IOSR Journal Of Humanities And Social Science (IOSR-JHSS)
Volume 21, Issue 6, Ver. 4 (June. 2016) PP 55-64
e-ISSN: 2279-0837, p-ISSN: 2279-0845.
www.iosrjournals.org

Demographic Dividend in India: A Conundrum

Arushi Varma

An emphasis on the role of Education and Skill Development as opportunities and solutions

ABSTRACT:-Demographic dividend refers to a period when fertility rates fall due to significant reductions in child and infant mortality rates thereby reducing the proportion of non-productive dependent population. This fall is often accompanied by an extension of average life expectancy that increases the proportion of the population that is in the working age-group. As more and more members of a family enter into the workforce and start earning, the expenditure of the household on the dependent population decreases as a proportion of the total income which increases savings. The increase in consumption and changes in tastes and preferences increases investment and the need for innovation and technology improvement. It is prophesied that around 60% of India's population will be in the working age group by 2020. This can reap a rich demographic dividend, but without a clear road map, it could turn horribly wrong. A clear vision is a key first step andunder the National Skill Development Policy (2009) the government's target to skill and employ 500 million people by 2022 is a step in the right direction. However, India has been facing difficulty in the realization of demographic dividend. This paper discusses challenges faced in India with an emphasis on Education and Skill Development. It looks into schemes carried out and organizations involved in improving the level of adeptness and skill development of individuals and the extent to which they have been successful. The paper conducts a primary research based on a perceptual survey of a cross section of the society comprising of economists, industry persons and other knowledgeable persons to understand their views on"DemographicDividend". An attempt has been made to identify the challenges and opportunities and to seek remedial measures and recommendations regarding the same.

Key Words*:* *Demographic Dividend, Kremer's hypothesis, dependent population*

I. INTRODUCTION

Thomas Robert Malthus in his Essay on the Principle of Population (1798) believed that the productivity of agricultural land was fixed, and to use this factor of production to its full potential, positive (famines, increased mortality) and negative/ preventative (family planning, delaying age of marriage) checks would be carried out in order to provide maximum availability of food for individuals. It was essential that the growth of population be exceeded by the growth of food. However, he underestimated the ability of the people to adapt to environmental constraints and the role of innovation and technology. Two major revolutions in food production- the agricultural revolution in China carried throughout the Qing dynasty and animal husbandry and the enclosure movements in Europe provided incentives to develop own land, invest in new techniques of production changing the face of population dynamics.

Malthus's gloomy predictions of the "cycle of misery" were countered by Ester Boserup, who promoted the role of technological change in her ideas of "agricultural intensification" and "invention push agricultural change". She proposed a link between the development and adoption of new techniques of production and modern technologies with population growth, the latter having a stimulating effect on the former. The shortage of food experienced due to population accumulation led to the need for improving technologies and the consequent development of fertilizers, irrigation, tractors and ploughs. Julian Simon stated that population is the solution to resource scarcities and environmental problems since people and markets innovate. While these arguments revolved around the agricultural sector, with industrialisation and fast paced development of the service sector in India, it is important to view these arguments in the light of enhancing human capital and its role in making efficient use of the increased population.

Economist Michael Kremer (1993) claimed that population growth is a key driver of advancing economic prosperity. More people imply more scientists, inventors and engineers that contribute to innovation and technological progress. This leads to an improved standard of living with the country and its people transforming from being dependent to self-reliant. While this virtuous cycle may have been true for some economies, the suggested result in India seems ambiguous.

A Planning Commission Report (2008)estimated that only 10% of the workforce in India has undergone formal skill training as compared to 68% in the UK, 75% in Germany, 52% in USA, 80% in Japan

and 96% in South Korea. Despite having low dependency rates and a large proportion of population in the workforce, especially the youth, India has been unable to create suitable job opportunities, develop skill to participate in a competitive job market and improve the standard of living of the masses.

In the International Conference on Indian Economy in Delhi, Prime Minister Narendra Modi spoke about three essential components that will bring forth the development of India. He acknowledged how fortunate India is to have the combined forces of Democracy, Demography and Demand and with these by her side, development is inevitable. This paper is concerned with the second component in particular- Demography. Further, he said, "We should consider demographic institutions and demand as strengths and make policies keeping them in view". However, in the very same speech, he voiced concerns about therebeing a deficit in the vibrancy of demographic institutions.

II. REVIEW OF LITERATURE

According to the document on the framework of implementation of the National Mission for Skill Development (2015), "India currently faces a severe shortage of well-trained, skilled workers. Large sections of the educated workforce have little or no job skills, making them largely unemployable. Therefore, India must focus on scaling up skill training efforts to meet the demands of employers and drive economic growth."

The Pre-Budget Economic Survey (2013-14) stated that the proportion of working-age population in India is likely to increase from around 58 per cent in 2001 to more than 64 per cent by 2021, with a large number of young persons in the 20-35 age groups. India with a large and young population has a great demographic advantage. The average age of the 1.25 billion strong Indian population will be 29 years in 2020, even younger than China and the US.

Advocate KapilSibal, former HRD Minister (2012) at an educational summit said, "India is going to play a significant role in the years to come because the human resource is here. You have 400 million people under the age of 14 and when they grow up, you can imagine the unmatched workforce they will provide to the world. What we need to do is to empower them."

According to the Economic Survey (2011) for 2010-2011 tabled in the Parliament, reaping the demographic dividend needs a vision, a long-term plan, and bold decisions. It said that given the advantage of a young population, the realisation of the demographic dividend is a factor that calls for reforms in the education and health sector. The RTE Act must face no implementation deficit for it to work towards realising the demographic dividend.

III. OBJECTIVES OF THE STUDY

- ❖To studythe extent to which Kremer's hypothesis has been true for India by analysing the current scenario.
- ❖To look into the working of some organizations involved in skill development and making the youth employable and self-dependent
- ❖To conduct a primary research based on a survey of people from a cross section of the society to understand their views on demographic dividend.
- ❖To offer recommendations about possible means to spur economic growth and optimize this current stage of demographic dividend.

Is population growth a key driver of advancing economic prosperity?

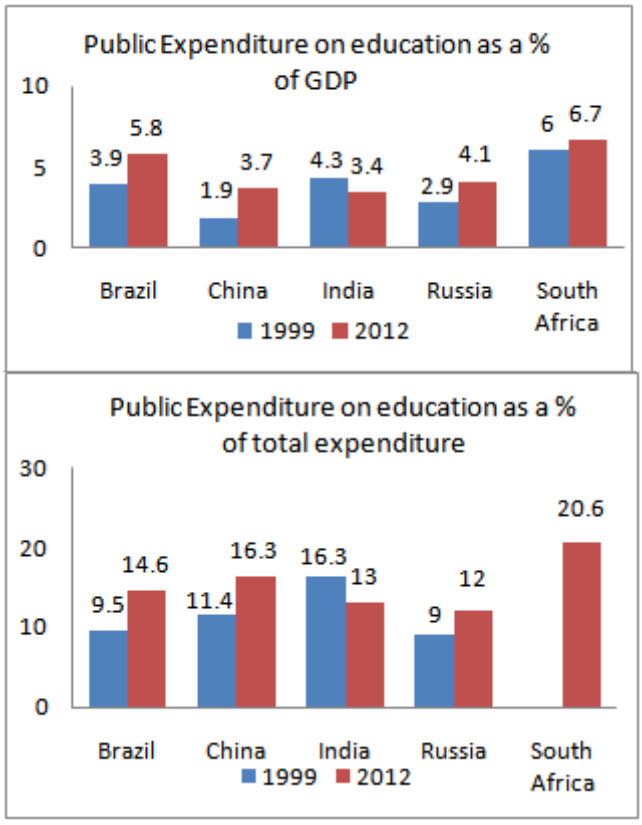
Michael Kremer was certain that population growth would be a key driver of advancing economic prosperity. Though the population of China is 100 million more than that of India, it still has an edge over India due to peculiar characteristics of China's economy, most notably the interventionist role of the government and its ability to implement things speedily. The Ministry of Education in China carries out a state-run system of public education. The World Bank Enterprise Surveys 2014 reveal that the percentage of firms offering formal training programmes for its permanent, full-time employees in India is just 35.9%, compared to China's 79.2%.There have been attempts made in China to make use of the large population by promoting education and skill development to the masses. Skill and knowledge are the driving forces of economic growth and social development of a country. In rapidly growing economies like India with a vast and ever-increasing population, with the corresponding increase in the population of scientists, engineers, and researchers, according to Kremer there should have been an inflow of ideas into the economy. Technological and production efficiencies should have been achieved on a greater scale than they are now. According to the India Skills Report 2015, "*For a nation like India, where the literacy rate has huge variation from one end of the country to another; and more*

than 90% of the workforce is part of unorganized sector, organizing the economy so that the available profits from a growing workforce get reinvested is the most daunting task ever, and the sub optimal quality of the workforce is something that increases the challenge associated with it by multiple levels"

In India,the broad picture shows a lack of highly-trained, quality labour and job skills contributing to poor demographic dividend realizations. A closer look implies various factors such as poor health which although obvious, play a major role in the poor performance of working population. The status of institutions in India regarding caste discrimination, gender inequalities, widening income gap between the rich and the poor, religious differences, inefficient and slow legal system- all contribute to the poor standard of living of the masses.

Economist PulapreBalakrishnan (2014) noted that there has been a decline in the relevance of agriculture in the economy in the past decade synonymous with a shift in the focus towards the industrial/manufacturing sector. The service sector has grown by leaps and bounds as is clear from the country's escalating service exports and the phenomenal progress of information technology. The wage differential between the rural and urban areas as pointed out by Arthur Lewis, carried forward by Todarro and Smith, has led to the migration of low skilled rural poor to urban areasin search for higher wages and the forming of the vast urban informal sector. Both the sectors-industrial and service require significantly different and often specialised skill sets, quite different from those desired in agriculture. This skill gap needs to be addressed through comprehensive efforts, at various levels and catering to different needs of the society and industry. To optimally use demographic dividend, skill development efforts have to be managed in a focused and coordinated manner.

Another major factor influencing the optimum utilization of demographic dividend is the basic level of quality education available to the masses. Cognitive abilities and understanding developed at a young age improve the grasping power of children at later stages. The level of primary education in India is fraught with poor enrolment rates and even worse attendance rates, especially for the female child despite the mid-day meal schemes and minimal levels of public expenditure on primary and secondary education. The following data shows a comparison of expenditure on education as a percentage of GDP and of the total expenditure in the BRICS countries (1999-2012).



*Source: UNESCO Institute for Statistics

The above data shows that the public expenditure in India has reduced over the decade from 4.3% to 3.4% of the

GDP. During the course of the same decade, other BRICS countries have increased public expenditure on education over the years, as a percentage of GDP as well as total expenditure. This issue will be taken up later on during the course of this discussion.

Organizations involved in skill development: Enhancing employability and self-dependence

Keeping in mind the prediction of Kremer that seems to have been fulfilled insufficiently in the context of India, there are certain organizations that are involved in improving the level of skill development of the masses. An effort has been made to make the population of India self-dependent and to utilize the demographic dividend to its full extent. The size of the Indian population can be seen as a boon, if organizations/ companies are successful in providing quality development and training to the masses.

National Skill Development Corporation (NSDC) is a first-of-its-kind Public Private Partnership (PPP) inIndia set up to facilitate the development and upgrading of the skills of the growing Indian workforce through **skill training programs**. The vast majorityof the unorganized sector does not possess the means to afford development workshops and training. NSDC supports skill development efforts by funding skill training and development programmes and engages in detailed research to discover skill gaps in the Indian workforce and developing accreditation norms.

National Skill Development Agency: Currently, skill development efforts are spread across approximately20 separate ministries, 35 State Governments and Union Territories and the private sector. The Office of the Advisor to the Prime Minister on PM's National Council on Skill Development has been set up with the mandate to:

- Develop a strategy for skill development at the national and state level.
- Map the gaps in the area of skill development and develop strategies to address the deficit.
- Identify new areas for employability and promote skill development in such sectors.
- Promote greater use of Information Communications Technology.
- Develop and implement an action plan for skill development to maximize job generation within the country and create human resources for global needs.

Under the ***National Skill Certification and Money Reward Scheme*** encouragement is given for skill development for youth by providing monetary rewards for successful completion of approved training programs. Specifically, the Scheme:

- Encourages standardization in the certification process and creating a registry of skills by aligning the training and certification to the needs of the country.
- Provides Monetary Awards for Skill Certification to boost employability and productivity of youth by incentivizing them for skill trainings.
- Rewards candidates undergoing skill training by authorized institutions at an average monetary reward of Rs. 10,000 per candidate.

This Scheme shall be implemented through Public-Private and Public-Public partnerships with NSDC. The monetary reward will be wholly funded by the Ministry ofFinance, Government of India, and will be affected through direct bank transfer to the beneficiaries' accounts. Appropriate consideration will be provided to the economically backward sections.

According to a press release on the 30th of May 2014, the University of Delhi had signed a landmark Memorandum of Understanding (MOU) with the NSDC. Under this MOU each year, approximately 60,000 students of each and every college of the University of Delhi being admitted each year for study under the Four Year Undergraduate Programme (FYUP) would be given in their second and third years the opportunity of acquiring special skills for jobs and entrepreneurships related to the knowledge in the sectors of: Banking, Financial Services and Insurance (BFSI); IT and IT Enabled Services (ITES); Health Care; Media and Entertainment; Tourism and Hospitality and Automotive Industry. 70% of all students under this programme would be assured of placement through NSDC for jobs or for becoming entrepreneurs. An additional MOU has been signed for skills based training under the Star Scheme of the NSDC for training students of the University of Delhi during the summer vacations. Upon successful completion the students shall be 'rewarded' with a refund plus a grant to be deposited directly into their bank accounts of students. While these kinds of initiatives might be helpful in the long run, students of the prestigious University of Delhi have relatively better chances of getting employed as compared to universities with lesser means as they have more opportunities by way of

companies/ firms coming to their campus itself for providing jobs. Such an initiative would show positive results if it is applied in a more inclusive manner, targeting universities the students of which genuinely face problems of poor training, lack of knowledge and confidence, and unpreparedness in looking for employment. It would be beneficial to extend such efforts to less privileged/ developed universities.

A primary research to understand views on demographic dividend:

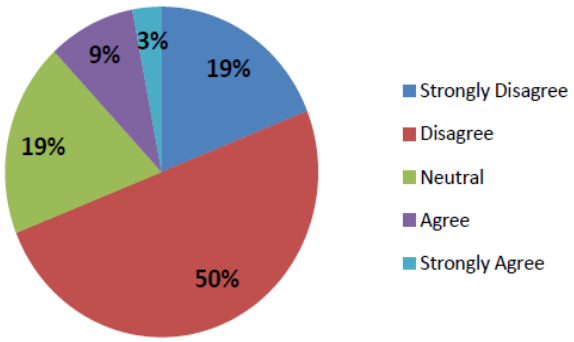
IV. RESEARCH METHODOLOGY

The research is based on a perceptual survey of a cross section of the society comprising of economists, industry persons and other knowledgeable persons to understand their views on "demographic dividend". A five point Likert Scale ranging from "Strongly disagree" to "Strongly agree" was developed to understand the views of people.

Sampling Unit: Economists, industry persons and other knowledgeable persons
Sample Size: 50
Sampling Technique: Convenience and Judgment Sampling
Research Instrument: Questionnaires and Interviews

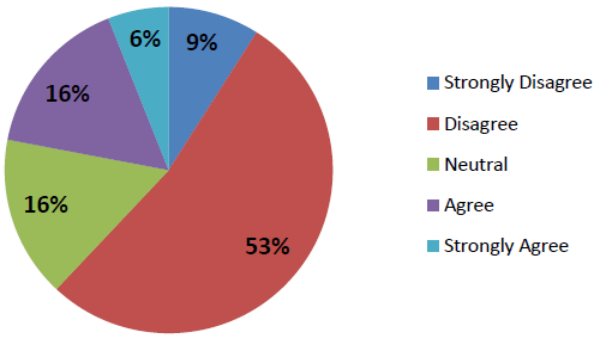
Analysis and Findings

1. Population growth is a key driver of advancing economic prosperity.



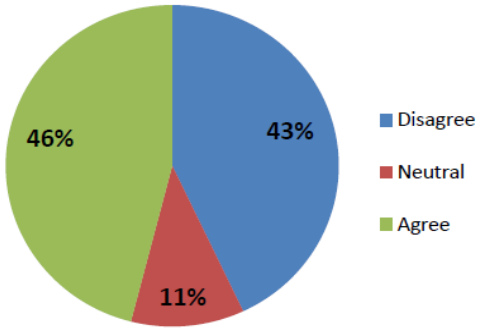
A very large proportion of the respondents disagree/strongly disagree (69%) that population leads to advancing economic prosperity as hypothesised by Kremer, while only 12% agree/ strongly agree with the same.

2. More people imply more scientists, inventors and engineers that contribute to innovation.



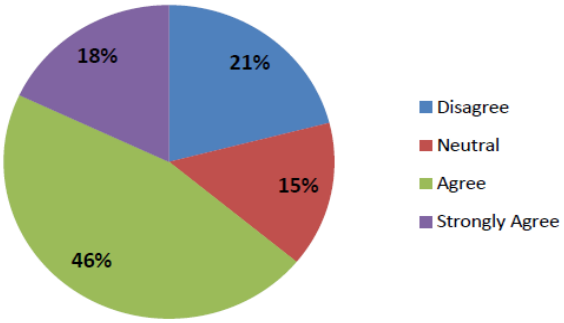
53% of respondents disagreed with the statement and only 22% strongly agreed/ agreed with it. 16% remained neutral.

3. High rate of innovations stemming from increasing population lead to greater technological progress.



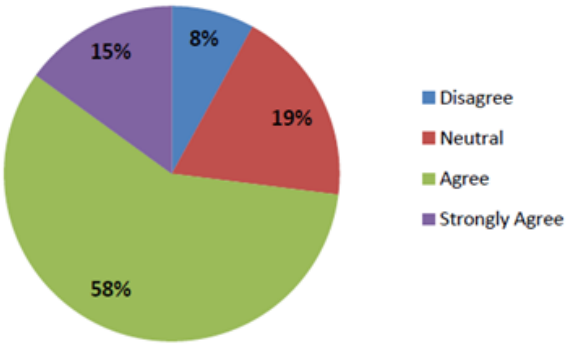
The responses are almost equally divided- 46% agree and 43% disagree that increasing population leading to high rate of innovations stems technological progress. 11% remain neutral.

4. The major reason for comparatively low standard of living in India is the lack of efforts to realise thedemographic dividend.



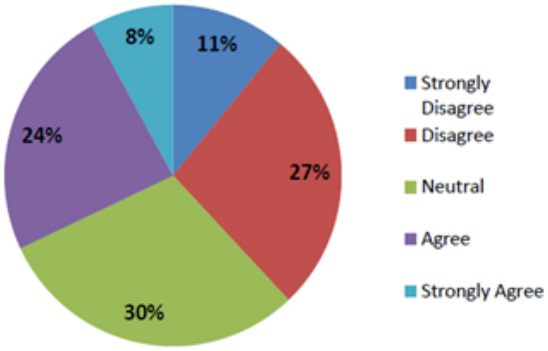
64% strongly agree/ agree with the statement while 21% disagree that low standard of living in India is only because of the lack of efforts to realize demographic dividend.

5. Policies should be made considering demographic institutionsand demand as strengths.



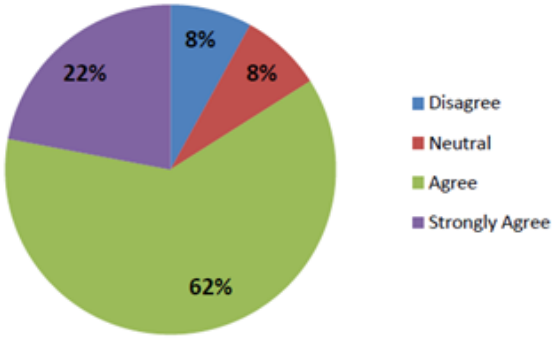
73% strongly agree/ agree that policies should be made considering demographic institutions and demand as strengths while 8% believe policies should focus on other issues. 19% remain neutral.

6. Higher is the population of a country the greater is the opportunity to transform the economy from a dependent to a self-sustained one.



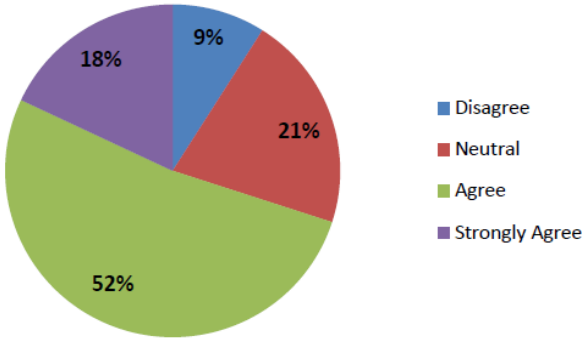
The proportion of people who disagree/strongly disagree with the statement (38%) is greater by only a small margin than the proportion of respondents who agree/strongly agree (32%) which is 2% greater than those who are neutral (30%).

7. Basic knowledge of computer skills and fluency in English provides people with an added advantage of getting jobs.



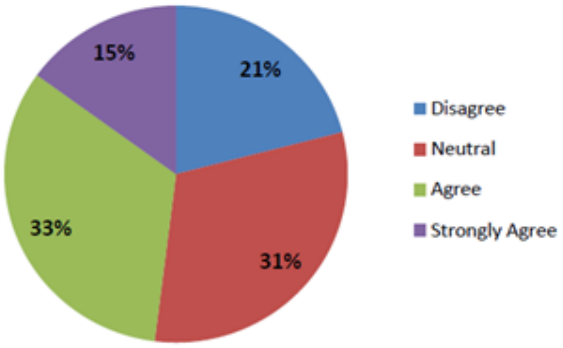
84% of the respondents believe that basic knowledge of computer skills and fluency in English provides people with an added advantage of getting jobs while 8% feel otherwise.

8. Policies should focus on family planning, channelling efforts towards reducing the large population.



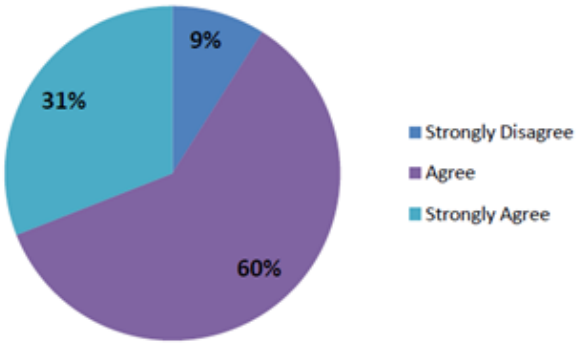
A large proportion (70%) of the respondents agrees/ strongly agrees that focus should be on family planning and population dynamics for reducing the population of India, whereas 9% of the respondents disagree with the viewpoint.

9. Expansion of primary education institutions is more important than funding higher and secondary schools and colleges to improve basic education levels.



While roughly 48% of respondents believe that emphasis should be on the primary education, 21% believe higher/ secondary education should be focussed on more. 31% remain neutral.

10. Colleges should conduct skill development workshops for students in different fields in order to get them better prepared for campus placements.



91% of respondents support the idea of skill development workshops for students in different fields whereas 9% strongly disagree with it.

V. INFERENCES

1. The pessimistic views in the above survey about population growth not being a key driver of economic prosperity indicate that it is possible that to some extent, Kremer's hypothesis might not have been true for India. According to the respondents, high population growth has not led to any significant increase in the number of scientists, researchers, engineers so as to improve technology and ideas to stimulate growth.

2. There is dissatisfaction about the high levels of population which is further substantiated by the widespread agreement of the respondents about bringing out more efficient family planning methods to reduce the population. However, it is acknowledged that non realization of demographic dividend caused because of the increased population in the working age group has led to comparatively low standard of living in India. It is imperative that policies are made by considering demographic dividend and demand as strengths.

3. As far as education is concerned, there needs to be an increased focus on both primary as well as higher/ secondary schools and colleges equally. Efforts should be made to not only increase the enrolment rates, but also the attendance rates.

4. With regard to skill development, fluency in English and basic technological (computer) skills, there is a general agreement on the need to improve the status of India in all these fields. Workshops are encouraged at the college level to ensure higher job opportunities for the students at campus placements. These workshops help in improving levels of confidence and ensure a sense of familiarity with the field of work the students wish to pursue in the future. It also helps them become more self-reliant and applying for jobs even outside college.

VI. RECOMMENDATIONS

- The most important route to follow is the improvement of the level of education in the country. 100% literacy must be targeted. The deficit is not just in size (primary education), but also in scope (secondary education). Education by rote should be done away with and learningof practical methods and concepts must be implemented. Projects, excursions, experiments, research work- the school curriculum should be inclusive of these. A strict watch must be kept on the conduction of exams and tests taken by the students to avoid cheating, in order to enable students to learn on their own accord. To keep pace with the increasing population, more number of primary schools must be opened but it is extremely important that the quality of the institute be tested and established. Otherwise, the country would boast of a high number of educational institutions without any improvements in the actual learning abilities and knowledge of the people. Higher education at the college and university level must be encouraged by way of incentives and scholarships.

- The **National Assessment and Accreditation Council** (**NAAC**) is an organization that assesses and accredits institutions of higher education in India. It was established in 1994 in response to recommendations of National Policy on Education (1986). The policy intent was to "address the issues of deterioration in quality of education". Currently out of 612 Universities in the country, only 172 of them have been accredited by NAAC. In 2010 a bill - ***NationalAccreditation Regulatory Authority for Higher Educational Institutions Bill*** had been introduced tomake it mandatory for every higher educational institution in the country to be accredited by an independent accreditation agency. The benefits of such initiatives can only be perceived and judged in the long run.

- It is of utmost importance to expand the mental horizon of the population especially those engaged in the workforce. Soft skills should be developed right at the nascent stages of development of children. Cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize relationships with other people prove profitable in the long run. Colleges should take an initiative to ensure their students are employment ready and willing to take the first step towards independence. Associations of universities and colleges (other than colleges with high employability like Delhi University) with NSDC to provide training and skill development workshops to graduates must be encouraged.

- Innovation and infrastructure will follow once good institutions and policies exist, not just in theory but also in implementation. Eradication of caste discrimination, gender inequalities, widening income gap between the rich and the poor, religious differences and a fast moving legal system should be aimed at and awareness must be created for the same. Steps should be taken no only to improve physical infrastructure (roads, bridges, canals, water supply etc.) but improvement of telecommunication facilities must be initiated which facilitates flow of good ideas, information and money while reducing transaction costs.

- Small and medium enterprises outnumber large companies by a wide margin and also employ many more people. SMEs are also said to be responsible for driving innovation and competition in many economic sectors. The products of SMEs must be supported by adequate marketing facilities so as to ensure their standing in the market and benefit the people involved in such enterprises.

The latest employment data for 2011-12 show that India's much-hyped demographic dividend has not yet arrived. The proportion of workers in the population rose slightly from 40% in 1980 to 43% in 2004-05, but is now down again to 40%.However, the demographic dividend has not vanished. It has merely been postponed, and mainly for an excellent reason. Over 300 million youngsters above the age of 15, above all females, are studying in schools and colleges rather than in the workforce. When they eventually join the workforce and start looking for jobs, they will be far better skilled than earlier expected.

REFERENCES

[1] P. Balakrishnan (2014)*A Macro Story: The Great Reversal*, Economic and Political Weekly
[2] G. Taneja (2014), "*Demographic Dividend: India's roadmap for skills development"*, The Economic Times
[3] Rukmini S (2013), *Demographic Dividend at its peak*, The Hindu
[4] V. Sharma (2014)"*Is demographic dividend turning into disaster for India?"*, Moneylife
[5] KS James (2008), "*Glorifying Malthus: Current Debate on Demographic Dividend in India"*, Economic and Political Weekly(Vol 43, No, 25, Pg 63-69)
[6] Department of Economic and Social Affairs of the United Nations Secretariat, *The World Population Situation in 2014*
[7] Economic Survey 2010-2011; 2013-2014
[8] NFHS Research Collaborators (2016) "*Demographic and Health trends in India* (2005-06 – 2015-16)",

Economic and Political Weekly, (Vol 51, Issue 14)
[9] World Population Review 2014
[10] A. Roychowdhury, CP Chandrashekar, J. Ghosh (2006), "*The Demographic Dividend and Young India's Economic Future"*, Economic and Political Weekly (Vol 49, Issue 49)
[11] National Assessment and Accreditation Council Website: *http://www.naac.gov.in*/ retrieved on 21th September 2014
[12] India Skills Report 2015, Wheebox
[13] Brics building education for the future (2014), "*Priorities for National Development and International Cooperation"*, UNESCO
[14] Kremer, Michael. 1993. "*Population Growth and Technological Change: One Million B.C. To 1990*". The Quarterly Journal of Economics 108 (3). Oxford University Press: 681–716.
[15] Aglicia P., "*Julian Simon and the "Limits to growth" Neo Malthusianism"*, The Electronic Journal of Sustainable Development.
[16] Ministry of Skill Development and Entrepreneurship Website: *http://www.skilldevelopment.gov.in/* retrieved on 4th September 2014
[17] National Skill Development Corporation Webstite: *http://nscsindia.org/AboutUs.aspx* retrieved on 4th September 2014
[18] *http://pmindia.gov.in/committeescouncils_details.php?nodeid=8* retrieved on 4th September 2014