

## HUMAN CAPITAL DEVELOPMENT IN SOUTH ASIA: REALIZING A QUALITATIVE DEMOGRAPHIC DIVIDEND

*“Young people have enormous potential to drive growth. They are the activists, innovators, leaders and workers of the future”*

Bill and Melinda Gates Foundation (2018 Goalkeepers Data Report)

**Anjali Taneja**

*Research Scholar completing her doctorate from Centre for South Asian Studies, School of International Studies, Jawaharlal Nehru University, New Delhi, E-mail: [eco84anj@gmail.com](mailto:eco84anj@gmail.com)*

**Abstract:** South Asia region is undergoing rapid demographic changes over the last few decades. The countries in the region are experiencing an age structure transition by which high fertility and mortality rates are replaced by low ones. For instance, David E. Bloom in his research has indicated that a rising working age to non-working age ratio not only generates an opportunity to reap a demographic dividend but also augurs well for regional economic growth. Moreover, he has emphasized that if South Asia has to capitalize on the high share of working age people in the population, it will have to ensure that those people are well educated, trained and equipped in the skills demanded by the labor market.

While the growing reserve of human capital is certainly a good indicator for development, South Asia has not been able to capitalize on this indicator effectively in order to realize a qualitative demographic dividend. Neither has the region utilized its manpower in spearheading the region's growth and development.

On the basis of emerging theoretical underpinnings on the subject, this paper aims to examine existing challenges and suggest measures for progressive development of human capital. It proposes to enhance investments in South Asia's young demographics and working age population to realise a favourable demographic dividend that in turn enables all round development of the region. The views are complemented with existing data and studies which support such analysis.

**Key words:** demographic dividend, education, health, human capital, human capital development, investment, skills development, South Asia

### I. INTRODUCTION

South Asia's shifting age structure over the last decade has finally brought policy options to crossroads. The region has been experiencing a rapid fall in infant mortality rates, growing life expectancies at birth, increasing working age population and thereby rising inverse dependency ratios. In other words, demographics of the region is building up a sizeable proportion of human capital that is contributing significantly to South Asia's wealth.

Latest statistics on this subject confirms such findings. According to World Bank (2018), while at the global level, human capital (measured as the value of earnings over a person's lifetime) accounts for two-thirds of the global wealth, this form of capital has accounted for nearly 51 percent of the total wealth of the South Asia region - the highest proportion, followed by produced and natural capital at 26 percent and 25 percent, respectively. Infact, South Asia has also witnessed the highest rate of growth in human capital per capita globally, at 4 percent between 1995 and 2014. It is also projected

that this region's share of working - age will continue to rise until 2040, have more working - age people than any other sub-region in the world, and that the majority surge would be contributed by India (UNDP, 2017).

Therefore, the current demographic situation is creating a favourable demographic window of opportunity in the region, which remains to be invested. As Bloom (2011) rightly pointed out that changes in the age structure of the population or rising proportions of working age population create a potential for faster economic growth - a phenomenon referred to as the demographic dividend. In the context of South Asia, there is an urgent need to invest in young people or in other words, the emerging human capital reserve; it has the potential to play an extremely important role in shaping the region's economic development in future.

This paper shall examine and explore the possibility of expanding investments in human capital of South Asia region so as to capitalize on the emerging potential of favourable demographics and realize a qualitative demographic dividend from its development and advancement.

## II. INVESTMENT IN HUMAN CAPITAL: LITERATURE REVIEW

Human capital as an embodiment of knowledge and skills was first emphasized by Theodore W. Schultz in his theory of human capital. Schultz (1961) argues that the increase in national output of the western countries was on account of the 'deliberate investment' in human capital. He also underlines the direct link between an increase in such investments (primarily through knowledge and skills enhancement of the work force) and the rise in the earnings of the workers.

New growth theories explain that the accumulation of human capital promotes economic growth over the long run (Lucas 1988, Romer 1990, Benhabib and Spiegel, 1994). Infact Lucas (1988) in his model suggests positive externalities related to the accumulation of human capital viz. knowledge. He reinforces the demand of 'skilled' human capital that can contribute towards increasing total factor productivity and earnings of labour. This in turn,

increases the labor force's capacity to absorb and adapt existing technologies and subsequently improve the country's ability to innovate and develop new technologies, products and processes and thereby driving economic growth. (Bosworth and Collins 2003, Klenow and Rodriguez-Clare 1997, Mankiw *et. al.* 1992, and Romer 1986 and 1990).

A growing body of literature also has established the positive impact of human capital and its development on productivity, technological adaptation and innovation globally. For instance, Lee (2001) found out that the stock of human capital in developing countries pursuing higher levels of education and training determine the development of ICT industry.

Moreover, human resource is also linked with the flow of foreign direct investment (FDI). According to Borensztein *et al.* (1998), human capital stock interacts with inflows of foreign technology embodied foreign direct investment (FDI), and thereby contributes to technology growth in developing countries. Moreover, such empirical studies have concluded that FDI contributes significantly to growth in productivity when the economy satisfies a minimum threshold stock of educated workers (Borensztein *et al.* 1998, Xu 2000).

According to Fleisher *et.al.* (2010), the regional growth patterns observed in People's Republic of China have been related to regional differences in human capital, among other things. They found out that human capital positively impacts output and growth in productivity across provinces through direct and indirect process. An example of a direct process could be innovation activities carried out domestically and an example of an indirect process could be the spillover impact on total factor productivity. They also found out that while infrastructure investment generates higher returns in developed regions, investment in human capital significantly contributes in higher returns especially in the less developed regions.

Collins (2007) showed that, of the growth in output per worker at nearly 2.4 percent in South Asian economies (Bangladesh, India and Sri Lanka) over the time period 1960 - 2003, education accounted for over 0.3 percentage points for India and Sri Lanka and 0.2 percentage points for Bangladesh. According to ADB (2017), the increase

in educational attainment of about 0.3 percentage points per year can make sizable differences in the living standards - it could lead to about a 10 percent increase in GDP per worker or per capita income of about 10 percent, besides the likely impact of education on physical capital accumulation and growth in total factor productivity (TFP).

Similarly, empirical estimates (of cross country data from 1970 to 2007) undertaken by Park (2012) confirm that a 1 year increase in average years of schooling leads to an increase in growth in total factor productivity by about 0.3 percentage points per year. Therefore, empirical results confirm that human capital and investment in research and development have significant and positive effects on growth in TFP. According to ADB (2017), in order to promote technological progress, quantity and quality of education must be improved and investments in technology imports and innovation should be encouraged.

While there are some critics of education (such as Arrow, 1973; Stiglitz, 1975; Wiles, 1974) - Arrow (1973), for instance, argued that education, especially higher education, has no inherent social and cognitive value; it rather serves as a screening device in that it sorts out individuals with differing abilities and that professional schools impart real skills valued in the market - literature on this subject has established the significant role of skills development and training in the development of human capital and its impact on economic growth (Barro, 1991; Barro and Sala-i-Martin, 2004; Bloom, 2011; Bloom and Williamson, 1998; Dutz and O'Connell, 2013; Krueger and Lindahl, 2001; Hanushek and Woessmann, 2008a & 2008b; Mankiw *et al.*, 1992; Temple and Woessmann, 2006). In Sri Lanka, for instance Dutz and O'Connell (2013) concluded that the availability of skills among the work force has a strong positive relationship with productivity and innovation, both within and across companies. They found out that output per worker was three times higher within a cluster of firms if all of them train workers than otherwise.

Similarly, the latest report of Bill and Melinda Gates Foundation (2018) has reiterated the need for investment in health and education for human capital development. It reinforces investment in human capital as a significant

contributor to growth in per capita GDP between countries. Infact, human capital has been defined in the report as the sum total of the health, knowledge and skills of the population.

Studies have shown that test scores on international assessments such as the Third International Mathematics and Science Study and the Programme for International Student Assessment (PISA), International Adult Literacy Survey (IALS), the Adult Literacy and Life Skills Survey, Programme for the International Assessment of Adult Competencies (PIAAC), are all positively related to economic growth (Hanushek and Woessman 2008, Hanushek and Kimko, 2000 and Hanushek and Woessman, 2012). For instance, the estimates undertaken by Hanushek and Kimko (2000) revealed that a 1 standard deviation increase in student's test scores on international assessments of literacy and mathematics is associated with a 2 percent increase in annual growth of GDP per capita. Similarly, Hanushek *et al.* (2015) inferred from their analysis that cognitive skills have a strong positive impact on the earnings of an individual.

An analysis undertaken by ADB (2017) using PIAAC data for the Republic of Korea has confirmed the instrumental role of schooling and on-the-job training on enhancing labour productivity and wage earnings. According to ADB, on top of formal schooling, on-the-job training and prior work experience improves skills of workers entering the labor markets. Point estimates indicate that 1-year experience has the effect on skills of work force of nearly 5-10 percent which is equivalent to the impact of 1 year's formal schooling. Similarly, Konings and Vanormelingen (2015) empirically deduced that the marginal product of a trained worker in Belgium, was on an average 23 percent higher than that of an untrained, across firms.

Investment in human capital can also have a significant impact on the reduction of poverty especially in the developing countries. Education, skills development and their implications for a poor person in finding a suitable employment are key factors for inclusive growth and sharing its proceeds widely. According to ADB (2017), the growth in labor income in Bangladesh during the period 2000-2010 and Nepal (during 1996-2003) for instance, accounted for over half of the reduction in their

respective levels of poverty. In Sri Lanka, during the period 2002-2009, human capital investment led to over two-fifths reduction in the country's poverty levels.

Therefore, an extensive body of literature has emphasized over the need for investment in human capital as a vital ingredient for economic growth and development.

### III. HUMAN CAPITAL DEVELOPMENT IN SOUTH ASIA: THE MISSING QUALITY LINKS

South Asia's demographic transition has been vital in its transformation and development. Infact, human capital has been actively contributing towards the economic growth of South Asian economies, besides physical capital and technology. According to ADB (2017), the estimates of growth accounting between 1981 and 2010 suggest that human capital contributed directly as a productive input

of about 22 percent to annual growth in GDP per capita per worker in India, around 21 percent in Bangladesh and 16 percent in Sri Lanka.

Globally, HDI values have been rising across all regions and human development groups. However, the development rates vary significantly. Interestingly, South Asia was the fastest growing region over the period 1990–2017. The region reported a growth of over 45 percent. This was followed East Asia and the Pacific (which was at nearly 42 percent according to UNDP, 2018) and Sub-Saharan Africa (at 35 percent according to UNDP, 2018). However, South Asia does not portray an impressive picture when it comes to Inequality - adjusted HDI (IHDI)<sup>1</sup>, Gender Development Index (GDI)<sup>2</sup>, Gender Inequality Index (GII)<sup>3</sup> or Multidimensional Poverty Index (MPI)<sup>4</sup>.

A comparison of the various composite indices (values) of human development from South Asia viz-a-viz other global regions is given in table 1 below.

**Table 1**  
**Human Development Indices (Values) from South Asia vis-a-vis other Regions**

| Regions/ Countries        | HDI Value    |              |              | Inequality -adjusted<br>HDI value | GDI<br>value | GII<br>value | MPI<br>value |
|---------------------------|--------------|--------------|--------------|-----------------------------------|--------------|--------------|--------------|
|                           | 1990         | 2000         | 2017         |                                   |              |              |              |
| Arab States               | 0.557        | 0.613        | 0.675        | 0.523                             | 0.855        | 0.531        | 0.098        |
| East Asia & Pacific       | 0.517        | 0.597        | 0.692        | 0.619                             | 0.957        | 0.312        | 0.025        |
| Europe & Central Asia     | 0.653        | 0.668        | 0.733        | 0.681                             | 0.956        | 0.270        | 0.009        |
| Latin America & Caribbean | 0.626        | 0.686        | 0.731        | 0.593                             | 0.977        | 0.386        | 0.042        |
| <b>South Asia</b>         | <b>0.439</b> | <b>0.503</b> | <b>0.584</b> | <b>0.471</b>                      | <b>0.837</b> | <b>0.515</b> | <b>0.143</b> |
| Sub-Saharan Arica         | 0.398        | 0.421        | 0.498        | 0.372                             | 0.893        | 0.569        | 0.317        |

Source: UNDP and OPHI (2018)

As reflected in the table, South Asia region has not fared quite well on various qualitative indices of human development. For instance, while the region has displayed impressive improvement in the HDI values over the period 1990 to 2017, it has a lower value, when adjusted for inequality. Infact, off the various indicators of IHDI, inequality in life expectancy (at 21.4 percent) and inequality in education (at 37.7 percent) are among the highest in the region viz-a-viz other global regions.

Moreover, the gender disparities in the South Asia region are miserably large. Sadly, among the developing

regions, gender gap is the widest in South Asia (16.3 percent - UNDP, 2018). As a result, GDI value is the lowest in the region in comparison to other global regions. Women empowerment (empowerment barriers belong to health and family planning, violence against girls and women and socio-economic empowerment) - which is a critical aspect of gender equality is lacking in the region. As a result, the GII value is among the highest in South Asia.

Similarly, while instances of multidimensional poverty are prevailing in all developing regions of the world, they

are particularly acute in South Asia besides Sub Saharan Africa. Nearly 41 percent of the world's poor live in the South Asia region, 39 percent of them being children which are considered as multidimensionally poor (OPHI, 2018).

Literature has emphasized over the increasingly important role played by education, skills development and training in ensuring human capital development. According to ADB (2017), raising the quality of education

and skills in its workforce can play a critical role in catching up to the level of human and economic development of the People's Republic of China, the Republic of Korea, and more successful Southeast Asian economies.

In case of South Asia, quality of human capital development has not been given the due attention it deserves. The table (table 2) below captures South Asia's relevant quality indicators on human development viz-a-viz other global regions.

**Table 2**  
**Quality of Human Development in South Asia viz-a-viz Other Regions (indicators)**

| Regions                         | Quality of health                   |                     |               | Quality of education                |  |                         | Quality of standard of living               |  |   |
|---------------------------------|-------------------------------------|---------------------|---------------|-------------------------------------|--|-------------------------|---|--|---|
|                                 | Lost health expectancy <sup>5</sup> | Physicians          | Hospital beds | Pupil-teacher ratio, primary school | Primary school teachers trained to teach | Vulnerable employment   | Rural population with access to electricity | Population using improved drinking-water sources | Population using improved sanitation facilities |
|                                 | (%)                                 | (per 10,000 people) |               | (pupils per teacher)                | (%)                                      | (% of total employment) |   | (%)  |   |
|                                 | 2016                                | 2007-2017           | 2007-2014     | 2012-2017                           | 2009-2017                                | 2017                    | 2016  | 2015   | 2015  |
| Arab States                     | 13.6                                | 13.5                | 12            | 20                                  | 89                                       | 26.3                    | 78.9  | 87.1   | 81.2  |
| East Asia and the Pacific       | 10.5                                | 27.5                | 31            | 17                                  | n.a.                                     | 37.9                    | 94.0  | 93.5   | 74.6  |
| Europe and Central Asia         | 12.0                                | 24.7                | 51            | 18                                  | n.a.                                     | 26.8                    | 100.0                                       | 95.0   | 95.8  |
| Latin America and the Caribbean | 11.6                                | 20.4                | 20            | 22                                  | n.a.                                     | 32.3                    | 90.5  | 96.2   | 85.6  |
| South Asia                      | 13.7                                | 7.8                 | 8             | 35                                  | 71                                       | 72.1                    | 79.8  | 88.4   | 48.3  |
| Sub-Saharan Africa              | 12.0                                | 1.9                 | 15            | 39                                  | 79                                       | 72.2                    | 23.2  | 57.7   | 28.1  |

Source: UNDP (2018)

As can be observed from the table, South Asia reflects a dismal picture on various input and output indicators measuring quality of human development. For instance, quality of health measured by access to physicians and hospital beds - both are lowest in the region in comparison to other global regions. As a result, the lost health expectancy is the highest. While life expectancy at birth (which is a reflection of quantity of development in human capital) might have improved for the region as whole over the years,

quality of health needs significant improvement in South Asia.

Similarly, when it comes to education and skills development, the quality of human capital development in South Asia is not quite satisfactory. Education and skills remain the binding constraint in South Asia (ADB, 2017). While, the region has made significant improvements in literacy rate, mean years of schooling, expected years of schooling, etc, over the years, the countries in the region still need to ensure that the time

spent in school necessarily translates into improved skills and capabilities. There are almost three times more primary school pupils per teacher in South Asia than in East Asia and Pacific and Europe and Central Asia (35 versus 17 and 18 respectively).

Taking a specific case of school completion rates in South Asia. Many students who enroll in schools drop out for one reason or the other. Figures reveal that the survival ratio of students in schools of South Asian countries is poor. For instance, Sabharwal (2013) has reported India's case that 7 in every 20 students who started school did not reach grade 10. Moreover, off the 26 million who took grade 10 exit examinations, nearly 10 million failed to clear them. Additionally, half of the 16 million who took the grade 12 examination, did not pass. Only 5 of the 8 million who successfully cleared grade 12 examinations were able to enroll for tertiary education. Similarly, in Bangladesh, only 66 out of 100 students survived to the last grade of primary education. (ADB, 2017).

Moreover, training and skills development of the teachers play an equally important role in enhancing the quality of education. Off the developing regions, South Asia has the lowest percentage of trained teachers averaging at 71 percent, compared to Sub-Saharan Africa and the Arab world.

Bhagwati and Paragariya (2013) have also underlined the poor quality of education across various levels as hindrance to the long-term growth process of the countries in South Asia. While the availability of competitive labor is an advantage for any country, the quality of education and training especially at higher level of education is vital for economies which are moving up the value chain and striving to generate sophisticated high - end products and services. Besides the lack of suitable infrastructure, the quality of teachers employed for rendering education and training services is low, particularly in rural areas. Reasons for such a dismal picture range from non existence of a suitable regulatory mechanism to oversee the entire recruitment process, lack of adequate facilities for training of the trainers and teachers, missing quantitative incentives (such as compensatory advantages) to enabling best practices in teaching and lack of supervision and scrutiny over the teaching performance of trainers and teachers.

Public investments in education have also been exorbitantly low in the region. From the year 2000 to 2009, the share of education in total government expenditure declined by at least 1.5 percentage points in Nepal and 5 percentage points in India (ADB, 2017). In fact the share of government expenditures on education and health, in India and Bangladesh, as a percentage of GDP, have been hovering between 2 to 4 percent since 1991 (World Bank, 2018).

While the instances of unemployment have reduced in the region with rising levels of economic growth and creation of jobs gradually, the earnings or the wage structure of the workforce is poor and working poverty is rampant in the region. For instance, in the background of the fact that agriculture sector continues to remain the largest employer among the three broad sectors – agriculture, industry, and services, in most of South Asia, it is observed that a huge proportion of the work-force is engaged in low-skilled jobs and earning low wages.

As a result, it is not surprising to note that 24 percent of the working population in South Asia earns less than \$1.25 per day. Nearly 61 percent earns less than \$2 a day. In countries like Afghanistan, Bangladesh, Nepal, and Pakistan, over 80 percent of the working people earn less than \$4 daily. While the size of middle class earning between \$4 and \$13 a day is rising in India, Bhutan, Maldives, and Sri Lanka, it is still small in other parts of the region (UNDP, 2016).

At the same time, the instances of vulnerable employment<sup>6</sup> are also quite high in South Asia. Notwithstanding the fact that vulnerable employment (as a percentage of total employment) has reduced in the region over the years (from nearly 80 percent in 1991 to 73 percent in 2017), it still continues to be among the highest in South Asia, compared to other regions globally (refer table 2). One of the primary causes of such high levels of vulnerability is the existence of a large informal sector in the region.

Therefore, rendering qualitative education and skills development services still remain a challenge. Addressing these challenges can have implications on increasing the regional productivity and maintaining the growth momentum of South Asia.

#### **IV. SHAPING THE FUTURE OF HUMAN CAPITAL: SUGGESTIONS**

The age structure transition in South Asia has created a 'window of opportunity' for realizing potential demographic dividend. Naveenatham and Dharmalingam (2012) have emphasized three ways to reap such dividends, namely by (i) making the available labor force productively employed to raise Gross Domestic Product (GDP); (ii) directing accumulated wealth and savings of households into productive investments as a result of the decline in fertility ratios, and (iii) generating high-quality human capital by greater public spending on education and health. Taking a clue from such theoretical underpinnings, it is imperative for the South Asian region to undertake adequate measures for enhancing investments in its emerging human capital by diverting resources towards improving the quality of human capital rather than quantity, more clearly termed as the 'quantity-quality trade-offs'.

The first step towards realizing potential demographic dividend is to ensure that the economic growth in the region is able to create more and skill-oriented jobs. For instance, considering the agrarian setup of the South Asian economies, agriculture sector still absorbs nearly half of the labor force in the region. Therefore, it is imperative to reach out to the bottom of the pyramid and establish skills development linkages at the grass-roots level.

This could be carried out by encouraging farmers to participate in self-employment activities and projects-based learning, on the one hand; and on the other hand, by facilitating vocational education and skills development of school children in rural areas through distance learning program with the help of ICT. Useful lessons can be drawn from the skills development programs carried out in some of the Southeast Asian agrarian economies such as Thailand (Agriculture Education for Life Program) and Cambodia (Giving Online Access to Learning – GOAL).

At the same time, there is a need to improve the quality of skills development systems to meet the standards of industry and job market. This not only requires a market demand-oriented training system but

also appropriate synergies between the academia and industry. According to ADB (2017), encouraging greater partnership between educators and employers to facilitate joint development of curriculum standards, internships, workforce exchange as well as financing, is a promising way toward narrowing the gap between supply and demand for skills.

Moreover, the internship programs of the employers can be integrated with the curriculum followed at secondary and tertiary levels of education to enable greater number of youth graduating with employable skills. At the same time, on-the-job competency based training and vocational qualification frameworks are useful instruments to establish appropriate quality standards in the workplace.

Lessons can be drawn from developed countries across the globe such as Germany and the United Kingdom, where education and training has improved the quality and quantity of youth employment particularly. For instance, Germany has introduced a 'Skills Initiative' to bring together German businesses and education and training providing institutions of the country, with the aim of developing training programs best suited to businesses' needs. There is an active involvement of employers in the education process of the country by running Experiential Learning Courses (ELC) for the youth which involve a mix of classroom and practical learnings. Such initiatives ensure that the trainings of youth and labor force are highly attuned to the needs of the job market. Moreover, the youth are encouraged to participate in such programs by offering them incentives in the form of education scholarships, monthly stipend, etc.

Such a model could be used as a useful benchmark to boost the quality of training and skills development systems in South Asia so as to mitigate skills demand - supply mismatches. Simultaneously, the South Asian countries could explore joint partnerships with such developed countries in specialized projects to enable technology transfer in the field. For instance, India has signed Memorandums of Understanding (MoUs) with various stakeholder agencies from the government, industry and civil society of the developed countries such as the UK, Germany, Australia, etc. to partner and adapt

their best practices in skills development – skills training, training of the trainers, and establishment of centers of excellence across the country.

The delivery of good quality education and training also requires an upgrading of infrastructure and facilities to improve learning outcomes in South Asia. According to ADB (2017), this region needs a transparent standard of recruitment and deployment of well-trained and qualified teachers who are able to help students develop cognitive and non-cognitive competencies. Simultaneously, periodic evaluation of the teachers' capacity to educate and train as well as students performance could help promote accountability and devise mechanisms to overcome the shortcomings.

In this respect, international assessment mechanisms introduced by OECD could be useful means to evaluate the progress of students and teachers. Teaching and Learning International Survey (TALIS) for instance, regularly assesses teachers' effectiveness in contributing towards education and skills development. Similarly, Trends in International Mathematics and Science Study (TIMSS) - is a global assessment test to evaluate the knowledge of students in the fields of Mathematics and Science. While India has been participating in such international assessment tests, other South Asia countries have not been taking part in such global evaluation systems. Therefore, investment in teachers' continuous professional development, periodic assessment of their capacity and student performance could help address the quality challenge.

All such efforts towards developing a skilled human capital resource in South Asia require an enabling policy framework and regular streams of funding. On one hand the governments of South Asian countries should strengthen their role and capacity for regulation, they should also actively encourage private sector participation in skills development in the region. Within a favourable regulatory environment, private training providers may be allowed to set their own fee levels and fields of concentration (ADB, 2017). Where private solutions are unviable to implement, governments and NGOs should cover up for the missing by encouraging public private partnerships in skills and training.

Parallely, the social spending on education and health could be effectively managed in the region and strategic investments in such sectors should be encouraged, for instance, by reallocating funds from one stream of projects to another depending upon the requirement and stage of development. In the mid-1960s, the Government of the Republic of Korea invested funds in higher education and skills development, which were released due to falling school enrolment rates (on account of country's declining birth rate), in order to equip the growing working-age population with marketable skills.

Apart from reallocation of the existing resources, public and the private sectors should be encouraged to leverage their own resources for greater financing and implementing cost-sharing mechanisms to support higher education and training. Affordable and effective mechanisms for financing quality improvements, such as competitive financing, training vouchers, a training fund and training levies, are essential for upgrading and expanding training and skills development (ADB, 2017).

It is imperative that the countries of South Asia should formulate suitable regulatory mechanisms governing mandatory implementation of skills development programs. In this respect, some suitable lessons can be drawn from East Asian countries.

For instance in People's Republic of China, vocational education forms an integral part of the educational programs of China which mandates, through the Education Law (1986), nine years of compulsory education including three years of vocational training. The law underlines the roles and responsibilities of the local government, industry/private participation and the vocational training institutes offering skill development programs in the country. It also specifies the clear functions and responsibilities of the government bodies such as Ministry of Human Resources and Social Security and Ministry of Education in ensuring the targeted vocational training practices to be fulfilled. Infact, the funding of the vocational education and training mechanism in the country is also decentralised with the largest responsibility of fund generation left to the local governments of the various cities and districts where such initiatives are introduced. Similarly, Republic of Korea also has in place a Vocational Training Law.



The countries of South Asia can also consider along similar lines of formulating national legal mechanisms governing vocational training practices in their respective countries. India is now exploring the possibility of formulating such a law.

Finally, the policy makers of South Asia should also implement sound policies directed towards ensuring reverse brain drain. According to UNDP (2017), one of the ways to prevent brain drain is for countries in the region to diversify their economies through cultivation of new domestic businesses which involve local skills. For instance, the regional countries could explore the possibility of leveraging local skills through deepening global value chains. Such coordinated networks do not necessitate the need to produce finished goods to promote foreign trade value and volumes. Instead, production of intermediate goods or semi-finished goods or parts are encouraged in some countries for assembly into complete products in others. In this regard, leveraging local expertise based on domestic labor market skills and available technology could further deepen production networks regionally within South Asia and with the global world.

## V. CONCLUSION

Harbison (1973) said, ‘‘Human resources constitute the ultimate basis for the wealth of nations. Capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organization, and carry forward national development. Clearly, a country which is unable to develop the skills and knowledge of its people and utilize them effectively in the national economy will be unable to develop anything else’’.

South Asia’s capability to maximize a demographic dividend would largely depend on its ability to cultivate and develop the skills of its emerging human resource in order to mitigate the demand and supply mismatches of the job market, ensure well being of its youth and invest actively in the provision of qualitative skill development initiatives.

Bloom (2011) in their study argue that existing skills levels are far from adequate in South Asia. ‘‘If the

governments are to capitalize on the high share of working-age people in the population, they will have to ensure that those people are healthy, well educated, and well trained in the skills demanded by the labour market’’. Furthermore, they add, ‘‘ the demographic dividend has not been enjoyed to an appreciable extent, because it has been choked off by a non-enabling policy environment’’. Therefore a suitable policy framework combined with various institutional mechanisms should be developed to enable the realization of a qualitative human capital dividend in the region.

All this requires bold commitments and active coordination among all relevant stakeholders from governments, businesses, civil society and non - government institutions in South Asia. Effective and appropriate engagement of media in the region would play an equally vital role in promotion and dissemination of regional policies and institutional practices governing human capital development. At the same time it will help in reducing the existing trust deficit among the countries of the region.

In a nutshell, the need of the hour is the expansion, investment and upgrading of South Asia’s human capital so as to ensure that the region is able to generate a sizeable demographic dividend, that ensures the growth in employment, productivity and incomes of its people.

## NOTES

1. IHDI has been defined by UNDP as the HDI value adjusted for inequalities in the three basic dimensions of human development - longevity, education and income per capita. In other words, it measures HDI according to the extent of inequality. The IHDI value can be interpreted as the level of human development accounted for the inequality.
2. GDI measures disparities on the HDI by gender. The closer the ratio is to 1, the smaller the gap between women and men.
3. GII measures gender inequality using three dimensions: reproductive health, empowerment and the labour market. A low value of GII indicates low level of inequality between women and men, and vice-versa.
4. MPI measures the extent of deprivations that people in developing countries face in their health, education and living standards.

5. Lost Health Expectancy is the relative difference between life expectancy and healthy life expectancy, expressed as a percentage of life expectancy at birth (UNDP, 2018).
6. percentage of employed people engaged as unpaid family workers and own account workers. In other words, those employed people that have a lower likelihood of having formal work arrangements.

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