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## DEVELOPMENT OF HUMAN CAPITAL, A PREREQUISITE TO THE ECONOMIC DEVELOPMENT OF SRI LANKA

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### *Abstract*

*Human factor is considered important to the economic development of a country as it was never before. Human capital refers to the stock of productive skills and technical knowledge embodied in labour. The process of building of human capital should involve investment in basic human development and the development of skills, training as well as the insight of the labour force.*

*In Sri Lanka, although the indicators of basic human development on the whole are satisfactory in comparison with other developing countries, when the skills development is considered, in terms of training as well as the insight of its labour force, the country seems lagging behind the demand of the global market. This article explains what human capital is, the present human capital situation in the country and why Sri Lanka has so far failed to achieve a competitive advantage in terms of human capital in spite of its commendable success in basic human development achieved over the years. Further it makes some basic suggestions to develop the standard of human capital of the country to match a knowledge based economy and harness the advantage of the ever competitive global market.*

### **Introduction**

It is common sense that more than ever, today, it has been prominent the need as well as the importance of the skills and talents of the people for the development of an economy. This is further evident when examining the role human capital has played during the last couple of decades for major and newly developed countries in achieving that height in their respective economic development.

Definitions of human capital are many and varied. A summarized and generalized idea can be produced as the talents and skills developed within human beings by

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learning, training or experience which ensure a better performance of their labour.

*"Human capital refers to the stock of skills and knowledge embodied in the ability to perform labour so as to produce economic value"* (Ratchford -2011)

According to Ratchford' s definition, human capital is basically knowledge, skill, or expertise embodied in people and acquired through investment, training or learning by doing.

*As Bekers (1923) states, " Notion of human capital has traditionally been applied to returns on investment in schooling and training , and the relationship between investments in human capital and economic growth"*(p.16)

The view of Foulkes (1975) who emphasizes the importance of human capital to the development is as follows;

*"For many years it has been said that physical assets or the capital as the bottleneck for the development. I don't, think this any longer holds true. I think it's the work force that does constitute the bottle neck for development. And I think this will hold true even more in the future,"*(p.71)

According to above definitions and accounts, it is clear what human capital means, how it is formed as well as the importance of it in the development of an economy. It is accepted that among the causes of strong growth or poor performance of the economies, the level of commitment of the particular economies to the human capital is highly significant. The other influential factors consist of nature of investment in infrastructure, efficiency in absorption of advanced technology and stability of political environment (Jones -1993)

Human capital is largely related to the human development of a country and a higher standard of human development very often leads to a better or the improved standard of human capital as well. It is fair to say that the standard of human development in a country primarily depends on the level of economic development of the particular country. As such, it is natural for economically strong countries to have a better standard of human development than developing countries. However, as the level of human development is crucial to the formation of human capital which is very much important to achieve the competitive advantage of the global market, it is essential and a prerequisite for the developing countries to pay more attention to develop the level of human capital. Nevertheless, many developing countries are still lagging behind in their

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development of human capital to match the competition in the global market. Human development records of many developing countries are far from satisfactory. Many African as well as Asian countries, except those East Asian countries which have shown a significant economic development in the recent past, are still very much backward even in their primary human development indexes. According to many critics, the poor economic development of the South Asian region in comparison to East Asian countries has to a great extent caused by the difference in human capital development in the two regions over the years.

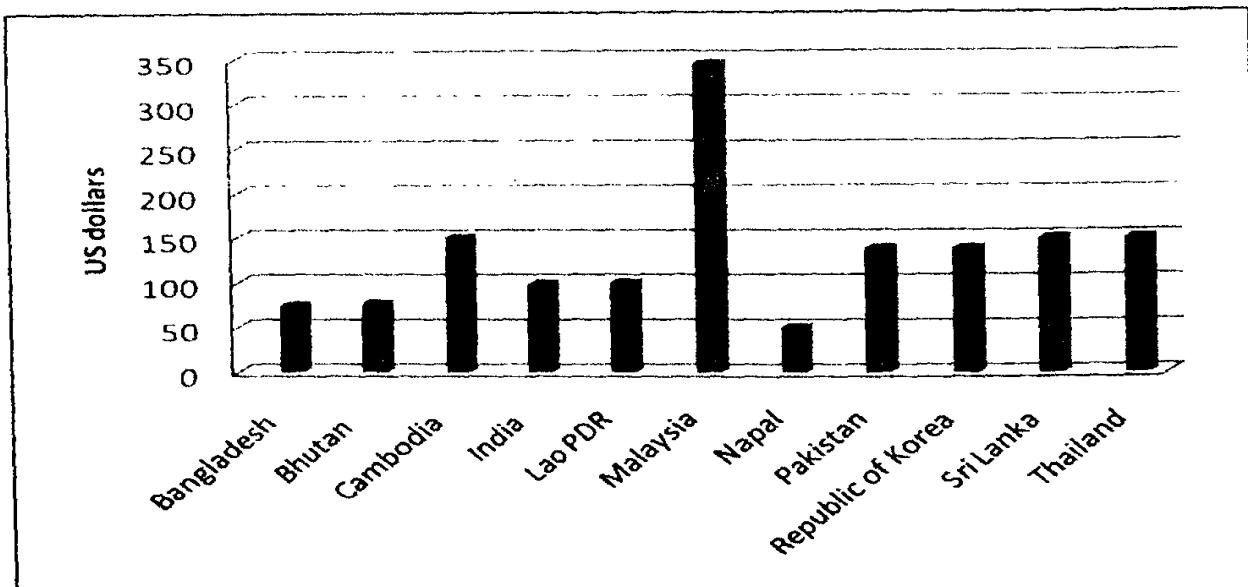
The role of human capital in economic growth and development is receiving its due theoretical recognition and value. In the traditional neoclassical growth models developed by Robert Solow and Trevor Swan in the 1950s, the output of an economy grows in response to larger inputs of capital and labour (all physical inputs). Non-economic variables such as human capital and or human health variables have no function in these models. As a result, these models were not sufficient to explain the exceptions caused by non economic variables in the economies. This caused the emergence of new paradigm in the literature, mostly due to Paul Romer (1986). This paradigm is now commonly known as "endogenous growth models". By broadening the concept of capital to include human capital, the new endogenous growth model argues the validity of the law of diminishing returns to scale phenomenon of the neoclassical growth models. In simple terms, what this means is that if the firm which invests in capital also employs educated and skilled workers who are also healthy, then not only will the labour be productive but it will also be able to use the capital and technology more efficiently.

Just in line of the above logic, it can justifiably be argued that East Asian countries which were in the same level of per capita income as the south Asian developing countries and the other less developed Asian countries in 1960s could achieve a remarkable economic development today by passing the latter groups among other things due to giving the proper concern to develop human capital at the right time. As Figure 1 shows, Sri Lanka enjoyed the highest per capita income than all other countries after Malaysia in 1966 while the Republic of Korea had less per capita income than Cambodia, equalling with Pakistan.

In the light of this phenomenon, the pertinent question that emerges is what factors led East Asian countries to achieve an overwhelming economic development in the last four decades in terms of their GNP per capita income which has risen to a surprising level in comparison with South Asian countries and other less developed Asian countries. Evidently the factors could be

numerous from social to cultural, from economic policies to institutional development, geographical location to opportune time. Yet it is argued and accepted that the impact of human capital dimensions blended well with the right formation of up physical assets contributed to the difference.

**Figure: 1. GNP per Capita Income (in US\$) of Selected Asian Countries, 1966**



Source: <http://www.adb.org/data/statistics>

### **Objectives of the Paper**

The prime objective of this paper is to elaborate the importance of human capital development to achieve a higher economic development of the country.

The other objectives are,

- Pointing out that the changes should take place in the present education system to produce more skilled and talented labour force
- Emphasizing the need of proper English education for children to make them fit well to the looming knowledge economy
- Emphasizing the need of proper and relevant on the job training for every category of workers for better performance
- Pointing out the importance of right investment on Research and Development for the development of human capital
- To emphasize the need to improve the level of ICT in the process of becoming a knowledge hub
- To explain the need to promote the technical & vocational training to infuse the talents and skills of the majority of the labour force

### Level of Human Development in Sri Lanka

Among developing countries, the achievement of primary human development standard of Sri Lanka is outstanding and commendable. A comparative description of some of the indicators with its south Asian neighbours is given below in the Table no. 1. These achievements of Sri Lanka in human development is significantly outstanding not only among those of most of its close neighbours in South Asia but also closely tally with those indexes of most of the developed countries as well.

**Table No: 1. Primary Human Development Indicators of South Asia**

Index	Country							
	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Life Expectancy at birth (%)	49	69	68	67	78	70	66	75
Adult Literacy (%)	29	57	47	61	93	60	55	91
Net Primary Enrolment (%)	—	94	—	92	95	79	72	99
Population Growth (%)	2.7	1.2	1.7	1.4	1.3	1.7	1.8	1.0
Fertility Rate (%)	6.2	2.2	2.3	2.6	1.7	2.7	3.3	2.2
Under Five Mortality Ratio (per 1000 live birth)	101	46	54	61	11	48	72	12
Maternal Mortality Ratio (per 100,000 live birth)	460	220	180	200	60	170	260	35

Source: <http://www.data.worldbank.org>-2008/2011

When comparing above human development indexes of other South Asian countries with those of Sri Lanka, it is fair to say that Sri Lanka's record is far excellent.

However, though Sri Lanka has not achieved a high economic development and still falls into the category of lower middle income countries, it is surprising how the country managed to achieve a basic human development record which closely tallies with that of economically developed countries.

**Table No. 2: Per Capita Income of Sri Lanka**

<b>Per Capita Income of Sri Lanka</b>				
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
At current Prices (Rs)	212,972	233,716	267,967	310,059
At current Prices(US \$)	1,966	2,033	2,370	2,804
At Constant (2002) Prices (Rs)	114,269	118,384	126,500	135,719

Source: <http://www.Statistics.gov.lk>

The basic human development indexes of several fast developing economies in Asia presented in the Table No.3 is a better comparison to show how closely the record of Sri Lanka's human development tallies with them.

**Table No. 3: Human Development Indicators of Several Fast Developing Countries in Asia**

<b>Index</b>	<b>Country</b>				
	<b>Hong Kong</b>	<b>Malaysia</b>	<b>South Korea</b>	<b>Singapore</b>	<b>Sri Lanka</b>
Life Expectancy at birth (%)	81.9	73.7	77.9	79.4	75
Adult Literacy (%)	=	88.7		92.5	91
Net Primary Enrolment (%)	93	95	99	=	99
Population Growth (%)	0.9	1.6	0.3	1.1	1.0
Fertility Rate (%0	0.9	2.9	1.2	1.4	2.2
Under Five Mortality Ratio (per 1000 live birth)	-	12	5	3	12
Maternal Mortality Ratio (per 100,000 live birth)	-	30	20	14	35

Source: <http://www.data.worldbank.org-2008/2011>

#### **Causative Factor of Basic Human Development in Sri Lanka**

It is obvious that Sri Lankans enjoy a higher level of human development standard in comparison with those other developing nations as pointed out above. However, this is not a recent trend. Well over five decades this high level

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of human development has been experienced by the people in the island. With comparatively lower income conditions, enjoying some almost equal basic human development indicators with economically developed countries is a surprise. This contrasts the opinion of mainstream economists who held the view that improvement in human development indicators generally follow rather than precede economic growth and the rising levels of income. The answer for this particular question as to how Sri Lanka was able to raise the human development levels of its people considerably before their economy attained any sustainable level is through welfare interventions.

Welfare measures to ensure a better life standard for the whole population in the country was initiated broadly when the country was still under the British rule.

### **Changes of Governance and Welfare Interventions**

In 1931, under the Donoughmore constitution, significant political power was given to the local population. Universal adult suffrage granted by the Donoughmore commission made government responsible for the people, raising the number of voters from around 0.2 million to 1.5 million. The legislature of the new constitution also had fifty members elected on universal adult suffrage and a Board of Ceylonese Ministers chosen among the elected members. This made the legislature more responsive to voters' demands. Education and the health services so far limited to a few in urban as well as the estate sector, took momentum of extension in response to a clamor from the electorate in the mid 1931 and 1936. The state assumed much more responsibility for the provision of education and health service. The government appointed a Special Committee on Education to investigate all aspects of the education system including the education related problem arising from the heterogeneous nature of the Sri Lankan society and the competing interests of the state and private organizations controlling the education system. In accordance with the recommendation of the committee (Sessional Paper xxiv of 1943) education was made free from kindergarten to university in 1945.

Medical treatment was also provided free, subject to an income limit, in all hospitals, clinics and dispensaries, but the income limit was rarely enforced as there was inadequate machinery for the investigation of income. During the 1930s, there was some increase in the number of hospital beds, health institutions, and health personnel provided through the country. After independence, the development of health services and education facilities was expanded further. In the health sector, the number of western-type health

institutions increased rapidly. During 1950-60, the number of hospital beds went up by 49 per cent and the major categories of curative health personnel doubled, thus keeping well ahead of the population increase. (Lakshman -1997)

**Table No. 4: Growth of Health Facilities**

Facility	1926	1930	1940	1950	1960	1970	1980	1991	2005	2010
Beds	8089	9477	11992	19959	29816	37735	42275	42437	60237	69,501
Hospitals	98	112	138	370	397	408	384	365	619	568
Central Dispensaries	543	595	632	240	283	332	339	275	413	475
Doctors	285	341	404	674	1173	1932	2055	2934	10198	15283
Nurses	437	605	744	1387	3232	5542	6834	9934	19934	27494
Indoor Patients (Mn)	0.21	0.21	0.38	0.90	1.40	2.10	2.89	2.63	4.34	5.47
Outdoor Patients (Mn)	2.9	3.9	5.4	14.1	24.6	23.0	26.9	28.6	42.5	48.78
Population per bed	609	554	534	385	332	332	349	406	326	297
Population per Health Worker*	4472	3876	3693	2805	1795	1442	1489	1226	594	482

Notes: \* Doctors, Nurses and Assistant and Registered Medical Officers (AMO/RMO)

Sources: Social Policy in Sri Lanka, Patricia J.Alima in Dilemmas of Development, 1997 and Department of Census and Statistics, 2005, Ministry of Health, Family Health Bureau, 2007, OECD/World Health Organization (2012)

On the other hand, educational facilities were made as widely available as possible, so that those with ability might compete for the best jobs, irrespective of their background. The original emphasis of the education system on general literacy and turning out persons for middle-class occupations continued.

In addition to the provision of free health and education facilities, in the 1940s state intervention started to maintain minimum consumption levels as well. Provision of free mid-day meal to some categories of school children started in 1945 and extended to all school children by 1950. The most significant measure undertaken in this line was the attempt to relieve food shortages during the war by the creation of Department of Food Supply in January 1942. The main activity of the department was to distribute essential food items including rice, sugar, curry stuffs and milk foods to the whole population on a scheme of rationing. After the war, although food shortages eased gradually, the schemes introduced during the war were carried on as means of stabilizing the cost of living.

The above mentioned welfare measures initiated by the state could be continued only for a few years after the political independence in 1948 without being a much burden to the government budget. The accumulation of external assets during the Second World War, which resulted from severe import restrictions and high prices fetched by major exports was considerable, hence the welfare measures could be adopted fairly well during the period short after the war. But the questions were raised about the continued viability of these measures during the 1950s. However, the election of a government with strong social democratic ideals in 1956 ensured that the maintenance of these measures continued well into the 1960s. The growing financial burden of maintaining the welfare state compelled subsequent governments to make ad hoc adjustments in the policy regime, but until 1977, the UNP government introduced open market economy, no fundamental readjustment of policy was undertaken to give lower priority to welfare objectives. However, it would be wrong to argue that objectives of social welfare were totally neglected or abandoned even after 1977. While the budgetary allocations for the health and education services were not trimmed or cut off, food subsidy was abandoned with the introduction of the food stamp scheme in 1977.

Even though successive governments which came to power after 1977 accepted market economy as a policy, continued with free health and education services while operating some social safety networks such as Janasaviya and Samurdhi to minimize the impact of high inequality of income distribution. However, all these measures act as a mark of the commitment of Sri Lankan state to further continue the social welfare of the people on one hand, it can also be easily argued that these measures have been used by politicians by and large for their own political survival throughout the post independent era.

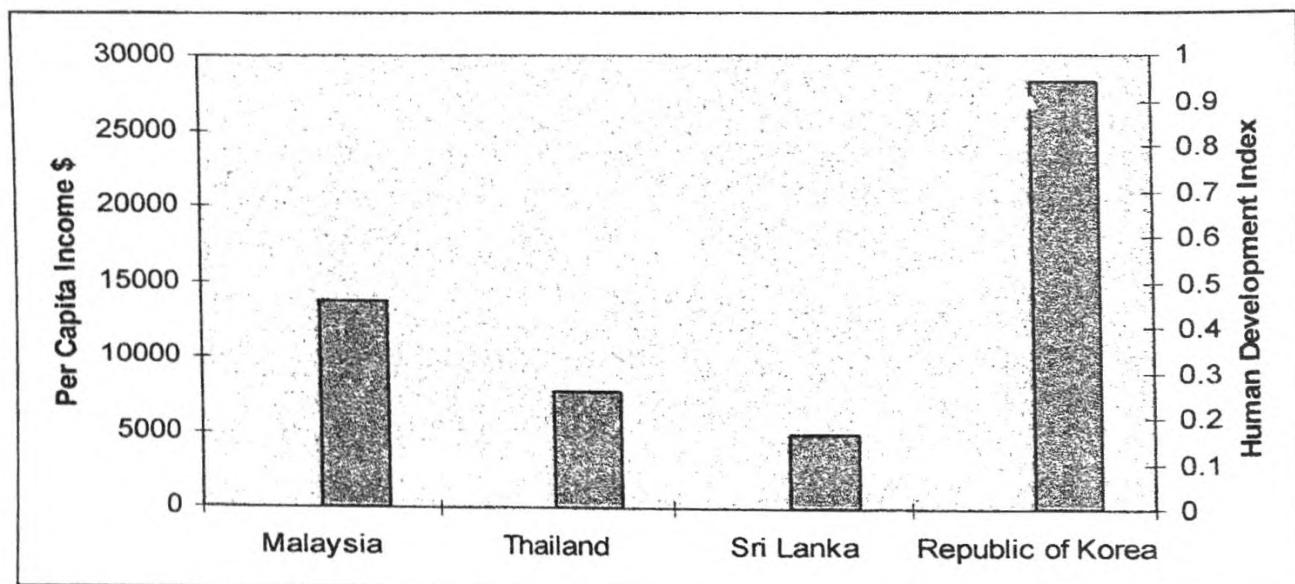
### **Level of Human Capital in Sri Lanka and its Determinants**

It is evident from above, the commitment of Sri Lanka to develop and maintain a higher basic human development standard from the time it was under the British rule to date, has paid rich dividends. This is evident not only in comparison with its neighbouring countries but also with other developing countries. However, one may also justifiably argue that this basic human development standard of the country is rather than genuinely purposed, is a by-product of the means, by and large used by the politicians especially after 1950s to maintain their popularity and political survival. More over the majority of the policy makers were blind to the genuine concerns of the country's real economic development and were inclined more to the measures of social-welfare which help wield political power.

This affected negatively in building of physical assets and promotion of especially skilled labour and talents which is the real human capital more productive to the economy. Priority in allocation of limited resources seems very often had given to perpetuate the irrationally planned subsidies and average well being, rather than to foster an overall economic development. Consequently, this phenomenon has caused the country to fail in achieving an economic development commensurate with its basic human development.

The following graph shows the Human Development Index (HDI) and the per capita GNI of Sri Lanka and the several South East Asian countries. This evidence shows despite the country's comparatively closer tally with the South East Asian countries in terms of HDI, how far it is away from achieving the corresponding economic development.

**Figure 2: Sri Lanka's Level of HDI Relatively to Several Selected Asian Countries**



Source: [undp.org/en/data/profiles](http://undp.org/en/data/profiles)

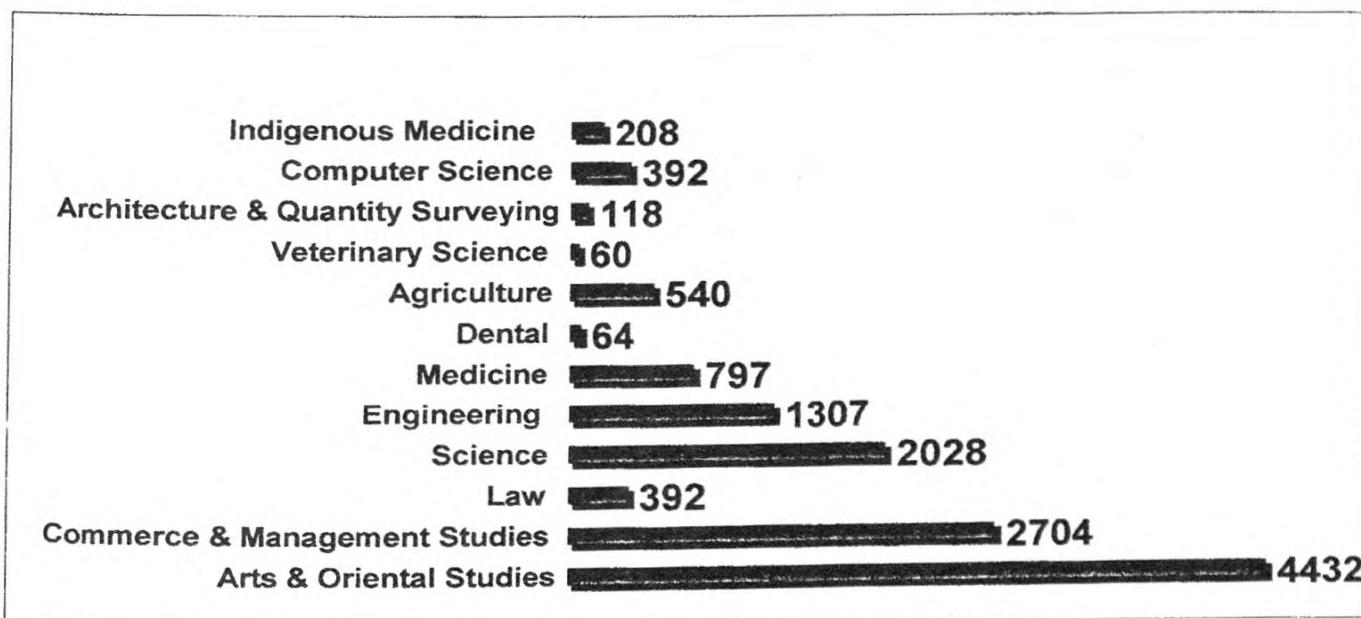
As widely accepted, in Sri Lanka among other things the inherent lapses in the education system have hindered the formation of human capital. It is not an exaggeration, that firstly with the throwing away of English as the medium of instruction in schools and universities gradually degraded the quality of education of the country. Due to this, critics opine that the free education as envisaged by Dr. C.W.W Kannangara, the father of free education, has not become a 'pearl of great price' instead a cheap imitation and not a genuine ornament. Over the decades, it became clear that in the modern world education received exclusively in and

through Sinhala or Tamil prevented children from rising as far as their natural talent could take them.

The majority of graduates educated with the public finance as alleged by critics have become unproductive or unemployable resulting in a huge loss to the country. They opine that because of the outdated and improper educational policies and systems that operate in the country. In contrast to a country like China, South Korea, Singapore where more than 50 percent of the total undergraduates enrolled in the courses of Science and Technology, in Sri Lanka the majority of undergraduates enroll in courses which are of less contribution to the direct enhancement of the economic productivity of the country. Eventually, this has been the reason for those virtually blessed with the opportunity of entering the university after a huge competition to be labelled as a heap of heads with no much use or validity in the development process.

Following graph shows the total enrolment of the undergraduates in the university system in 2011.

**Figure 3: Intake of Undergraduates to Universities - 2011**



Source: <http://www.ugc.ac.lk/en/university-statistics-2012.html>

It is also obvious that there has been no proper planning or thinking given fairly in advance for the development of a skilled, trained and professional human resource at an adequate pace to face the country's future challenges. As a result,

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the country is currently lagging behind in terms of the skilled, trained and knowledgeable human resources to suit the demand at global level.

Sri Lanka is a lower middle-income country. It is required to accelerate economic growth and enable Sri Lanka to become a high-middle income country. In the promotion of growth, developing knowledge-based industries and services is imperative. This is also a prior condition for the country to develop as a knowledge hub. Talents, skills and Knowledge are central to the transformation of the economy, as they are the key ingredients of growth in the modern global economy. Education system of a country bears this utmost responsibility of developing its human capital to support the economic development. As a result, the authorities should realize that the country's education system changes and develop to meet the challenge.

### **Future Challenges in Education**

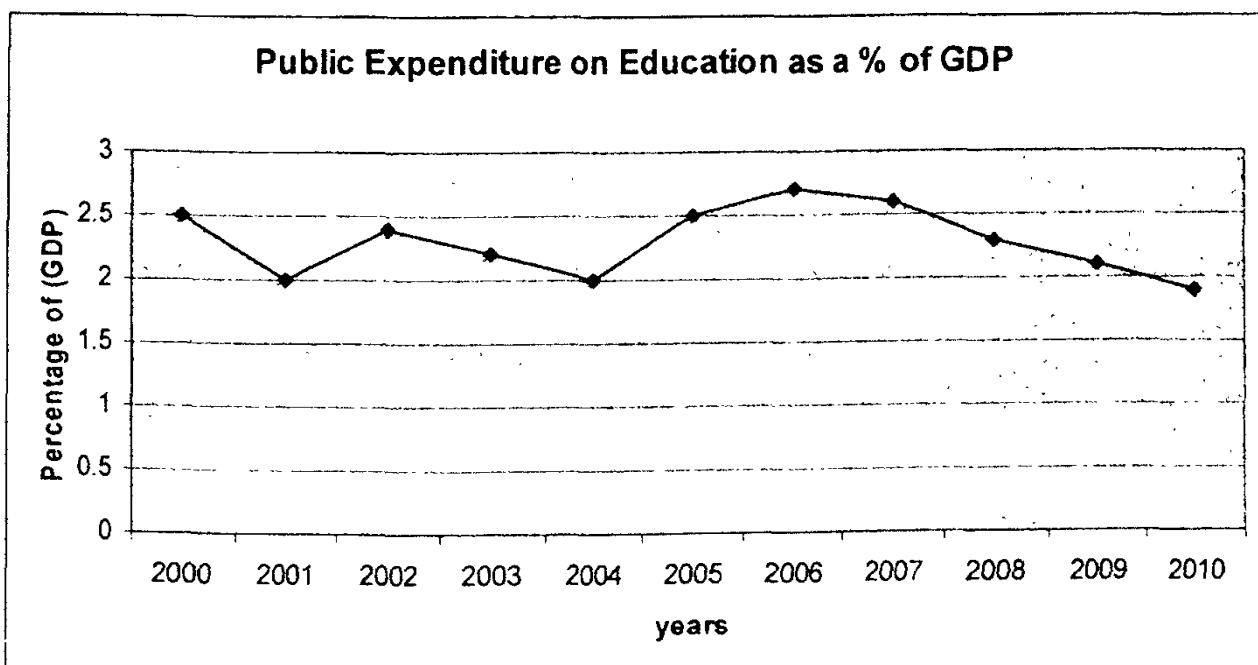
Firstly, the skills and competencies required for modern knowledge-based economic activities have become considerably more complex in comparison to the past. For instance, while many jobs in the past could be performed with routine manual and cognitive skills, today, many jobs require expert thinking and non-routine analytic skills; such as the ability to identify and solve new problems, and complex communication and non-routine interactive skills; such as the ability to elicit, utilize and communicate critical information. The main focus of policy attention in the past was on basic education. However, there now needs to be a greater policy focus on secondary education, which has to be transformed into a human capital production system that generates complex skills broadly to enable the country to compete in the knowledge economy.

Secondly, key skills for a knowledge hub, such as proficiency in English language as already mentioned, information and communication technology, science and mathematics need to expand considerably. The capacity of the secondary education system to produce these skills and talents in proportionate to the adequate standards of quality has been poor. Fluency of English language, which was not promoted adequately in Sri Lanka from 1956 onwards is particularly an acute constraint on the entire education system and the labour market. Science and mathematics skills are also acutely limited. For instance, there are about 2,650 secondary schools offering GCE A/L courses (ages 16-18) in the country. Yet, only about 600 schools (23 percent of secondary schools) offer GCE A/L science and mathematics. Further, nearly all the students who are enrolled in science-based university degree programs, such as medicine, engineering, IT and the sciences come from about 200 of these schools. This suggests that only 8

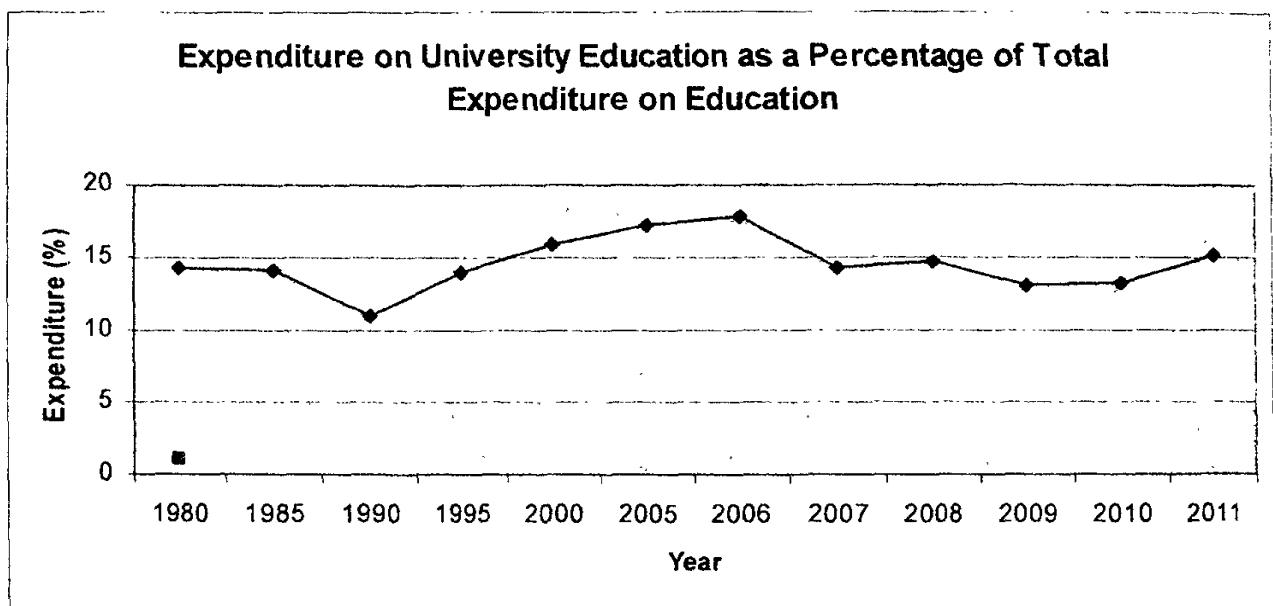
percent of secondary schools are currently of adequate standard to support a knowledge-based economy ([Sri\\_Lanka\\_education\\_information\\_2010](#)).

Thirdly, there are wide regional disparities in the current education system, which need to be addressed urgently in the interests of equity. Differences in education outcomes between the developed Western Province and some of the other less developed provinces are sharp. On the whole, the country's expenditure on education apparently low and being eroded annually despite the challenge of developing the quality of human capital required for knowledge economy. In the following figures numbering 3 and 4 respectively show the share of government expenditure from GDP on education as a whole and that of university education in particular.

**Figure 4: Government's Expenditure on Education**



Source: <http://www. ugc.ac.lk/en/university statistics-2012.html>

**Figure 5: Government's Expenditure on University Education**

Source: <http://www.ugc.ac.lk/en/university statistics-2012.html>

Until recently, Sri Lanka apparently had not paid due attention to improve computer literacy as well. A survey conducted by the Department of Census and Statistics in 2006/2007 revealed how poor the level of computer literacy of the school teachers in the country. This while being clearly an obstacle for the teachers to improve their knowledge to keep up with the rapid changes in the global level also invariably affects the quality of their teaching.

The following table shows the level of internet use in some Asian countries. It is an evidence to how backward Sri Lanka had been in that aspect even as recent as the year 2008.

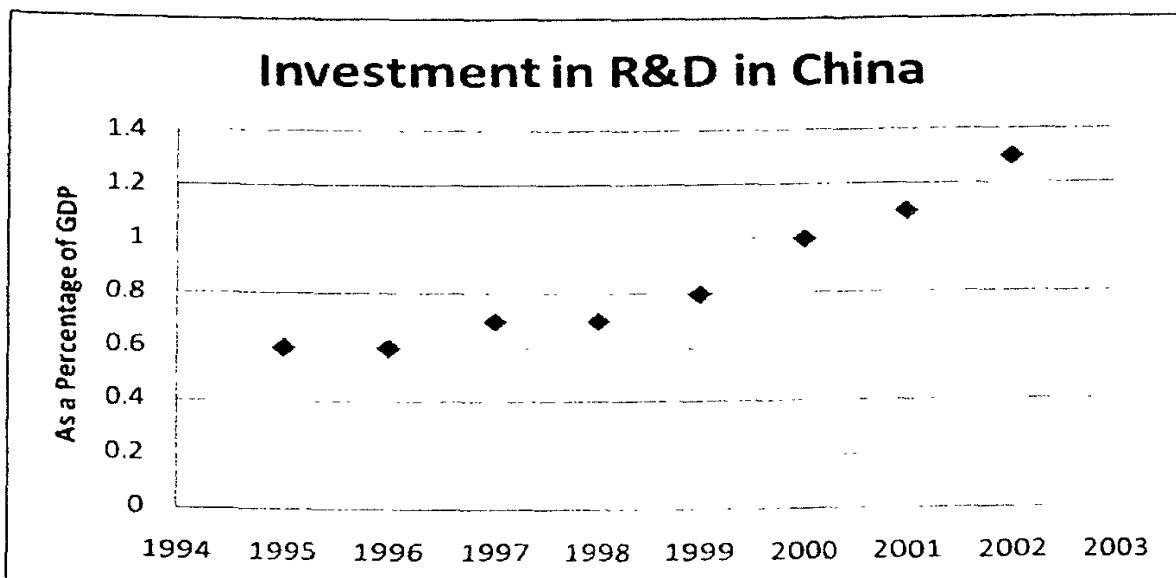
Table 5 shows, in spite of a high literacy record, Sri Lanka's poor performance in terms of the decisive capabilities demanded by the today's knowledge economy.

**Table No. 5: Level of Internet Use of Some Selected Asian Countries**

Country	No. of People (Per 1000 Persons)
Bangladesh	03
Bhutan	39
India	55
Indonesia	73
Malaysia	435
Maldives	59
Nepal	04
Pakistan	67
Singapore	571
South Korea	684
Sri Lanka	14
Thailand	110

Source: [http://www.undp.org/en/media/HDR\\_2007/2008](http://www.undp.org/en/media/HDR_2007/2008)

This ground reality indicates that Sri Lanka has a long way to go to become a knowledge-based economy and enjoy competitive advantage in the global market. In a knowledge economy ICT, R & D and S & T play a critical role. But in Sri Lanka, the investment in those spheres has not been satisfactory. Nevertheless, technologically developed countries have fairly well invested on the particular aspects in their journey to success. For instance, the following graph shows the priority given by China to the sphere of R&D over the years.

**Figure 6: China's Expenditure on R&D**

Source: OECD, An Emerging Knowledge-Based Economy in China? 2004

## **Development of Skills and Talents**

As already mentioned, the lack of skills and talents in the majority of Sri Lanka's labour force is a significant weakness and it prevents the formation of economically worthwhile human capital. This is indicated in many fronts. Very often administrators from leading private companies are complaining of the lack of qualified people to fill their vacancies while a huge number of educated young people in the country are unemployed. This is caused as they do not possess the skills and talents required by the particular jobs. Poor knowledge of English, computer, lack of experience and training are the major factors. It is evident that this has compelled many private sector companies to look for overseas sources to find suitable candidates to fill their top level vacancies. The biggest danger of this lies in the foreign investment in Sri Lanka in the future as investors are also concerned on the human resource aspect among other factors which are favourable to safe investment. If our human resource or human capital cannot cater to the interests or the requirements of the investors, they may turn back incurring huge losses to the economy.

Lack of talents and skills in our manpower is again evident when considering the low or unskilled overseas jobs in which majority of Sri Lankans are engaged. If the country possesses skilled labour, it alone would be a substantial source of foreign exchange. As a result, it is imperative to have skilled people to get the best advantage of the overseas employment opportunities. The demographic changes and the results in labour shortage looming in most of the developed countries would create more overseas job opportunities in the future, which would require right resources to harness the benefit.

According to the available records more than 90 percent of the Sri Lanka's overseas employees are unskilled. This is a huge loss both to the country as well as to the employees themselves. But in contrast India, though records a lower literacy rate than Sri Lanka in general, has been able to employ many thousands of her people in well- paid jobs requiring high skills and knowledge such as Information Technology in United States and many other western countries. This shows that not in one form of literacy but we should be geared in all the aspect and skills which form the human capital.

Other than that, in Sri Lanka especially the public sector work force is very often criticized for poor performance and the resulted inefficiency of the sector. Their talents and professionalism is often challenged and criticized. This is to a certain extent, while not without, a reason seems a result of inadequacy of the effort and interest taken to improve their skills and attitudes. On the job training is

the best solution to counter the situation and improve the quality of the work force in case right recruitments have not been made. However, within the context of public service of Sri Lanka, on the job training often seems rare, limited, or not to the satisfaction of the employees themselves too.

Though there are ample instances to prove this, just one example is presented here with regard to the Agricultural Research and Production Assistants (ARPAs) widely known as *Krupanisa*, a post of village level officers in the Departments Agrarian Development.

The particular post was created in 1996 with around 9500 employees extracted from the Samurdhi Movement and employed in Agrarian Development Centers (ADC) through out the country. Among the various assignments given, they were also made to support Agricultural Instructor (AI) to carry out extension activities at the village level to fill the vacuum created by the abolition of KVS (*Krusi Viyapthi Sevaka*) post in 1989. However, the ARPAs, not recruited with the qualification to carry out any extension service, have been forced to provide certain extension duties at the grassroot level and understandably have not been able to render a satisfactory service due to having no adequate knowledge to suit the job. In addition, training ARPAs for the job has been irregular, poorly planed and not properly carried out. This is clear from the fact that just only around 1500 of all recruited, receiving training even after a decade since the post was first established. Other than this, it has also been revealed that even the ARPAs as well are not interested in undergoing the training provided for them as one year and two year diploma courses. This is due to the absence of incentives in respect of the successful completion of the training.

This situation has led to the deterioration of the extension support available for farmers at grassroots' level and resulted in a number of issues which hamper the development of the domestic agricultural sector in the country.

The following table, comprising of the data obtained from a survey conducted on the job satisfaction of ARPAs using a sample of 226 officers shows the educational background of the officers. This indicates the need for a better training to them.

**Table No. 6: Educational Background of the Agricultural Research and Production Assistants**

Level of Education	District							Total
	Matale	K'gala	H'tota	A'pura	Badulla	Kandy	Kalutara	
Up to G.C.E (O/L)	02	01	01	02	01	—	03	10
Passed G.C.E (O/L)	11	14	15	13	03	01	05	62
G.C.E (A/L)- Arts	13	28	12	14	05	03	06	91
G.C.E (A/L)- Commerce	02	09	02	09	05	02	07	36
G.C.E. (A/L)- Science	02	05	06	04	03	00	03	23
Graduates (Arts)	-	03	-	03	01	-	-	07
Agriculture Diploma	—	—	—	—	—	—	02	

Source: Lurdu et al-2007

### **Measures Needed to Develop the Standard of Human Capital of the Country**

It is clear that prevailing situation in relation to the country's human capital poorly matches the both, the current demand of the local as well as the global market. As a result, it needs urgent attention to counter the situation. Due to the fact that we have already achieved a satisfactory development in basic human development, achieving a comparatively better level of development in human capital as well is not a difficult issue. What is needed is taking correct policy measures and making the right investments.

Especially, the education sector of a country is very vital in this aspect. It should necessarily be oriented towards the developing of human resource of the country. The optimum result of the education today is considered as the skills development of the people for economic development. It has been the broad opinion that Sri Lanka's system of education has not properly oriented to produce skilled, trained and productive personals who fit well into the present global market requirements. This mismatch of education and the needs of the global market has become a severe impediment in harnessing the economic

benefits. To rectify this situation necessary changes have to be made in the education system as soon as possible.

As authorities at least belatedly have become cognizance of the need for the changes in education in view of matching it with the current demand of the global market, it is their responsibility to act promptly. To make higher education, in any field of study or discipline more meaningful, relevant changes are necessary in the existing structure of the Universities. The changes need to be made from the point of view of global standard enabling Sri Lankan Universities to become global players in highly competitive global market of higher education. The whole university system in the country, including the academic staff has come under stark criticism for the process of producing graduates who are low in quality. Thus the authorities concerned should pay their attention to change this outlook of the university system because it definitely damages to the intellectual life of the country.

Besides, all institutions of higher education today should cater to the demand of a knowledge economy. A knowledge-based economy needs to add new knowledge and new techniques continuously and be innovative in order to remain competitive in this highly integrated or the globalized world.

However, apart from making necessary changes in the curricula of higher education and introducing innovations to improve the quality of academic staff, it is also a requirement to enable many qualified young people who fail to enter the national universities due to remarkable low intakes, carry on their tertiary education. It should be accepted that the government which makes a very low expenditure on education (In some instances lower than other South Asian countries) is unable to ensure the tertiary education in national universities for all who qualified in the A/L examination. Considering that aspect making joint efforts with the private sector to provide opportunities for those interested to continue their higher education is commendable. That is due to the fact that tertiary education for a significant part of the population is essential in a knowledge economy where human resource is a key player.

Similarly partnership with the private sector to address the demand for higher education will definitely be a solution to the problem in two ways. On one hand it may help retain a huge sum of money that is drained out of the country on overseas education and on the other hand it can provide study opportunities to those who cannot afford overseas education at a reasonable rate within the country. In addition, the extended opportunities for a quality higher education

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especially due to the private sector involvement would definitely ensure the ability of our labor to match the standards expected in the global market.

Taking further measures to introduce and popularize vocational training among school leavers is yet another requirement to develop the level of skilled human capital in the country. As vocational training is completely oriented to skill development, it is a better solution to relieve pressure of unemployment in the country while producing skilled labour which is in demand in the labour market. It is also evident that investment in promoting vocational training fetches multiple advantages. For example, investment in vocational training may work as an investment in alleviating the possible youth unrest which may threaten the social stability due to unemployment.

In the attempt of promoting vocational training, further to introducing courses in demand in the global market, attention should also be paid to take these centers as well as courses beyond main cities to rural areas as well to make it more accessible and beneficial to students.

Another factor which makes a huge impact to dry up a country of quality intellectuals and skilled people is brain drain. This may happen due to many reasons such as the interest of higher income and better life standards, absence of justice and fair play, absence of social and political security as well as the want of quality education for the children. Introducing and implementing of required reforms in education while trying to establish a trouble free, business friendly peaceful environment and a just society which ensures the rule of law are the necessities to halt this situation. However, Sri Lanka should at any cost arrest this growing trend of brain drain, as a developing country Sri Lanka cannot afford to lose its best human resource.

Investment in the field of Science and Technology is also imperative to develop the level of human capital in a society. High exposure to new technology broadens the knowledge as well as the skills of the people while accelerating the economic development. For example, especially in today's knowledge-based world, Information and communication technology (ICT) plays a central role in economic growth and productivity. It has been estimated that an increase of 10 mobile users per 100 people can boost GDP growth by almost 1 percent. One percent increase in the number of internet users can boost GDP growth by 4.3 percent according to the World Bank Report- ([w.w.w.worldbank.org-2008](http://w.w.w.worldbank.org-2008)). As a result, it is understood that investment in this sphere is essential. The best way to encourage a high quality and low cost network to develop is by establishing

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liberal regulatory structures that allow for competition and private sector participation.

Finally, though Sri Lanka boasts of a high standard of basic human development record, country also records a considerably high percentage of underweight children amounting to 30% among those of less than five years. Similarly around 21 % of the children and 30% of mothers are suffering from anemia. This situation of poor nutrition among those crucial for the future of a country, may definitely lead to creating generations with low mental capacity as well as poor physical vigor, resulting in huge damage to the country in many aspects. As a result, it is very important that the government takes urgent action to rectify the situation.

### **Conclusion**

Human capital and its formation refers to the process of labour force acquiring and increasing the skills, education and experience which are critical especially for the economic development of the country. Sri Lanka, though over the years has been able to acquire and sustain a very satisfactory overall basic human development level for a developing country, its level of human capital obviously requires much concern for improvement. In a world order which recognizes what is detrimental to development of an economy is nothing else but knowledge, human capital formation should grow at a higher rate than the economic growth and the growth of labour force. In the particular process of formation of human capital, undoubtedly the foundation is the country's education. As a result, appropriate changes are urgent while paying prompt attention to the other priorities as well such as right investment in R&D and S&T which help infuse the skills and knowledge in the work force. Skilled human resources plus the rest of the pillars of the Knowledge Economy such as Business Environment, Information Infrastructure and an innovation system eventually would ensure an edge over other countries in the ever increasing global competition to actualize the dream of becoming the miracle of Asia.

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