Employment in the Knowledge Economy of Sri Lanka

Nisha Arunatilake

Fellow,
Institute of Policy Studies of Sri Lanka[1]
Colombo.

Abstract

Sri Lanka is still grappling with the problem of unemployment. Technological change and globalisation have opened new employment avenues across the globe. Promoting employment in the global market can adversely affect the country by creating shortage of skilled workers and upward pressures on wages, unless the education and training sectors cater better to the changing demands. This paper highlights the importance of opening access to science and technical education and improving quality and relevance of education at the secondary and tertiary levels for maximising benefits from emerging opportunities.

Introduction

Ensuring access to productive employment opportunities is a key element in alleviating poverty and reducing social unrest. However, progress in this regard has been slow. In recent times, technological change and globalisation have opened new opportunities for employment, both in the global market as well as within the country. This paper examines how emerging opportunities in the knowledge-driven global economy can provide solutions for the employment problems in the country. It examines means of maximising benefits of foreign employment and opportunities opened up by globalisation and technological change, particularly Information Technology (IT) and Information Technology-Enabled Services (ITES).

An Overview of Employment Trends in Sri Lanka

According to the Labour Force Survey(LFS) data of the Department of Census and Statistics, the overall unemployment rate for Sri Lanka (excluding the Northern Province) has come down from 8.4 per cent in 2003 to 5.4 in 2008. This decrease is reflected across both males and females. It is also encouraging that the decline is sharper for youth in the 20 to 24 age group and for females with more than an Advanced Level education; the two groups that have had historically high unemployment rates.

The ratio between employed and total population has remained around 45 from 2003 to 2008 in the country, indicating that the ability of the economy to create jobs has stagnated over the years. The proportion of workers participating in the labour market – the labour force participation rate - also had remained just below 50 percent over the same period. According to the LFS data, in 2008, around 60 percent of the employed were working in the informal sector. These included, 83 percent of those in the agricultural sector and around half (49 percent) of those in the non-agriculture sector. A main concern regarding the high incidence of informal employment is the lack of social protection available for these workers and their vulnerability to external shocks.

According to available data, about a quarter of workers in 2003 was skilled agricultural or fishery workers, while a similar proportion was in elementary occupations. Although the proportion of workers in these occupations has decreased over time, still by 2008, more than 40 percent of workers was in these two categories of occupations. In comparison, only around 13 percent of workers was in the senior managerial, professional or associate professional and technical categories. Industry, agriculture, fishery and forestry industries absorbed the highest proportion of workers, followed by manufacturing industry. The structure of the economy has changed from agriculture since 1992, largely due to the expansion of the industrial sector with a slight improvement in the services sector. Although, a shift from agriculture is usually accompanied by the expansion of the formal sector, this has not been the case for Sri Lanka, indicating that the expansion in the industrial and service sectors was largely driven by employment creation in the informal sector. Available data on the type of employment suggests that the expansion in employment was largely in the informal sector.

Sri Lankans has been able to take advantage of globalisation and technological change not only for generation of employment opportunities within the country, but also to gain access to those available across the globe. Foreign employment was a major source of employment for Sri Lankans in recent times. According to the Sri Lanka Bureau of Foreign Employment (SLBFE) data, on average, the gross departures for foreign employment have increased by 4.5 per cent over the 1992 to 2006 period. At present 201,948 persons migrate for employment in a year,. Although, successive governments have encouraged emigration for employment purposes, largely due to benefits in terms of remittances, it is not yet

clear whether there is a net benefit from foreign employment. Recently, the country has also seen an expansion in IT and ITES-related employment in the country. The expansion in this sector has been made possible due to technological advances which have allowed firms to outsource work using the internet.

The rest of this paper will examine specific challenges faced by the labour market of Sri Lanka in using the knowledge economy for creating productive employment opportunities.

Foreign Employment[2]

With globalisation, labour markets across the world have become increasingly integrated. In the initial waves of globalisation, foreign firms invested in the country to make use of lower-waged workers which mainly resulted in shifting employment from agriculture to manufacturing. Along with that, the number of people leaving the country for economic and political reasons increased significantly in the early 1980s. According to estimates by the SLBFE, more than 250,000 Sri Lankans emigrated for foreign employment in 2008. This outflow of workers is higher than the number estimated to be entering the labour force annually by the Department of Census and Statistics. Majority of these migrants are low-skilled female workers who migrate to Middle-Eastern countries as housemaids. However, according to SLBFE, the emigration of skilled workers has increased over time.

As indicated earlier, the unemployment rate in Sri Lanka has steadily come down over the years. This is partly attributable to foreign employment (Arunatilake and Jayawardena, 2010). However, the effect of migration on labour force participation is less pronounced. Labour force participation rates have remained around 48 percent from 1998 to 2007, despite large number of workers emigrating for work. The effect of migration on wages is hard to be established. There is some evidence to suggest that unemployment has influenced wage increases in occupations. The Central Bank Annual Report 2008, states that the continued domestic demand for construction sector workers together with shortages of these workers due to foreign employment were contributory for the 15 to 16 percent increase in nominal wages over the 2007 to 2008 period.

Employment in the IT and ITES Sectors

Another area in which there has been a recent surge in employment is software development and in ITES, such as business process outsourcing and knowledge process outsourcing. Earnings from this sector have grown by close to 200% from US$82 Mn in 2005 to US$ 245 Mn in 2009 (Central Bank, 2009). The Sri Lanka Information and Communication Technology Association (SLICTA) data shows that the overall IT workforce in Sri Lanka has doubled from 2003 to 2006, and it was estimated to be around 45,000 in 2008. About 22,000 of these workers were demanded by the IT sector while 20,000 were demanded by the non-IT sector and the rest by government agencies. These are only workers whose primary work is IT related. In addition, a large number of workers have found employment in ITES services, i.e., services that are enabled by developments in IT. The demand for IT workers has far exceeded the supply of workers. For example, SLICTA estimated that 5,755 IT graduates were needed in 2007 to cater to the growth in demand. In addition, 2000 more non-graduate IT experts were required. However, less than half of the IT graduate requirement (2,216 graduates) was trained in that year. Although an attempt was made to fill in vacancies with graduates in IT-related degree courses, still the supply did not meet the demand.

A more recent trend in globalisation is the development of Information Technology-Enabled Services (ITES). Recent developments in technology have enabled firms to outsource services to developing countries. In providing these services, workers reside in home countries and work for parent Knowledge-Based Outsourcing (KBO) companies in other countries. The types of services that are outsourced include back office functions, such as data entry, customer support, as well as more technical jobs, such as, financial analysis, designing, and distance education. Unlike in the creation of jobs with the expansion of the industrial sector, the employment opportunities in the IT and ITES sector offer attractive salaries. A recent graduate, with no experience can expect to receive a salary of Rs.15, 000 per month in the IT sector, which is more than the average salary for a teacher with experience. Furthermore, these salary scales increase rapidly with experience. The starting salaries in the KBO sector are even more attractive.

Information on employment in ITES industry is not available through traditional sources of information in the country. But, anecdotal evidence suggests that it has grown substantially over time. Amba, a company that specialises in providing investment research support, started with 20 employees in Sri Lanka in 2003.Now it has employed more than 400 workers and has branched out to India and Costa Rica. The Honkong and Shanghai Bank Corporation (HSBC) recently invested in a call centre in Sri Lanka which can employ up to 3000 workers. This has specialised in providing support services to HSBC branches in the UK and the US. These examples highlight the potential for the ITES expansion in the country. Although there is no hard evidence, anecdotal evidence suggests that, as in the IT sector, lack of skilled man power in the ITES sector is a constraint for its expansion.

A main setback faced by IT and ITES sectors is the shortage of qualified workers. Sri Lanka has a comparative advantage in attracting investments in this sector, given its educated workforce, who are IT and foreign language literate. However, the available pool of workers who are willing to work in this sector is not sufficient to meet the demand by this sector. Some companies who sought to expand within Sri Lanka have chosen to expand their activities abroad, due to this reason. An example of one such company is Amba research, which branched out to other countries. At the high end, software and KBO companies look for degree holders competent in IT and English. At the low-end Business Process Outsourcing (BPO) companies look for workers competent in English with a working knowledge in IT. The University and non-university tertiary education sector is unable to cater to this demand due to various reasons. One main constraint faced by IT training institutes is attracting qualified trainers. The government training institutes are particularly handicapped as they are unable to offer salaries demanded by qualified and good trainers. Financial and geographical barriers prevent students from obtaining qualifications in areas that are in demand. Most training-offering internationally-recognised qualifications are available only in Colombo and a few major cities, and most school leavers are unable to bear the cost of these training programmes.

Challenges for the Education Sector

On one hand, for decades, the country has been faced with the challenge of creating productive jobs. The expansion of the industrial sector mainly created jobs for those with a secondary-level education. There was some expansion in jobs for more educated workers in the service sector, but this increase was relatively slow. Globalisation has increased the potential for creating jobs both within and outside the country for more educated workers, in the IT and ITES sector as well as in medical, paramedical, engineering, accounting and other sectors internationally. Although opportunities in this regard have increased, the expansion of these sectors has been constrained by lack of skilled human capital. Most of these employment opportunities require IT literacy or degrees in science and technology-related subjects. As seen in Figure 1, although the number of university entrants has increased over time, the increase has been mostly in entrants for undergraduate courses in arts subjects. Although there has been some increase in the number of science and technology subjects the increase is far below what is required by the market.

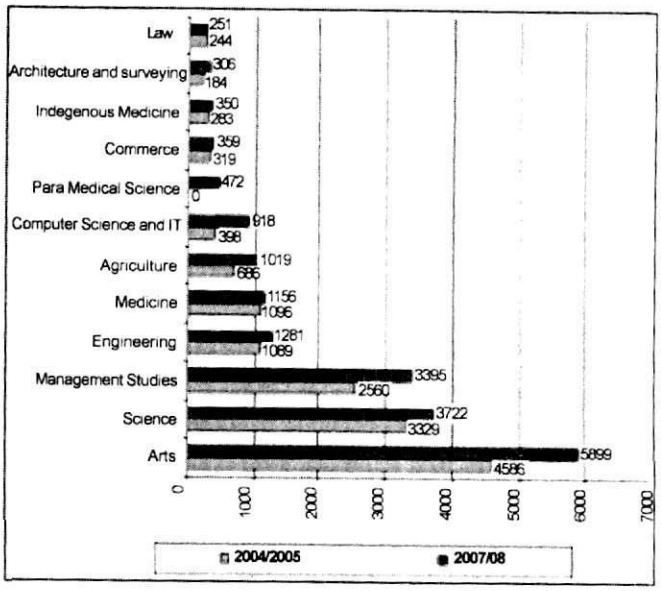

Figure 1: Number of undergraduate entrants by academic stream (main streams)

Source: Author's calculations based on University Grants Commission data.

The limitations in the diversity of education options go beyond the university sector to the secondary education sector. The National Youth Survey 2009 data (conducted by the Social Policy Analysis and Research Centre (SPARC) of the University of Colombo) reveals that of the 3000 surveyed youth (individuals in the 15 to 29 age group), 47 percent had not sat for GCE Advanced-level exam, while 30 percent had taken the exam in the arts stream. Those who have taken the GCE Advanced Level exam in the science stream (mathematics or biology) were limited to 9 percent of the sample. Of the same sample, only 7 percent was able to speak English very well, while only 34 percent had ever used the internet. This output of GCE Advanced Level science-qualified students are inadequate given that they have to fulfil employment requirements in an array of science and technology disciplines, including medicine, engineering, IT, paramedical sciences, etc. The present government policy aims to improve access to secondary education by extending the compulsory education age to 16 and to improve computer and foreign language literacy at the secondary level. These are encouraging developments. The need is also for implementing and obtaining results from these initiatives fast and to expand education opportunities in the science stream.

Conclusions and Policy Direction

Providing productive employment for the unemployed/under employed is a major challenge for Sri Lanka. Opportunities in this regard come from two areas. Foreign employment has been a continued source of employment to the country. The government of Sri Lanka actively promotes migration of skilled workers, by promoting high-quality tertiary and vocational education targeting global job markets. Given the limited opportunities in the country's tertiary education sector, there is a high demand for training programs aimed at foreign employment. There is evidence to show that emigration

of workers has helped lower the unemployment rate and increase wages. On the other hand, despite benefits from low-skilled migrations, over reliance on foreign employment can delay reforms needed for job creation in the country.

To safeguard the interest of the country, while reaping the benefits of labour migration, it is necessary to ensure that education policies and training programmes in the country match the needs of the local market as well as the envisaged global markets.

To take advantage of employment opportunities in the IT and ITES sector in the global market, the country needs a ready supply of qualified, young workers who are literate in English and IT. There is an urgent need to modernise and develop the training potential in the country to cater to the growing demand for skilled workers, both locally and abroad. The need is to develop the tertiary education sector giving particular attention to improving university education and expanding training in science and technology-related subjects. In addition to issues concerning modernising and upgrading the tertiary education, there is a need to improve science education at the secondary school level so that a sufficient pool of school leavers has skills to advance for training in science and technology-related courses in the tertiary education.

References:

Arunatilake, N., S. Jayaratne, P. Jayawardena, R. Jayaweera, and D. Weerakoon. (2010). 'Impact of Remittances on the Household of the Emigrant and on the Economy of the Migrants' Country: Sri Lanka", IPS, mimeo.

Arunatlake and Jayawardena, (2010). 'Labour Market Trends and Outcomes in Sri Lanka' in The *Challenges of Youth Employment in Sri Lanka*, Eds. R. Gunatilaka, M. Mayer and M. Vodopivec, World Bank, Washington, D. C.

Central Bank of Sri Lanka (2009). *Annual Report 2009.*

Database on Immigrants in OECD Countries (DIOC) and Barro and Lee (2000). 'International Data on Education Attainment: Updates and Implications', Harvard University.

Dumont J-C and Zurn P. (2007). Immigrant Health Workers in OECD Countries in the Broader Context of Highly Skilled Migration, in International Migration Outlook, SOPEMI, Paris.

World Bank (2006). "Global Economic Prospects: Economic Implications of Remittances and Migration", World Bank, Washington D.C.

World Bank (2007). *World Development Report 2007.*

Footnotes:

[1] nisha@ips.lk

[2] Arunatilake, N., S.Jayaratne, P. Jayawardena, R.Jayaweera, and D. Weerakoon.(2010).

Message from Microsoft Corporation, Chairman Bill Gates to mark the Year of English & IT in Sri Lanka.[1]

".....As I reflect on these thirty-three years of great innovation since Microsoft was started, I am amazed at how far we've come and the many ways in which IT is transforming how people live and work all over the world and the pace of progress continues to increase. The personal computer we have today is already over a million times more powerful than the original PC that Microsoft wrote software for back in 1981. I'm confident that even more dramatic changes are yet to come and that the future of technology will be far more exciting than even the past."

"At the same time, it's also clear that large segments of the world's population have not reaped the full benefits of technology. Only about a billion of the roughly six billion people in the world have regular access to sophisticated forms of Information Technology. IT skills lag far behind where they need to be in an increasingly competitive and globally interconnected economy."

"Sri Lanka has an advantage though, with a government that's committed to investing further in IT, as outlined in President Rajapaksa's vision statement. Like President Rajapaksa, I am optimistic that the country is poised for greater economic growth and development and much of that will be fueled by the use of software and the power of IT. Sri Lanka's high literacy rate, at over 90%, and its high standards of education and healthcare give it a strong economic foundation. The country's IT literacy rate is nearing 20%, which represents a significant jump from 8% only a few years ago. English language speaking skills are also a crucial part of the foundation for future growth. I am pleased to see that the government has identified the importance of English language skills by declaring 2009 the Year of English and IT Services."

"..... Microsoft stands ready to fully support the initiative and Sri Lanka's broader IT-objectives over the long term. The theme of the work we do in Sri Lanka is "Creating Employability." Through our Partners in Learning and Community Technology Skills Programs and our other initiatives, Microsoft has partnered with educational and non-governmental organizations in Sri Lanka to bring IT skills and training to over a million people across the country. These efforts have reached students, teachers, academia, rural communities, IT professionals, and migrant workers. To date, Microsoft has invested over 450 million rupees in Sri Lanka towards these programs and plans similar investments over the coming years. We have already made Windows Vista Sinhala enabled, and we are currently localizing our Office Suite for Sri Lanka."

http://www.microsoft.com/srilanka/MessageFromBillGates.aspx

Footnote:

[1] Following text contains only selected quotations of the message send by Bill Gates on 13th July, 2009.