# Skill Development: A Way to Leverage the Demographic Dividend in India

Sushendra Kumar Misra

Abstract -The world's population is ageing fast and it is estimated that the global population aged 65 and above shall reach to 1.3 billion by 2040, which will be more than double of 530 million in 2010. Rapidly ageing population shall result in severe labor shortage across in the global market. The world's largest economies like Germany, France and US are expected to suffer due to the acute shortage of skilled workers. According to a global study, presently India is one of the largest labor-surplus countries in terms of its working age group (15-64 years) populations worldwide. India is in demographic dividend phase and can generate skilled manpower for employment through effective use of vocational and skill development training. The present study is to examine how to create skilled labor force through effective use of schemes of Government of India, run by different ministries to facilitate its skill development mission target to train 500 million people by 2022.

Keywords- Demographic Dividend, Skill Development, Vocational Education, Employability.

# I. INTRODUCTION

In contrast to western countries where there is an increasing liability towards an ageing population, India has a rare 2-3 decades of window known as the "demographic dividend." The "demographic dividend" means that India has a higher proportion of population in the range of 20-65 years, i.e. working age population in the total population as compared to the other countries. As a result, India is having a low dependency ratio, which can provide a comparative cost advantage and competitiveness for the labour to the economy. <sup>1</sup>

DOI: 10.5176/2010-4804\_4.2.367

It is expected that this global ageing population will create a shortage of skilled workforce by about 56.7 million by 2020 ["Skill development and training," Planning commission (Government of India), 2008]. At the same time, the world's population is ageing fast. It is estimated that by 2040, the global population, aged 65 and above shall reach 1.3 billion. i.e. more than double of 530 million in 2010. This trend of rapidly ageing shall lead to huge labor shortage all across the globe. U.S., France and Germany are expected to suffer severely due to the acute shortage of skilled workers. Due to the high competition in the global world there is a rising trend of outsourcing work, India has a tremendous opportunity to become a global reservoir of skilled manpower, contributing to 28% of the graduate talent pool among 28 of the world's lowest-cost economies.

# A. Objectives of the study

The objectives of the skill development mission is to upgrade skill, provide knowledge and recognized qualification to get the access of global labor market and increase the productivity in organized and unorganized sector. The objective of this study is to understand the present skill development policy initiatives in India and find out the ways and means to produce world-class skilled manpower domestically through effective use of skill development schemes of Government of India.

# B. Research Methodology

Primary data was collected through personal interview with government officials and training providers. Secondary data collected through government policy documents, schemes, case studies, research papers &

documents of various international agencies like ILO, WB, OECD etc.

# II. LITERATURE REVIEW

The demographic dividend is a rare window of opportunity in India. However, this is a debatable issue that whether India is in a position to reap the benefits of this demographic dividend for the economic growth of the country.

A number of authors are of the view that this demographic dividend itself is not able to automatically lead to high economic growth if the policy environment is not suitable and conducive (Bloom et al 2011). However, (Aiyar & Mody, 2011) have reported that the India's high economic growth in the recent times is due to the demographic transition in the country. As per their study, the policy reforms are not that significant as compared to demographic dividend as far as the economic growth is concerned and hence they have estimated that this demographic dividend will lead India to further economic growth in the next decades.

Human capital is an important aspect of the demographic dividend while determining the economic growth (Chandrashekhar 2006). It is pointed out that there is huge shortfall of human capital in the country. Although there is swelling workforce in the country, this is a big challenge for India because there is a huge shortfall of educated, skilled and trained workforce. Since India is facing these shortages, the demographic dividend itself cannot lead to a high economic growth.

There is denying to the fact that demographic dividend has strong impact on the employment rate as well. If the adequate number of suitable jobs is not generated during the demographic dividend, there can be very high rates of unemployment or underemployment. Under such circumstances, it shall not be possible to absorb the swelling work force into the suitable jobs. Some studies have found out that India has a potential to achieve a higher rate of economic growth through productive employment of this swelling work force arising out of the demographic dividend (Ghani 2011). If the suitable employment and job opportunities are not created, the demographic dividend shall be a serious impediment in the economic growth.

Organizations across the world have recognized the importance of skilled manpower and the value it can provide despite being a little costlier. Skilled workers provide high value for money and initiate a ripple effect in the growth of a country's economy. The demand for unskilled labor has automatically begun to decline in the foreign market and the future belongs to skilled workers, preferably those who have multiple skills due to the pressures of bringing down the cost in order to remain competitive. This has resulted in large-scale migration of skilled labour in the recent past to better job markets.

The skilled workforce requirement is varying from industry to industry which reflects the skill gap mismatch between demand and supply side of the labour market. Education and training in specified area through skill development are very much relevant in domestic as well as global labour market to fulfill the need of skill workforce.

# A. Pathways to address the problem

India is a vast country having mixed economy in which there is a wide range and heterogeneity. Looking to the vast magnitude of the scope of the skill development schemes, it is not possible to have a "one size fit all" kind of approach for the solution. However, the skill development scheme needs to be well coordinated and properly dovetailed to have an effective and efficient mechanism to fulfill the requirement. The government of India is taking initiative to fill the existing skill gap through skill development mission in order to leverage its position to fulfill domestic and global requirement and at the same time fulfilling its domestic requirement of the skilled labor force. As per the study by the National Skill Development Corporation (NSDC), in the domestic market incremental requirement of skilled manpower across various sectors in India would be 347 million by the year 2022.

# III. POLICY ANALYSIS AND DISCUSSIONS

As India is progressively moving towards a "knowledge economy," it is highly important for its work force to acquire and then upgrade the skills that are suitable for the upcoming economic opportunities. This will transform to its large labor pool into a skilled workforce, which will be highly adaptable, highly flexible

and analytical to the global needs and environment. Skill acquisition takes place through formal and informal. The existing skill development schemes are almost leading us to nowhere because of not any significant outcome. Hence, through policy analysis, we must arrive at an appropriate scheme.

# A. Policy Alternative to Status Quo

Vocational training is being imparting by seventeen ministries and department of government. The departments are working at national level and they are also able to reach small part of the country to impart training. As per the report of planning commission, 1244 polytechnics, 415 diploma in pharmacy, 25 in architecture and 63 in hotel management institution are offering various courses with a capacity of 3 lakhs students under the MHRD. There are 10228 ITI's imparting engineering and non-engineering courses with a capacity of 7.42 lakhs students. In order to provide autonomy academically and financially, the government launched a scheme for up gradation of the existing ITI's. The government also initiated skill-building activities in school to impart training and make them marketable. These school offering various courses of two-year duration in the field of agriculture, engineering and commerce.

The skill formation in unorganized sector takes place through family occupations, on the work training and there is no linkage with formal education and certification. There are several alternate schemes may fulfill the needs of training, education and certification in unorganized sector through informal training like Jan Shiksha Abhiyan, National Rural livelihood Mission, PMRY, KVK, SJSRY etc. but the outcome is not appreciable and encouraging.

# B. Skill Development Initiatives

The Government has formulated a National Policy on Skill Development, which envisages the exponential expansion of the current capacity for skill development in the country to facilitate its target of imparting requisite skills to 500 million people by 2022.

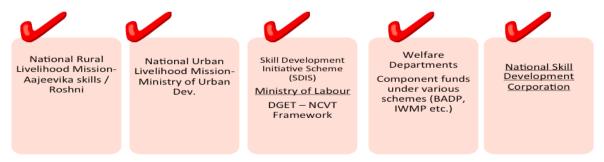
Sr.	Ministries / Departments	Projection by
No.		2022 (in Lakh)
1	National Skill Development Corporation	150,000,000
2	Ministry of Labor and Employment	100,000,000
3	Ministry of Human Resource Development	50,000,000

	l a company	20.000.000
4	Ministry of Transport	30,000,000
5	Ministry of Rural Development	20,000,000
6	Ministry of Agriculture	20,000,000
7	Construction Development Council	20,000,000
8	Ministry of Urban Development	15,000,000
9	Ministry of Micro Small and Medium Enterprises	15,000,000
10	Ministry of Power	15,000,000
11	Ministry of Women and Child Development	10,000,000
12	Ministry of Industries	10,000,000
13	Ministry of Information Technology	10,000,000
14	Ministry of Health & Family Welfare	10,000,000
15	Ministry of Finance, Insurance / Banking	10,000,000
16	Ministry of Consumer Affaires	10,000,000
17	Ministry of Tourism	5,000,000
18	Ministry of Food Processing Industries	5,000,000
19	Ministry of Social Justice & Empowerment	5,000,000
20	Department of International Development	5,000,000
21	Ministry of Chemical and Fertilizers	5,000,000
22	Ministry of Textiles	1,000,000

The establishment of a National Skill Development Initiative will have the following mandate:

- Upgrade skills to international standards through significant industry involvement and develop necessary frameworks for standards, curriculum and quality assurance
- Enhance, support and coordinate private sector initiatives for skill development through appropriate Public-Private Partnership (PPP) models; strive for significant operational and financial involvement from the private sector
- Focus on underprivileged sections of society and backward regions of the country thereby enabling to move out of poverty; similarly, focus significantly on the unorganized or informal sector workforce.
- Play the role of a "market-maker" by bringing financing, particularly in sectors where market mechanisms are ineffective or missing. Prioritize initiatives that can have a multiplier or catalytic effect as opposed to one-off impact.

# Running Schemes under key Ministries



The government of India has created different bodies to cater the need of skill development and training of youth for employment and their livelihood time to time as per the need. These are explained below.

Prime Minister's National Council on Skill Development

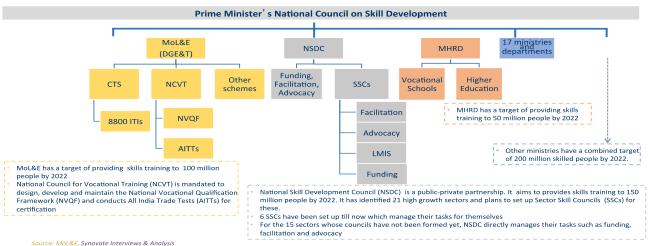
This council has been setup for policy direction and review. The members of the council consist of the ministers of different department and the Principal Secretary to the Prime Minister is the Member Secretary of the council.

Skill development initiative are being run by 20 ministries, 35 State Governments and Union Territories and the other players from private sector to harness the demographic dividend. The following are the objectives of the Prime Minister's National Council on Skill Development.

- To develop national and state level strategy for skill development.
- To study skill gap required in different area and frame strategy to tackle skill deficit. to study and Find out the gaps in the area of skill development and develop strategies to tackle the skill deficit.
- To identify new areas of employability and encourage skill development in such areas.
- To advise on remodeling of existing skill development program being run by various ministries.
- To promote use of ICT in skill development program.
- To develop and implement an action plan for skill development to maximize job creation domestically and create human resources for global needs.
- To provide guidance to the Centre and the States on implementation of skill development

# National Policy on Skill Development

National Policy on Skill Development aims to train 500 million people in vocational skills by 2022



National Skill Development Co-ordination Board (NSDCB)

This Board was setup under chairmanship of the Dy Chairman, planning commission to cater the need of skill training of different ministries. The Chairperson/ Chief Executive officer of the NSDC, Minister of different department, 4 secretary from state government for two year on rotation basis, and three distinguished academicians and secretary, planning commission is the member secretary of the board. The functions of the NSDCB are to:

- Formulating strategies to implement the decisions of the Prime Minister's National Council on Skill Development
- ii. Developing appropriate and practical solutions and strategies to address regional and social imbalances, the quality of vocational education and training, the evolution of a robust regulatory structure, private participation and putting in place sectorial action plans
- iii. Encouraging state governments to structure their initiatives in a way that can be modeled on similar lines (or in any other way), as deemed suitable by them
- iv. Monitoring, evaluating and analyzing the outcome of the various schemes and programs and apprising the Prime Minister's National Council on Skill Development about this.

# National Skill Development Corporation (NSDC)

The National Skill Development Corporation (NSDC) was formed in the year 2008-09 as a not-for-profit company in PPP mode to simplify skill development initiatives. The NSDC provide viability gap funding to the organization that provides skill development training. To enhance, support and coordinate private sector initiative, the council develops appropriate PPP models. The council focuses on 21 sectors with the aim to attract private investment. The approach of the council is to develop partnership with multiple stakeholders, rather than undertaking too may initiatives directly or duplicating efforts currently underway. As per the mandate of the NSDC, the following are the function of the council:

- Develop ultra low cost, high quality, innovative business models
- Attract significant private investment
- Ensure that its funds are largely "re-circulating": i.e. loan or equity rather than grant

- Create leverage for itself
- Build strong corpus.

National Skill Development Agency

The Government of Indian has reviewed the existing setup of the skill development and subsumed 3 different offices working for skill development under the National Skill Development Agency (NSDA). NSDA has been established as an autonomous body to harmonize and coordinate the skill development efforts of the Government in accordance with the 12<sup>th</sup> plan and beyond to bridge the regional, social, gender and economic gap by ensuring skilling of disadvantage, disabled person and marginal group through skill development training. National Skill Development Agency will anchor the NSQF and facilitate in setting up of certifying agency. National Skill Development Agency has been set up with mandate to:

- 1. To meet targets as envisaged in the 12th Five Year Plan and beyond by taking all possible efforts of skilling the youth;
- 2. Harmonize the activities of skill training among central government, state government, private sector and NSDC.
- 3. To meet the sector specific needs, NSDA will ensure quality and standards by anchor and operationalizing the NSQF scheme.
- 4. To work as a nodal agency for all State government Skill Development Missions;
- 5. To raise fund for the various activities of skill training and development from internal organization, MLA's and private sectors.
- 6. To evaluate the existing skill development schemes run by different department and ministries with a view to assess their effectiveness and suggest corrective ways to make these schemes more effective.
- 7. To develop dynamic LMIS for maintaining of national level skill development data.
- 8. To take positive action for the advocacy of skill development.
- 9. To ensure and fulfill the skilling needs of the disadvantaged group and the marginal groups such as SCs, STs, OBCs, women, minorities, and differently abled persons.
- 10. To discharge any other function as may be assigned to it by the GoI.

#### Central State Industry Private Ministries Governments Bodies sector Labour & Technical training Employment Advanced training education and Training of trainers Human Polytechnics Resources training institutes Distance Urban HUDCO Education Development Content design and affiliations Rural Development Region and social Textile Finance NSDC Commerce Sector specific Agriculture Range of schemes Food Processing Health & Family Welfare Information Technology development · Curriculum & instructions development Curriculum & instructions Standards & Assessments Standards & Assessments Heavy Environments Environments Industries SIDO MSME Professional Professional Tourism KVIC Learning Learning Women & Child Development Tribal Affairs National Vocational National Vocational Others... Qualification Framework Framework Proposed

## Existing skill delivery framework of India

The existing delivery mechanism of skill development for various ministries and Skill Development Council with the linkage with state government and private sector player are shown above. This include the vocational education, technical education, HUDCO, SIDCO, rural development, health, women and child etc. all these ministries and department will provide the information and data to the NSDA time to time.

# Implementation Challenges

On the basis of primary study on skill development initiatives taken by Government of India and State Government, it is found the following challenges could play a key role in achieving the target while implementing the skill development initiatives.

- 1. Heterogeneous nature of schemes.
- 2. Training institutions with varying infrastructure.

- 3. Diverse nature of curriculum and quality of education and training.
- 4. No linkage between departments, Ministries, State Government and Central Government.
- Lack of industry focused demand on skilling of manpower.
- Non-recognition of skills acquired by workers by employers.
- 7. Transfer of credit of course for higher training or study.
- 8. Curriculum is not as per the global standards for skilled work force as required by industry.
- 9. Non-availability of data of trained and placed workforce at one place.
- Skill development schemes are Government driven, private participation in the skill development and training is very less.

Skill development implementing agencies both government and private, vocational training providers are facing the challenges with mobilization of students, infrastructure, qualified trainer problem, third party assessment of the course and funding problem.

# IV. RECOMMENDATIONS

Various parameters were taken to evaluate the existing policies in India and found that India can learn very useful and relevant lessons from the strengths of the skill development, vocational education and training program of other nations. While studying skill development schemes of Government of India to address the problem mentioned above, shows that skill development schemes are not at par with the other countries. Based upon the discussion and findings of the leading skill development in the world, following recommendations are suggested to incorporate into the National Skill Development Program in order to reap the demographic dividend in India and transform it into a global hub for a competitive and cost effective skilled resource. A national strategy based on quality training and education and skill development fuels increase in productivity, innovation, investment and diversification of economy that are needed for the sustain and accelerate of job creation and better employment. The following are the few recommendation for the effective development and implement of skill development mission in India to meet international and domestic need for labour workforce and leverage the demographic dividend to train 500 people by 2022.

# A. Restructuring of skill development mission:

It is proposed that operation and monitoring of skill development mission can effectively be monitored to ensure delivery of desired outcomes by restructuring of system and dovetailing of schemes. Proposed structure is given below for management of skill development mission.

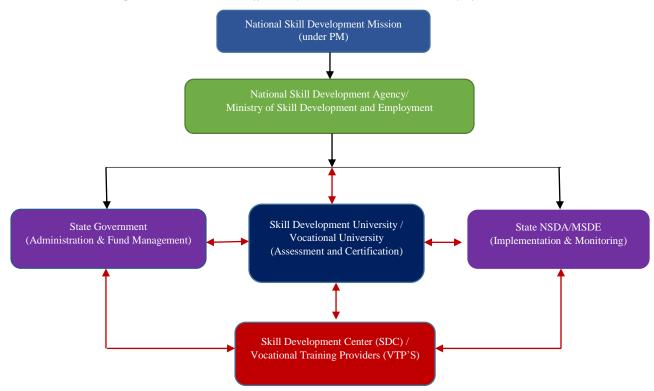
- i) It is proposed that under control of Prime Minister, an apex body namely National Skill Development Mission can be set up to look after the work of skill development mission. The main responsibility of the apex body could be drafting and framing the rules and regulation, norms and procedures, allocation of budget, coordination with other countries to study the requirement of workforce and other international market.
- ii) National Skill Development Agency / Ministry of Skill Development and Employment may take the lead role to provide the directives for implementation skill development initiatives. This will work at national level and responsible for the Apex Body.
- iii) In every state, State Government should take lead role to administer and manage the fund for the NSDM. The State Government shall be responsible for administrative, financial control and for disbursal of fund to skill development centers / vocational training providers and the utilization of fund.
- iv) At the State level, in every state a wing of NSDA should be established to provide the linkage between NSDM and training providers to work in line with the policy. The State NSDA may be entrusted for establishment of Skill Development Centers / VTPs as per the need of the industries in region. The SNSDA may be given the responsibility of periodic inspection of centers, preparation of annual training plan, Data Management of the Schemes and trained personnel. Assess labour market demand, tie-ups with Industries and publicity of the schemes. The NSDA will work in coordination with State Skill Development University (SDU) / Vocational University and Industries.

v) Establishment of Skill Development University / Vocational University in every state will solve the problem of academic quality, education, testing and certification. The Vocational University will deal with the affiliation and monitoring the SDCs / VTP's. The SDU may be entrusted to design curriculum, Assessment of competencies of trained persons and certification, training to the trainer and certification and assist in developing standards and qualification

To deliver the objectives of the skill development scheme, Skill Development Centers (SDC) / Vocational Training Providers (VTP) roles is very important. They will work at gross root level and shall provide a wide range of services to the society. The SDCs / VTP's will provide training facilities and infrastructure to impart training and support to trainees in getting employment. SDCs will track the trainees until they get gainfully employment. The SDC may be assign the job to conduct base level survey to assess the need of local labor market and work in accordance with the guidelines of NSDM.

# Proposed Structure: Skill Development Mission

Skill Development Schemes can be effectively monitored to ensure deli very of desired outcomes



# B. Implementation

The implementation of the proposed structure for the coordinated and unified skill development scheme shall be organized that at the center, it will be directly under the Prime Minister and it will be assisted at the state levels by State NSDA to implement and monitor the schemes and at the same time state governments will fulfill with the financial and audit requirements. In every state, establishment of Skill Development University may bridge the gap of academic curriculum and certification related requirements. State NSDAs will discharge their functions through skill development centers, which will be on PPP model.

# V. CONCLUSION

It is concluded that India is in demographic phase and is in position to reap the benefits of the demographic dividend by providing trained manpower to fulfill the global and domestic need for skilled manpower, the Government of India had initiated National Policy on Skill Development, to facilitate its target of imparting requisite skills training to 500 million people by 2022. However, on the other hand, there are lots of challenges in the way of achieving target such as quality of training, standardization of curriculum, recognition of course globally etc. India has lot to work on policies for the skill development and put efforts for effective implementation of these schemes. The adoption of a much more robust approach is essential for putting in place a quality skill education and training framework in the country.

It is proved from the above studies that existing skill development policy should be modified in accordance with the need of the industry and global market. By establishment of Skill Development University in every sate will fulfill the need of academic curriculum design, assessment and certification as per the global standard. Private participation will be more appropriate in infrastructure development and training to the participants. Target to train 500 million people by 2022 can be achieved through effective use of schemes by proposed restructuring of Skill Development Mission.

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### AUTHOR'S PROFILE



Dr. Sushendra Kumar Misra holds Master in Business Administration from Lucknow University, 1999. He has completed Ph. D in Management from IK Gujral Punjab Technical University and PG Program in Public Policy and Management from IIM Bangalore, 2015. Dr. Misra has served as Dy. Registrar, Controller of Finance, Director Finance in education institution and presently working as Finance Officer with I.K. Gujral Punjab Technical University, Kapurthala, India. His areas of interest include Financial Management, Educational Planning and Management, Human Resource Management, Public Policy, Skill Development and IFRS. Dr. Misra has published many research papers and visited many countries like Malaysia, Thailand, Australia, Slovenia, Austria and United State of America. Dr. Misra is a Life Member of AIMA, ISTE, YHAI, New Delhi and Association of Indian Management Scholars International (AIMS), Houston, USA. He is Associate Fellow of WBI, Australia and Member of IERDC, Hong Kong.