different periods. In the last chapter, conclusions and recommendations are presented.

## **II. KEY CHARACTERISTICS OF EMPLOYMENT AND LABOUR MARKET CONDITIONS IN NEPAL**

### **2.1 Labour Supply and Demographic Characteristics**

Despite fluctuations, population growth has been steadily decreasing in Nepal. The growth rate decreased from 2.7 per cent in 1971-1981 to 2.1 per cent in 1981-2001. The Census of 2011 shows that the population growth rate further declined to 1.35 per cent in 2010-2011. Out of the total population of 26.49 million in 2011, the share of terai population was 50.27 per cent followed by hills at 43 per cent and mountains at 6.73 per cent respectively. A shift in the sex composition had also taken place overtime, with the percentage of males per 100 female reducing to 94.2 per cent in 2011 from 99.8 per cent in 2001.

Another phenomenon to be noted is that Nepal has the highest pace of urbanisation in South Asia. With annual growth of 5 per cent per annum, the share of urban population has reached 17.1 per cent in 2011 from 13.1 per cent in 2001 as a result of migration from rural to urban areas, among others. This has posed additional problems for the burgeoning labour market from the point of view of decent employment, considering the predominance of the informal labour market which is largely made up of unskilled labour.

A big demographic change in terms of age structure is taking place in Nepal despite the falling population growth rate. As of 2011, the population of the 0-14 years age group accounted for 34.91 per cent of the total population, and the population of the 60 years and above age group formed 8.09 per cent. The share of the working age population (15 to 59 years) was 57 per cent as of 2011, an increase from 54 per cent in 2001. Youth (15 to 39 years as per the Nepalese definition) formed 40.43 per cent of the population, and 15-24 year olds made up about 19.97 per cent. If the 15-24 years population accounts for 20 per cent of the total population, such an age group is often considered to be vulnerable. Because of changes in the demographic structure, almost 4 to 4.5 million youth enter the labour market each year.

The addition of such a high number of workers to a labour market each year is partly due to a high labour force participation rate. More recent NLSS data show that the labour force participation rate has gone up to 80.1 per cent in 2011 from 75.2 per cent in 1996. The female participation rate has also increased considerably overtime (Table 2.1), from 66.4 per cent (1996) to 79.4 per cent (2011).

**Table 2.1 Labour Force Participation Rate among Male and Female and Unemployment**

	<i>Male</i>			<i>Female</i>			<i>Total</i>		
	<i>1996</i>	<i>2004</i>	<i>2011</i>	<i>1996</i>	<i>2004</i>	<i>2011</i>	<i>1996</i>	<i>2004</i>	<i>2011</i>
Employed %	71	77.3	78.3	63.7	71.7	78.3	67.2	74.3	78.3
Unemployed %	4.2	3.1	2.6	2.8	2.7	1.2	3.4	2.9	1.8
Participation Rate	75.2	80.4	80.9	66.4	74.4	79.4	70.6	77.2	80.1
Unemployment Rate	5.6	3.9	3.2	4.1	3.6	1.5	4.9	3.8	2.2

*Source:* NLSS 1995-1996, 2003-2004 and 2010-2011

## **2.2 Characteristics of Employment and Labour Market Conditions**

Employment data collected and compiled based on the total hours spent in a particular enumerated week shows that there is no unemployment problem as such in Nepal. As shown in Table 2.1, the unemployment rate which was 4.9 per cent in 1996 reduced to 3.8 per cent in 2004 and further went down to 2.2 per cent in 2011. It, however, conceals some unique characteristics of the employment situation in Nepal and structurally driven labour market conditions.

Time related underemployment is estimated to be about 6.7 per cent. A detailed breakdown by age group shows that the underemployment rate among 20-29 year olds is high at 8.1 per cent. Labour underutilisation predominantly affects the 15-29 years age group with more than 35 per cent underemployment in such an age group. The survey reports indicate that the unavailability of jobs, inadequate earnings and skills mismatch are the main reasons. For the youth aged 20 to 24 years, labour underutilisation rises up to 46 per cent. Underemployment of the 15-19 years and 25-29 years age groups are estimated to be 35.3 per cent and 39.1 per cent respectively. On the whole, among employed persons, 32 per cent of workers worked less than 40 hours in a week in 2008, compared to 27 per cent in 1999. Out of 30 per cent of the total economically active population classified as underutilised, 49.9 per cent comes from urban areas and 26.9 per cent from rural areas (CBS, 2009). This partly indicates that the large inflow of youth from rural to urban areas, compounded by the absence of employment opportunities in urban areas, is aggravating youth underemployment in urban areas more pervasively.

An ILO estimate in 2001 showed that out of total employment, the wage and salary component formed just 24.6 per cent. It indicates that the share of self-employment is 66.5 per cent, in which the share of own accounts workers is reported to be 62.7 per cent. All together, the share of vulnerable employment is estimated to be as high as 71.6 per cent (Table 2.2).

Table 2.2 **Status in Employment and Vulnerable Employment, \* 2001**

<i>Status</i>	<i>Share in total employment</i>
Wages and salaried workers	24.6
Self-employed	66.5
– <i>Employers</i>	3.8
– <i>Own-account workers</i>	62.7
Contributing family members	8.8
Vulnerable employment	71.6

Source: International Labour Office, *Key Indicators of Labour Market*, Sixth Edition, ILO, Geneva.

\*Vulnerable employment is defined as the sum of two employment status groups - own account workers and contributing family workers.

Moreover, the Labour Force Survey 2008 shows that informal employment is extremely high at 96.2 per cent. In agriculture, 99.7 per cent of employment is informal. In the non-agricultural sector, the ratio is as high as 86.4 per cent. Out of the total employed, 39.7 per cent are paid employees, 36.5 per cent are self-employed without regular pay, 19.8 per cent are family members and the remaining are employers and others (Table 2.3). Out of the total, the share of female paid employees is low at 23.7 per cent. The share of female workers as contributing family members is high at 40.6 per cent as against 9.1 per cent among males. Relatively, more female workers are engaged in the informal sector (91 per cent) as opposed to male workers (83.8 per cent). Moreover, the latest NLSS survey (CBS, 2011) shows that the ratio of self-employment to total employment has remained at 61.2 per cent.

Table 2.3 **Status in Employment, 2008**

<i>Status</i>	<i>Share in total employment</i>	<i>Male</i>	<i>Female</i>
Paid employee	39.7	48.1	23.7
Self-employed with regular employees	3.4	4.5	1.3
Self-employed without regular employees	36.5	37.7	34.2
Contributing family members	19.8	9.1	40.6
Other	0.6	0.6	0.6
Total	100.0	100.0	100.0

Source: Nepal Labour Force Survey (NLFS), 2008

The Labour Force Survey (CBS, 2009) further shows that more than half the workers employed in 'elementary occupations' and 'subsistence agriculture' never attended school. Among those employed in the above sectors, more than two-thirds of female workers had never attended school. In contrast, about 37 per cent of those classified as professionals had completed undergraduation. Out of paid employees, almost 11 per cent received payments on a piece-rate basis. This proportion among the crafts and related trade and elementary occupation sectors was 32 and 28 per cent respectively. Workers in occupations that required a low skill level were paid on a daily basis as opposed to the monthly payments made to professionals, technicians, clerks and machine and plant operators. The survey results also indicate that the average monthly earnings of paid employees are higher than that of daily workers. Another phenomenon revealed by the Labour Survey was that the monthly earnings of female workers were just 60 per cent of what male workers receive. Female earnings were found to be low particularly in occupations like agriculture, crafts and related trades and elementary occupations in which women are largely employed.

Such a situation is more precarious in the informal market, since it largely relies on unskilled labour. Of the lowskills occupation groups, the service workers group is largest and accounts for as much as 90.7 per cent of total informal sector jobs. Women tend to be largely employed in this sector. Time related underemployment estimates classified by occupation show that 68.4 per cent of female workers are employed in subsistence agriculture followed by 17.2 percent in elementary occupations and only 14.4 per cent in other occupations. By industry, underemployed females (on the basis of time) are concentrated in agriculture, hunting and forestry sectors (86.6 per cent) as opposed to other industries (13.2 per cent) (CBS, 2009).

Moreover, exclusionary practices based on caste and gender continues to affect the Nepalese labour market. As will be discussed later, contemporary policies and related institutional and structural factors exacerbate the problem. For instance, out of the total female labour force, only 2 per cent were in the formal non-agricultural sector in 1999. No noticeable improvement has taken place overtime as the share hardly reached 3.5percent in 2008 (CBS, 2009).

A comparative study examining the representation of minority groups such as Madhesi and Dalits in various institutions further indicates that the problem is quite serious and challenging. In 1999, despite holding a share of 22.1, 30.9 and 8.8 per cent in the total population, the representation of these minority group, the Madhesi and Dalits, in the public and private sectors as well as politics and civil society organisations was 0.5, 0.5 and 0.1 per cent respectively. In 2005, their share declined or stagnated despite the rise in the share of their population (Tiwari, 2008). Public sector reservations introduced in 2006 have partially attempted to address inclusionary practices in employment. But pervasive inequality and discriminatory practices, compounded by limited job creation, has constantly perpetuated vulnerability in the labour market.

Thus, it can be concluded that Nepal faces adverse employment characteristics and labour market conditions from the standpoint of productive employment, which is key to inclusive growth. Within a highly segregated labour market that is facing a high level of underemployment, female workers are more likely to work in low quality jobs for very low wages in the service sector. Illiteracy and a lack of skills training, exacerbated by continued exclusionary practices in the form of caste, ethnicity and gender discrimination, have compounded productive employment problems among female workers in Nepal.

### **2.3 Labour Mobility and Migration**

Labour mobility and migration, both internal and external, has massively increased overtime in Nepal. The demographic changes and very unique labour market conditions in Nepal have contributed toward this.

The Census of 2001 shows that out-migration from mountain, hill and terai regions were 16.8, 68.4 and 14 per cent respectively. The corresponding ratios for female workers were 17.4, 69.4 and 13.2 per cent respectively (CBS, 2002a). The Labour Force Survey 2008 provides more insights into the extent of migration in Nepal. It reveals that out of all households, 44 per cent had at least one absentee member in Nepal. It further shows that out of such households, the percentage of households with out-migrants is more than 29 per cent and with in-migrants is 19 percent. The proportion of all households receiving remittances was 56 per cent with the average per capitano nominal remittance being NRs. 9,245. Interestingly, most remittances (58 per cent) were from within the country, followed by other countries (23 per cent) and India (19 per cent) (CBS, 2009).

Nepal's migration trends and its features have been exclusively examined by a World Bank survey carried out in 2009 (World Bank, 2011). The survey findings show that migrants comprise 15 per cent of the resident Nepali population, most of them aged 20-44 years, with two-thirds of these migrating for work, predominantly abroad. The resident population at the time of the survey (2009) was estimated to

be about 27.5 million. Out of this, the total migrant population was estimated to be in the neighbourhood of 4.2 million (Table 2.4). Out of two-thirds migrants going abroad (about 2.9 million), 2.1 million or about three-quarters of them were found to be going mainly for work.

**Table 2.4 Numbers of Migrants in Nepal Relative to the Total Population (2009)**

<i>Migration status</i>	<i>Estimated number (000s)</i>	<i>Per cent of resident population</i>	<i>Per cent of total population</i>
<i>Members temporarily away from home</i>			
Work migrants abroad	2,137.1	7.8	6.7
Work migrants in Nepal	771.2	2.8	2.4
Non-work migrants	1,195.2	4.3	3.8
Migrant children <5 years	132.4	0.5	0.4
Total migrant population	4,236.0	15.4	13.3
<i>Members currently at home</i>			
Return migrant from abroad	817.2	3.0	2.6
Return migrant from Nepal	279.9	1.0	0.9
Non-migrant	24,213.8	88.0	76.3
Children <5 years	2,194.5	8.0	6.9
Total resident population	27,505.4	100.0	86.7
Total population (including migrants)	31,741.3		100.0

Source: World Bank, 2011.

Among the migrants, most domestic and foreign migrants were found to be from rural areas within terai and hill regions, almost 10 times the number of migrants from urban areas (Table 2.5). Domestic migrants largely moved from rural areas in the hills to urban areas, whereas foreign migrants mostly came from the terai region.

**Table 2.5 Number of Work Migrants Abroad by Place of Origin: Rural--Urban, Ecological Belt and Development Region (000s)**

	<i>Migrants abroad</i>	<i>Migrants in Nepal</i>	<i>Total migrants</i>
<i>By rural--urban sector</i>			
Rural	1,937	744	2,680
Urban	200	28	228
<i>By ecological belt</i>			
Mountain	92	90	182
Hill	963	392	1,355
Teri	1,082	289	1,371
<i>By development region</i>			
Eastern	606	279	885
Central	477	237	714
Western	589	174	763
Mid-Western	240	64	304
Far-Western	225	17	242

Source: World Bank, 2011.

Recent estimates on out-migration indicate that during the period between 1994-1995 and 2011-2012, almost 2.44 million people had gone abroad, primarily for employment purposes. Additionally, unofficial records report that more than 3 million Nepalese citizens may have gone abroad for foreign

employment by the end of 2011-12. It has also been pointed out that out of the 276,787 workers who had travelled abroad for employment in the second quarter of 2012-13, 16,713 were women (MoF, 2013). The out-migration of women for foreign employment was negligible a few years ago as there were some legal restrictions as well.

Thus, these trends additionally corroborate the extent of the deepening problems in the Nepalese labour market as revealed by the Census and other sources. They clearly show that if the pressure on the labour market has eased, it is primarily due to the massive outflow of workers. It is also worth noting that internal migration from rural to urban areas has been partly induced by the creation of new opportunities in urban areas resulting from some spill-over from such inflows. The role of remittances, as revealed by the recent NLSS data, substantiates this. The recent NLSS estimates that Nepal received NRs 259 billion<sup>9</sup> (in nominal terms) in the form of remittances in 2010, comprising 20 per cent from internal and 80 per cent from the external sources. Out of the external sources, 11 per cent is estimated to have come from India alone. All in all, it is reported that remittances make up 31 per cent of the income of households that receive remittances. At the same time, it is also estimated that out of the total, about 79 per cent of remittances received by the households are used for daily consumption, 7 per cent for loan payments, 5 per cent for acquiring household property, 4 per cent for education and only small proportion of 2 per cent is used for capital formation (CBS, 2011).

Despite the big contribution made by workers to the national economy through remittances, most workers are reported to work in dismal conditions. For instance, a study by the Institute for Policy Research and Development (IPRAD), which examined recruitment and placement processes as well as level of wages and facilities in relation to contracts, indicates that a system of fraud and cheating is rampant in the recruiting or selection processes. The study further points out that workers frequently face discrimination in the host countries in terms of low wages, less facilities and risky work environments, and above all, almost half of the workers are deprived of jobs as per the agreement or contract (IPRAD, 2008). This simply means that the lack of decent employment is a big problem in the foreign employment front as well.

The excessive dependence on foreign employment during a time of increased political instability and conflict in many countries indicates the possibility of increased labour vulnerability in Nepal. An immediate rapid assessment of the likely effects of the financial crisis of 2008 corroborates such a possibility (Khanal, 2008). The study shows that in the event of a prolonged global crisis, jobs, foreign exchange earnings and remittance inflow losses could be extremely high in Nepal with very adverse spill-over effects on labour market conditions. The current international political environment poses a bigger threat in terms of labour market shocks in Nepal.

---

<sup>9</sup> The balance of payments data of the Central Bank show that in the first nine months of 2013-2014, total remittances inflows were in the order of Rs 397.8 billion, indicating an inflow of almost Rs. 1.5 billion daily. Total inflows in 2012-2013 were Rs. 434.6 billion (NRB, 2014).

### III. AN OVERVIEW OF LABOUR MARKET INSTITUTIONS, LABOUR AND EMPLOYMENT POLICIES AND PROGRAMMES

#### 3.1 Labour Law and Labour Market Institutions in Nepal

The role of labour market institutions, which are driven by the labour law and other arrangements, including employment protection, minimum wages, unionisation (including collective bargaining) and unemployment benefits schemes, have been highly debated and are a centre of policy discussion. Focusing on the economic costs of regulations, a widely-held view is that labour regulations, instead of creating a healthy environment for job creation and labour productivity growth, generate adjustment problems or costs, create dualistic labour markets and drive informality among others (Blanchard and Wolfers, 2000). Another view, broadly guided by the institutional approach and based on some evidences, argues that labour market institutions play a positive or beneficial role not only in terms of protecting workers' employment conditions, but also in improving both economic efficiency and income distribution.<sup>10</sup> It is argued that the unionisation of workers and the principles of collective bargaining help overcome unequal power relations in the labour market, enhance returns to labour, protect individual workers against discrimination, ensure minimum wages and enforce labour regulations.<sup>11</sup> Such an argument has received prominence gradually in the policymaking world today, as the focus has now shifted to decent work and productive employment rather than unemployment or the lack of jobs per se. There are also apprehensions about such arguments as they often simplify or overlook the unequal economic and social structures and relations that affect decent work and productive employment.<sup>12</sup>

Like in many other countries, the debate on the role and type of labour market institutions required has been continuing in Nepal since the beginning of market oriented reforms in the early 1990s. The flexibility or rigidity of labour laws is at the centre of debate. Employers are persistently lobbying for greater labour market flexibility with regard to hiring and firing rights. It is argued that such laws, by hindering reforms in production organisations as per changing market conditions, hinder growth in both output and employment. On the other hand, trade unions refute such an argument and point out that for the sake of higher profits through elimination of the workers' right such a demand is being pushed. They further point out that job security and other workers' minimum rights, added to work incentives, contribute to labour productivity and higher output growth, leading to an increase in the employment capacity of firms and industries. Thus, the debate is often caught in between these two schools of thought. In Nepal, despite the increased thrust on productive employment, problems of policy clarity have prolonged debates.

The Labour Act of 1992 and the Trade Union Act of 1923 form the legislative foundation of the labour markets in Nepal. The Labour Law of 1992 covers all organised sectors, including construction, transport and services, and covers different aspects of labour markets. One distinguishing feature of the law is that it covers only those firms and enterprises that employ 10 or more workers. Labour market regulations and workers' rights are specifically provisioned in it. The right to form associations, the right to collective bargaining as well as the right against gender discrimination are important features of the act. With the legislation of the Labour Court Regulation Act in 1995, the labour court was established. Wages have to be fixed based on a tripartite agreement as per the law.

More broadly, the Labour Law of 1992 deals with matters relating to employment and job security, working hours and minimum wages, the welfare of employees, employer-employee relations and the

---

<sup>10</sup> Varied arguments citing empirical studies are eloquently presented in Cazes and Verick (2010).

<sup>11</sup> For arguments along those lines see LO (2012).

<sup>12</sup> A critical view on similar arguments in the context of India is found in Ghosh (2013). A thorough discussion on the likely ramifications emanating from inequalities and discrimination is found in IHD (2014).

settlement of labour disputes. Labour Regulation, 1993 further clarifies issues regarding security of profession and service, remuneration and welfare provisions, health, cleanliness and safety, etc. The Bonus Act of 1974, as amended subsequently, provides a legal basis for the payment of bonuses to workers and employees of factories and commercial establishments.

The Labour Act of 1992 provisions that a worker must be granted a permanent work status after six months of employment, making it difficult for the employer to dismiss workers after they have been made permanent. The provision obligates firms to obtain government approval for firing and laying off of workers. The law has a tendency of pressure employers to hire employees on a permanent basis rather than allowing them to explore alternative hiring arrangements. The dismissal of employees is often found to be expensive, making business expansion difficult, and thereby employment. The fixing of minimum wage is also regarded to be detrimental from the standpoint of investing in human capital, as this system often creates a discouraging work environment by limiting the wage gap between skilled and unskilled workers. There is also a tendency to explore compliance avoidance strategies, partly due to increased business complexity and the cost of compliance.<sup>13</sup> For similar reasons, the act has been consistently criticised by the business community as being 'more regulatory than promotional', which they claim is detrimental to investment and employment generation. From the perspective of trade unions, however, the anti-dismissal provision of the act is justified specially from the point of view of social security and job safety for workers.<sup>14</sup>

International studies more broadly support or advocate the view that Nepal's labour laws are labour friendly but do not support investment. A detailed World Bank survey, that examines the investment climate in Nepal, particularly private sector development, points out that the labour market in Nepal is characterised by rigid regulations and unionisation. It argues that such a policy approach reduces the incentive to hire workers through formal contracts and adds that this usually results in low job creation, high levels of unpaid work and underemployment and higher migration abroad for work. It adds that the law also provisions minimum wages with very little differentiation across skill levels, which has adverse effects on labour productivity and investments in human capital. It also indicates that large firms constrained by labour regulations are often subject to trade union actions motivated by certain political intentions (World Bank, 2012a). An ADB study, which focused on the constraints caused labour market conditions, provides many insights into the compounding problems in related areas. According to it, employer's perceptions on obstacles to investment efficiency vary widely by location, size of the firm and the economic sector. While employers in the large scale manufacturing sector believe there to be many labour problems, those in smaller scale enterprises or in the service sector, which is the largest and fastest growing part of the economy, do not. It points out that the tradition of collective bargaining is both recent and undeveloped; that human resource management and business management generally are often weak; and that trade unionism in Nepal, as elsewhere in South Asia, is structured along ideological lines. It adds that labour management relations are hampered by multi-unionism at the workplace, with inter-union rivalries as each union attempts to outbid the others for gains and membership. It observes that for more flexible labour laws greater social protection is demanded by the workers. One of the interesting findings is that like the unions, employers' associations are equally politicised (ADB, 2009).

In Nepal, institutional frameworks and arrangements that enforce the law are usually quite complicated, which is often overlooked or neglected as a result of the debate about rigidity or flexibility. In the tripartite system, the government, employer's agencies and trade unions are responsible for negotiations through bargaining processes. From the government side, the Ministry of Labour and Transport Management is mainly responsible with the backing and support of other ministries depending on the specific issue. From the employer's side, the private sector is represented by the

---

<sup>13</sup>For such findings see Khanal and Dahal (2007).

<sup>14</sup>A brief review of labour law from both employers and employees is found in ILO, 2011.

Federation of Nepalese Chamber of Commerce and Industry (FNCCI). But with the creation of the Confederation of Nepalese Industries (CNI), both organisations perform similar roles, which sometimes leads to some ambiguities. Moreover, like the multi-unions, there are also very active employer's associations in some key sectors like transport and retail trade. Some of these associations are accustomed to imposing syndicate systems which the FNCCI often opposes, but with little success. In many instances, the government has remained a silent spectator. Many retail trade related organisations follow carteling and syndicate systems uncompromisingly. There is also a tendency to create monopolies in the private sector following the deregulation or divestment of public sector enterprises. The institutional capacity for enforcement has also been very weak and is often neglected. The market imperfections and market capturing practices due to weak regulatory institutions often undermine firm's efficiency and productivity. All these factors make collective action problematic though the situation is almost always portrayed as one arising from labour related issues. Despite attempts to provide different perspectives, even sometimes contradicting its own findings, the Doing Business indices of the World Bank clearly reveal that there are other bigger problems than the labour ones. The *Doing Business Report*, based on 2015 data, shows that out of 189 countries, Nepal is ranked at 99, which is lower than Sri Lanka (107), India (130) and Pakistan (138). Out of the 10 indices, enforcing contracts (152), getting credit (133), getting electricity (131) and paying taxes (124) are more problematic than employing workers (World Bank, 2016).

At the same time, the debate on the labour market often ignores or undermines the severity of the problem caused by the predominance of the informal labour market. Despite difficulties in estimating the size of the informal sector accurately, based on the Nepal Labour Force Survey 2008, it is estimated in the neighbourhood of 96 per cent (CBS, 2009). The most challenging feature of this sector is that there is virtually no social security arrangement for informal workers in Nepal (Khanal, 2012). Even more alarmingly, among the informal workers, unskilled workers in general and female workers, Dalits, marginalised ethnic groups, minorities and people living in remote or backward areas in particular are the ones who are mostly deprived in terms of social security. Apart from the absence of guaranteed minimum wages, there are no social security related facilities available to workers in the informal sector. Although trade unions have been lobbying to legislate regulations for the informal sector, no rules ensuring social security for informal sector workers have been enacted so far. This means that the labour flexibility debate covers only a tiny section of the labour force working in the organised sector. Moreover, there are also indications that the use of contracts is pervasive in the organised sector, reinforcing the possibility of a greater prevalence of informalisation in one form or the other than what is revealed by the survey data. Despite a commitment to a minimum wage floor as per the ILO declaration on Fundamental Principles and Rights at Work which covers all workers, regardless of whether they are in the formal or informal economy, Nepal is yet to fully implement such a commitment. Countries like Thailand and the Philippines have successfully implemented the minimum wage floor principle as a part of the social security rights guaranteed to informal workers.

Thus, the predominance of the informal market and the lack of social security rights for informal workers indicates that decent work and productive employment is very crucial from the standpoint of pro-poor and inclusive growth in the context of Nepal. This again stresses the need for serious consideration on how informal employment and working poverty could be integrated into a broader development strategy. In such a new strategy, the transition to formality, decent work and productive employment should be at the forefront, which again is linked to policies and programmes, among others.

### **3.2 Labour and Employment Policies and Programmes**

Employment generation was one of the four pillars of the Tenth Plan (2002-2007), which was formulated under the Poverty Reduction Strategy Paper (PRSP) framework. As an offshoot, a new Labour and Employment Policy was introduced in 2005. It aims to alleviate poverty by creating income generating employment by exploring and tapping into new opportunities and potentials. The policy focuses on

eliminating forced labour practices, including bonded labour, and establishing congenial labour relations by introducing international labour standards at the workplace in both formal and informal sectors. Investment in employment stimulating economic sectors, generating youth targeted employment and promotion of self-employment are some of the strategies envisaged in it.

A major breakthrough in this area took place after the historic political change of 2006. Grounded in a more inclusive and participatory democratic system, plans and programmes have focused on employment generation, particularly growth induced employment. Specific programmes targeting deprived socio-economic groups, most backward areas and youth are part of the overall strategy. Enhancing the employable capability of workers also forms part and parcel of such a new orientation in which access to vocational education, training and skill enhancement is emphasised.

For instance, reducing unemployment, poverty and inequality were the specific objectives laid down in the first Three Year Interim Plan (NPC, 2007). Employment and poverty reduction oriented sustainable and broad-based growth were the main goals set in the next Three Year Plan (NPC, 2010). The Approach Paper of the current Three Year Plan (2013-2016) following the changed global focus, stresses on inclusive, broad-based and sustainable economic growth (NPC, 2013).<sup>15</sup>

In order to achieve broad-based and inclusive growth, recent policies and strategies focus on more equitable and inclusive access to education and health. Similarly, there is an increased focus on more labour intensive sectors and activities. Infrastructure programmes also prioritise employment generation. Recently, apart from the focus on youth employment, new initiatives, including the minimum 100 days employment generation programme, have been launched. For financial inclusion and enhanced access to financial services, priority sector credit and special credit facilities have been made available to the deprived. Group based credit is being made available to women through rural development banks and micro credit institutions.

The country's major policy and programme initiatives from the standpoint of enhancing inclusive growth and augmenting employment are as follows:

#### i. Growth Inducing Employment

A review of plan documents, policies and strategies implemented after the political change of 2006, indicate that higher growth has been the primary focus of the plans, under the assumption that this will simultaneously lead to employment generation. For instance, in the first Three Year Interim Plan (2007-2010), based on the estimated employment elasticity of about 0.64, employment growth was projected to be 3.5 per cent per annum along with a targeted growth rate of 5.6 per cent. In the subsequent Three Year Plan (2010-2013), assuming almost 0.65 employment elasticity, employment growth of 3.6 per cent was envisaged with the targeted growth rate of 5.5 per cent. Although the details of the job creation agenda in the current Three Year Plan (2013-16) are yet to be brought out, it envisages employment growth of 3.2 per cent under the assumption of slightly lower employment elasticity at 0.53 amidst a planned growth rate of 6 per cent. In all these projections, employment growth is assumed to be very high compared to labour force and population growth. It has been stated in plan documents that the targeted growth led employment thus generated will contribute to enhancing productive employment by reducing both unemployment and underemployment levels.

The growth, in turn, is assumed to be driven by higher investment. Apart from prioritising government investment in production sectors like agriculture as well as physical and social infrastructure, the private sector is expected to pump in investment. Both, strategies and market oriented reforms, are directed

---

<sup>15</sup> It is worth noting that despite the increased prioritisation of employment generation with a focus on productive employment, no specific goal like in other areas as per MDGs is found.

toward promoting private investment in small and medium manufacturing industries, infrastructure development and the expansion of tertiary sector activities. Investment in infrastructure facilities and enhanced access to social and financial services, on the part of both, public and private sectors, as well as by cooperatives and community organisations grounded on equity and inclusiveness principles, are assumed to augment growth and employment. The popular assumption is that such an approach, aided by a robust employment policy, will provide decent jobs and employment to the growing labour force including women and deprived socio-economic groups. It is also assumed that such an approach will facilitate the formalisation of employment in the labour market.

Notwithstanding the importance attached to growth and employment by the plans, backed by targeted investment and accompanying broad strategies and policies, the biggest problem is that no attempts have been made to establish a proper linkage between the projected investment in various programmes and their likely implications on employment generation. This has resulted in serious lapses in setting employment targets. The lapses are found in the performance reviews and progress reports as well. The problem primarily lies in the methods used to make employment targets. Still, employment generation projections are based on employment elasticity, which again is derived by simply regressing the extrapolated economically active population against aggregate GDP or value added by sector. It therefore simply overlooks the time factor or the number of hours employed per day or week and month while assuming employment. This simply means that the underemployment dimension, which needs to be addressed for true productive employment, is largely overlooked in such a mechanistic approach despite apparent thrust on it. As obvious, such lapses have had wider ramifications for employment objectives and their realisation. The lapses, from a future strategy and policy standpoint, are again repeated when plan performances are evaluated. In such an exercise as well, crude employment elasticity figures are simply multiplied with the realised growth rate to arrive at a measure of additional employment generation. Consequently, despite the plan priority and added policy focus, the decent employment dimension is generally overlooked when both macro and sectoral perspectives are taken into account. As an offshoot, the problem of underemployment of women and the working poor in the informal sector receives less attention from both strategic and policy point of view. It deserves.

## ii. Specific Employment Programmes

Apart from prioritising employment friendly investment and some employment generating programmes, the programmes focus on training, skill formation, entrepreneurship and micro-enterprise development. Some of them aim at creating employment as a part of income generation. The last Three Year Plan (2010-2013), for instance, emphasised micro finance, entrepreneurship promotion, skill development, appropriate technology promotion, self-employment and micro enterprise development programmes. Over the last several years, numerous training and skill development programmes have been implemented to enhance the self or wage employment capacities of the deprived, women and those in conflict affected areas. Among such programmes, vocational and skill development and training programmes, both short term and long term, have received priorities which focus on Adibasi, Janajatis, Madhesis, conflict affected women, internally displaced and conflict affected people. Special skill oriented training programmes are also regularly conducted by the Ministry of Agriculture, Ministry of Industry and Ministry of Labour. Similarly, both bilateral and multilateral donors, including the DFID, SDC, GIZ, JIACA, SNV, ILO, UNDP, World Bank and ADB, have been supporting special income generation programmes that also contribute to job creation. For example, the World Bank funds the Poverty Fund introduced in 2002 as a part of PRSP; this is the largest income generation programme targeted at the deprived and women. Similarly, the UNDP supports the micro enterprise development programme implemented more than a decade ago. The programme focuses primarily on income generation through promotion of commercial agriculture and agro-enterprises. Lately, the government also initiated a 100 days employment guarantee programme in 2012 through an Act in 2012, similar to the one implemented in the neighbouring country of India. The important features of some of the

programmes that are aimed exclusively at productive employment generation and enhancing inclusiveness through employment opportunities are presented below. Some of the public works programmes (PWPs) aimed at creating temporary employment opportunities are also discussed below.

*a. Inclusiveness in employment opportunities:* Nepal society is characterised by deep rooted exclusion and discrimination, driven by its social structure. The Nepal Gender and Social Exclusion Assessment (GSEA) Report, 2006 has identified six dimensions of social exclusion in Nepal. These dimensions include: gender, caste, ethnicity/race, language, religion and geo/political. Although the form of exclusion in each dimension is found to be different, women from subordinate castes are reported to face the most exclusion. Based on this data, the Interim Constitution of Nepal 2007 guarantees the right to equality. Clause 3 of Article 13 mentions that

nothing shall be deemed to prevent the making of special provisions by law for the protection, empowerment or advancement of women, Dalits, ethnic nationalities (Adibasi--Janajati), Madhesi or farmers, labourers or those who belong to a class which is economically, socially or culturally backward or children, the aged, disabled or those who are physically or mentally incapacitated.

Recognising exclusionary practices in employment as one of the principle forms of discrimination that prevent the deprived from participating in decision making processes, a reservation system in the civil service was introduced, with 45 per cent of seats reserved for the disadvantaged. Of these, 33 per cent are reserved for women, 27 per cent for the Adibasi--Janajatis (ethnic nationalities), 22 per cent for Madhesi (terai people), 9 per cent for the Dalits, 5 per cent for disabled and the rest 4 per cent for backward areas.

An evaluation study shows that in the first five years, 10,809 candidates were selected for the civil service. Of these, only 3,561 candidates, or 33 per cent, were selected on the basis of inclusiveness criteria. A study evaluating the reservation policy indicated that though more women were selected through the system, the percentage of Madhesi, disabled and candidates from remote areas selected was below the allotted percentage (Dhakal, 2012). Minority groups may not have the necessary qualifications to apply for these roles currently, which may explain why the number of selected candidates is lower; however, such a policy may have a long term positive impact on enhancing productive employment and promoting inclusiveness.

*b. Karnali One Family One Employment Programme:* The Karnali Employment Programme is one of the employment programmes designed to reach backward and remote areas. The programme was introduced in 2006 and was implemented in five districts (Jumla, Mugu, Kalikot, Dolpa and Humla) in Karnali, which is the most marginalised and underprivileged region in the country. In 2011, the programme was extended to the adjoining districts of Jajarkot, Achham, Bajhang and Bajura, which are also extremely backward. Initially, NRs. 180 million was allocated to the one family, one employment programme with a scheme of 100 days employment per year through public works programmes. The programme aims to reach very poor households that have no employment opportunities or regular sources of income. The programme is solely financed by the government and managed by the Karnali Region Development Unit of the Ministry of Local Development (MoLD).

An evaluation report by the NPC shows that the total amount allocated to the programme from 2006-2007 to 2010-11 was NRs. 1,056 million. Together with the budget of 2011-12, it amounted to NRs. 1,316 million. The report indicates that out of the total allocated budget, around 85 per cent was spent. But in terms of accomplishment, it generated only 13 days of employment per person in a year (NPC, 2012). This means that the programme almost failed to fulfil its objectives. The programme encompassed many lapses and shortcomings. The major problem is that a top down process is followed, as the total budget was fixed by the centre in an a priori fashion following some incremental approach

rather than based on performance based criteria. This is done simply to give the impression that the government is serious about providing for the welfare of the poor by allocating more resources to backward areas. Hence, the budget allocation is not backed by concrete programmes that follow bottom up participatory approaches from the grassroots. Similarly, though it targets the poor on paper, it benefits the non-poor also for political reasons. Third, as partly evident from the NPC evaluation, there is no effective progress reporting or monitoring mechanism through which accountability could be strengthened to check the misuse of funds or prevent the use of funds for purposes other than the intended objectives of the programme. The experience, thus, indicates that ongoing practices will have little positive impact on employment generation.

c. **Youth Self-Employment Fund:** The youth self-employment programme through creation of a fund was announced in the budget of 2008-09 by the first elected government formed after the Constituent Assembly Election in 2008. The youth employment fund is now called the Youth and Enterprises Self-Employment Fund. In the beginning, NRs. 500 million was allocated to the fund. The programme aims to promote self-employment and vocational training among unemployed youths through collateral free periodic loans, up to a maximum of 2 lakhs per person, at concessional interest rates from banks and financial institutions. The programme covers multiple industries including farming and agriculture, operation of rickshaws, arts services, traditional skills, 'one village one product' and skill formation. For the mobilisation and operationalisation of the fund, coordination between government and non-government organisations, banks and financial institutions is also envisaged by the programme.

The banks, financial institutions and cooperatives are required to deposit one-third of the mandated credit flow to the deprived sector in this fund. The fund acquires this amount as a loan at 5 per cent interest rate per annum. The deposited amount is re-financed through banks and financial institutions for self-employment programmes at 7 per cent interest rate. The banks and financial institutions are then allowed to invest the amount received through refinanced loans at 12 per cent interest rate. There is also a provision 60 per cent write off of the interest as subsidy upon timely repayment of both the principle and interest as scheduled. All loan recipients under the self-employment programme are required to be insured mandatorily.

When it was launched, several young people rushed to take the advantage of the programme. The government, at the time of launching, had promised self-employment opportunities to 700,000 youths across the country. More than 622,000 youths applied for the programme across the country in a very short span of time. But there were reports that around 326,000 candidates were waiting for government support to commence their businesses despite completing the necessary orientation training through the various districts' subsidiaries of Chamber of Commerce and Industry.<sup>16</sup> The irony is that the programme had been politicised from the very beginning, and hence successive governments did not prioritise it. Reports of massive misuse of funds also defamed the programme. The training programme was also not effective. The new and upgraded version of the programme, including reforms in the training curriculum, were initiated again in 2012 after a gap of three years. Under the new loan scheme, two cooperatives from each of the 240 constituencies and four from each district were selected and funded, with the aim of providing self-employment to 50,000 youths per year. In order to avoid accusations that the amount had been distributed to political workers, the involvement of the Rastriya Banijya Bank, Agriculture Development Bank and Nepal Bank Ltd was made mandatory. A government report shows that by the end of the fiscal year 2011-12, around Rs. 2.71 billion had been invested in the programme. A media report quoting the vice-chairman of the fund shows that a target of providing self-employment to 50,000 people was fixed for 2012-13.<sup>17</sup> The government report shows that out of the approved fund of NRs. 590 million distributed to 20 banks and financial institutions for the operation of self-employment programmes in FY2011-12, Rs. 420.04 million was released leading to the self-employment to

---

<sup>16</sup> This was reported in the Rising Nepal of 1<sup>st</sup> April, 2012 which is government run paper.

<sup>17</sup> There was a media report on 4<sup>th</sup> Aug 2012 quoting the vice-chairman of the Fund.

4,206 persons. It has been claimed that under the Youth and Small Entrepreneur Self-Employment Fund, about 13,862 youths were able to achieve self-employment by mid-June 2013 (MoF, 2013). Such a claim contradicts other reports which state that in the three years prior to 2012-13, only 3,000 youths were employed through the programme and almost Rs. 5 billion went unclaimed.<sup>18</sup> Over politicisation, lack of clarity about the programme modality, including the absence of an integrated approach toward skill development, clear rules about fund uses and an accountability system have made the programme debatable and ineffective.

*d. Public Works Programmes:* A number of programmes that use labour intensive techniques for asset creation processes also provide temporary employment. These programmes vary in size, geographical spread and coverage in terms of penetration within districts. They also vary with regard to their primary focus, with some aiming to create infrastructure, some employment, and others to contributing to social protection or food security outcomes, and a few to addressing multiple objectives simultaneously.

These programmes share design similarities since they all pertain to the construction of physical infrastructure and provide employment on similar, although not identical, terms with some discrepancies in wage levels and duration of employment (ranging from 13 to 150 days). The infrastructure created comprises mostly bridges, roads, rails and other social and economic infrastructure, in addition to community facilities, irrigation and flood mitigation interventions such as river training.

The World Food Programme (WFP) supported Rural Community Infrastructure Works (RCIW) is the longest-standing programme, initiated in 1996 with support from German Technical Cooperation Agency (GIZ), and covers 21 food-insecure districts. In addition to the RCIW, a number of other PWPs are currently being implemented under the aegis of the Ministry of Federal Affairs and Local Development (MoFALD), with some degree of design and operational autonomy. The most significant among these in terms of district coverage is the Decentralized Rural Infrastructure Livelihood Project (DRILP), implemented in 25 districts under the DoLIDAR section of MoFALD. It aims to reduce poverty in conflict affected areas and focuses on vulnerable populations, particularly Dalits, women and children. The first five-year phase of the DRILP was completed in October 2011. The second phase (2012-2017) is currently under implementation, funded by ADB with technical support from SDC. SDC is also supporting the District Roads Support Programme (DRSP), together with the World Bank. There are also some collaborative public works programmes under implementation across the districts.<sup>19</sup>

*e. Employment Guarantee Programme:* In 2012, a new employment guarantee programme, broadly similar to the one implemented in India, was launched. The Employment Guarantee Bill, drafted by the NPC, was approved by the cabinet and then forwarded to the legislative parliament through the Ministry of Labour and Employment. But due to the suspension of the legislative parliament, it is still pending. It proposes to guarantee employment for 100 days, and also provisions at least 50 days of unemployment allowance if employment for 100 days could not be provided.

*f. Access to Assets, Physical, Social and Financial Services:* The importance given to more equitable and inclusive access to physical, social and financial services has reaped benefits, and steady progress in terms of enhancing inclusive growth and productive employment has been made in those areas. NLSS findings show that in the areas of physical and social services, access has increased overtime across various regions, including backward regions, castes and ethnicities as well as rural and urban areas (CBS, 2011). This is further corroborated by the *Nepal Human Development Report 2014* (Sharma, Basu and Khanal, 2014). However, there is a clear indication that the access to education and health is highly disproportionate and discriminatory across gender, caste, ethnicity and geography. There is also a large

---

<sup>18</sup> This was also reported in the *Rising Nepal* of 1<sup>st</sup> April, 2012.

<sup>19</sup> For details see Harris, McCord and K.C., 2013.

gap between rural and urban areas. Recent poverty estimates that use a multidimensional approach also indicate that poverty is still above 42 per cent (Oxford, 2014). In terms of access to financial services, the problem is quite large. Still, 80 per cent of households in Nepal are deprived of institutional credit from the banking system despite their marked expansion in recent years (CBS, 2011). On the other hand, land distribution has remained highly skewed (CBS, 2012), and there are no direct policies as such that could enhance access to assets more equitably.

Thus, compared to some other South Asian countries that have succeeded in promoting higher growth and productive employment through, among others, minimum job guarantees and job insurance policies, Nepal faces bigger problems in terms of both, growth and interlinked productive employment. A failure to enable an investment environment has encouraged the private sector to divert their resources toward non-tradable consumable and unproductive activities leading to an adverse effect on the quality of growth and thereby on productive employment.<sup>20</sup> The simultaneous growth and employment analysis in the next chapter provides more insights on this.

#### **IV. AN EMPIRICAL ANALYSIS OF LINKAGES BETWEEN EMPLOYMENT AND GROWTH PATTERN (STRUCTURAL TRANSFORMATION) WITH SPECIAL FOCUS ON PRODUCTIVE EMPLOYMENT ASPECTS**

##### **4.1 Overall and Sectoral Growth Performance and Current Growth Engines**

Table 4.1 presents the overall and sectoral growth performance of the Nepalese economy for the period of 1991-2013. As shown in the table, the average growth of GDP decelerated sharply to 2.7 per cent in 2001-2010 from 4.4 per cent in 1991-2000. Despite some improvements in 2011 and 2012, it again decelerated in 2013, with the growth rate slowing to below 4 per cent. The trend also portrays wider fluctuations in the growth rate from one year to another, largely due to changing monsoon conditions. In the agricultural sector, the growth was 2.2 per cent during 1991-2000 and 2.32 per cent during the period of 2001-2010, indicating a low growth rate.

Amidst the expedition of liberalisation in the beginning of the 1990s, which was characterised by deregulation, privatisation, free trade, limiting the role of the state and opening the economy to foreign investment, there was some growth momentum in the non-agricultural sector, where the growth rate stood at 6.16 per cent on average during the period 1991-2000. However, such a pace could not be maintained in the following years. The growth rate tumbled down to a mere 2.95 per cent during 2001-2010, primarily due to the decade long conflict (1996-2006) in the country. At the same time, the abrupt and narrow focused liberalisation programme induced urban-centric capital intensive activities, immature sequencing and above all a negligence of institutional and structural constraints. This affected, among others, the investment environment and contributed to the poor performance of the non-agriculture sector (Khanal *et al.* 2005 and 2012).

---

<sup>20</sup> To review the role of investment patterns and other determinants on sectoral growth, see Khanal *et al.* (2012). In the study, sectoral decomposition analysis to examine the effect of capital and labour on sectoral growth and productivity has also been made.

Table 4.1 **Sectoral Growth Rate (1990-2013)**

	1991-2000 (%)	2001-2010 (%)	2011 (%)	2012 (%)	2013 (%)
Agriculture, fisheries and forestry	2.2	2.3	4.5	5.0	1.3
Mining and quarrying	5.1	2.9	2.0	5.0	5.5
Manufacturing	8.6	0.4	4.1	3.6	1.8
Electricity, gas and water	7.1	4.3	4.4	8.4	0.2
Construction	5.6	2.7	4.8	0.2	1.6
Trade, restaurant and hotel	5.6	0.7	2.0	3.4	9.2
Transport, communication and storage	7.3	4.6	5.2	5.7	6.7
Finance and real estate	5.2	3.7	2.6	3.1	3.4
Community, social services and others	5.5	5.9	4.5	6.0	4.6
Non-agriculture GDP	6.2	3.0	3.6	4.2	5.0
Total GDP	4.4	2.7	3.9	4.4	3.7

Source: Economic Survey (1992, 2012 and 2014), Ministry of Finance, Government of Nepal

The subsector performance breakdown provides more insights into the underlying reasons for the low but fluctuating growth rate. Interestingly, during 1991-2000, all the subsectors within the non-agricultural sector grew by more than 5 per cent. The manufacturing sector recorded growth of 8.6 per cent followed by transport, communication and storage (7.34 per cent) and electricity, gas and water (7.09 per cent). But due to their relatively low contribution to the overall growth in terms of GDP at 17, 11.1 and 2.4 per cent respectively, the average growth rate could not go beyond 4.4 per cent in this period despite it being higher than the long term growth rate of around 4 per cent (Table 4.2). During this period, the contribution of the agricultural sector to total GDP was 20.1 per cent.

Contrarily, all the non-agricultural subsectors registered a deceleration in growth during 2001-2010. During this period, the performance of sectors like manufacturing and trade and restaurant and hotel has been disappointing, with the average growth rate decelerating to less than one per cent. Only community and social services grew at a growth rate of above 5 per cent during the same period. In terms of contributing to growth, the contribution of the agricultural sector to the total GDP increased further to 30 per cent. Among the non-agricultural subsectors, the contribution of community and social services to total GDP was 25.6 per cent. This was followed by finance and real estate at 16.2 percent and transport, communication and storage at 14.3 per cent. On the other hand, the contributions of manufacturing; electricity, gas and water; and trade, restaurant and hotel accounted for just 1.1, 3.2 and 3.9 per cent of the GDP respectively. The contribution of the construction sector to the total GDP also declined from 14.3 per cent during 1991-2000 to 6.0 per cent during 2001-2010. Thus, during 2001 to 2010, the performance of almost all the non-agricultural subsectors was poor, hardly catching up to even the stagnated agricultural sector.

Some improvements in the growth rate took place in 2011-2013, in addition to some changes in the sectoral contributions to the overall growth rate depending on the growth performance of the particular sector. For instance, in the year 2013, the trade, restaurant and hotel sector made the largest contribution to the overall GDP growth at 36.9 per cent. In this year, a sharp reduction in the agricultural sector's contribution was compensated by this sector.

Table 4.2 **Sectoral Contribution to GDP Growth**

	1991-2000 (%)	2001-2010 (%)	2011 (%)	2012 (%)	2013 (%)
Agriculture, fisheries and forestry	20.1	30.2	40.1	39.5	11.8
Mining and quarrying	0.6	0.5	0.2	0.5	0.7
Manufacturing	17.0	1.1	7.0	5.5	3.4
Electricity, gas and water	2.4	3.2	2.5	4.3	0.1
Construction	14.3	6.0	7.3	0.3	2.4
Trade, restaurant and hotel	14.1	3.9	7.0	10.7	36.9
Transport, communication and storage	11.1	14.3	12.4	12.3	17.9
Finance and real estate	11.6	16.2	8.1	8.6	11.1
Community and social services	11.0	25.6	15.7	18.9	17.8
Non-agriculture GDP	79.9	69.8	60.0	60.6	89.0
Total GDP	100	100	100	100	100

Source: Economic Survey (1992, 2012 and 2014), Ministry of Finance, Government of Nepal

The overall sectoral growth and accompanying sectoral contributions to the growth pattern clearly show that structural change has not only progressed at a slower pace, but has also emerged differently compared to the structural change that has taken place in advanced and newly emerging countries in the course of take-off and rapid development. For instance, the share of the manufacturing sector reduced from 7 per cent in 1991 to 6.7 per cent in 2013 (Table 4.3). Similarly, the growth of the construction sector, which partly mirrors the transformational process in the economy, witnessed a sharp fall in its share from 10.5 per cent in 1991 to 5.7 per cent in 2013. Sectors such as trade, restaurant and hotel; transport, communication and storage; finance and real estate; and community and social services only witnessed a rise in their share in total GDP. All these trends, accompanied by wider fluctuations, indicate that no sector has emerged as a leading dynamic sector from a sustainable growth perspective. In this respect, the disappointing performance of the manufacturing sector has been an important factor. High production and transaction costs, poor and low quality infrastructure, high interest rates and other policy biases, rigid labour laws and over politicisation of labour unions, and a very weak regulatory system have encouraged market distortions and immature liberalisation policies. These policies have failed to take into account the threat of cheap products from other countries and have contributed to augmenting de-industrialisation in Nepal. The decade long conflict which created hurdles and forced industries to close down also contributed to this.

Table 4.3 **Sectoral Share in GDP**

	1991 (%)	2001 (%)	2011 (%)	2013 (%)
Agriculture, fisheries and forestry	46.5	38.0	35.0	34.4
Mining and quarrying	0.5	0.6	0.4	0.4
Manufacturing	7.0	9.9	6.8	6.7
Electricity, gas and water	1.4	1.7	2.2	2.2
Construction	10.5	11.4	6.1	5.7
Trade, restaurant and hotel	10.7	11.2	14.1	14.7
Transport, communication and storage	5.7	7.4	9.4	9.8
Finance and real estate	9.5	9.8	12.2	12.1
Community and social services	8.3	10.0	13.7	14.1
Non-agriculture GDP	53.5	62.0	65.0	65.6

Total GDP	100.0	100.0	100.0	100.0
-----------	-------	-------	-------	-------

Source: Economic Survey (1992, 2012 and 2014), Ministry of Finance, Government of Nepal

## 4.2 Overall and Sectoral Employment Performance and Main Employment Sources

The employment performance of the Nepalese economy has been assessed based on data on the economically active population obtained from the population census. For comparison purposes, data of the three population censuses, viz., 1991, 2001 and 2011 have been used. Out of the total working age population, 73 per cent were employed in 1991, which increased to 77 per cent in 2001. However, thereafter, the ratio declined to 67 per cent. This clearly indicates that the growth in employment has been slower than the growth in population. Another phenomenon, as revealed by the employment pattern, is that no discernible changes in the employment structure have been observed overtime. Despite some reduction in the share of agricultural employment, it is still a dominant sector as two-thirds of the economically active population are still engaged in this sector, though the percentage has reduced from 81.2 per cent in 1991 to 66.7 per cent in 2011. On the other hand, the share of manufacturing employment has gone down sharply in recent years from 8.8 per cent in 2001 to just 5.5 per cent in 2011. Now, after agriculture, community and social services is the largest employment generating sector with a 12.8 per cent share in total employment. Despite a reduction in its share from 2001 to 2011, the trade, restaurant and hotel sector still occupies third place with a share of 8.1 per cent in total employment.

Table 4.4 also presents the rate of growth of employment in different sectors over the periods of 1991-2001 and 2001-2011. As the figures indicate, overall employment growth reduced to 0.6 per cent in 2001-2011 from 2.7 per cent in 1991-2001. It shows that the slower sectoral growth in the later period took a heavy toll on employment generation. Another interesting phenomenon is that despite some sectors growing moderately, their employment demand remained low. The combined effect resulted in job-less growth during 2001-2011.

Table 4.4 Employment Growth and Employment Share in Sectors

	Employment share			Employment growth (Annual average)	
	1991 (%)	2001 (%)	2011 (%)	1991- 2001 (%)	2001- 2011 (%)
Agriculture, fisheries and forestry	81.2	65.7	66.7	0.8	0.7
Mining and quarrying	0.0	0.2	0.3	17.4	5.1
Manufacturing	2.0	8.8	5.5	16.0	-3.7
Electricity, gas and water supply	0.2	1.5	0.2	23.1	-16.0
Construction	0.5	2.9	3.2	18.9	1.6
Trade, restaurant and hotel	3.5	9.9	8.1	12.2	-1.3
Transport, communication and storage	0.7	1.6	2.4	10.5	4.3
Financial and real estate	0.3	0.8	0.7	11.8	0.2
Community and social service and other	11.6	8.6	12.8	0.0	4.2
Total	100	100	100	2.7	0.6

Source: Calculated based on economic survey data of various years

The linkage between economic growth and employment can be better understood by examining overall and sectoral employment elasticity patterns. Such estimates are presented in Table 4.5. The estimates show that during 1991-2001, the employment elasticity of the whole economy was 0.64. Thereafter, elasticity declined sharply and reduced to just 0.18 during in 2001-2011. The negative elasticity of 4.85,

1.83 and 1.43 in the manufacturing; electricity, gas and water; and trade, restaurant and hotel sectors respectively were mainly responsible for this. Conversely, the low or moderate elasticity in sectors like agriculture (0.25), construction (0.47), transport (0.74) and community services (0.63) also contributed to the low elasticity. Elasticity in sectors like real estate and finance was found to be very low at 0.05, which again indicates that these sectors are highly capital intensive. The employment elasticity numbers further corroborate the theory that it is not just low growth, but also the pattern of growth, that has been instrumental in creating the job-less growth situation in Nepal. The declining elasticity pattern, compounded by wider fluctuations, show that there is hardly any sector that could be regarded as a dynamic lead sector from growth and employment perspectives. Nonetheless, under the existing pattern, the construction, community services and transport sectors could be considered as meeting both objectives even if minimally.

Table 4.5 **Employment Elasticity**

	1991-2001	2001-2011
Agriculture, fisheries and forestry	0.32	0.25
Mining and quarrying	3.70	1.50
Manufacturing	2.15	-4.85
Electricity, gas and water supply	3.93	-1.83
Construction	3.76	0.47
Trade, restaurant and hotel	2.58	-1.43
Transport, communication and storage	1.55	0.74
Financial and real estate	2.60	0.05
Community, social service and other	0.00	0.63
Total	0.64	0.18

Source: Calculated based on economic survey data of various years

### 4.3 Sources of Income, Earnings/Wages and Factor Distributional Pattern

A closer examination of the income sources of households reveals the ramifications of job-less growth and changes in employment patterns overtime (Table 4.6). In addition to some noticeable increments in the share of non-farm per capita income (from 21.2 in 1996 to 37.2 per cent in 2011), accompanied by a sharp reduction in the share of per capita farm income (from 58.4 in 1996 to 27.7 per cent in 2011), during the period 1996 to 2011, the inflow of remittances gradually emerged a big income source (from 7.6 in 1996 to 17.2 per cent in 2011). NLSS data further reveal that the share of agriculture wage income has gone down to 35 per cent in 2011 from 53 per cent in 1996 (CBS, 2011).

Table 4.6 **Sources of Household Income in Nepal, 1995-96, 2003/04 and 2010/11**

(Average per capita income at 1995-96 prices; in NRs)

Income by Sources	1995- 96	%	2003-04	%	2010-11	%
Farm income	4,491	58.4	7,217	47.6	11,540	27.7
Non-farm income	1,630	21.2	4,154	27.4	15,497	37.2
Remittances income	584	7.6	1,668	11.0	7,165	17.2
Housing income	807	10.5	1,516	10.0	6,457	15.5
Other income	177	2.3	606	4.0	1,000	2.4
Total	7,690	100	15,162	100	41,659	100

Source: NLSS 1995/96, 2003/04 and 2010/11

A positive phenomenon from the standpoint of wage employment is that wages has steadily increased in the labour market in recent years, partly due to the massive outflow of youth in search of jobs to the Gulf countries and other places. In terms of nominal wages, the wages in agricultural sector rose to Rs. 170 per day in 2011 from Rs. 40 in 1996. Similarly, non-agriculture wages rose to Rs. 263 from Rs. 74 during the same period. In other words, the rise in agricultural wages was 4.25 times against the 3.55 times increase in non-agricultural wages (CBS, 2011) amidst a 2.9 fold rise in consumer prices (NRB, 2013). This clearly indicates that there has been a real increment in the wage level. The *Doing Business* study also indicates that the minimum wage level of a 19 year old worker has increased to US\$ 75.9 per month from almost US\$ 30 during 2008-2014 (World Bank, 2014). NLSS data further shows that the gap between urban and rural wages has narrowed in the agricultural sector to 8 per cent. However, the difference in rural and urban wages persists in the non-agricultural sector, with urban wages higher by almost 28 per cent. An even higher wage gap persists between male and female workers, with the male wage rate higher by 37 per cent in the agricultural sector and by 51 per cent in the non-agricultural sector (CBS, 2011).

Notwithstanding some encouraging developments in the wage front amidst continued wage gaps particularly between male and female workers, the wage share in the main sector of employment reveals that wage hikes have benefitted majority of working population only marginally. As shown in Table 4.7, the share of self-employment in agriculture had reduced to 61.2 per cent in 2011 from 70.6 per cent in 1996. Likewise, along with the rise in the share of extended economic work<sup>21</sup> from 9.4 per cent in 2004 to 10.7 in 2011, the share of wage employment in the agriculture sector has reduced to 2.8 per cent in 2011 from 12.2 per cent in 1996. On the other hand, only a modest increase in the share of non-agricultural sector wage employment has taken place during this period, from 9.5 to 12.6 per cent. Interestingly, the share of self-employment in the non-agricultural sector slightly exceeded in 2010-11 compared to the share of wage employment in the agriculture sector in 1995-96.

**Table 4.7 Main Status Employment**

	1995-96 (%)	2003-04 (%)	2010-11 (%)
Wage employment in agriculture	12.2	6.8	2.8
Self-employment in agriculture	70.6	64.3	61.2
Wage employment in non-agriculture	9.5	10.2	12.6
Self-employment in non-agriculture	7.7	9.3	12.7
Extended economic work		9.4	10.7
Total	100	100	100

Source: NLSS 1995-1996, 2003-2004 and 2010-2011

Such a sectoral employment structure, as well as wage employment pattern, has been detrimental to the overall distributional gains supposed to be resulting from the increased wage rate in the labour market. One of the indicators used to examine distributional gains is factor distribution or returns to labour and capital in the form of operating surplus and compensation given to employees. National accounts estimates indicate that the factor distribution or returns to labour and capital has moved in the opposite direction. According to the estimated compensation paid to employees and operating surplus, the share of the former in total value added has gone down steadily from 46.7 per cent in 2001 to 38.1 per cent in

<sup>21</sup> The work not falling into agriculture and non-agriculture category is included in this.

2011. On the other hand, the share of operating surplus in the total value added has risen to 58.6 per cent in 2011 against 50.4 per cent in 2001 (Figure 4.1).

Figure 4.1: **Share of Compensation of Employees and Operating Surplus in GDP**



Source: Economic Survey (2005 and 2014)

A comparison of the per capita income of the lowest and other deciles groups, against the per capita income of the highest deciles group, shows that a very adverse income distribution pattern has manifested in Nepal. In 1996, the per capita income level of the 10th highest deciles group was 20.5 times higher than that of the lowest income group. In 2011, its per capita income level jumped to 26.4 times the per capita income level of the lowest deciles group. A rough calculation based on the cumulative per capita income share by deciles group reported in the NLSS of 2011 reveals that income inequality measured in the form of the Gini coefficient is in the neighbourhood of 0.51 (Khanal, 2011)<sup>22</sup> for Nepal.

#### 4.4 Structural Change, Labour Productivity and Employment

Development history and the experiences of many countries indicate that structural changes play a critical role in a country's rapid development. The shifting of labour and other resources from agriculture and other traditional products to modern economic activities is considered an inevitable step to enhancing overall productivity and incomes and speeding structural transformation and economic prosperity (McMillan and Rodrik, 2011).

Some structural changes have gradually taken place in the Nepalese economy too. Whether such changes enhance economic growth and employment is a question to be asked. A quick look at labour productivity shows that some improvements have taken place between 1991 and 2011. But the labour productivity gaps between different sectors are typically very large. The agricultural sector, which absorbs more than two-thirds of the labour force, has the lowest labour productivity despite some improvement overtime. Labour productivity in the financial and real estate sectors is very high, but the employment generated by this sector is very low (Table 4.8 and Figure 4.2). The labour productivity of the finance and real estate sector was 28 times higher than that of agriculture in 2011. Among the non-agricultural sectors, the community and social services sector had the lowest productivity, but in terms of employment it is the largest sector after agriculture.

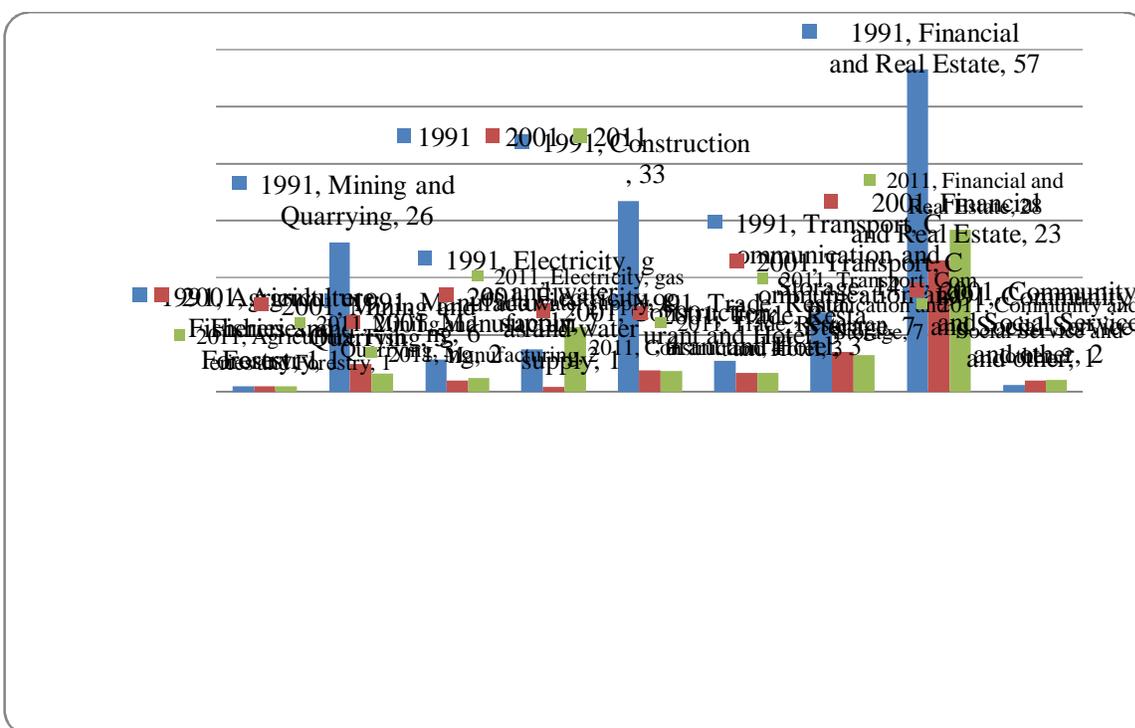
<sup>22</sup> In Nepal, there is a system of estimating inequality based on consumption differences among deciles group derived from NLSS. The Gini coefficient reported based on the consumption approach for 1996, 2004 and 2011 are 0.322, 0.414 and 0.328 respectively. These cannot be considered the best measures.

Table 4.8 Sector-wise Labour Productivity (Annual Output per worker at 1991 Price)<sup>23</sup>

	1991 (000s)	2001 (000s)	2011 (000s)
Agriculture, fisheries and forestry	9.3	11.5	14.6
Mining and quarrying	243.5	56.8	47.2
Manufacturing	52.6	22.2	36.3
Electricity, gas and water supply	69.5	10.9	166.7
Construction	310.7	43.5	53.0
Trade, restaurant and hotel	50.4	38.8	49.2
Transport, communication and storage	129.1	80.6	95.3
Financial and real estate	525.0	264.5	413.7
Community and social service and others	11.7	23.3	30.6
Total	15.8	20.2	27.3

Source: Calculated based on value added data from economic survey of various years and population census data of CBS

Figure 4.2 Labour Productivity Ratio (Relative to Agriculture Sector)



Source: Author's calculations

Figure 4.2 presents the ratio of labour productivity relative to agriculture overtime across sectors. Except for the community and social services sector, which has very low productivity, the labour productivity of

<sup>23</sup> Per worker productivity has been calculated using sectoral gross value added figures.

other sectors declined in 2001 from 1991 and slightly revived again in 2011. In 2011, labour productivity was highest in the financial and real estate sector (28 times), followed by electricity, gas and water supply (11 times), and transport, communication and storage (7 times). Despite declines over time, the labour productivity of the manufacturing sector was twice the productivity of the agricultural sector in 2011. Similarly, labour productivity in construction was four times higher than the productivity of the agricultural sector in the same year. The low productivity at aggregate and sectoral level, including the wider fluctuations caused by persistence of larger inter-sectoral productivity gaps with higher productivity in low employment absorbing sectors, pose major challenges from the standpoint of changing employment patterns in higher productive sectors.

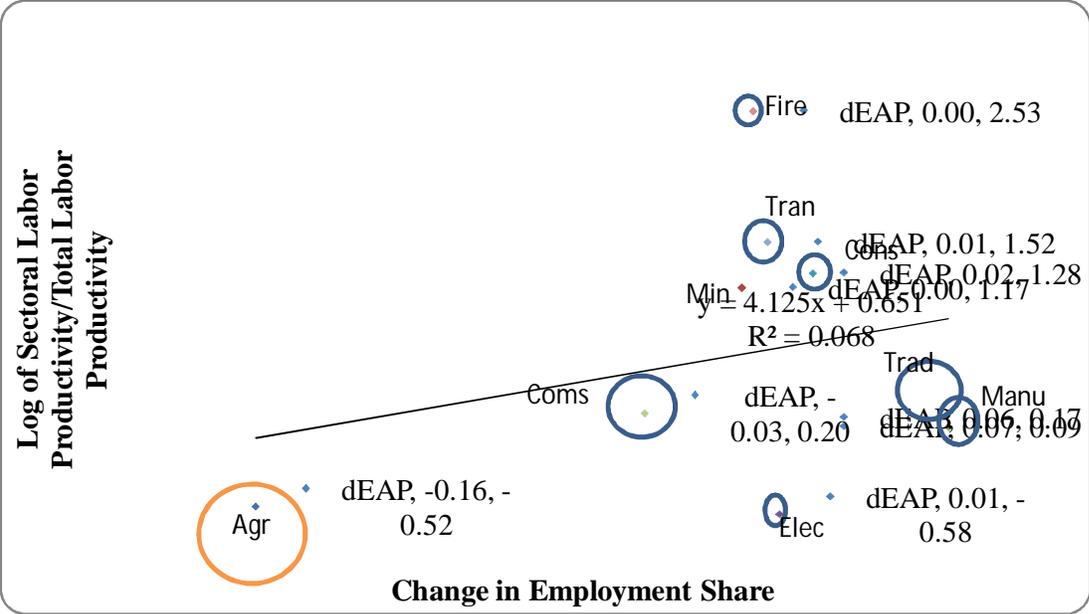
It is well known that labour productivity can be increased either by raising productivity within sectors through capital accumulation, technological change, reducing misallocation across plants, or through moving labour from low productivity to high productivity sectors (McMillan and Rodrik, 2011). The second type of effect emerges through structural changes that result in the reallocation of labour across different sectors. When employment changes positively correlate with the productivity level, this may have a positive impact on overall productivity amidst structural changes. Hence, examining the productivity performance of individual sectors may be misleading when there is a large gap in the labour productivity and employment shares of various economic activities. A high rate of labour productivity growth within an industry can have quite ambiguous implications for overall economic performance if the industry's share of employment shrinks rather than expands. Studies indicate that if the displaced labour end up in activities with lower productivity, the economy wide growth will suffer. Large inter-sectoral productivity gaps, therefore, are regarded to be detrimental to higher economic growth. In view of the large inter-sectoral labour productivity gap, it is important to take into consideration such dimensions in the Nepalese context.

In Figure 4.3 and 4.4, the relative productivity of sectors (end of period) against the change in their employment share is presented for the period between 1991-2001 and 2001-2011. As the studies indicate, a negative correlation between the direction of labour flow and the labour productivity of individual sectors indicates growth reducing structural change and vice-versa (McMillan and Rodrik, 2011). Figure 4.3 shows the positive correlation between labour productivity and change in employment share in 1991-2001. This indicates that there was some growth-enhancing structural change –that is, workers moved from agriculture to productive non-agricultural sectors. This was the period when the liberalisation programme was launched and speeded up. During this period, the communication, transportation, finance and manufacturing sectors expanded amidst a more open and liberal environment.

But along with the intensification of internal conflict and political instability, supply side bottlenecks emanating from poor infrastructure and energy shortage, as well as the escalation in production and transaction costs, gradually affected both, employment share and labour productivity. As Figure 4.4 depicts, there was a negative correlation between labour productivity and change in employment share during 2001-2011. During 2001-2011, there was a relative loss of employment in sectors like manufacturing, trade and restaurant and electricity. The sector that experienced the largest employment gain was community and social services. However, this sector has a high level of informality and is also the least productive. The employment share of the agricultural sector also increased marginally during 2001-2011. In this way, the Nepalese economy has been witnessing some reversal structural changes as a result of a phenomenal decline in employment in potential sectors, leading to a return to agriculture, among others. Amidst severe energy shortages and sour industrial relations, import competition has caused many industries to contract and release labour to less productive activities and informality, which has also driven the trend of foreign employment. An overvalued exchange rate, caused by the maintenance of a pegged exchange rate, fixed against the value of Indian currency, and with no change in the rate since 1993, also seems to affect the manufacturing sector in

Nepal. Probably because of reverse structural change and the lack of employment for the growing population, the outflow of youth has continuously increased.

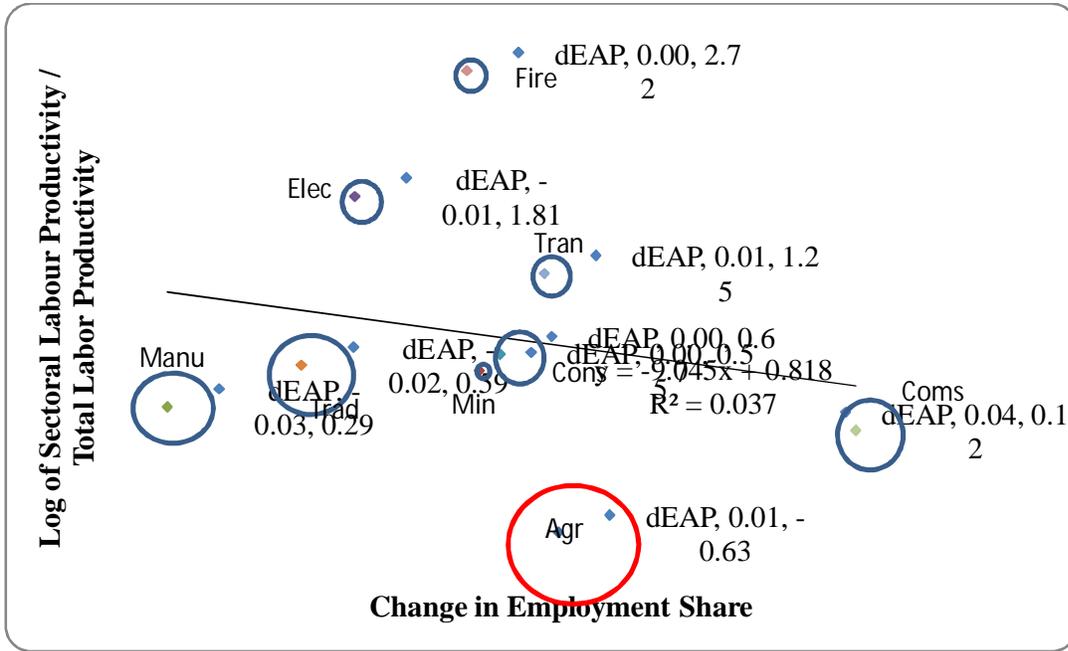
Figure 4.3: **Correlation between Sectoral Productivity and Change in Employment Shares in Nepal (1991-2001)**



Source: Authors' calculation

Notes: Fire is finance and real estate, tran is transport, cons is construction, trad is trade, manu is manufacturing, elec is electricity, min is mining, coms is community services and agr is agriculture.

Figure 4.4 **Correlation between Sectoral Productivity and Change in Employment Shares in Nepal (2001-2011)**



Source: Authors' calculation

#### 4.5 Decomposition of Per Capita GDP Growth

A simple decomposition of per capita GDP into three major components enables us to understand the association of growth with changes in productivity, employment rate and demography. Following Gutierrez *et al.* (2007), per capita GDP,  $Y/N = y$  can be expressed as:

$$\frac{Y}{N} = \frac{Y}{E} \frac{E}{A} \frac{A}{N} \dots \dots \dots (1)$$

or,

$$y = \omega * e * a \dots \dots \dots (2)$$

where  $Y$  is value added,  $E$  is employment,  $A$  is the working age population and  $N$  is the total population. The ratio  $\omega = Y/E$  corresponds to output per worker,  $e = E/A$  corresponds to the share of the working age population employed and  $a = A/N$  corresponds to the share of the working age population. The decomposition can be extended to multiple sectors as

$$\frac{Y}{N} = \left( \sum_s \frac{Y_s}{E_s} \frac{E_s}{A} \right) \frac{A}{N} \dots \dots \dots (3)$$

or,

$$y = \left( \sum_s \omega_s * e_s \right) * a$$

where the sub-index stands for the sector of economic activity.

Following the Shapley decomposition, we can have

$$\frac{\Delta y}{y} = \bar{\omega} + \bar{e} + \bar{a}$$

where  $\bar{\omega}$ ,  $\bar{e}$  and  $\bar{a}$  are the marginal contributions of each component to the observed change in per capita value added. Similarly, equation (3) can be written as

$$\frac{\Delta y}{y} = \sum_s \bar{\omega}_s + \sum_s \bar{e}_s + \bar{a}$$

Here,  $\bar{e}$  would be the amount of growth that can be linked to changes in the employment rate as measured by the ratio between total employment and the working age population. The component  $\bar{a}$  reflects changes in the demographic structure of the population. Moreover, the term  $\bar{e}_s$  denotes the amount of growth that can be linked to changes in the share of employment in each sector. The term  $\bar{\omega}_s$  denotes the amount of growth that can be linked to productivity changes in sectors.

A decomposition analysis for the period of 1991-2001 and 2001-2011 has been done. Table 4.9 presents the main data used for the aggregate decomposition. Data on the value added are at 1991 prices.

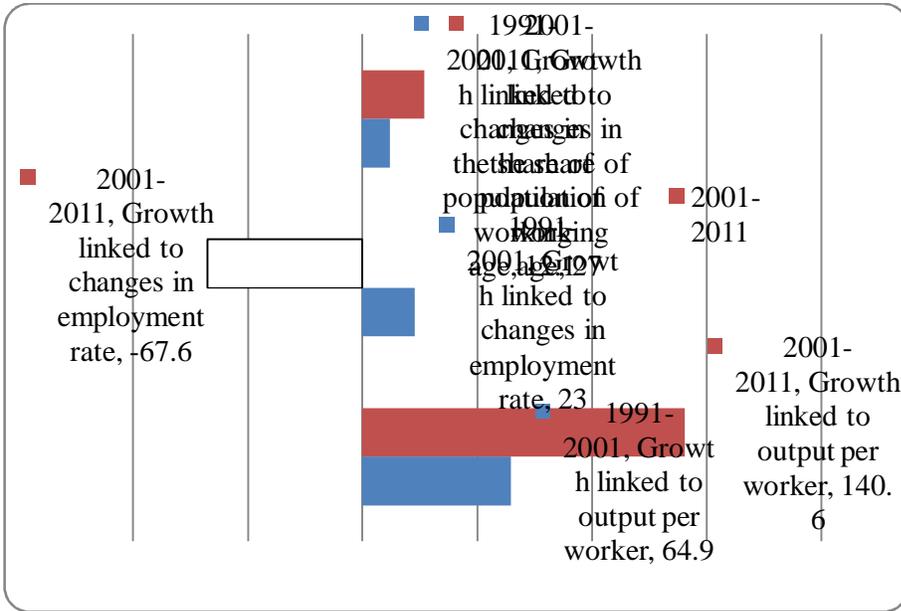
Table 4.9 and Figure 4.5 below present the results of the decomposition of aggregate per capita growth into its main components. Table 4.9 shows the contribution in absolute observed growth in per capita GDP at 1991 prices as well as the per cent contribution. The results show that during 1991-2001, almost 65 per cent of the change in per capita value added was linked to changes in productivity. Change in employment was also important, accounting for 23 per cent of observed growth. Thus, the growth during 1991-2001 was not 'job-less'. The remaining 12.1 per cent of growth was linked to the changes in the structure of the population, i.e., the increase in the proportion of working age population.

**Table 4.9 Decomposition of Growth in Per Capita Value Added (1991-2011)**

	1991-2001		2001-2011	
	<i>Change in per capita value added (@1991 price in Rs.)</i>	<i>% of total change in per capita value added growth</i>	<i>Change in per capita value added (@1991 price in Rs.)</i>	<i>% of total change in per capita value added growth</i>
Total growth in per capita GDP	1,898.7	100	2,159.4	100
Growth linked to output per worker	1,232.1	64.9	3,035.2	140.6
Growth linked to changes in employment rate	437.3	23.0	-1459.0	-67.6
Growth linked to changes in the share of population of working age	229.3	12.1	583.2	27.0

*Source:* Authors' calculation

**Figure 4.5 Aggregate Employment, Productivity and Demographic Profile of Growth (1991-2011)**



Source: Author's calculations

Contrary to 1991-2001, the employment rate went in the opposite direction during 2001-2011. A large portion of people were out of work. A decline in the per capita value added due to the fall in the employment rate was compensated by an increase in productivity. Increases in the working age population contributed to an increase in per capita value added to 27.0 per cent in 2001-2011 from 12.1 per cent in the previous period. In this way, there has been 'job-less growth' during the later period. Thus, the rise in per capita value added during 2001-2011 has been mainly due to the rise in productivity, driven by increasingly capital intensive nature of production in different sectors.

**4.6 Role of Sectors to Employment Generation and Per Capita GDP Growth**

To compute which sectors contributed to employment generation and to per capita GDP growth, we decompose the change in employment rate ( $\Delta e$ ) by sectors as

$$\Delta e = \sum_{i=1}^s \Delta e_i$$

where  $\Delta e_i = \Delta E_i/A$  represents the change in employment in sector  $I$  as a share of total working population. This analysis gives us a simple measure of which sector contributed more to changes in the employment rate.

Table 4.10 presents the data on employment by sector. All sectors registered absolute growth in the number of employed during 1991-2001. Likewise, except agriculture and community, social and other service, all sectors gained in terms of total employment during that period. In contrast, three sectors - manufacturing; electricity, gas and water; and trade, restaurant and hotel - registered a decline in employment during 2001-2011. Only the community, social and other service sector gained in terms of share of total employment during 2001-2011. Total employment grew by 2.7 per cent and the employment rate increased by 4.5 percentage points during 1991-2001. However, despite the absolute increase in employment by a meagre 0.6 per cent, the employment rate declined by 10.5 percentage points during 2001-2011. It shows that getting employment has become precarious in recent years in Nepal, compelling people to seek foreign employment.

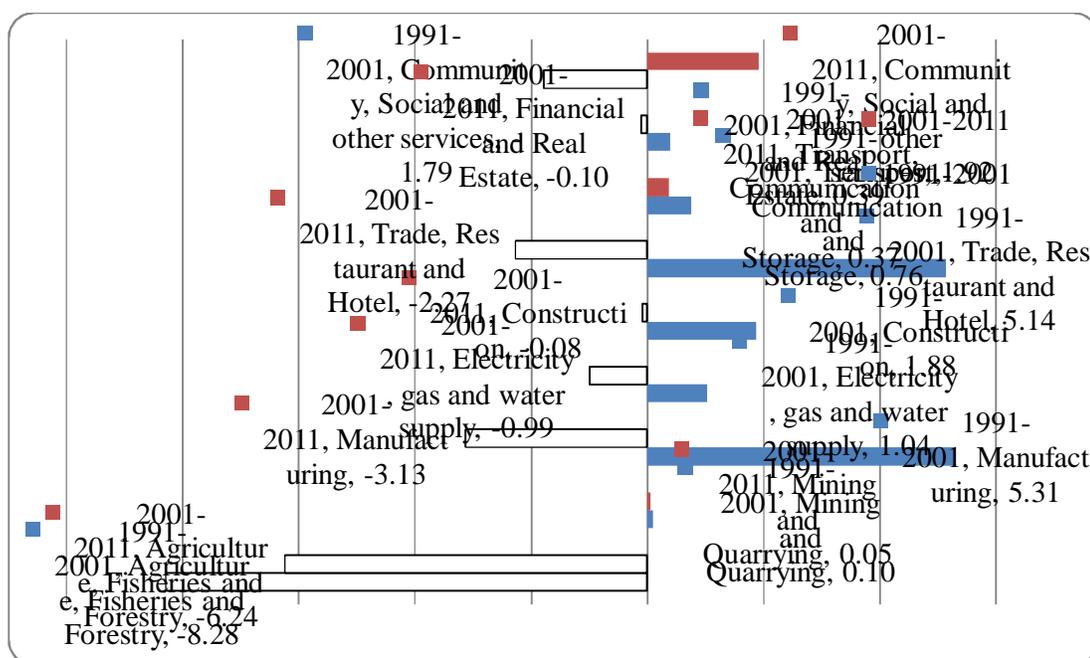
Table 4.10 **Employment by Sectors of Economic Activity, 1991-2011**

<i>Economic sectors</i>	<i>Employment (in,000)</i>			<i>Employment growth (annual %)</i>		<i>Employment/Pop. of working age (e)</i>			<i>Change in 'e' in each sector</i>	
	<i>1991</i>	<i>2001</i>	<i>2011</i>	<i>1991-2001</i>	<i>2001-2011</i>	<i>1991</i>	<i>2001</i>	<i>2011</i>	<i>1991-2001</i>	<i>2001-2011</i>
Agriculture, fisheries and forestry	5,961.8	6,504.7	7,047.3	0.8	0.7	58.98	50.69	44.45	-8.28	-6.24
Mining and quarrying	2.4	16.0	28.0	17.4	5.1	0.02	0.13	0.18	0.10	0.05
Manufacturing	150.0	872.2	581.5	16.0	-3.7	1.48	6.80	3.67	5.31	-3.13
Electricity, gas and water supply	11.7	148.2	25.4	23.1	-16.0	0.12	1.16	0.16	1.04	-0.99
Construction	35.7	286.4	340.9	18.9	1.6	0.35	2.23	2.15	1.88	-0.08
Trade, restaurant and hotel	256.0	984.7	856.9	12.2	-1.3	2.53	7.67	5.40	5.14	-2.27
Transport, communication and storage	50.8	161.6	258.8	10.5	4.3	0.50	1.26	1.63	0.76	0.37
Financial and real estate	20.8	76.7	78.5	11.8	0.2	0.21	0.60	0.49	0.39	-0.10
Community and Social Service and other	850.3	849.6	1,353.4	0.0	4.2	8.41	6.62	8.54	-1.79	1.92
Total	7,339.5	9,900.1	10,570.7	2.7	0.6	72.61	77.15	66.67	4.55	-10.48

*Source:* Census Survey and Authors' calculation

Further, during 1991-2001, the employment rate declined in agriculture and community and social services (Table 4.10 and Figure 4.6). However, during 2001-2011, such a drop was observed in almost all sectors except transport, communication and storage; community and social services; and mining and quarrying.

Figure 4.6 Contribution of Each Sector to Changes in Employment Rate (1991-2011)



Source: Author's calculations

In Table 4.11, the contribution of sectoral employment changes to growth in total per capita output is presented. Out of the contributions of Rs. 437.3 (or 23.03 per cent) due to changes in the employment rate during 1991-2001, the contribution of the manufacturing sector was Rs. 510.9 followed by the trade, restaurant and hotel sector at Rs. 494.4. Sectors like agriculture and community and social service contributed negatively as a result of employment contraction in these sectors. On the other hand, except for community and social service; transport, communication and storage; and mining and quarrying, changes in per capita output to the changes in employment were negative during 2001-2011.

Table 4.11 Contribution of Employment Changes to Overall Change in Per Capita GDP (1991-2011)

	Contribution to changes in per capita GDP		Per cent of total changes in per capita GDP	
	1991-2001	2001-2011	1991-2001	2001-2011
Agriculture, fisheries and forestry	-796.7	-868.9	-41.96	-40.24
Mining and quarrying	9.8	7.2	0.52	0.33
Manufacturing	510.9	-435.8	26.91	-20.18
Electricity, gas and water supply	99.9	-138.5	5.26	-6.41

Construction	180.7	-11.4	9.52	-0.53
Trade, restaurant and hotel	494.4	-315.9	26.04	-14.63
Transport, communication and storage	72.8	51.9	3.83	2.4
Financial and real estate	37.6	-14.3	1.98	-0.66
Community, Social and other services	-172.2	266.7	-9.07	12.35
Total	437.3	-1459	23.03	-67.57

Source: Authors' computation

#### 4.7 Sectoral Productivity Changes and Their Contribution to Per Capita GDP

This section performs decomposition of productivity in terms of sectoral employment shifts and changes in productivity within sectors by

$$\frac{Y}{E} = \sum_s \frac{Y_i E_i}{E_i E} \dots \dots \dots (4)$$

where  $Y_i$  is value added of sector,  $E_i$  is employment in sector  $I$  and  $E$  is total employment. The equation states that the total output per worker is the weighted sum of output per worker in all sectors, where the weights are simply the employment share of each sector.

Using the Shapley approach, changes in aggregate output per worker can be decomposed into changes in output per worker within sectors and movement of labour between sectors (inter-sectoral shift). An increase in productivity within a sector increases average productivity, but the size of the increase depends on the size of each sector, i.e., its share in total employment. Similarly, inter-sectoral shifts of labour from low productivity sectors to high productivity sectors also increases the average productivity.

Table 4.12 gives the contribution of each sector as well as of inter-sectoral employment shifts to the observed growth in total output per worker. The growth of total productivity by Rs. 2,961.6 for the period of 1991-2001 was driven by an increase of Rs. 2,520.8 from the agriculture and community and social services sectors and a decrease of Rs. 10,433.6 across all other sectors. A more discernible aspect of the pattern is that inter-sectoral labour relocation was one of the primary causes for the increase in total output per worker which comes out to be Rs. 10,874.5. Such a positive inter-sectoral effect indicates that there was a movement of labour from lower than average productivity sectors to above average productivity sectors during 1991-2001. During 1991-2001, labour exhibited a tendency to move to manufacturing; trade; restaurant and hotel; construction; and electricity, gas and water sectors. All these sectors reported labour productivity higher than average.

Table 4.12 **Decomposition of Output/Worker into within Sector Change in Output/Worker and Inter-Sectoral Shifts**

	<i>Contribution to change in total output per worker</i>	
	<i>1991-2001</i>	<i>2001-2011</i>
Agriculture, fisheries and forestry	1,390.9	2,142.7
Mining and quarrying	-177.9	-19.5
Manufacturing	-1735.8	1,022.8
Electricity, gas and water supply	-487.8	1,371.9

Construction	-4106.9	307.0
Trade, restaurant and hotel	-1896.4	974.4
Transport, communication and storage	-503.2	315.3
Financial and real estate	-1525.7	1,161.7
Community and social service	1,129.9	809.3
Inter-sectoral shift	10,874.5	-820.9
Total change in output per worker	2,961.6	7,264.9

*Source:* Authors' calculation

The inter-sectoral shift had a reversal effect on productivity during 2001 to 2011. The productivity turned into a negative effect during this period. This indicates that labour moved from highly productive non-agricultural sectors to agriculture or remained unemployed and largely opted for foreign employment. Amidst job-less growth or a massive decline in employment in some sectors, an increase in labour productivity was observed in all sectors except mining and quarrying, largely due to an increase in total output per retained worker during 2001-2011. It seems more capital intensive techniques in industries and service sectors, including the use of computers and information technology, also partly contributed to the increase in productivity in these sectors. Out of the increased productivity, one-third was generated from agriculture. Among non-agricultural sectors, electricity, gas and water contributed more, which was followed by the manufacturing and the finance and real estate sectors.

#### **4.8 Combining Effect of Change in Employment Rate and Productivity**

Table 4.13 and Table 4.14 combine the exercise to see the intricacies of change in per capita GDP which is the result of changes in productivity, employment share, inter-sectoral shifts and demographic change during the two periods, viz., 1991-2001 and 2001-2011. While Table 4.13 shows the change in per capita GDP and its components in absolute values, Table 4.14 presents the same in per cent. Sectoral contributions are decomposed into (i) the contribution of within changes in output per worker (first column); (ii) the contribution of changes in employment (second contribution); and (iii) contribution of the sector to inter-sectoral employment shifts. The final column show the total effect of the sector.

As evidently clear from the tables, except for agriculture, all the other sectors contributed positively to the increase in per capita GDP during 1991-2001. There was an increase in employment in almost all the non-agricultural sectors, resulting in a positive effect due to the inter-sectoral shift of labour from low productivity to high productivity sectors during that period. However, the period 2001-2011 was quite different. There was a fall in employment in almost all sectors, which resulted in negative contributions to the change in per capita during 2001-2011. The contribution of the inter-sectoral shift became negative in this period, indicating that workers moved toward the low productivity agriculture sector and opted for foreign employment. Hence, there was a fall in per capita GDP in sectors like manufacturing; electricity, gas and water; and trade, restaurant and hotel. Positive contributions from the community and social services; transport, communication and storage; and finance and real estate sectors helped increase per capita GDP during 2001-2011. An increase in the working age population also contributed to growth in per capita GDP during that period. However, except for community and social services and mining and quarrying, all the other sectors reported a negative contribution in terms of change in employment toward growth in per capita GDP. This shows a situation of shrinking employment amidst rising population, especially the working age population. Thus, the decomposition analysis shows that without a radical transformation of the development strategy, productive employment-led higher growth will be difficult to accomplish.

Table 4.13 **Growth Decomposition, Contribution to Total Growth in GDP (Value Added) Per Capita**

	1991-2001				2001-2011			
	<i>Contribution of within sector change in output per worker</i>	<i>Contribution of change in employment</i>	<i>Contribution of inter-sectoral shift</i>	<i>Total</i>	<i>Contribution of within sector change in output per worker</i>	<i>Contribution of change in employment</i>	<i>Contribution of inter-sectoral shift</i>	<i>Total</i>
Agriculture, fisheries and forestry	578.7	-796.7	-661.0	-879.1	895.2	-868.9	52.9	79.2
Mining and quarrying	-74.0	9.8	82.1	17.9	-8.1	7.2	22.5	21.5
Manufacturing	-722.2	510.9	1,030.7	819.5	427.3	-435.8	-406.9	-415.4
Electricity, gas and water supply	-203.0	99.9	222.6	119.6	573.2	-138.5	-472.1	-37.4
Construction	-1708.6	180.7	1,894.1	366.2	128.3	-11.4	67.4	184.3
Trade, restaurant and hotel	-789.0	494.4	974.7	680.2	407.1	-315.9	-340.6	-249.3
Transport, communication and storage	-209.3	72.8	420.5	284.0	131.7	51.9	301.7	485.4
Financial and real estate	-634.7	37.6	777.3	180.2	485.4	-14.3	-46.0	425.1
Community and social service	470.1	-172.2	-216.9	81.0	338.1	266.7	478.0	1,082.8
Subtotal	-3292.1	437.3	4,524.2	1,669.4	3,378.2	-1459.0	-342.9	1,576.2
Demographic Components				229.3				583.2
Total change in value added per capita				1,898.7				2,159.4

Source: Author's calculation

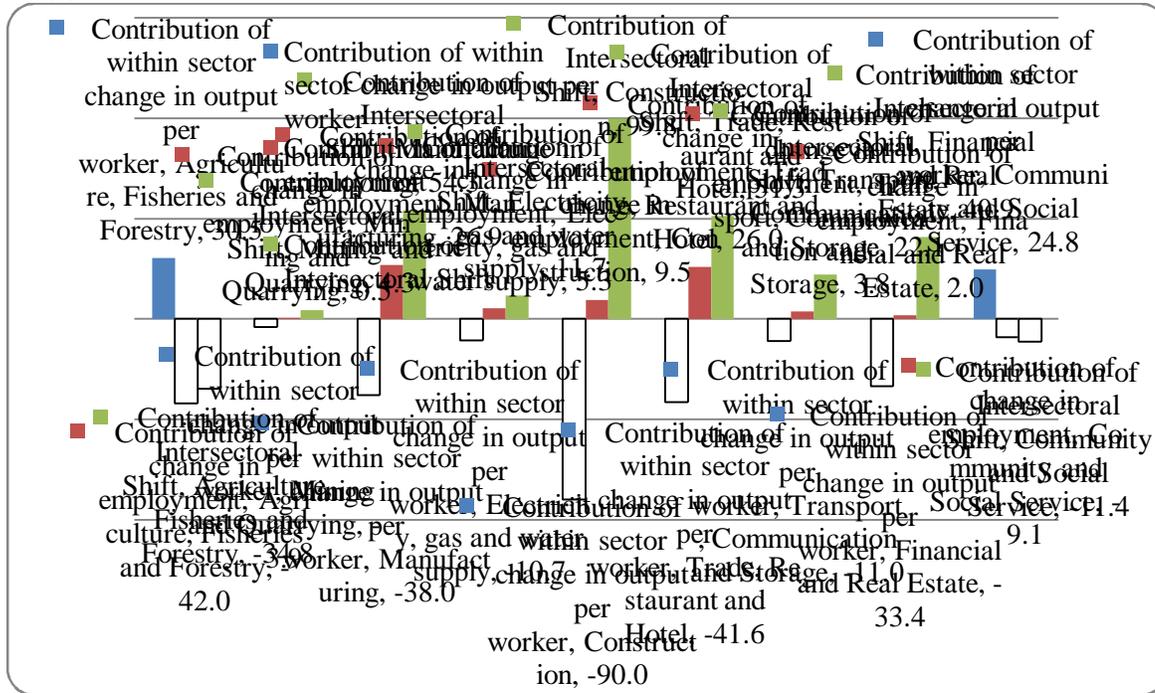
Table 4.14 **Growth Decomposition, Per Cent Contribution to Total Growth in GDP (Value Added) Per Capita**

	1991-2001				2001-2011			
	<i>Contribution of within sector change in output per worker</i>	<i>Contribution of change in employment</i>	<i>Contribution of inter-sectoral shift</i>	<i>Total</i>	<i>Contribution of within sector change in output per worker</i>	<i>Contribution of change in employment</i>	<i>Contribution of inter-sectoral shift</i>	<i>Total</i>
Agriculture, fisheries and forestry	30.5	-42.0	-34.8	-46.3	41.5	-40.2	2.5	3.7
Mining and quarrying	-3.9	0.5	4.3	0.9	-0.4	0.3	1.0	1.0
Manufacturing	-38.0	26.9	54.3	43.2	19.8	-20.2	-18.8	-19.2
Electricity, gas and water supply	-10.7	5.3	11.7	6.3	26.5	-6.4	-21.9	-1.7
Construction	-90.0	9.5	99.8	19.3	5.9	-0.5	3.1	8.5
Trade, restaurant and hotel	-41.6	26.0	51.3	35.8	18.9	-14.6	-15.8	-11.5
Transport, communication and storage	-11.0	3.8	22.1	15.0	6.1	2.4	14.0	22.5
Financial and real estate	-33.4	2.0	40.9	9.5	22.5	-0.7	-2.1	19.7
Community and social service	24.8	-9.1	-11.4	4.3	15.7	12.4	22.1	50.1
Subtotal	-173.4	23.0	238.3	87.9	156.4	-67.6	-15.9	73.0
Demographic Components				12.1				27.0
Total change in value added per capita				100.0				100.0

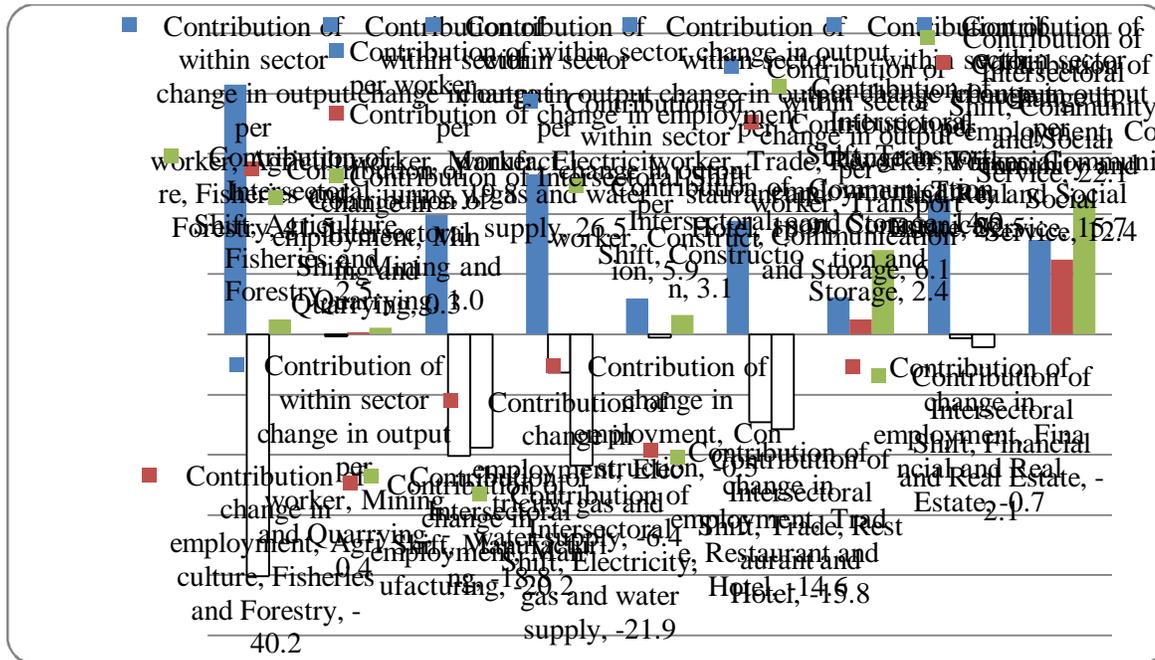
Source: Author's calculation

Figure 4.7: Growth Decomposition, Per cent Contribution to Total Growth in GDP (Value Added) Per Capita

(a) 1991-2001

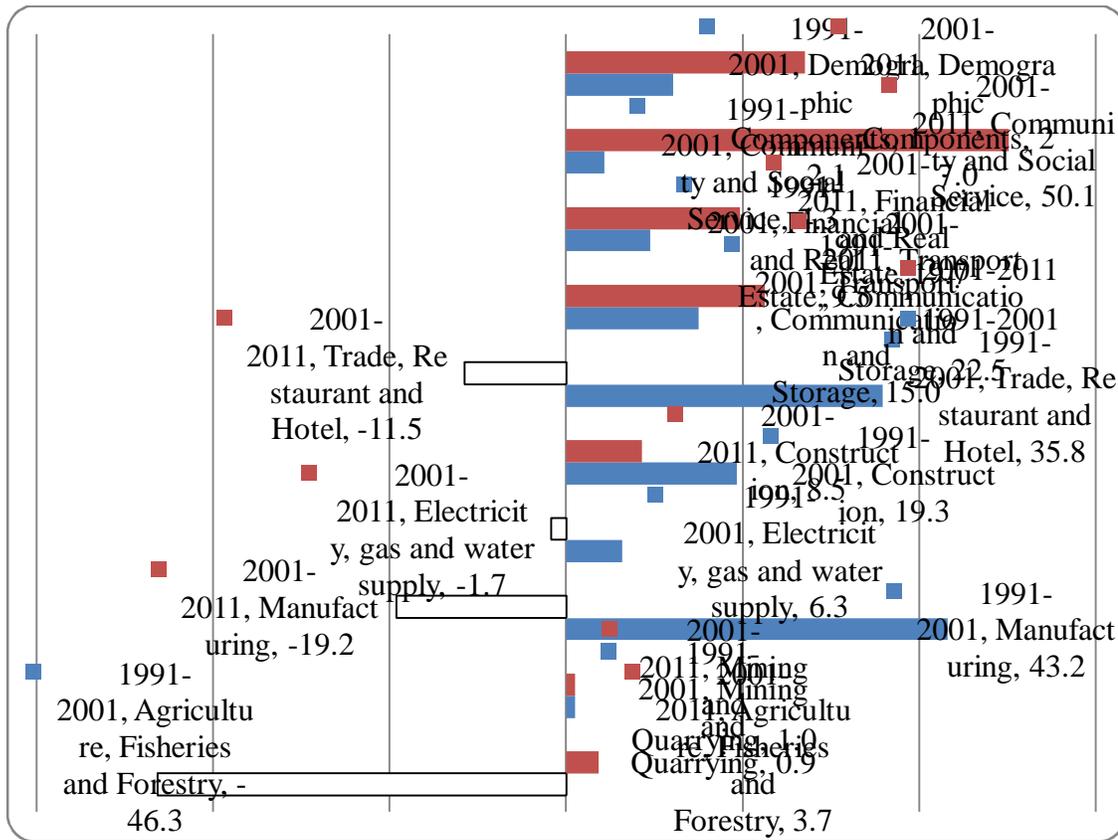


(b) 2001-2011



Source: Author's calculation

Figure 4.8 Growth Decomposition, Total Per Cent Contribution to Total Growth in GDP (Value Added) Per Capita by Sectors



Source: Authors' calculation

## V. ANALYSIS OF LABOUR DEMAND ASPECTS OF INDUSTRIAL DEVELOPMENT WITH FOCUS ON THE PROSPECT OF RAISING PRODUCTIVE CAPACITY FOR GREATER VALUE ADDED EMPLOYMENT AND DECENT WORK

In this chapter, the effect of industrial development on the demand for labour as well as productivity from the standpoint of high value added employment and decent work has been evaluated. For this, based on the available manufacturing surveys of 1997, 2002 and 2007, trends in labour demand, employment elasticity and the labour productivity of manufacturing firms employing 10 or more workers have been examined.

### 5.1 Labour Demand in Manufacturing Firms

As shown in Table 5.1, the labour demand of manufacturing firms declined by 2.5 per cent between 1997 and 2002. Such a decline continued, and by 2007, the demand for labour further decelerated by 7.5 per cent. During 1997 and 2007, in several industries such as tobacco, textile and leather, a sharp fall in employment took place. The demand of labour increased only in wood-related, chemical, rubber and plastic, basic metal and electrical industries. In terms of numbers, the food, textile and cement and ceramic industries hired relatively more workers. The textile industry, which is highly labour intensive, reduced labour demand by almost half, from 75,283 in 1997 to 40,500 in 2007. The closure of many such industries, after the end of the US quota in 2005, took a toll on employment. There was a substantial fall in employment in the apparel industry between 2002 and 2007 as well, amidst growing competition from imported goods.

Table 5.1 Labour Demand in Manufacturing Firms

	1997	2002	2007	% Change	
				1997-2002	2002-2007
Food industries	24,114	31,867	30,594	32.2	-4.0
Tobacco industries	3,213	2,896	2,618	-9.9	-9.6
Textile industries	75,283	43,873	40,500	-41.7	-7.7
Apparel industries	15,126	18,389	4,850	21.6	-73.6
Leather industries	2,130	2,107	1,163	-1.1	-44.8
Saw mills (wood-related industries)	3,731	3,796	4,975	1.7	31.1
Paper industries	3,528	3,072	3,784	-12.9	23.2
Publishing and printing	2,621	3,999	3,964	52.6	-0.9
Chemical industries	5,107	7,759	8,777	51.9	13.1
Rubber and plastic industries	3,457	5,423	7,088	56.9	30.7
Cement and ceramic industries	43,927	52,312	48,108	19.1	-8.0
Basic metal industries	1,234	2,887	3,724	134.0	29.0
Fabricated metal industries	5,235	4,983	6,046	-4.8	21.3
Electrical industries	1,612	2,103	2,256	30.5	7.3
Furniture industries	5,276	5,027	5,051	-4.7	0.5
Other industries	1,114	1,360	4,052	22.1	197.9
Total	196,708	191,853	177,550	-2.5	-7.5

Source: Manufacturing Census Surveys of 1997, 2002 and 2007.

## 5.2 Value Addition and Labour Productivity in Manufacturing Firms

Table 5.2 presents the value added by different industries at 1991 prices. The food industry, which is highly labour intensive, registered an average annual growth of 10.7 per cent value addition during 1997-2002 and decelerated by 1.4 per cent during 2002-2007. The textile industry, which performed well in 1997, registered a decline in value addition by 10.5 per cent during 1997-2002. Only a marginal recovery of 0.6 per cent took place during 2002-2007. While the output of the apparel and leather industries fell substantially during 2002-2007, the paper and basic as well as fabricated metal industries witnessed substantial growth. The tobacco, paper, rubber and plastic, cement and ceramic and metal industries registered growth in both time periods. On the whole, overall manufacturing output decelerated to 3.3 per cent during 2002-2007 from 4.3 per cent during 1997-2002.

Table 5.2 Value Addition in Manufacturing Firms (NRs. in Million @ 1991 Prices)

	1997	2002	2007	Average annual % change	
				1997-2002	2002-2007
Food industries	2,866.0	4,889.8	4,564.9	10.7	-1.4
Tobacco industries	1,505.3	2,034.8	3,278.4	6.0	9.5
Textile industries	3,254.2	1,923.7	1,981.7	-10.5	0.6
Apparel industries	789.4	1,141.1	182	7.4	-36.7
Leather industries	165.1	189.8	110.9	2.8	-10.8
Saw mills (wood-related industries)	177.4	133.2	231.8	-5.7	11.1
Paper industries	212.6	220.5	801.3	0.7	25.8
Publishing and printing	181.4	321.7	222.4	11.5	-7.4
Chemical industries	756.1	1,597.2	1,413.6	15.0	-2.4
Rubber and plastic industries	372.0	603.3	811	9.7	5.9
Cement and ceramic industries	908.8	976.6	1,600.4	1.4	9.9
Basic metal industries	221.6	342.2	939.4	8.7	20.2
Fabricated metal industries	628.1	793.2	1,312.4	4.7	10.1
Electrical industries	277.1	184.0	210.5	-8.2	2.7
Furniture industries	167.5	134.4	188.5	-4.4	6.8
Other industries	65.8	51.6	491.4	-4.9	45.1
Total	12,548.4	15,537.1	18,340.6	4.3	3.3

Source: Manufacturing Censuses Surveys of 1997, 2002 and 2007

In Table 5.3, the labour productivity of manufacturing industries at 1990-1991 prices are given. Similarly, for comparison across industries, the labour productivity index, relative to average labour productivity treating 100 as a base, is also presented in the table. A general phenomenon observed is that labour productivity has varied substantially among various manufacturing industries. For instance, in the tobacco industry, labour productivity has remained high and has even increased over time. Such an increment in labour productivity is also found in the paper, rubber and plastic, basic and fabricated metal industries. In contrast, labour productivity in food, apparel, publishing and printing and chemical industries slowed down over time. The estimates show that industries like apparel, cement and ceramic and furniture have the lowest productivity. A moderate productivity level is found in industries like textile, wood, publishing and printing. In general, industries that employ a large number of workers are found to face the problem of low productivity.

Table 5.3 **Labour Productivity in Manufacturing Industries**

<i>Manufacturing industries</i>	<i>Labour productivity @ 1990/91 price in 000s</i>			<i>Labour productivity index (average = 100)</i>		
	<i>1997</i>	<i>2002</i>	<i>2007</i>	<i>1997</i>	<i>2002</i>	<i>2007</i>
Food industries	118.9	153.4	149.2	186	189	144
Tobacco industries	468.5	702.6	1,252.3	734	868	1,212
Textile industries	43.2	43.8	48.9	68	54	47
Apparel industries	52.2	62.1	37.5	82	77	36
Leather industries	77.5	90.1	95.3	121	111	92
Saw mills (wood-related industries)	47.5	35.1	46.6	75	43	45
Paper industries	60.3	71.8	211.8	94	89	205
Publishing and printing	69.2	80.4	56.1	108	99	54
Chemical industries	148	205.8	161.1	232	254	156
Rubber and plastic industries	107.6	111.2	114.4	169	137	111
Cement and ceramic industries	20.7	18.7	33.3	32	23	32
Basic metal industries	179.6	118.5	252.3	282	146	244
Fabricated metal industries	120	159.2	217.1	188	197	210
Electrical industries	171.9	87.5	93.3	269	108	90
Furniture industries	31.8	26.7	37.3	50	33	36
Other industries	59.1	37.9	121.3	93	47	117
Total	63.8	81	103.3	100	100	100

Source: Author's calculation

### 5.3 Employment Elasticity in Manufacturing Industries

The employment elasticity of different manufacturing industries has been estimated at a point of time using cross-section data. Following double-log linear equation relating employment and value addition has been used for such an estimate:

$$\ln L = \beta_0 + \beta_1 \ln Y$$

Where L is employment and Y is value addition. The regression coefficient  $\beta_1$  serves as employment elasticity.

As shown in the Table 5.4, the employment elasticity of manufacturing industries ranges from 0.25 to 0.70. The textile and apparel industries seem to have higher employment elasticity compared to other manufacturing industries. In contrast, saw mills and furniture industries have the lowest employment elasticity. More generally, there is no any discernible and common trend in terms of changes in elasticity over time among manufacturing industries. The industries that registering some increments in employment elasticity are apparel, leather, paper, rubber and plastic, metal and electrical industries. On the other hand, there was a deceleration in the employment elasticity of the food, tobacco, textile, saw mills, publishing and printing, chemical, cement and ceramic and furniture industries in between 1997 and 2002.

Table 5.4 **Employment Elasticity (Cross Sectional at a Point of Time)**

<i>Industry</i>	<i>1997</i>	<i>2002</i>	<i>2007</i>
-----------------	-------------	-------------	-------------

Food industries	0.37	0.38	0.37
Tobacco industries	0.40	0.41	0.33
Textile industries	0.57	0.52	0.50
Apparel industries	0.56	0.57	0.70
Leather industries	0.35	0.25	0.44
Saw mills (wood-related industries)	0.25	0.28	0.25
Paper industries	0.30	0.40	0.41
Publishing and printing	0.51	0.51	0.45
Chemical industries	0.43	0.47	0.44
Rubber and plastic industries	0.26	0.33	0.35
Cement and ceramic industries	0.49	0.55	0.37
Basic metal industries <sup>24</sup>		0.40	0.45
Fabricated metal industries	0.40	0.42	0.45
Electrical industries		0.53	0.54
Furniture industries	0.30	0.34	0.28

Source: Author's calculation

In addition to the above cross-section employment elasticity at a point time, employment elasticity was also computed for two periods, viz., 1997-2002 and 2002-2007, by estimating the ratio of proportionate change in employment to proportionate change in output. As shown in Table 5.5, food industries had the highest employment elasticity during 2002-2007, while tobacco industries had negative employment elasticity in both periods. On the other hand, the employment elasticity of the textile, chemical and cement and ceramic industries turned negative in the second period. There were also some positive developments. Industries such as leather, saw mills, paper, fabricated metal and electrical converted negative employment elasticity into positive elasticity during the latter period. During the same period, the publishing and printing and furniture industries recorded very low employment elasticity. Thus, more workers are employed in traditional and low productive industries compared to modern and high productive industries.

Table 5.5 **Employment Elasticity of Manufacturing Industries**

<i>Industry</i>	<i>1997-2002</i>	<i>2002-2007</i>
Food industry	0.46	7.31
Tobacco industry	-0.28	-0.13
Textile industry	1.02	-0.79
Apparel industry	0.48	0.89
Leather industry	-0.07	1.19
Saw mills (wood-related industries)	-0.07	0.36
Paper industry	-3.46	0.08
Publishing and printing	0.68	0.03
Chemical industries	0.47	-2.3
Rubber and plastic industries	0.92	0.71
Cement and ceramic industries	2.56	-0.11
Basic metal industries	2.46	0.15
Fabricated metal industries	-0.18	0.28

<sup>24</sup> Separate data are not available for this industry for 1997.

Electrical industries	-0.91	0.33
Furniture industries	0.24	0.01

Source: Authors' calculation

#### 5.4 Inter-Industries Employment and Productivity

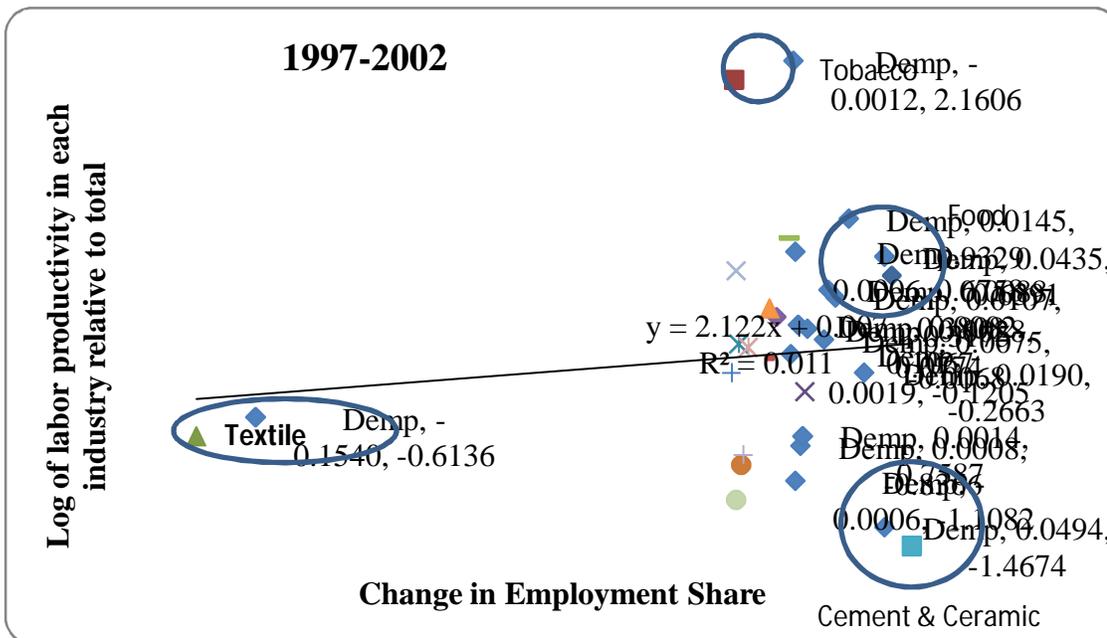
Meeting both objectives-generating employment and enhancing labour productivity-at the same time is often regarded to be problematic. In order to find out how industries are performing in both fronts simultaneously, inter-industry employment and productivity trends have been examined more closely.

Figure 5.1(A) shows the correlation between labour productivity and changes in employment share within manufacturing industries for the period of 1997-2002 and 2002-2007. Such a correlation remained very low in 1997-2002 and marginally improved in 2002-2007 as reflected by the trend line. This indicates that, at the aggregate level, both can move in a positive direction. The correlation exhibited by different industries, however, shows that inter-industrial restructuring is essential for positive spill-over effects in both fronts. This is corroborated by the results. For instance, during 1997-2002, the textile industry witnessed a substantial fall in employment, and at the same time, witnessed very low labour productivity - lower than average productivity of manufacturing industries. The removal of the textile industry makes the trend line negative, reflecting that this industry has growth reducing effect (Figure 5.1 (B)). Except for the food and chemical industries, the employment shares of low productive industries like cement and ceramic and apparel is found to be increasing during 1997-2002. On the other hand, the tobacco industry has remained stagnant in terms of employment generation despite high labour productivity during this period.

During 2002-2007, like the textile industry, the apparel industry faced a substantial fall in both productivity and employment share (Figure 5.1 (C)). Its removal lowered the slope of the trend line indicating that for higher productivity with positive employment industrial restructuring is needed. (Figure 5.1 (D)). In this period, the employment share of the tobacco industry remained stagnant. The correlation analysis clearly shows that there are very few industries, like chemical, rubber and plastic, as well as other minor industries, that contributed to a marginal increase in employment share while maintaining an above average labour productivity.

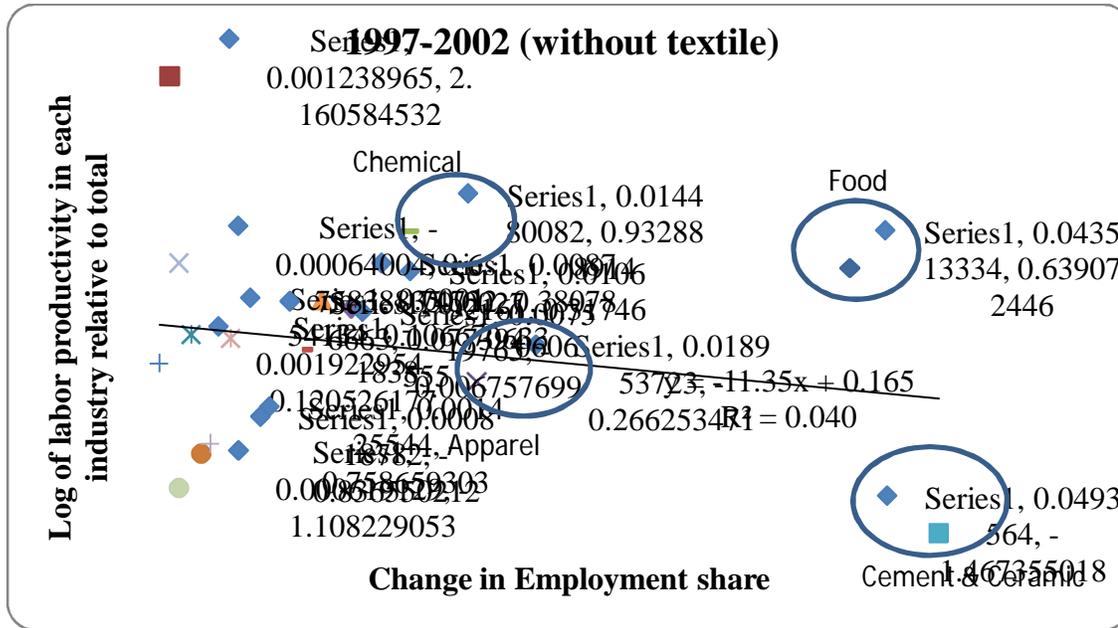
Figure 5.1 Correlation between Labour Productivity and Change in Employment Share within Manufacturing Industries

(A)



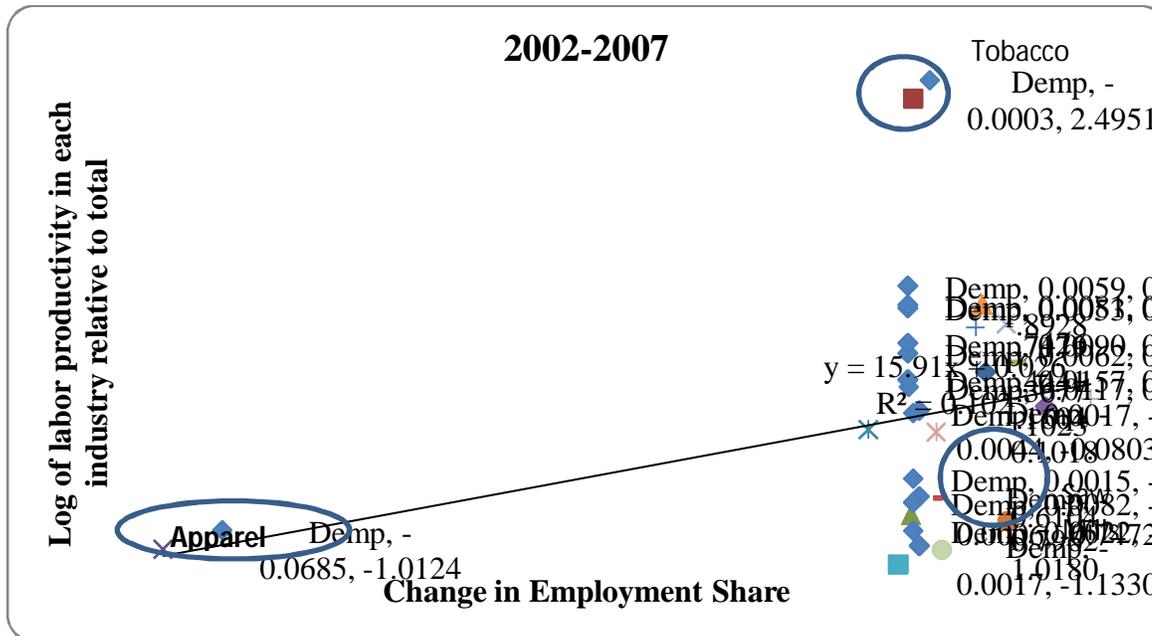
Source: Author's calculations

(B)



Source: Author's calculations

(C)



Source: Author's calculations

(D)



- The situation is even more precarious in the informal market, as most low skill jobs are concentrated in this market. Of the low-skill occupation groups, the largest number are service workers, most of whom are women. Thus, decent employment for women is a bigger problem within the highly segregated labour market.
- The adverse labour market conditions have resulted in a phenomenal rise in labour mobility and migration in search of employment, predominately external migration. The paucity of employment opportunities in the country is evidenced by the fact that more than 1,500 people leave the country every day, leading to total outflows of almost 3 million by the end of 2012-2013. The share of remittances in the GDP has reached almost 25.7 per cent in 2012-2013, indicating too much external dependence and subsequent vulnerabilities in the Nepalese economy, with added risks to the vulnerable domestic labour market. Moreover, in the Nepalese context, foreign employment is often characterised by recruitment processes, placement systems and working conditions that are rife with fraud, cheating, wage discrimination, risky work environments and violation of contracts, indicating defiance of decent employment principles.
- Notwithstanding the positive impact of foreign employment in mitigating underemployment problems, and the positive contribution of remittances to economic activities, easing foreign exchange constraints, promoting investment in human capital and reducing poverty, among others, the excessive dependence on foreign employment in a time of increased political instability and conflict in the countries hiring foreign workers has increased labour market vulnerability further in Nepal. In the event of prolonged global political or economic crises, job, foreign exchange earnings and remittances inflow losses could be extremely high with very adverse spill-over effects on labour market conditions.
- Though the Labour Act of 1992 attempted to streamline labour market institutions in Nepal through labour market regulations, enforcing workers' rights and minimum wages and providing provisions for collective bargaining and tripartite agreement, the informal market still remains outside the purview of the law. At the same time, labour market rigidity has adversely affected investment flow, labour productivity growth and job creation. This has also amplified labour market distortions contributing to a wider mismatch between labour demand and supply.
- A review of plans, policies and programmes shows that employment generation became a point of focus from the Tenth Plan (2002-2007), in which it was conceived as one of the four pillars of broad-based growth and development. A new Labour and Employment Policy introduced in 2005 provided a more specific policy direction, especially from the standpoint of generating decent employment for alleviating poverty. After a historic political change in 2006, employment was envisaged as a part of an inclusive and participatory democratic system. Both macro and sectoral growth targets have been directed toward enhancing growth led employment through the promotion of private investment in key sectors like small and medium manufacturing industries, infrastructure development and expansion of tertiary sector activities. In addition to a focus on education and health, policies have also been recently prioritising increased access to financial services, especially in the form of group-based credits extended to women through rural development banks and micro credit institutions. Other employment and income generation programmes target deprived socio-economic groups, most backward areas, women and youth.
- Despite the focus on growth led employment and the implementation of specific targeted policies and programmes, many serious lapses are apparent. First of all, employment is treated as a by-product of growth, and hence, underemployment, a major impediment to productive employment, is largely overlooked. Similarly, no studies have been conducted to establish the linkage between specific programmes and employment generation, which indicates a ritualistic approach rather than a concrete strategic approach to employment generation, which in turn worsens the pervasive problems in the Nepalese labour market. Except for thinly dispersed training and skill development programmes, and temporary employment generating public works programmes that contribute positively albeit to a limited extent, all other highly publicised programmes like the Youth Self-Employment Programme and Karnali One Family One Member Employment Programme have dismally failed to accomplish their intended objectives.
- On the one hand, despite steady progress in enhancing physical and social services overtime across various regions, castes and ethnicities, access to these services is highly disproportionate and discriminatory based on gender, caste, ethnic and geographical lines. In terms of access to financial services also, the gap is quite large.

On the other hand, amidst highly skewed land distribution, there are no direct policies as such that could enhance access to assets more equitably.

- Examining the broader ramifications of development approaches, strategies, policies and programmes on employment, taking output and demographic factors into special account, provides many important insights into the roots of employment problems. Amidst deceleration in GDP growth from the period 1991-2000 to 2001-2011, employment elasticity in sectors like electricity, manufacturing and trade has turned negative in recent years indicating that, unlike the claims that have been made, the policies have been detrimental to promoting employment enhancing potential sectors.
- Very adverse labour markets conditions, job-less growth and employment patterns have had strong distributional implications with the share of wage income declining rapidly overtime, despite some encouraging developments in the wage front. Along with a sharp fall in the share of compensation paid to employees and reduced per capita income share of the lowest deciles group, the inequality Gini coefficient now stands at 0.51, indicating the likelihood of a larger section of the working population being poor. This is further corroborated by labour productivity trends.
- Very slow or adverse structural changes and productivity enhancement seem to be the crux of the problem as productivity estimates and decomposition analysis indicate. Despite some improvements in average productivity in recent years, the gap between different sectors is quite high with very low productivity in sectors like agriculture, which absorbs more than two-thirds of the economically active population. On the other hand, productivity gains in sectors like manufacturing in recent years have been largely caused by a massive decline in employment in relation to output. The high productivity is in sectors like finance and real estate, which are highly capital intensive. A correlation analysis, showing a negative relationship between labour productivity and changes in employment share in recent years, indicates that the Nepalese economy is passing through growth or employment reducing structural changes. Amidst severe energy shortages and sour industrial relations, import competition has caused many industries to contract and release labour to less productive activities, the informal sector and foreign employment. High production and transactions costs, compounded by poor and low quality infrastructure, interest rates and other policy biases, rigid labour laws and over politicisation of labour unions, a very weak regulatory system encouraging market distortions, and above all, immature liberalisation policies that neglect the threat of cheap products from other countries, have contributed to augment de-industrialisation in Nepal affecting employment more pervasively. The decade long conflict, which has created hurdles and forced industries to shut down, also contributed to this.
- An in-depth quantitative analysis examining the role of industrial development on the demand for labour as well as productivity from the point of view of high value added employment and decent work shows a disappointing prospect for the business as usual scenario. Currently, it appears that labour demand is slowing down in Nepal, along with a deceleration in output at the aggregate level in manufacturing industries. In addition to diverse employment elasticities and productivity trends across various sectors, a notable phenomenon observed is that industries like textile and apparel faced a substantial fall in employment share amidst low productivity. Therefore, a tardy pace of industrial transformation is a real challenge for high productivity led decent work and employment generation in Nepal.

## 6.2 Recommendations

- From an overall perspective, there is a need for a development paradigm shift and a transformational strategic approach that aims to move workforce from agriculture to industry and other potential sectors, while prioritising productivity enhancement. Since no sector in Nepal is currently performing the role of a dynamic lead sector in terms of growth and employment, such a necessity is urgent in the Nepalese context. This requires broad-based or comprehensive reform to correct policy inconsistencies or gaps and remove structural and institutional impediments. Both the state and market need to work together to balance and correct deliberate distortions by both state and market institutions.
- Such an employment shift and productivity enhancement transformation discourse is particularly essential for enhancing decent work led inclusive growth, which is key to shared benefits and improved living standards across various social groups. The high rate of youth migration underscores such a necessity. It is also necessary

to ensure that the social aspect is taken into consideration while formulating the new macroeconomic policy direction, which should also aim to improve the productive ability of the excluded in general and women and youth in particular. The social aspect should prioritise enhancing access to health and education for deprived socio-economic groups, castes and ethnicities, women and minorities across various regions in general and backward and remote regions in particular. This, in turn, will contribute to boosting their employable capacity and the quality of jobs available to such groups.

- More comprehensive and focused private sector development policies and programmes need to be vigorously pursued, in order to reduce production and transaction costs to attract private sector investment in potential productive areas. The low labour costs, rich bio-diversity and strong tourism and energy sectors in Nepal provide scope for higher growth and raising employment potentials. Apart from the construction, transport, social and community services sectors that hold some potential for augmenting growth and employment, a diversified approach grounded on such potentials and competitive strengths would be rewarding from employment-led inclusive growth and development perspectives.
- Given the tremendous potential, water resources development should be expedited, not only to meet energy shortages, but also to create multiple positive spill-over effects on different fronts of the economy to boost higher growth and enhance productive employment.
- A rigorous decomposition analysis shows that industries such as paper, basic metal and fabricated metal have high labour demand as well as high productivity. Apart from these, the food, apparel, leather, rubber and electrical industries have relatively higher employment elasticity. Therefore, there is scope for reviving the manufacturing sector through intra-firm level and inter-industry restructuring. A more dynamic approach led quantitative analysis considering the future prospects of industries from both, an internal and external demand point of view, may provide more insights on the potential of industries in terms of both, output growth and employment.
- From the employment perspective, a focus on micro, small and medium enterprises will be necessary. It is also important to focus on women's entrepreneurship development by facilitating women's access to finance, credit and skills including business, accounting skillset, etc.
- Continued discriminatory practices or very disproportionate access to infrastructure, social and financial services underscore the need to pursue a more systemic approach in removing structural and institutional bottlenecks as well as exclusionary practices at macro, meso and micro level. For sustainable inclusive growth and decent employment, addressing the multidimensional nature of inequality is essential as Nepal's experience indicates.
- In a low income country like Nepal that has a highly exclusionary social structure, in addition to a very high share of informal employment driven vulnerability, there is a need for a comprehensive social security and protection policy. It is well established that a robust system of social protection, in addition to fulfilling people's basic rights, creates a firm foundation for both, social and economic development, by providing an automatic stabiliser for vulnerable groups. There is also a need for labour market formalisation in order to raise the share of decent employment. More particularly, attention should be given to enhancing the productive employment of women and other underemployed in the vulnerable labour market.
- Accompanied by flexibility in the labour market, conditional cash transfers can help in mitigating the effects on the poorest households. Therefore, labour market institutions need to adapt to a new, more dynamic and changeable economic and social context. Policies should pay attention to tackling unemployment and in-work poverty without hampering labour market efficiency.
- A minimum employment guarantee scheme aimed at productive employment for all with a focus on the deprived, including women and youth, accompanied by more effective targeted employment programmes will be required. In addition to overhauling the ongoing employment schemes to increase effectiveness, there is a need for a more comprehensive policy orientation for wider coverage. There is also a need to bring together focused and effective programmes on occupational training, employment services and self-employment under one comprehensive programme.
- To increase labour productivity in the informal sector, more effective targeted policies and programmes that include access to credit and capital, vocational education and skill enhancement as well as employment linked infrastructure development programmes have to be implemented.

- International migration and increased remittance inflows are crucial from Nepal's overall development perspective, including poverty reduction, higher growth and sustainable development. To boost that process, Nepal needs to revive its economy at the earliest by rebuilding damaged or destroyed human capital and physical assets, among others. For this, apart from support from development partners, remittance inflows could be one of the feasible and better means of meeting the required massive investment. For build on remittance inflows, however, there is a need to address various problems associated with decent employment abroad through better coordination internationally. More proactive regional level SAARC initiatives could be effective and result oriented in this respect. Internally, a better strategy to channelise remittance inflows through official channels and then divert such flows toward productive areas including areas of rebuilding will be highly necessary.
- Above all, it is necessary that monitoring and compliance are made an integral part of productive employment led inclusive growth and development agenda..

## REFERENCES

- ADB (2009), *Country Diagnostics Studies Nepal: Critical Development Constraints*, Asian Development Bank, Kathmandu.
- Adhikari, D. et al (2013), *Practical Situation Doing Business in Nepal*, Samriddhi, The Prosperity Foundation, Kathmandu.
- Blanchard and Wolfers (2000), *Institutions and Labor Market Performance*, Massachusatts of Technology Press.
- British Council (2010), *Youth Survey of Nepal*, British Council, Kathmandu.
- Cazes, S. and Verick, S. (2010), *What Role for Labour Market Policies and Institutions in Development?* International Labour Organization, Geneva.
- CBS (1992, 2002 and 2007), *Manufacturing Census*, Central Bureau of Statistics, Kathmandu.
- CBS (1992a, 2002a, 2012), *Population Census*, Central Bureau of Statistics, Kathmandu.
- CBS (1996, 2004 and 2011), *Nepal Living Standard Survey*, Central Bureau of Statistics, Kathmandu.
- CBS (2000, 2001 and 2012), *National Accounts Estimates*, Central Bureau of Statistics, Kathmandu.
- CBS (2009), *Nepal Labor Force Survey*, Central Bureau of Statistics, Kathmandu.
- Dhakal, D. (2012), "Analyzing Reservation Policies in Civil Service of Nepal", *Paper Presented at GraSPP*, University of Tokyo.
- Duncan, C. (2010), "The Non-Mystery of Employment Led Growth", *Paper Presented in a Seminar on Labor and Social Trends in Nepal*, International Labour Organisation Nepal Office, Kathmandu.
- (2011), *Key Lessons from the Crisis and Way Forward*, International Labour Organization, Geneva.
- Ghosh, J. (2013), "The Strange Case of the Jobs that Did Not Appear: Structural Change, Employment and Social Patterns in India", *Presidential Address at the Indian Society of Labor Economics 55th Annual Conference*, New Delhi, India, 16-18 December 2013.
- GoN (2004), "Nepal: Trade and Competitiveness Study", *Study Conducted with Donor's Assistance as a Part of the Integrated Framework for Trade Related Assistance for Government of Nepal*, Government of Nepal, Kathmandu.
- GSEA (2006), *The Nepal Gender and Social Exclusion Assessment (GSEA)*, Government of Nepal, Kathmandu.
- Gutierrez, Catalina, Orecchia, Carlo, Paci, Pierella and Serneels, Pieter (2007), "Does Employment Generation Really Matter for Poverty Reduction?" *Policy Research Working Paper WPS4432*, World Bank.
- Harris, D., McCord, A and KC, S. (2013). *Politics of a National Employment Guarantee Scheme in Nepal: An Initial Assessment of Feasibility*, Overseas Development Institute, London.
- Hull, K. (2009), *Promoting Pro-Poor Growth: Employment (Understanding the Relationship between Economic Growth, Employment and Poverty Reduction)*, Organisation for Economic Co-operation and Development, Paris.
- IHD (2014), "Labor Market Inequality in Brazil and India: Concepts and Methods", *Working Paper 04/2014*, IHD, New Delhi.

- ILO (2001), "Poverty Reduction and Decent Work in a Globalizing World", *Working Paper GB.280/WP/SDG/1* March 2001, International Labour Organization, Geneva.
- (2002), "The Decent Work Agenda and Poverty Reduction", *ILO Contribution to IMF/World Bank Comprehensive Review of Poverty Reduction Strategy Process*, Washington, 14-17 January 2002.
- (2008), *In Defense of Labor Market Institutions*, International Labour Organization, Geneva.
- (2011), "Growth, Employment and Decent Work in the Least Developed Countries", *Report of the ILO for the Fourth UN Conference on the Least Developed Countries*, Turkey, 9-13 May 2011.
- (2012), *Employment Diagnostic Analysis: A Methodological Guide*, International Labour Organization, Geneva.
- (2013), *Global Employment Trends*, International Labour Organization, Geneva.
- ILO Consultant (2008), *A Rapid Assessment: Impact of Global Financial and Economic Crisis in Nepal*, ILO Regional Office, New Delhi.
- IMF (2013). *Jobs and Growth: Analytical and Operational Considerations for the Fund*, International Monetary Fund, Washington.
- IPRAD (2008). *Recruiting Procedures, Type of Emigrant Workers and Impact on Household Welfare: A Case Study of Migrants Workers from Nepal to Malaysia and Gulf Countries*, Institute for Policy Research and Development, Kathmandu.
- Islam, R. (2012). *Nepal: Addressing the Employment Challenge through the Sectoral Pattern of Growth*, ILO, Kathmandu.
- (2013). "Integrating Productive Employment into the Post 2015 Development Agenda", *Southern Voice Occasional Paper 3*, Southern Voice on Post MDG International Development Goals, [www.southernvoice-postmdg.org](http://www.southernvoice-postmdg.org).
- Khanal, D.R. (2007). *Nexus of Growth, Investment and Decent Work: A Critical Assessment of Nepalese Experience*, International Labour Organization, Geneva.
- Khanal, D.R. (2008). **A Rapid Assessment: Impact of Global Financial and Economic Crisis in Nepal**, New Delhi: ILO Regional Office.
- . (2011). "Is Inequality Improving in Nepal? Facts Disclose the Opposites", *The Himalayan Times*, December 9.
- Khanal, D.R., Thapa, R. and Belbase, A. (2012). *Sources of Growth, Factor Returns and Sustained Growth: A Comparative Study of Primary, Secondary and Tertiary Sectors in Nepal*, Economic and Social Commission for Asia and the Pacific /Asia-Pacific Research and Training Network on Trade, Bangkok.
- Khanal, D.R., Rajkarnikar, P., Acharya, K. And Upreti, D. (2005). *Understanding Reforms in Nepal: Political Economy and Institutional Perspective*, Institute for Policy Research and Development, Kathmandu.
- Khanal, D.R. and Dahal, D. (2007), *The Impact of Labor Laws and Business Environment SSEs: A Country Review-Nepal*, International Labour Organization, Kathmandu.
- Kucera, D. and Roncolato, L. (2013), "Sectoral Drivers of Growth and the Labour Productivity-Employment Relationship", *Research Paper No. 3*, International Labour Organization, Geneva.

- Kuznets, S. (1973), "Modern Economic Growth: Findings and Reflections", *The American Economic Review*, Vol. 63, No. 3, pp. 247-58.
- Lewis, W.A. (1954), "Economic Development with Unlimited Supplies of Labor". *The Manchester School*, Vol. 22, No. 2, pp. 139-191.
- McMillan, M. and Rodrik, D. (2011), "Globalization, Structural Changes and Productivity Growth", *Paper Prepared for a Joint ILO-WTO Publication*, Tufts University and Harvard Kennedy School.
- MoF (1992, 2012 and 2014), *Economic Survey*, Ministry of Finance, Kathmandu.
- Mol (2010), *New Industrial Policy 2010*, Ministry of Industry, Kathmandu.
- Nepal, A., Acharya, K. and Neupane, S. (2013). *Industrial Relations: An Institutional Analysis*, Samriddhi, The Prosperity Foundation, Kathmandu.
- New Business Age (2012), "Labor Issues", [www.newbusinessage.com](http://www.newbusinessage.com). November Issue.
- NPC (2002), *Five Year Plan (2002-2007)*, National Planning Commission, Kathmandu.
- (2007), *Three Year Interim Plan (2010-2013)*, National Planning Commission, Kathmandu.
- (2010), *Three Year Plan (2010-2013)*, National Planning Commission, Kathmandu.
- (2012), *Assessment of Karnali Employment Program*, National Planning Commission, Kathmandu.
- (2013), *Three Year Plan (2013-2016)*, National Planning Commission, Kathmandu.
- (2015). *Post Disaster Needs Assessment (PDNA)*, National Planning Commission, Kathmandu.
- NRB (2012 and 2013), *Annual Macroeconomic Situation*, Nepal Rastra Bank, Kathmandu.
- (2014), *Macroeconomic Situation of First Nine Months*, Nepal Rastra Bank, Kathmandu.
- Oxford (2014), *Multidimensional Poverty - Nepal*, Oxford University, Oxford.
- Sharma, P., Basu, and Khanal, D.R. (2014), *Nepal Human Development Report: Sustaining Human Progress - Reducing Vulnerabilities and Building Resilience*, United Nations Development Fund, Kathmandu.
- Tiwari, B.N. (2008), "Horizontal Inequalities and Violent Conflict in Nepal", *Himalayan*, Vol. 17, No. 1-2.
- UN/UNDP/ILO (2012), *Jobs, Decent Work and Inclusive Growth*, United Nations, United National Development Programme and International Labour Organization, New York and Geneva.
- UNCTAD (2013), *The Least Developed Countries Report: Growth with Employment for Inclusive and Sustainable Development*, United Nations Conference on Trade and Development, Geneva.
- Weller, J. ed. (2009). *Regulation, Worker Protection and Active Labour-Market Policies in Latin America*, Economic Commission for Latin America and the Caribbean (ECLAC), Santiago.
- World Bank (2011). *Large-Scale Migration and Remittances in Nepal: Issues, Challenges and Opportunities*, World Bank, Washington.
- (2012) *World Development Report 2013: Jobs*. World Bank, Washington, DC.

- (2012a). *Nepal's Investment Climate: Leveraging the Private Sector for Job Creation and Growth*, World Bank, Washington.
- (2014). *Doing Business Survey*, World Bank, Washington.
- (2016). *Doing Business Survey*, World Bank, Washington.

## **PROGRAMME STEERING COMMITTEE**

Alakh N. Sharma

Director, Institute for Human Development (IHD), New Delhi  
(Convenor)

Sher Verick

Deputy Director, ILO Decent Work Team for South Asia, New Delhi

Nagesh Kumar

Head, UNESCAP South and South-West Asia office, New Delhi

Edgard Rodriguez

Senior Program Specialist Supporting Inclusive Growth, IDRC, Canada

## **PROGRAMME ADVISORY COMMITTEE**

Dr. Rashid Amjad

Director, Graduate Institute of Development Studies, Lahore School of Economics

Professor Ajit Ghose

Visiting Professor, Institute for Human Development, New Delhi

Dr. Rizwanul Islam

Former Special Advisor, ILO, Geneva

Professor Rounaq Jahan

Distinguished Fellow, Centre for Policy Dialogue (CPD), Dhaka

Dr. Saman Kelegama

Executive Director, Institute of Policy Studies (IPS), Colombo, Sri Lanka

Professor Aliya H. Kha

Professor of Economics and Dean, Faculty of Social Sciences, Quaid-i-Azam University, Islamabad

Professor Deepak Nayyar

Professor Emeritus, Jawaharlal Nehru University and Former Vice Chancellor, Delhi University

Dr. Posh Raj Pandey

Executive Director, South Asia Watch on Trade, Economics and Environment (SAWTEE), Kathmandu, Nepal

Professor T. S. Papola

Visiting Professor, Institute for Human Development, New Delhi and Honorary Professor, Institute for Studies in Industrial Development, New Delhi

Dr. Gerry Rodgers

Visiting Professor, Institute for Human Development, New Delhi

Professor Ashwani Saith

Emeritus Professor, Institute of Social Studies, The Hague

South Asia Research Network (SARNET): Employment and Social Protection for Inclusive Growth aims to bring together researchers and institutions working on issues of employment and social protection in South Asia. Initiated by the Institute for Human Development (IHD), New Delhi in collaboration with ILO and UN-ESCAP with support from International Development Research Centre (IDRC), Canada, SARNET addresses the ways of achieving the development priorities of inclusive growth or growth that produces good quality employment with increasing access to social protection. Its activities include research and preparation of a data bank relating to labour markets and social protection as well as capacity-building of young scholars in the region through training and methodology courses and organizing workshops through competitive call for papers.



SOUTH ASIA RESEARCH NETWORK  
Institute for Human Development  
NIDM Building, IIPA Campus, I.P. Estate  
Mahatama Gandhi Marg, New Delhi -110002  
Phone: + 91 11 2335 8166, + 91 11 2332 1610  
Fax: + 91 11 2376 5410, Email: sarnet@ ihdindia.org



I SSN: 2227- 4391