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Editor's Note

ARTICLES

Lakshmidhar Mishra	How to Integrate Lifelong Learning, Skill Development, Empowerment and True Development of an Individual	5
Harbans Singh Bhola	Lifelong Learning and Skill Development: Dialectic Between Past and Future	37
M C Reddeppa Reddy	Vocational Skill Development Training and Economic Development	54
Sayantan Madal	National Skill Drive and the Universities of Yesteryears: Can Lifelong Learning be the Answer?	73
Asoke Bhattacharya	Vocational Training in Unorganized Sector-Need for Standardization	88
V. Mohankumar B Sanjay	Importance of Skill Training in 'Make in India' Programme	94
L. Raja	Vocational Education in Higher Education System	106

Contributors

120

{ This issue contains invited papers for the All India Adult Education Conference held at Gandhigram Rural Institute-Deemed University, Gandhigram, Tamil Nadu on December 28-30, 2015 }

Editor's Note

The Hon'ble President of India Shri Pranab Mukherjee in his speech on February 13, 2016 on the occasion of Presentation of Infosys Prize 2015 said that India is a young nation as by 2020 it is set to become the world's youngest country with 64 percent of its population in the working age group. This demographic potential offers India and its growing economy an extraordinary advantage that could significantly contribute to the country's GDP. This is important information for the country. However, the worrying point here is widespread illiteracy and lack of skills among the youths. As per 2011 Census the number of illiterates in the age group 15 and above was 25.76 crore out of which 9.08 crore were males and 16.68 crore were females. This number must have increased in the last four years due to increase in population. If we look into illiteracy in rural areas the scenario is much more precarious. The number of illiterates in rural areas was 20.97 crore out of which males were 7.40 crore while the females 13.57 crore. No development can take place in the country leaving a large section of the society and that is the precise reason inclusive growth is always insisted for advancement of any country. Hence, all our programmes need to be little more focused on women and rural areas. In fact, Indian planning gives a lot of importance to these areas but still a long way to go for full achievement.

Today a lot of importance is given to skill training programmes and all out efforts are taken by the government with the support of industries to make India a country with the most skilled manpower par excellence to other countries. All the institutions already existing in the area of skill training have been brought under a big network except Jan Shikshan Sansthan (formerly known as Shramik Vidyapeeths), an important skill training institutes funded by the Ministry of Human Resource Development, Department of School Education and Literacy which have proven record of success and long standing achievement in the past 49 years. The credit of these institutes is training less literate, neo-literates and persons with basic level of education with a nominal fee structure which anyone can afford. The skill training is imparted in a large number of assorted courses based on the interest and need of the clientele with a reasonable duration. Unless the Jan Shikshan Sansthan are brought under the broad network of skill training institutions,

a large section of youth population who has either no education or less education will be left out. In fact, this is the section which is engaged by market institutions/individuals in large number in the technical/vocational related work who in course of time claim to be technically/vocationally good to attend the work independently. In reality this section receives training under unqualified or less qualified persons with no standardized curriculum followed and at the end no certificate issued.

Hence, it is high time that either the Ministry of Human Resource Development takes necessary steps to bring these institutes to mainstream skill development with enhanced annual recurring grant or the Ministry of Skill Development and Entrepreneurship bring these institutes under its purview, increase annual grant and use them for promoting skill training to non-literates/less literate people.

Dr. V. Mohankumar

‘How to Integrate Lifelong Learning, Skill Development, Empowerment and True Development of an Individual’

Lakshmidhar Mishra

I am grateful to IAEA and to its ever youthful and energetic President – Shri K.C. Choudhary for this rare opportunity and honour. I recall the happy memories of having been invited by IAEA on an earlier occasion to deliver Dr. Zakir Hussain Memorial Lecture on ‘Education, Development and making of a whole being’ at Bhopal on 26.05.1990 when I was the first servant of literacy as Director General, National Literacy Mission Authority and Joint Secretary in the Ministry of Human Resource Development. One quarter of a century has passed since then; there have been multiple social, political and economic changes of a far reaching dimension. IAEA has also entered its 75th year. On 2nd December, 2014, a group of adult education lovers including this humble self had assembled at IAEA premises at 17 B Indraprastha Estate, New Delhi to recollect and share the glorious scroll of historic events since IAEA was founded by Dr. Zakir Hussain, the trials and tribulations faced, the seminal contribution made in creation of a learning Society and the challenges to be faced ahead which often baffle one’s imagination and vision. On this happy occasion I extend to all the distinguished adult educators who have assembled at Gandhigram Rural Institute, the venue of the 61st All India Adult Education Conference my greetings and felicitations. I also avail of this opportunity to offer my humble tribute to scores of creative thinkers, writers, artistes, social and educational activists – both who are alive and who are no more for their lifelong dedication and commitment to adult education.

It may be appropriate to start with an ancient adage which is also replete with wisdom and truth:

‘तस्मात् योगाय युज्यस्व
योगः कर्मसु कौशलम्’

Keynote address delivered by Dr. Lakshmidhar Mishra in the 61st All India Adult Education Conference at GRI-Deemed University, Gandhigram, Tamil Nadu on December 28, 2015.

‘Yoga is skill in action’

(Sloka 50 Canto II Shrimad Bhagavad Geeta)

In a literal sense, yoga is union. It means harmony of body and mind. It also means harmony with the divine law, becoming one with the divine life, by the containment of all outward going energies. It represents a rare state of equilibrium of human mind. To reach this, the self-joined with the self shall not be affected by pleasure or pain, desire or aversion or any of the pairs of the opposites between which untrained selves swing backwards and forwards like a pendulum. A true yogi is not attracted by the attractive nor repelled by the repellant, into which all desires flow as rivers flow into the ocean which is filled with water but remains unmoved – placid, serene and tranquil.

Let me illustrate an episode from my own life to establish the inter-connectivity between yoga and skill in action. This was November, 1964. I was an IAS Probationer at the Lal Bahadur Shastri National Academy of Administration along with 135 co-probationers. The occasion was the day of final horse riding test which was also a test for the coveted Director’s gold medal – a test of one’s physical stamina and equilibrium of mind. On account of my short stature (a height of 152 cm), I had genuine initial difficulties to climb up to the horse, hold the stirrup and to put myself firmly on the saddle. As days went by, I toughened my muscles and hardened my will power to completely master the art and the technique of horse riding. On the day of the final test we were required to cross a hurdle which is 6 ft. high while being on the horse back but without holding the stirrups. I instantly remembered Maharishi Mahesh Yogi’s basic tenets of transcendental meditation i.e. concentrate on one and only one fixed object while performing a duty. This is like prince and warrior Arjuna telling Guru Dronacharya in response to a pointed question that he was able to see only a bird as his terminal object on the final day of the archery competition among the Pandava and the Kaurava princes. With this I could cross the hurdle as effortlessly as I could. I narrowly missed the Director’s medal by one mark (I got 79 while the winner got 80) but the neat, orderly and flawless performance had earned accolades from the panel of judges who had assembled to decide the winner on the occasion.

I shall share with the distinguished audience a second real event to illustrate the strong link between high level of cognitive skills of human mind with its physical capacity to deliver the end product with uncanny speed and

with clocklike precision. The year was May, 1999. I was then Union Labour Secretary, the 35th year in my service career. I was deputed by Government of India to visit Federal Republic of Germany (FRG) to make a detailed presentation before the Minister, Labour, FRG on the steps taken by Govt. of India on elimination of child labour and rehabilitation of children who have been withdrawn from work through education, nutrition and skill training. After the presentation which was very well received, I was invited by the Government of FRG for visiting the Bavarian Motor Works (BMW) plant at Bavaria. At the plant I watched the process of dismantling and re-assembly of body parts of BMW car which is internationally acclaimed for the highest level of standardization and quality control. The whole process of dismantling and reassembly was completed in an incredibly short time with uncanny precision and deft application of mind, nothing short of a marvel.

How was this possible? It was possible on account of a very high level of cognitive skill acquired by the craftsman concerned together with a remarkable physical capacity to fix the right body parts at the right place with clocklike precision. The whole process could be attributed to (a) very high level of functional literacy in FRG (b) high quality of craftsmen training which makes possible the integration of lifelong learning with acquisition and application of skills (c) a conducive work environment with recognition of the importance of human element in industry-the recognition of dignity and creativity of the human entity at the work place.

A couple of years earlier (1990-91 to be precise) as DG, NLMA/JS in MHRD, I had witnessed in course of my visit to a couple of craft schools in Sweden the vital link between lifelong learning, skill training and the remarkable level of agility with which skills acquired in craft schools are translated to action.

The same level of high quality performance has been found in countries like South Korea, Australia, New Zealand, China & Japan and in cities like Hong Kong, Sanghai & Singapore. These are all fast changing knowledge economies which have been able to introduce all the core competencies among the learners in the society. Additionally (a) there is both a comprehensive plan for lifelong education as also for skill training (b) a clear complementarities between physical capital and human capital has been established and (c) policy, structure and mechanisms are in place for harnessing the findings of scientific and technological research for the benefit of the deprived sections of the society in general and in the larger interest of nation building in particular.

Not so, however, in India where (a) 95 PC of the 487 million + workforce is unskilled (b) there is no plan as yet for establishing an integration between lifelong learning and skill training and (c) the findings of scientific and technological research are yet to be fully harnessed for the benefit of the deprived sections of society. Successive national policies, plans and programmes have failed to perceive, internalize and translate to action the vital link between functional literacy and numeracy, lifelong learning and skill training. Consequently, those who are not literate and numerate have, generally speaking, low levels of skills (although there may be exceptions) and even those who are products of ITIs and Polytechnics have low educational levels.

Broadly speaking, skills have two connotations namely social skills and economic skills.

Social skills centre round attributes of human nature which are mind boggling. To understand these attributes, it is necessary to divide the cycle of human life into four parts namely:

- ♦ Childhood;
- ♦ Adolescence or youth;
- ♦ Adulthood;
- ♦ Old age.

Social skills of a child, the flowers of home and the finest human resource begin at home only. As it is said in the Hindu scriptures, 'a child is to be reared with love and affection till he is five years of age, he/she is required to be disciplined till he/she is ten years of age and is to be treated as a friend once he/she has attained sixteen years'.

If the parents, teachers, brothers and sisters, friends and well-wishers inculcate in the child the right social skills at the most tender, formative and impressionable stage in the cycle of life, the latter will learn to trust the world around him, would develop self-confidence, together with a spirit of inquisitiveness and exploration would make and do practical things while taking new initiatives. This will enable the petals of childhood to blossom to the flowers of youth and manhood to the full bloom.

The social skills in adolescence and adulthood will be somewhat different and unpredictable. In adolescence, as Erickson, the Danish born

psychoanalyst puts it there is a crisis of identity versus role confusion. The crisis centres round the young person's sense of certainty versus uncertainty about who he/she is. Very often, the adolescent is unable to develop the kind of positive identity as there is a negative identity thrust on him/her from outside.

For the adult, who represents the most productive and reproductive phase of human life, the conflict is between intimacy and isolation. Intimacy is a sense of emotional closeness. It develops between friends, peers, soldiers in the army, navy and air force (as they are committed to a common cause), husband and wife whereas isolation occurs where there is a conflict of interest or conflicting emotions which are quite normal and natural.

Old age follows adulthood when there is a detached concern with life itself. When an elderly person looks back on life and its achievements with a sense of fulfillment, he experiences for the first time a sense of identity. In sharp contrast, there would be despair when he feels that he has led a life of missed opportunities and that it is too late to start life afresh and accomplish what is left out.

In essence, social skills relate to the capacity of an individual to act and react in relation to fellow beings in a decent and dignified manner. This country belongs equally to people of plurality of faiths and belief systems, cultures and languages. It prohibits any form and manner of dominance – religious, ethnic, cultural, legal or moral of any one faith or belief or culture over another. The essence of secular thought and value system lies in the fact that there is no need for any kind of conformity of faith, belief, culture, food/diet, dress or language to qualify as a fully equal Indian citizen.

Social skills thus basically relate to skills of tolerance or adjustment with fellow beings in society with or without any commonality or identity of interest. Such adjustment or tolerance is necessary as no two human beings are alike. They are born, live and grow differently; they think, perceive, act and react differently. Difference which is the bedrock of creation can only be harmonized; it cannot be wiped out. Adjustment is the other name for this process of harmonization. Developing a genuine respect for dissent is yet another name for such adjustment.

Imbibing and assimilating such a culture of respect for or tolerance of dissent without, however, compromising with ones fundamentals is extremely

relevant in a world torn by a lot of strife, discord and artificial division on the basis of language, culture, religion and ethnicity. Such a culture will be reflective of large heartedness of one individual for another with whom he has disagreement but no malice or ill will.

While on the subject of respect for or tolerance of dissent, I am reminded of a story from Atharva Veda. The inquisitive disciples ask the Sage 'O Rishibar! What is the creative form in which numerous people on our earth manifest themselves'? The Rishi gives the reply, 'People living on this planet belong to different caste, creed, colour, language and religion'. The disciples ask the Rishi once again out of curiosity, 'If such is the scale of difference of beings, how is unity possible'? The Rishi gives the reply 'Yes, unity amidst diversity is possible only through respect for and tolerance of dissent'. He exhorts his disciples to observe one more additional tenet through which unity amidst diversity will be possible. That is: when women and men converse with each other, they must not utter words which are offensive but full of genuine sweetness.

These words were spoken thousands of years ago but continue to be as relevant today as they were then. There was a time when we used to say 'everybody and every material object on earth will disappear but the earth will remain'. Today, in our unbridled craze and acquisitive instinct to exploit mother earth beyond limits we have not only heightened the prospects of mother earth being extinct along with the entire human race but have also offended Bapu who had once said, 'Mother earth gives us everything that we need but not enough to meet our greed'. As far as speaking to others with genuine sweetness is concerned, the increasing incidence of road-rage in the streets of Delhi to which I am an eyewitness, the instinctive indulgence in a shooting spree and sporting with human blood and the venom of communal hatred which is sprouted when human beings belonging to two different communities act and reach to each other only goes to prove how prophetic were the words of our ancient seers. This is how the current generation has perfected destructive social skills to an extent which may eventually lead to annihilation of human race.

The economic component of skills relates it to employability of the job seeker. Precisely defined, employability is the endowment and capacity of a job seeker to get a job of his/her choice in the labour market. Such endowment and capacity together are known as skill and the process of development of such skills is known as skill training. It includes acquisition of new skills as

well as refinement and sharpening of the existing skills with a view to upgrading them. Both the components of skill development together contribute to the employability of an individual and sustainable development of an enterprise.

Skill development is, therefore, crucial to employability. This is, however, not the same as or co-terminus with employment. Employability may lead to employment but not in a straight-jacketed or a linear fashion. In any case, skill training and employability must precede employment. Besides, adaptability of any technology and putting it to use would involve use of skills. Additionally and amongst other factors, it contributes to production and productivity and through these to (a) Gross Domestic Product (GDP) rate of growth of enterprises and (b) GDP rate of growth of the national economy. Indirectly, it will facilitate harnessing the findings of scientific and technological research for the economic benefit of all sections but in particular of the deprived ones.

In the context of skill training for new skill formation and existing skills up-gradation we have a few needs as well as dilemmas.

In the context of emergence of Liberalization, Privatization and Globalization (LPG) syndrome we would certainly need to make ourselves more productive and competitive. Secondly, since an informal economy (which is a direct offshoot of the LPG syndrome) is associated with low skill, low wage, low income and low social protection and not conducive to health, safety and well-being of workers, it is necessary to promote through skill training, a quick transition from the informal to the formal sector of the economy.

Our dilemmas are as under:

- ♦ There is heightened competition between the domestic and the foreign economy even though there is always no level playing field in such competition between two unequal rivals;
- ♦ Sweeping changes are taking place in the economy, at the workplace and in employment relationship which is mostly a-typical or a-symmetrical;
- ♦ We need to maintain employability and productive efficiency of a huge labour force numbering 487 million.

- ♦ Annually 12.08 million workers are entering the labour market not always with the best of education and skill training with the inevitable consequence of being repulsed by the market; they would go on adding to the ranks of informal sector workers;
- ♦ This is a tough challenge as there are too many forces at work with too many competing claims and cooperation and collaboration between these forces are always not forthcoming.

The net result which emerges as a synthesis of our needs and dilemmas are:

- ♦ On account of stiff competition our workers have no option and discretion except to be better skilled, better trained and better endowed;
- ♦ If they do not do this, they will eventually perish.

Different constructive skills are needed for different jobs available at different sectors of the economy at different points of time in the labour market and with different stake holders such as public, private and local self-governing bodies. These are:

- ♦ Technical skills are needed for particular trades (garment making, engineering, automobile, electronic, fabrication and services);
- ♦ Transaction of business in shop skills (body language characterized by civility and courtesy, social communication, capacity to adjust to a changing work environment);
- ♦ Computer literacy skills (these are needed in all modern white collar avocations);
- ♦ Quality management skills (conservation of energy, avoidance of leakage and wastage, observance of workplace safety by pre-empting accidents, the extent by which the quality of the product conforms to the norms of standardization, precision and quality control);
- ♦ Entrepreneurial skills i.e. ability to bring about a meaningful coordination between land, labour and capital for creating a new enterprise, ability to face teething problems at the infancy thereof and eventually overcoming them to kick-off the enterprise;
- ♦ Managerial skills i.e. ability to manage the day-to-day affairs of an enterprise encompassing management of human, material and financial resources;

- ♦ Supervisory skills i.e. ability to oversee the affairs of an enterprise including exercise of continuous vigilance to ensure economies of scale, timeliness in delivery, professionalism in meeting customer's satisfaction in terms of post delivery services etc.

A worker in addition to being an employee (both wage employed and self-employed) is also a human being and a citizen. He is also a consumer in addition to being a producer. The skills required for being a productive human being, a citizen, a producer and a consumer are:

- ♦ Life skills;
- ♦ Cognitive, affective and psychomotor skills;
- ♦ Communication skills;
- ♦ Attitudinal and behavioural skills resting on empathy and sensitivity;
- ♦ Survival skills;
- ♦ Leadership skills.

These may be enumerated as under:

I. Life skills

A set of life skills as brought out by Remedia Trust Foundation by way of interaction with 57 NGOs (which was supported by UNESCO in 2001) are self-awareness, empathy, critical and creative thinking, decision making and problem solving, coping with stress and strain, effective communication and inter-personal relations, spatial orientation etc.

II. Cognitive skills

This represents the basic capacity to learn. Learning implies thinking, reflecting, questioning, introspection and analysis. The attributes of learning as enunciated in Shrimad Bhagavat Geeta are:

‘तत् विद्धि प्रणिपातेन परिप्रश्नेन सेवया’

‘You learn by discipleness, by investigation/inquisitiveness and by service’.

(Shrimad Bhagvat Geeta, Fourth Canto, Sloka 34)

It implies that nuances of certain lessons are imbibed and assimilated best by the learner only after he/she has questioned the rationale of what is

taught instead of meekly acquiescing what is taught and has satisfied himself/herself that the lesson to be learnt is of interest and relevance to the life of the learner.

III. Affective skills

This refers to behavioural skills which imply the following:

- Establishing correct relationship between self and peers, self and elder members;
- Caring for others like and unlike oneself who are in genuine need/distress;
- Developing empathy for others i.e. 'Do unto others as you would like to do unto yourselves';
- Grappling with problems, constraints and challenges of life and overcoming them with strength, courage and self-confidence.

IV. Psycho-motor skills

This refers basically to psychomotor coordination which is essential for carrying out certain activities like:

- Driving;
- Acting on the stage;
- Playing any game (to illustrate, maintaining a balanced coordination between hand, foot and ground as in cricket is an important psycho-motor skill);
- Public speaking.

Without such psycho-motor coordination, different components of an activity will not gel; they will be disjointed and the desired result will not be produced.

V. Communication skills

Communication is basically a bridge between the sender and the receiver. While communicating, the sender is expected to inform, equip, inspire and motivate the receiver. Two way communication rests on trust, openness, credibility and transparency; it involves the basic skills of speaking as well as listening. Patient listening implies giving thoughtful attention as also by

opening the third inner ear to the feelings of the person at the other end like music behind words. Effective communication as a two way communication process implies:

- Being clear about the purpose of communication;
- Understanding the effect which would eventually result from such communication;
- Communicating what one has to say simply, clearly, forcefully and concisely using the most appropriate words and methods. Good communication makes everyone in the organization feel that he/she is a partner in a common enterprise. This leads to an emotive bond which binds everyone in the organization together.

VI. Leadership skills

Leaders provide the direction and insight which contributes to the prosperity of an enterprise. Leadership skill is a cumulative product of a number of other skills such as life skills, communication skills, and survival skills, entrepreneurial, managerial and supervisory skills.

VII. Survival skills

It implies the capacity to survive in the midst of a difficult geographical terrain and difficult climate and weather characterized by extreme heat and humidity (like the art of storing green vegetables in the desert districts of Barmer, Jaisalmer, Jalore, Sikar, Jhunjhunu, Bikaner and Jodhpur in Rajasthan). It also implies the art and technique of surviving in the midst of most difficult situations and human beings (non-cooperative, indifferent and hostile) as also the most difficult work environment (unclean, unhygienic and unsafe due to exposure to too much of dust, heat, fume, noise, gaseous, poisonous and toxic substances).

VIII. Attitudinal and behavioural skills

Very recently on the first anniversary of Swachh Bharat Abhiyan the Prime Minister emphasized the importance of attitudinal and behavioural skills. According to him, right attitudes hold the key to right behaviour and the right behaviour holds the key to the success of any programme. If by our attitude, we want to go in for a clean India this will be reflected in our behaviour and clean India will eventually emerge.

Skills – be they social or economic rest on certain principles and it will be unwise to delink the two. This could be illustrated by a few examples.

First: One of the factors which contributes to existence of child labour in India (the largest number in the world) is the theory of transfer of intergenerational skills. This basically implies that children learn best from their parental occupations when they are young. This is a myth and I would like to dispel this by affirming and re-affirming that the son of a carpenter is not required or destined to be a carpenter; the son of a blacksmith is not meant to be a blacksmith. In both the cases, the children have infinite possibilities and potentialities which need to be harnessed so that they may go beyond the traditional boundaries of a caste based occupation and carve out a career and decent livelihood of their choice.

Second: Women according to popular notion, are meant for performing certain tasks or discharging certain responsibilities like household chores, de-weeding and transplanting in agriculture, changing the side of raw bricks in the sun for even drying in a brick kiln, selling milk, fruits, fish and flowers etc. in the local market, carrying head loads for sale of commodities etc. This is also a myth or terrible mind-set of men. Women without doubt or dispute are more hard working, dexterous, imaginative and resourceful and are capable of doing what men can do even better. It will be a travesty of reason to subject them to accept rather helplessly what men consider to be their assigned tasks in a traditional society.

Third: One may commit a cold-blooded murder either on mere suspicion or out of hatred or vendetta but nothing would justify such an act even though they may be performed in a highly skilled manner.

It is important that we dissect ourselves, our own thinking, reasoning and analysis and be our own informed and dispassionate critic before we judge others through a tainted glass. This is the only way to dissect our own follies and weaknesses with all humility and learn to connect them before it is too late.

Humility is the much needed affective skill which like love will enable us to go into the depths of the reality of life while vanity, arrogance and ego hassles would make us blind to all the good things and reality of life. This is how it has been aptly said, 'vanity is the name of vampire'.

It may be pertinent to ask us to how lifelong learning is considered crucial to success of skill training programmes. A combination of skill training and lifelong learning would undoubtedly unleash a new energy and create a workforce which will be an asset to the enterprise and the nation. Such a combination or integration will have several built-in-advantages such as:

- Skill training programmes envisage preparation of a number of pamphlets, handbooks, advisories etc. covering (a) the Knitty Gritty of the manufacturing process (b) description of tools, equipments and spare parts of a machine and (c) standardization, precision and quality control devices and (d) how to attend a crisis situation when a machinery has broken down or there is leakage of deadly gas with possibility of an impending disaster. Those who are functionally literate will be able to go through these materials, comprehend them and act on them; they will be able to grapple with and overcome the crisis situation better;
- Skill training programmes involve a number of drawings with numerical dimensions (length, breadth, height, tensile strength, permeability etc.). Those who are functionally literate will be able to understand and internalize the shape, size and colour of various objects which form part of training; they will be able to do the mathematical calculations accurately and apply them with equal accuracy;
- Skill training programmes have both the components of employability as well as actual placement in a job (employment). For the latter, a strong level of general and social awareness, understanding and internalizing complex situations, peculiarities and complexities of certain operations and strength, courage and self-confidence to face these situations or to deal with these complexities will be necessary. It may be difficult to acquire the desired level of awareness, understanding, maturity and sensibility without being functionally literate and without pursuing lifelong learning;
- Easy access to a wide range of information of interest and relevance to the lives of learners-cum-workers/trainees is a must. Such information will have to be put to use in day-to-day real life situations to ensure avoidance of wastage and leakage of resources and better preventive maintenance. This can also be harnessed for import

substitution and saving scarce foreign exchange. Such access will be easy for those who are functionally literate and numerate and who through lifelong learning have been able to develop the desired levels of imagination, perception, ingenuity, creativity and resourcefulness.

As empirical studies have shown, such integration would also empower the working class to withstand the market forces which are aggressively selfish, acquisitive and ruthlessly competitive and sometimes exploitative. Implementation of Prime Minister's Shram Award Scheme in the Ministry of Labour and Employment over the last few decades has demonstrated the effectiveness of this combination or integration.

Conversely, if levels of general education are low or below the expected minimum, the skill levels will be correspondingly low and will not contribute to high production and productivity.

It has been found that workers of corporate enterprises who are literate and numerate, who have the urge and aspiration to rise to academic as well as professional heights and who strive to reach those heights acquire an extra-ordinary wherewithal through which they succeed in (a) better preventive maintenance (b) saving scarce foreign exchange by going in for more of import substitution and (c) saving precious human lives by pre-empting accidents. Such workers are usually considered for the PM's awards.

It may be useful to simultaneously ask and find out the reason as to why skill training and vocational skill training in particular has assumed so much of importance in our scheme of priorities all of a sudden. I am particularly prompted to put this question as when I mooted the idea of constitution of a Skill Development Fund on my return from FRG in May, 1999 I was at a loss to understand as to why there were no takers and why I was left isolated. It was not as if that there was anything insensible or impractical in the idea but perhaps the times were not opportune for its acceptance and implementation. To my wonder of wonders, after ten years or so, the idea has not only been accepted but implemented and a National Skill Development Corporation with a Board and a hundred percent government funded Skill Development Fund are the two redeeming features of the new Skill Development Policy of Government of India since 2008-09 which has

been reinvented and redesigned on July 15, 2015 by the Hon'ble Prime Minister.

The reasons behind this new found love for skill development and training are many. To start with, skill development and training enhance labour productivity even with existing technology. It is universally acknowledged that labour productivity is a necessary pre-condition for raising living standards of both wage and non-wage workers. It has further been acknowledged that potential for better wages of workers and remunerative income of the self-employed and living standards of the working poor (both rural and urban) increases *pari passu* with increased productivity of labour.

There is a spin-off effect of higher wages and incomes as a result of increase in productivity. Higher the income, greater will be the aggregate effective demand for goods and services produced in both informal and formal sectors stimulating investment and high GDP rate of growth.

Conversely, higher the GDP rate of growth, higher will be the surplus amount available for education, health, nutrition, child survival, protection and development and greater the scope for investment in these human resource activities and greater will be the perceived and felt need for skill training.

Empirical studies have shown that it will be possible for the fruits and benefits of a high GDP rate of growth to percolate equitably to all sections of the society including the working class only if they were literate, educated and skilled and are able to bargain for, absorb and assimilate these fruits and benefits. These studies have further revealed that the impressive rate of growth achieved in ten years between 1993-94 and 2004-05 have bypassed an overwhelming majority of India's population comprising Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Caste (OBC), Muslim minorities who were left either illiterate or were without primary education. These groups emerge as a coalition of socially discriminated, educationally deprived and economically below the poverty line population. This is borne out from the following table:

Table - I

Educational Level	Number of Persons			Percentage of distribution		
	1993-94	1999-2000	2004-05	1993-94	1999-2000	2004-05
Illiterate	443.89	447.96	432.00	49.69	44.62	39.59
Below Primary	159.83	184.42	197.16	17.89	18.37	18.07
Primary	103.62	119.87	150.83	11.60	11.94	13.82
Middle	85.89	113.70	137.37	9.62	11.32	12.59
Secondary	50.73	67.77	76.42	5.68	6.75	7.00
Higher Secondary	25.75	34.97	53.50	2.88	3.48	4.90
Graduate & above	23.59	34.10	44.00	2.64	3.40	4.03

Source: 61st Round of NSSO Survey

There is yet another table reflecting the findings of 61st Round of National Sample Survey Organization (NSSO) in terms of educational achievement of workers, their distribution amongst workers, those who are unemployed and out of labour force in 2004-05.

Table - II

Levels of Education	Workers	Unemployed	Out of Labour Force	Total Population age wise (percentage) (7-15 yrs)
Illiterate	38.77	7.59	36.38	37.32
Below Primary	10.93	5.06	8.26	9.84
Primary	13.74	9.11	11.50	12.83
Middle School	15.47	18.87	17.20	16.16
Secondary	8.75	17.55	12.86	10.42
Higher Secondary	6.17	19.77	8.75	7.36

Source: 61st Round of NSSO Survey

Some of the disquieting features emanating from the findings of NSSO study could be listed as under:

- Overall educational standard of population in general and that of the working class population in India is poor.
- Despite a wide network of technical educational institutions in the country, percentage of population with technical education is very low.

- Only 1.5% of the total population and 2.5% of population of 15 years and above is reported to have received any kind of formal technical education.
- The percentage of women to have received technical education is even lower than 1.5%.
- The growth rate of diploma/certificate level education compared to the degree level technical education has declined by 1.3% between 1999-2000 and 2004-05.
- The rate of unemployment among educated youth in the last couple of decades has been constantly on the rise.
- Out of 33 million (approx) youth who received some vocational training, more than 18 million possess low levels of skills as their general educational achievement levels are below middle level.
- More than 75 million youth with secondary or even higher levels of general education (which includes 13 million graduate youth) are not reported to have received any vocational training.

It is regrettable but true that the levels of vocational skills in the labour force in India compare poorly with the position in other countries. Only 5% of the Indian labour force in 20 – 24 age group has got some vocational skills, howsoever inadequate. The percentage in industrial countries is much higher varying between 60% to 80% except for Italy where it is 44%. The percentage for South Korea which has recently been categorized as an industrialized country is exceptionally high at 96%. As a member of the high level ILO tripartite delegation led by Mr. Kari Tapiola, former Executive Director, ILO to Seoul in 1997-98, I had seen in my own eyes how the highly educated and skilled workforce in that country could erect structures which represented a marvelous combination of physical safety (of structures) with remarkable aesthetics or sense of beauty and functional utility.

The poor quality of general education, irrelevant curriculum, poor teaching learning environment, poor quality of teacher's training, low level of parental and learner motivation, high levels of drop-outs right from primary to elementary, elementary to secondary and from secondary to higher secondary levels, low levels of retention and participation and equally low levels of achievement of proficiency in mother tongue, arithmetic, sciences and environment studies have no doubt contributed to this regrettable phenomenon.

An important silver lining amidst so many grey areas is that India has

the single largest young population in the whole world (35% of Indians are below 15 years of age while 18% fall within the age group of 15 – 24 years) with a median age of 24 years. This is a favourable demographic dividend which is likely to continue till 2040 which can be an important instrument for harnessing India's economic potential. If this trend continues and if the skill training programmes are successfully implemented as envisioned in the new national skill development policy (15.07.15), India might emerge as a hub for supply of knowledge workers and skilled professionals to the western economies which are estimated to face a shortfall of 39 million skilled workforce by 2020 and who also have a demographic disadvantage in as much as the elderly in those economies far outweigh the young.

This demographic dividend is neutralized when it is found that out of total estimated number of Indian children in 6 – 13 age group i.e. 204.01 million, 60.41 lakh children are estimated to be out of school (National Sample Survey conducted in September, 2014 by Social and Rural Research Institute, a specialist unit of IMRB International).

These children may be divided into the following categories:

- Children who have never been enrolled in any school recognized under the Right to Education (RTE), 2009;
- Children have been enrolled, their names are in the school register but they have not been attending the school;
- Children who have dropped out after completing some studies, have crossed childhood, have grown up to be adolescents and adults and have remained illiterate.

Regardless of the factors which may have contributed to the out-of-school children phenomenon, this represents a colossal waste of precious human resource. They are not only an accretion year after year to the growing ranks of illiterates (350 million in India, the single largest number of illiterates in the whole world), but will remain cut off from the world of information, communication, modernization, innovation and competition for a long time.

While efforts are being made at various levels to identify and mobilize these children, impart them a special training as provided u/s 4 of RTE Act and admit them into age appropriate classes, these have not produced the desired results. Consequently, many of the out-of-school children are forced to enter the informal/unorganized sector for sheer biological survival. Many of them accompany their migrant parents to a destination point work site

and remain primary victims of educational deprivation. The destination States do not appear to be much concerned about their remaining cut off from the educational mainstream. Their skills and competencies also remain both underdeveloped and untapped as they get trained under low skilled and low literate supervisors.

Out-of-school children should, therefore, constitute a prioritized target group in terms of both education and skill training programmes, the other three target groups being:

- Those who are entering the labour market for the first time (12.08 million annually);
- Those who are employed in the organized sector (26.0 million);
- Those who are working in the informal/unorganized sector (433 million).

Informal sector workers are those who do not have any job security, income security, social security and benefits are, therefore extremely vulnerable; they work and live in a low skill, low wage and low social security milieu. The sector is vast, has numerous categories and sub-categories of workers with low educational and skill levels but is continuously growing. It contributes 60% of the country's GDP and accounts for an overwhelming percent of country's total employment (although bulk of it is self-employment followed by casual employment which is of poor quality). Considering the importance of the sector Chapter 5 of the National Policy on Skill Development (2009) (which has since been replaced by a new policy w.e.f. 15.07.15) has been devoted exclusively to skill development of workers in the unorganized sector. It has rightly recognized that if the skill base of the workers in the sector is strengthened it will lead to higher productivity, better working conditions, better observance of labour rights, better social protection and better living standards.

The National Policy on Skill Development has identified the following target groups in the unorganized sector in need of skill training:

- Own account workers (self-employed);
- Unpaid family workers;
- Casual employees;
- Home workers;
- Migrant workers;
- Out-of-school youth;

- Adults in need of skills;
- Farmers and artisans in rural areas.

The last category i.e. farmers and rural artisans is very large and an important one. As far as rural artisans are concerned, they at one point of time were the pride of India; by the power of their fingers and brush they could infuse life into the inanimate. I recall what I had seen in my own eyes while touring Uttarakhand in early 80s as Director General (Labour Welfare) (Uttarakhand was a part of undivided UP then). The floral motifs carved out on the walls of households by the artisans could be the feasts for the eyes of mankind. The same skills obtain in Raghurajpur village in Puri district of Odisha where I was ADM in the latter half of 60s. There are stone cutters and patta painters who can recreate objects and episodes of history and puranas by the sheer dexterity of their fingers and brush and leave for posterity specimens of indescribable beauty. The same could be said about the handicrafts of many other states such as Tamil Nadu, Karnataka, West Bengal, Andhra Pradesh, Bihar, UP and Rajasthan. As it has been very appropriately said, 'A thing of beauty is a joy forever'. Centuries of foreign invasion, the instinctive annihilation of objects of beauty by the predators and various other economic compulsions has deskilled these artisans, converted them to landless agricultural labourers and led to the decline of arts and crafts professed and mastered by them. It is time that the source which gave birth to these numerous forms of arts and crafts is identified state-wise, district-wise, taluk/block-wise, GP wise and village-wise, the information (like Dr. Jagannath Prasad Das's Patta paintings of Odisha) is collected, compiled and stored in archives and a package approach encompassing identification of master craftsmen, designing an appropriate training curriculum, imparting training by the master craftsmen, enabling the craftsmen after training their easy and smooth access to raw materials, credit, technology and market so that the infinitely beautiful ancient arts and crafts can be revived, with full state patronage, provide economic empowerment to the artisans and promote tourism on a large scale.

While all these efforts should undoubtedly be given a pride of place in skill development and training in the national policy and programme of action, the million dollar question which remains to be answered is how do we inspire and motivate workers in general who had some skill at one point of time but who are now deskilled and workers in the informal sector in particular to go in for skill training? Who are to be chosen as their skill providers? Who will evaluate the content, process, quality and impact of training? Who will

be the certifying agency? How to ensure that those who have received some modicum of training have really become employable? How to establish an effective interface between employability and actual employment? These and many other related questions are likely to arise as we proceed further.

One thing stands out clearly that these workers in the informal sector may not immediately perceive the need for further skill acquisition at all. They may have been lulled to a false sense of complacency that as long as they have two bare hands they should be able to put in some efforts earn some wage/income and maintain a livelihood, howsoever fragile, it may sound. They may have no idea as to where to go even if new skills are seen necessary to be acquired. Besides, training duration may be long and any time off from the productive work would entail loss of daily earnings which most cannot afford unless there is a scheme for compensating the opportunity cost of such training.

Equally problematic is the motivation on the part of those who are undergoing skill training in some form or the other to go in for higher education. The long duration, inconvenient timing of classes, the curriculum not being attuned to individual preferences and interests and the heavy burden/liability of the family (if they are married and have a family) are some of the possible factors which inhibit skilled workers to go in for higher education.

Motivation becomes sustainable when it is self-propelled and self-driven. But where it is not possible to make motivation self-propelled and self-driven external interventions appear to be absolutely necessary and unavoidable. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) formally launched by the Hon'ble Prime Minister in 2014-15 provides one such external stimulant to skill formation and skill upgradation on a nationwide scale. The Process Manual developed by the National Skill Development Corporation under the PMKVY seeks to make skill training demand driven exactly the way a demand driven strategy was adopted in 90s under Rastriya Saaksharta Mission when I was DG, NLMA/JS in MHRD. Under the PMKVY, there will be Skill Development Mission in each State. As a part of the demand driven strategy, the State Skill Development Mission (SSDM) will have a calendar of Kaushal Melas in the State preferably at the level of each Parliamentary Constituency. While there will be uniformity of messaging for the Kaushal Mela at the level of National Skill Development Corporation, a standardized advertisement campaign will be conducted in the regional language with focus on target group(s). In organizing the Kaushal Melas, the State Skill Development

Missions are required to adopt a camp based approach for disseminating information about various skill training options, outline possible career paths and income generation potential of each skill to be covered in the programme. The PMKVY also envisages Skill Yatras to generate awareness in the hinterlands and include live demonstration of skills in mobile vans/buses/centers. The PMKVY has also emphasized the need for multi-media campaign including radio jingles, print and TV advertisements, posters, brochures etc. It further envisages that soft copies of poster templates and messaging to be used will be available on PMKVY Scheme website for usage by the training providers. It has entrusted the responsibility to run national level campaigns in radio, print and TV advertisements to National Skill Development Corporation.

There are a number of interesting and innovative features in PMKVY. These are:

- Identification of ten key stakeholders;
- Identification of institutional mechanisms for implementation of PMKVY;
- Identification of components of preparatory phase;
- Identification of components and sub-components of operation phase such as:
 - Target allocation;
 - Mobilization;
 - Marketing promotion, messaging and logo usages;
 - Enrolment;
 - Training;
 - Assessment;
 - Certification;
 - Reward disbursement;
 - Mentoring support to the trained candidates.

To generate and sustain interest and not to drop out at any stage in the minds of the trainees selected to undergo training in a particular skill/trade, PMKVY has introduced a scheme of monetary rewards for the trainees. The reward amount would be fixed after taking into account the cost of training, willingness of trainees and other relevant considerations. Higher incentives have been fixed for training in manufacturing, construction and plumbing sectors. The reward amount will be transferred directly to the

trainee's bank account. Aadhar number will be used for unique identification of each candidate.

Mentoring support is yet another significant component of PMKVY. Such support is meant for trainees who have successfully completed the programme and are in the process of looking for employment opportunities. Training providers will be responsible for identifying mentors who will support and guide trainees in the post-training phase. Such support includes (a) Career Guidance and Counselling (b) Connecting the Trainees who have completed training to employment opportunities and (c) Tracking Trainees in the post training phase.

PMKVY provides that trainees with prior experience or skills and competencies will be assessed (recognition of prior learning) but does not attach any importance to the quest for lifelong training side by side with skill training. Those of us who have been in the field of adult education for years do recognize that (a) learning is a continuum (b) there is scope for synergizing lifelong learning, skill training and employability of youth and (c) necessary opportunities and incentives should be extended to all persons undergoing skill training or in employment after skill training so that they can fulfill their desire for acquiring higher qualifications and make use of the same in the larger national interest. This is elaborated in the subsequent paragraphs.

Synergizing lifelong learning, skill training and employability of youth

What is lifelong learning?

The concept of lifelong learning implies that learning is a continuum which occurs every day, week, month and year. It is a gradual and sequential process in which everybody learns albeit step by step. Lifelong learning cannot be compartmentalized in terms of a temporal division of life into youth and old age.

The concept figured for the first time in a concise form as the very first recommendation of the report of the International Commission on Development of Education captioned 'Learning to be' authored by Mr. Edgar Faure. To quote from the body of the recommendation 'we propose lifelong education as the master concept for educational policies in the years to come for both developed and developing countries'.

The Report of the Second Education Commission (1964-66) popularly known as the Kothari Commission had observed that 'Education does not end with schooling but is a lifelong process'.

This observation was reiterated in the National Policy on Education in India, 1986. To quote from the text of that national document:

'Lifelong education is the observed goal of the educational process which pre-supposes universal literacy, provision of opportunities for youth, housewives, agricultural and industrial workers and professionals to continue the education of their choice at the pace suited to them'.

Dr. (Prof.) R.H. Dave, a distinguished scholar and educationist, an authority on evaluation of learning outcome and former Director, UNESCO Institute of Education, Hamburg (UIE) has in a UIE monograph brought out implications of lifelong education clearly, lucidly and forcefully with the help of a few illustrations as under:

- The learner develops an increasing awareness of the modern world, the changes occurring in all walks of life at a rapid pace, the phenomena of expansion and obsolescence of knowledge, changes in life roles as well as physiological conditions at different stages of life;
- He/she realizes that school education is only a first systematic step towards lifelong learning, certainly not the end;
- He/she develops an understanding of his personal responsibility for progress in life by acquiring new knowledge, skills and attitudes from time to time;
- The learner under a programme of lifelong education develops competence to profit from different learning strategies such as:
 - Learning under the guidance of a teacher;
 - Learning without a teacher;
 - Inter-learning in small groups;
 - Exchanging teacher learner roles in different situations.
- He/she develops basic learning skills such as purposeful reading, keen observation, listening with patience, comprehension, verbal and non-verbal communication;

- He/she simultaneously develops basic skills such as reasoning, critical thinking, interpretation, application, methods of scientific inquiry;
- Lifelong learning enables the learner to bring about an integration between school and out-of-school experience.

To sum up and as succinctly put by Dr. Malcolm S. Adiseshiah, former Deputy Director General, UNESCO and former Vice Chancellor, University of Madras, 'lifelong learning reaches out to all life because it is all of life. There is no sector of life, whether it be the family, the school, the university, the business, the office, the class, the firm, the factory, the temple, mosque or church, the hospital, the cinema or any other recreation hall, where the effort to learn, training and develop is not possible. For all around us everywhere are lessons to be learned, knowledge to be garnered, information to be culled and the personality to be developed in a subtle or obvious way'.

The implications and importance of lifelong learning have considerably changed in recent times due to a number of factors. In a technology driven knowledge based competitive economy, the landscape of learning is bound to change from basic rudimentary literacy to lifelong learning/education. Basically what is implied and what was clearly stated in Rastriya Saaksharta Mission document and now in Saakshar Bharat document, neo-literates coming out of adult literacy centres should continue learning and acquire equivalency to formal educational system.

Saakshar Bharat envisages that for equipping both non-literates and neo-literates with vocational skills to improve their living conditions, Jan Shikshan Sansthan (JSSs) will be institutionally networked with Adult Education Centres (AECs) so that they could impart skill development training as well as literacy linked vocational training.

This is how lifelong learning both conceptually and operationally has been recognized in Saakshar Bharat. It is a different matter that operationally speaking Lok Shiksha Kendras or AECs which were to be set up for every Gram Panchayat with a population of 5000 and which were to be the principal instrument for promoting lifelong learning have either not been set up as per the norm laid down or, wherever set up, they have miserably failed in discharging the mandate entrusted to them.

Synergy or convergence could be partly on an individual plane, partly on

an institutional plane but largely on an emotional plane. As far as institutional convergence is concerned, we have a set of lifelong learning/educational institutions as also skill training institutions at the national, State and district levels. Convergence between these institutions would depend on their spread and distribution, suitability of learners passing out from lifelong learning institutions and intending to join skill training institutions, the extent by which the functionaries in charge of these institutions have been able to understand and internalize the importance of convergence and how to promote the same. Interactivity between the functioning of the two institutions would mean:

- They must meet, get to know and understand each other and be able to establish an emotive bond which will be to their mutual benefit;
- In course of visits, they should be able to share ideas, information and experiences which are relevant to the target groups managed by them;
- They should be trained and equipped to study the aptitude of learners/students as to what they would like to pursue;
- They should continuously promote, encourage and exhort as also counsel the talented and aspiring learners/students to pursue advancement in their career and provide opportunities for the same;
- Simultaneous visits of students of lifelong learning institutions to skill training institutions and vice versa should also be organized;
- Quizzes, curtain raisers and interviews for promoting awareness of the importance of both lifelong learning and skill training should also be organized;
- Skill training should be integrated into the curriculum of training of teachers of lifelong learning institutions;
- Skill training should be integrated into the curriculum, course content and textual matters which are being used in lifelong learning institutions;
- Every teacher – alike in skill training as well as lifelong learning institution should be trained to inculcate in the mind of every learner/student the importance of the following life giving, life breathing and life saving skills:
 - Survival skills;
 - Communication skills;
 - Cognitive, effective and psychomotor skills;
 - Elementary vocational skills;
 - Leadership, attitudinal and behavioural skills.

I would like to conclude by referring to a seminal work captioned, 'Let My Country Awake' (1970) by Dr. Malcolm S. Adiseshiah and the distilled wisdom contained therein. 'Let my country awake' is the last line in Tagore's 'Where the mind is without fear' from an anthology of poems called Gitanjali or Song offering. It may be appropriate to reproduce the English translation of the full text 'where the mind is without fear' to enable us to appreciate the context from which Dr. Adiseshiah derived his inspiration and wisdom and the end objects which he had envisioned in 'Let my country awake':

'Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up into fragments by narrow
domestic walls;
Where words come from the depths of truth;
Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into the dreary
desert sand of dead habit;
Where the mind is led forward by thee into ever widening thought and
action;
Into that heaven of freedom, my father, let my country awake'.

'Let my country awake' was first published in 1970 when Dr. Adiseshiah was serving UNESCO. It is largely based on facts and ideas made by the author in course of his numerous speeches, statements and articles over almost a decade (1961-70).

The Preamble to UNESCO reads, 'If wars begin in the minds of men, it is in the minds of men that the foundations of peace will have to be laid'.

Keeping this seminal observation as a pole star before him, Dr. Adiseshiah has presented a number of seminal ideas or gems of truth in his work which in a summary form would look like as under:

- Development is the road to peace;
- Laying down a firm and lasting foundation (as in the Preamble to UNESCO) of peace, would primarily imply improving the lives of women, men and children everywhere;
- To achieve this, a universal realization of the importance of human factor in economic and social development is necessary;

- Simultaneous realization of the importance of moral and spiritual development is absolutely necessary;
- Simultaneous transformation of certain traditional concepts and attitudes is necessary in the context of a rapidly changing world;
- The approach to the role of education, science and culture in the development process has to be humanistic;
- Education which is key to human development should be seen as a lifelong learning and continuing process.

India needs to awaken itself to a realization of the immensity of human failures on all fronts as envisioned by the author in the following areas:

- The pledge which was to be redeemed as succinctly brought out by Pandit Jawaharlal Nehru in his 'Tryst with destiny' speech made on the midnight of 14th August, 1947 remains unfulfilled;
- There have been failures to agree, failures to change and failures to serve;
- Promises have been proven empty and declarations have rung false;
- Education is not a one way flow; it is a dialogue, a shared effort which rewards all who are engaged in it;
- Development like education is a mutuality requiring common purpose and struggle, not an intervention from without or exclusion from within;
- Man's life cannot be viewed like business of life as in economics in a narrow and restricted sense;
- Economics must take its place alongside ethics, aesthetics, psychology, jurisprudence, sociology, history, anthropology, linguistics and philosophy to make life meaningful;
- Simultaneously, the first test of development is by economic growth, which is primarily quantitative, essentially economic and basically measurable;
- A country whose standard of living is not rising, whose annual per capita income is not increasing is not meeting the first test of development;
- Change means adopting and adapting the ways of modern science and technology, it means being open to innovation and experimentation, developing intellectual flexibility and creativity; it means revising, discarding, and/or adapting traditional social moorings and accepted hypotheses;

- Development is growth plus change, not growth first and changes second. Growth also takes place through change just as change is a consequence of growth.

In the ultimate analysis, development is a form of humanism; its finality is the service of man, the finest and best in creation. It is as much moral and spiritual as it is material and practical. It is an expression of the wholeness of man serving his material needs of food, clothing and shelter and embodying his moral demands for peace, compassion and charity.

‘Let my country awake’ was written forty five years ago but the anxiety and concern which have been expressed therein under caption ‘the crisis of man’ continue to be as relevant even now as then (1970). There may have been radical shifts from an economy which was mixed, closed, inward looking to one which is open and outward looking over a period of last twenty five years (July 1991 to July 2015) with consequences – some positive and some not so positive but the basic dilemma as presented in the book remains unresolved i.e. there is no perceptible integration or balancing the material and practical with moral, ethical and spiritual. This has been compounded further by a few other developments which are neither pro-poor nor pro-gender nor pro-children as enumerated under the following heads:

I. Disintegration of the joint family system

Disintegration, division and atomization of the family structure has corroded the ties of the kindred, has separated parents from the children and has bred distrust between the spouses, between the young and the old. The old world values characterized by kindness and compassion, rapport and bonhomie have been replaced by rancor, jealousy, greed, intolerance, mindless hatred and violence. The elderly who will number 230 million by 2030 stand left out by the wayside on the ground that they represent a spent up force. The young who are wedded to money, property, career and ambition are growing more and more impatient, intolerant, aggressive, acquisitive and restless; they would also grow old but their mundane worldly desires characterized by lust for money and flesh grow younger day-by-day.

II. Pollution of public life

Public life is getting contaminated beyond comprehension. The old public life of 20s, 30s, 40s led by Bapu, the Father of the Nation and built on the

edifice of self-abnegation, sacrifice and dedication to a public cause like freedom from foreign yoke has been mired by more selfish, aggressive and acquisitive instincts resting on craftiness, manipulation, deception and fraud. The permissive and licentious milieu all around has been degraded further by the culture of sycophancy, nepotism and cornering unmerited benefits by a few at the cost of the many. This has been compounded further by the culture of mediocrity and sloppiness completely replacing the culture of meritocracy.

III. Government, governance and tenets thereof

Compliance with law made by Parliament – the temple of democracy is the first and foremost requirement of good governance. Such law(s) is required to be complied by multiple agencies – government, corporate enterprises, individuals, statutory bodies, courts, magistracy, police etc. Very often the law is flouted due to a variety of considerations by the vested interests – some open, some hidden and some not so transparent. This has consequences by deprivation of genuine and legitimate entitlement of persons who need protection of and equality before the law most.

Secondly, law is invariably interpreted in a manner which does not make the law beneficial for whom i.e. the poor, deprived, helpless and defenceless the law was enacted.

Thirdly, those who are left aggrieved or victimized on account of being denied their just and fair entitlements have nowhere to go for ventilation and redressal of their genuine grievances.

Fourthly, those who commit serious breach or transgression of the law are not pursued seriously; they are often willy-nilly allowed to escape scot free or with impunity as there is collusion between the law breakers and vested interests.

Fifthly, for the few perpetrators of a crime who are caught red handed, are brought to book and are awarded penalties, the entire process does not leave any perceptible impact as the penalty awarded is seldom proportionate to the severity of the offence committed.

Sixthly, the honest and upright who make sincere efforts to uphold the highest standards of probity, rectitude and orderliness in public life are

sometimes taken to task, driven to desperation and punished on mistaken beliefs or flawed assessment of their action, conduct and performance. This leads to footloose governance.

Dichotomy between material and spiritual development

As a free, resurgent and aspiring nation, we are keen and eager to establish our rightful place in the comity of nations while grappling with bewildering problems of poverty, unemployment, pervasive ignorance, illiteracy and low skills at home. Our government is moving in a new direction in a determined bid to make India clean, bold, bright, digital, skilled, productive and self-reliant. None can doubt or dispute, far less belittle or minimize the importance of certain new initiatives taken with a tremendous amount of political will, commitment and determination as also speed during the last one and half years. These initiatives are absolutely essential in a fast growing and fiercely competitive world where multiple forms of physical and material development (ports, railways, airfields, national highways, hydro-electric projects, power plants, aero-space stations, etc) are absolutely essential.

But we need simultaneously to go back, take a cue from what distinguished educationist Dr. Malcolm S. Adiseshiah had envisioned in 'Let my country awake', introspect a bit and ask ourselves 'Are all these initiatives in the direction of true, holistic and integrated development?'

True development as Dr. Adiseshiah had visualized is total development of human spirit in a climate of freedom, dignity and spontaneity.

True development as I had visualized 'Can education make us more humane' in a piece I wrote for 'Think India – quarterly in June, 2004 is replacement of the culture of acquiescence, conformism, obscurantism and serf like submissiveness by a dispassionate scrutiny to weed out the illogical, irrational, irrelevant and incongruous by something which would sound logical, rational, coherent and scientific.

True development, as I had written in that piece, is replacement of the culture of intolerance, mindless hatred, violence, wanton cruelty and killer spirit by a culture of self-abnegation, kindness, compassion and commiseration.

True development is replacement of the policies of irrational and

unprincipled segregation, differentiation and discrimination by a culture of equality before law and equal protection of law, provision of equal opportunities of free and uninhibited access to education, health care, nutrition, environmental sanitation (Swachh Bharat), skill training to enhance employability, full, freely chosen and productive employment, equal wages for women and men and equal/equitable treatment of one and all regardless of class, caste, creed, colour, faith and belief, social origin, gender and political ideology.

An old adage in Sanskrit read thus:

‘सा विद्या या अमिमुक्तये’

That is true education which liberates human beings from mindsets and diehard obscurantist ideas and practices which have no rational and scientific basis.

To the extent, we have succeeded in imparting such a liberating force to education, we would have certainly lived up to the lofty thoughts composed by Gurudev Rabindranath Tagore about one hundred years ago in ‘where the mind is without fear’ ably supplemented and fortified by the very sound sensible thoughts of Dr. Malcolm S. Adiseshiah contained in his seminal work, ‘Let my country awake’.

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Lifelong Learning and Skill Development: Dialectic between Past and Future

Harbans Singh Bhola

I. Introductory Remarks

Indian Adult Education Association (IAEA) was formally established as a Non-Formal Organization (NGO) in New Delhi, India in 1939. Dr. Zakir Hussain, one-time President of the Republic of India observed that “The History of Adult Education Association is History of Adult Education in India.” That is a truly grand commendation for the Indian Adult Education Association of India.

This author is proud to have been associated with the Indian Adult Education Association since the 1950s.

II. The Gandhigram - Conference Spotlights: “Lifelong Learning” and “Skill Development”

As a gathering of Adult Education Leaders from all over India, we are here to Confer on two of the most significant Educational Discourses of the new Millennium: (1) Lifelong Learning and (2) Development of Skills.

We will begin with the history of the coinage of the term “Lifelong Learning” and relate how Lifelong Learning came to be accepted as a global ideal in educational policy and practice. We will then turn to the concept of “Skill” and attempt to capture the development of its expanded meanings – not only as something being sharply-bounded narrow capacity to do or produce something material and concrete, but something with widely expanded scope to include skills that are not just manual, but also ideational, conceptual, scientific, mathematical, and indeed creative, musical, and artistic.

In an honest and courageous self-analysis, as Adult Education Leaders at the national level, we should then ask ourselves as to what “expanded” skills we **ourselves** may be lacking and how we could develop a national,

Indian Journal of **Adult Education**, Vol. 77 (1); January-March 2016, pp. 37-53

multi-level Agenda to pursue, for the next 5 years or more, to list and master those skills ourselves.

In Resonating to the Locale of the 61st All India Adult Education Conference in Gandhigram, we should pay our Homage to Mahatma Gandhi; as also show all due respect to Pope Francis, whom I personally have come to think of as a new, modern-day *Catholic* Gandhi.

This section will be in two sub-sections: The Development of the Concept of *Lifelong Learning*; and Meaning and Process of *Skill Development*.

II-A. Lifelong Learning Delineated

A *Wikipedia* entry on “Lifelong Learning” admits the ambiguity of the term and states: “Although, widely used in a variety of contexts its meaning is often unclear.” Shifting to a more promising stance, it then defines “Lifelong Learning” as the “ongoing, voluntary and self-motivated pursuit of knowledge for either personal or professional reasons. Therefore, it is not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, rather than competitiveness and employability.” It then adds another challenge to the understanding and use of the term “Lifelong Learning” imposed by today’s new “Technologies”, including e-learning, that adds ever greater complexities.[<https://en.Wikipedia.org/wiki.lifelong_learning>]

Lifelong Education: An Even Wider Understanding

Lifelong Learning, a short pithy expression, is widely used today in a variety of contexts. The semantic complexity is huge as Lifelong-Learning is juxtaposed with terms such as “Teaching”, “Learning”, “Self-Learning” and “Independent-Learning,” Adult Education, Continuing Education, Study Circles, etc.

A quick historical sketch of development of “Education” in human societies would be useful here. First, Education was part of socialization of young ones by the Elders of the family and the community. Then “Education” came to be delivered in temples, churches, mosques and gurdwaras. “School” as an institution to teach children came next, assisted by the process of colonization of the non-West by the Western countries. The process of *de*-colonization, some centuries later, demanded “planned development” in newly independent nations which required dissemination

of new information about health and farming and much else, hence arose the need to work with adults in out-of-school settings. The concept and practice of “Adult Education” was Born!

The delivery of development-related information to adults was not always adequate, without their ability to read. Thereby, arose the need for teaching “Adult Literacy” which became the second – and indeed the stronger — leg of Development. Then came yet another realization that “Teaching” by a teacher or by a field-worker was not enough. Adults had to engage in “Learning” that was untied to “Teaching” by another agent. The grand train of ideas did not stop there but steamed forth, on and on. Then, yet another explosive idea emerged: that Learning not only had to be Self-Learning, but it also had to be Lifelong Learning –without grades and age requirements, covering young adults, females and males, as well as their parents and grandparents, with no age limits.

II-B. Skills: Multiple Dimensions & Directions

After the conversation above on “Lifelong Learning”, we now turn to “Skills Development.”

What is Skill?: Skill, in its dictionary meanings is Expertness, Excellence, Competence, Craft, Practiced ability, Facility in doing, Dexterity, Adroitness, Knack, Trick, even Cunning.

Today, we know very well from our hindsight rooted in history, that the “Handyman” or “Handywoman” with *Tools* who worked with his or her hands, with the benefit of organized apprenticeship and/or sheer commonsense have had a long history. Understandably, in the age of Crafting with hands, *Skills* came to be associated with things manual, mechanical and industrial — concrete skills, things to do to make products using hand tools, and later on, machines.

A Whole Array of Learnings over the Lifetime

Men and Women born in the “Age of *Literacy*” who could Read or Refer to a Book or a Manual, created a new world where the very idea of Skills changed drastically and over time it exploded. Skills today are truly multiple, along a whole array, requiring varied Levels of Ability for the holder of Skills.

It can be said, in somewhat colorful style that today's *Lifelong Learners* to achieve Multiple Learnings, will require a corresponding array of *Literacies* at various levels of competence. Then there would be the challenge to improve both personal and institutional capacities over the life-time, as a Lifelong-Learning Process.

To serve well the communities of (a) *Adult Learners, and Adult Education Workers at various levels*; and (b) *to Learn to be Good Nationals and State Level Leaders in Adult Education ourselves*, a rough and ready Taxonomy of Literacies is presented below.

The list of Literacies we propose is by no means "complete", and it is not in any way "absolute." Indeed, each and every *Literacy* will be re-defined in particular Contexts of Clientele – Male or Female; Age Groups; Rural versus Urban Setting; Institutional Settings: School, Adult Education Class, Church, Temple, Mosque, Hospital, or Prison.

The Naming of Skills we may have to promote as part of our Lifelong Learning agenda, for instance:

1. Literate in regard to Reading and Writing in the Mother Tongue and the national or regional Language of Education, Work and Business.
2. Literate in the Language(s) of Childcare, Nursing, and general Health Maintenance Skills including – Yoga.
3. Literate in Language of Farming
4. Science Literacy – Most importantly, we will need to demolish the old division between and among, Arts, Humanities and Sciences. Science Literacy, essentially will include Conceptualizing to rise above and beyond the Concrete.
5. Digital/Computer Literacy: In the age of Cell phones and I-pads an introductory level of Computer use has become important for field-level workers.
6. Cultural, Social and Political Skills.
7. Developing Innovative Orientation, to cultivate Management Skills; and Entrepreneurial Skills.
8. Cultivating Humanism, facing the Moral Imperatives and to practice Social Ethics

II-C. Handling the *Dialectic* between “Lifelong Learning and Development of Skills

It is not to say that commitment to “Lifelong Learning” means that Adult Educators in one stroke can wash their hands off all other Modes and Methods Educating, for instance, “Teaching of Select Groups, at Fixed Time Tables, within particular Institutional Settings, with no pre-arranged Content and Curriculum. It may sound *paradoxical*, but in the beginning, makers, shapers and shakers of Education Policy within State Departments as well as within the Structures of Leadership of Non-Governmental Associations (NGO’s) and Civil Society ventures, will have to engage in *systematic* selling of the ideas of how “Lifelong Learning” can be promoted; and how our “Dependencies” on “organized education” as now prevalent, can be broken.

In the preceding, we have talked of “**What**” as initiators or agents of “Lifelong Learning” we would do for selections of a package of Methods and Contents. To put it differently, this could be, in a general sense the challenge of “Curriculum Development.” That will mean understanding as to what is being Taught and Learned in other settings by the clients of Lifelong Learning? We must keep in mind that Lifelong Learning does not make all other “**organized**” Learning being pursued, redundant and unnecessary. A particular focus such as “Skills” is possible to include, but that does not mean that all else is excluded.

Next, is the Question of “**When**” should “Lifelong Learning” be advanced during the life-span of a learners? Lifelong Learning” by its very nature assumed freedom on the part of the Learner, but freedom should be freedom to make intelligent choices by self and good advisers. Finally, the question to be tackled is “**How**” the Learning should be acquired. Lifelong Learning does not impose what sources of knowledge should be used and on what time schedules – though the Lifelong Learner has the freedom of using different modes, and methods. Lifelong Learner may use Radio and TV, Books and Magazines, and of course, even institutional structures which look very much like a school or a night-school.

The Way to Go in Lifelong Education

It should be noted that the Reality of the “*Institutionalization of the Idea of Lifelong Learning by OECD and UNESCO*” has given Lifelong Learning both a History and a set of Organizational Structures. The coinage of the

term “Lifelong Learning” is attributed to an international organization, OECD: Organization for European Cooperation and Development. The idea was later enthusiastically adopted by UNESCO Institute of Education (UIE) of Hamburg, Germany which re-named itself as UNESCO Institute of Lifelong Learning (UIL) – from UIE to UIL was a fundamental “Structural” reconstruction.

The Indian Adult Education, **perhaps**, should follow the examples of OECD and UIE and reconstruct itself to fully internalize these ideas. In handling the Dialectics between “Lifelong Learning” and “Development of Skills”, we should ourselves become Born-again Leaders of Indian Adult Education. We should as a Group, find time to sit down to do some serious unlearning and new-learning and develop a Long-term, Futuristic Plan of Action for the fruition of the newly defined Objectives for IAEA.

III. New Referenda and Agendas: Climate Talk and Social Protection

It is worth remembering that in the Indian folklore, Dharti (Earth) is our Mata (Mother). What is still embedded into the Indian folklore is, unfortunately, not a reality anymore in the real lives of the millions living in poverty, and sometimes without any shelter. Indians themselves have for long been terrible abusers of the *Earth* they live on as shown in a bitter polemic written and published by an American historian Katherine Mayo in 1927.

Drowning ourselves in old regrets is unnecessary. Today what Adult Educators in India and elsewhere, need is to seek full understandings of the phenomenon of **Climate Change**; and participate in both Thought and Action to seek change at all levels of state and society, from the Local to the Global.

In this respect, the most important Agenda for us all should be to develop intelligent familiarity with the **United Nations Summit on Climate Change**, held in Paris, during late November 2015.

To that we turn in the following:

III-A. United Nations Climate Change Summit

As per a CNN Report of November 29, 2015: World Leaders arrived in Paris for Climate Change Conference on November 29, 2015. “The talks were to begin in earnest on Monday (November 30, 2015). Nearly 150 world leaders were expected to attend the United Nations Climate Summit, called

with the aim of reaching a landmark deal limiting greenhouse-gas emissions (*Greenhouse-gas emissions* are composed of Methane and CO₂ — our killers.) The leaders of the United States, China and India — the world's top three carbon emitting countries — are among those scheduled to attend the opening day of the event, known as COP21."

As a watcher and participant in the part of the recent conversations on the topic, Development and Cooperation (D+C) has dedicated two of its issues: (I) **Climate Talks**; and (II) **Social Protection**.

In anticipation of the "United Nations Climate Change Summit" on November 30, 2015), a Special Issue of *Development and Cooperation* (D+C), Vol. 42, 6-8/2015, had been dedicated to "**Climate Talk**." *Arizona Daily Star*, of December 1, 2015, on pages 1-4 A, provided a good Background to the event as follows:

The discussions on Environment and Climate Change are again upfront because of World Conference on Climate Change seeking a climate pact of world leaders. It continued thusly, "The gathering in Le Bourget [Le Bourget is an easier to protect suburb of Paris], France, was nonetheless still shaken by the terrorist attack. Before Le Bourget, there had been the Kyoto Protocol of Japan (1997), and then they had come to Copenhagen (2007). But Le Bourget on all counts had seemed more hopeful. It was "the largest gathering ever of world leaders" — gathered for two weeks of talks on Monday, Nov 30, 2015) aimed at producing the most far-reaching pact to reduce greenhouse-gas emissions and avert environmental havoc: United Nations Framework Convention on Climate Change UNFCCC). All this two weeks after the extremists' attacks when the wounds were still raw.

The task in Concrete Scientific Terms

Even before the *actual* gathering in Le Bourget, more than 180 countries had already pledged to cut or curb their emissions, but scientific analyses show that much bigger reductions would be needed to limit man-made warming of Earth to 2 degrees Centigrade (3.8 degree Fahrenheit) over pre-industrial times, the internationally agreed-upon goal.

Who will bear the Burden of Costs?

"The last major climate agreement, 1997 Kyoto Protocol, had required

only rich countries to cut emissions, and the U.S. never signed on.... This new round of talks sought to produce an agreement that would require all countries, rich and poor, to take action. The new agreement hopefully would chart a path toward reduced reliance on coal, oil and gas and expanded use of renewable energy such as wind and solar power. More importantly, the negotiations will “focus on whether emissions targets should be binding or voluntary and how to verify that countries were indeed hitting their targets.” Another big issue was as to how to provide the finance and technology to developing countries to enable them to rise to the challenges. Who should do more? Wealthy Western nations that have polluted the most, or countries like China, and India? No plain answer there. India and China both bear the dilemma – India more than China — in their need to continue their socio-economic “development” to reduce poverty among their peoples, and indeed to improve their living standards. The search for this sort of development process, paradoxically, produces huge greenhouse-gas emissions.

Rising above all this, U.N. Secretary General Ban Ki-moon continued asserting: “We cannot afford indecision, half measures, or merely gradual approaches. Our goal must be a transformation.”

Le Bourget Accord on Climate Change, Full of Discords!

As reported in the Arizona Daily Star, of December 6, 2015 (page A-13), the News about the UN Conference held in Le Bourget (outside Paris) was not good. “Negotiators adopted a draft Saturday (Dec 5) that was cluttered with brackets and competing options, leaving ministers with the job of untangling key sticking points in what is envisioned to become a lasting pact to fight global warming.”

“Many disagreements remained, almost all related to defining the obligations and expectations of rich and poor countries....who should pay for a global transition to clean energy, and should there be an international tribunal of climate justice”?

The Final Resolve: “We Will Overcome!”

Finally, the conferees at Le Bourget, France, representing “Nearly 200 nations adopted the first global pact to fight climate change on Saturday (Dec 5), calling on the world to collectively cut and then eliminate greenhouse-gas pollution but imposing no sanctions on countries that don’t. “The Paris

agreement aims to keep global temperatures from rising another degree Celsius (1.8 Fahrenheit) between now and 2100, a key demand of poor countries ravaged by rising sea levels and other effects of climate change.

“Loud applause erupted in the conference hall after French Foreign Minister Laurent Fabius gaveled the agreement.”

“In the pact, the countries pledge to limit the amount of greenhouse gases emitted by human activity to the levels that trees, soil and oceans can absorb naturally, beginning at some point between 2050 and 2100....In practical terms, achieving that goal means the world would have to stop emitting greenhouse gases – most of which come from the burning of oil, coal and gas for energy – altogether in the next half century.”It is a first pact to ask all countries to join the fight against global warming. Previously it was required that only wealthy nations reduce their emissions.”More importantly, now: “there is a legal requirement that every five years each country will present new emission reduction targets.”

Other Good Signs:

Commitment to “Transparency”: One of the serious concerns of the delegates to the Paris Climate Conference was “how to measure, report and verify emissions to ensure that countries are meeting their reduction targets. The issue was far more from being fully resolved, but it was assured that it would not be allowed to fade away.

Pledge for \$100 Billion Annually for the World’s Defenseless: All nations, big and small economies, called on developed countries to adhere to their pledge to provide \$100 billion annually to developing nations, focusing particularly on people living in low-lying and coastal areas and small nations.

[Adapted from Karl Ritter, Seth Borenstein, and Sylvie Corbet of Associated Press, reported in Arizona Daily Star, Sun, December 13, 2015, pages 7 & 13]

III-B. Agenda Item: Social Protection

Social Protection as a concept was invented in the context of the general discussion on “Climate Talk” so fully discussed in the previous D+C Issue [Vol. 42, 6-8/2015] had been dedicated to “**Climate Talk**.” In the firm belief that controlling Climate Change and thereby to save the Environment, by itself is

not enough, nor would mere conversations on sustainable development do any good. To do well by the people, both rich and poor, 'Climate Talk' was to be complemented and supplemented with "Social Protection Talk."

Social Protection: Defined and Delineated

To emphasize, we will recollect and repeat. Development and Cooperation (D+C), a Non-Government Agency of Germany who over the years have come to act and think in behalf of Europe, and indeed the whole developing world is also responsible for promoting the Concept and Practices of ensuring **Social Protections** of peoples around the world in their Special Issue (Vol. 42, 9-10 / 2015). The two Issue were joined together by a short sentence at the very end of the "Climate Talk"

"Social protection policies prevent poverty, foster pro-poor growth and stabilize political orders. They also serve to reduce inequality in society. Every nation must take approaches to age-old pensions, health insurance and poverty alleviation that fit its needs. There is no blueprint that would fit all countries, and private sector businesses can play an important role. Unless governments implement appropriate policies, however, there will only be marginal progress."

Examples of Measures for *Social Protection*

Brazil, later joined by **Mexico**, were lauded for their well-known programs of "Social Protection" such as conditional cash-transfers for poor families that send their children to school; and make them visit a doctor regularly. **India's** establishment of a public works scheme that guarantees rural households a minimum income was also highly appreciated. In **Sub-Saharan Africa** organization of flat-rate old-age pensions were taken note of. It was also noted that the **European Union** was tentatively discussing a scheme for pan-European unemployment benefits. Finally, **USA's** introduction of a universal health-insurance coverage – derisively named as Obama Care by the President's political adversaries, was considered a major leap forward in behalf of the nation's citizens.

IV. Resonances to our Moral Heritage: Mahatma Gandhi, and Pope Francis

The Section - IV is also in two Parts: The first deals with Mahatma Gandhi; and the second with Pope Francis, the present-day Catholic Gandhi.

IV- I. Mahatma Gandhi

I strongly hold the view that education in general, and *Adult Education*, in particular should be fully drenched in the “Sarovar” (pool) of Morality, and be deeply rooted in a culture of Ethics. Doing Adult Education should never be seen as merely an *Academic Project*.

Writing a paper to deliver at The 61st All India Adult Education Conference, being held at **Gandhigram** Rural Institute, Tamil Nadu, India, it was no wonder that I thought of Mahatma Gandhi as one most precious deep well of the Moral and the Ethical.

Another person that now keeps on coming to my mind is Pope Francis who I have been thinking of as a “*Catholic Gandhi*”—considering his humanity, his vision, his inclusion of all humans irrespective of religion, caste and class but in need of the 3-L's: Lodging, Labor and Land.

Mahatma Gandhi as the Super Moral Man: Read About, Seen, Felt, Brought Alive

A Sikh by birth, son of a liberal Lawyer, in Amritsar, Punjab, religions or sects were never an issue, they were just “accidents of birth” in a Sikh, Hindu, Jain, Christian or Muslim family! The couple of years preceding the Partition of India, had changed things rather drastically. As a College Graduate and a daily reader of national Newspapers, growing up in Amritsar, Punjab – at the time in the process of the Partitioning of India into Pakistan and East Punjab, and reading about the role of Mahatma Gandhi in promoting amity between Hindus and Muslims, I could not have been unaware of the role of Mahatma Gandhi in the Indian Independence Movement and his passionate dedication to avoiding Hindu-Muslim conflicts in Punjab and Bengal. Unfortunately, the Moral and Ethical did not work and Independence was literally drenched in rivers of blood. Almost half of the city of Amritsar was burned down to ashes.

In 1948, within a year after the partition I moved to Delhi in search of a job — there was no work for a B.Sc. (Honors) in Physics and Math in Amritsar, except as a science teacher in a school which I did not find attractive. I found a welcome with a relative in Paharh Ganj just two miles from the Famous Birla Mandir. In January 1948, the local leaders Delhi state were able to persuade Gandhi Ji for his Prayer Meetings in one of the Prayer Halls

attached to Birla Mandir. One morning, when I was getting ready to walk to the Delhi state Job Exchange, I learned that Mahatma Gandhi, had been shot dead by one Nathuram Goddse, a Hindu fundamentalist. All India Radio kept on repeating the terrible news and his famous sing-song, "Ishwar Alla Tero Naam Sab Ko Sanmati De Bhagwan." One of the occasions when I felt Gandhi Ji's presence, real close.

In Touch with Gandhi Ji's Spirit in Pretoria, South Africa

That Gandhi Ji had lived in South Africa for 22 long years may not be common knowledge. Indeed, long back in 1893, he had gone to Natal, South Africa with a one-year contract to work with an Indian firm. He then continued working on other projects and elsewhere for another 21 years.

Mahatma Gandhi, had left India to study Law in England, and decided to go settle and practice law in South Africa. As a Brown man sitting in a first class carriage in the train, he was literally thrown out of the carriage on to the platform in Pretoria – despite his possession of a valid ticket.

That gave him a "Moral Cause" to fight for — Apartheid – which means keeping peoples of different races apart, the inferior Blacks and Browns were to be kept apart from the Superior White people. When South Africa became Independent and Nelson Mandela became the President, there was a national retribution and a statue of Mahatma Gandhi was built on the same railway platform where he had been thrown out.

Years later, while working on a Literacy project in South Africa, I was passing through Pretoria and quite accidentally saw this statue of Mahatma Gandhi. Then again, I was able to see Mahatma Gandhi's Statue now installed in the Time Square in London, U.K., close to the statue of Winton Churchill who had once dismissed Gandhi Ji as "that dismal Fakir." Wonders of History. [An Additional Biographic summary is included in the INDEX at the end of this paper].

IV-II. Pope Francis: The Catholic Gandhi

I will be struck with disbelieve, if I was told that there are some among us who have not heard or read anything about Pope Francis. In any case, a short sketch on the Moral and Ethical standing of Pope Francis – who is at the top of a religious establishment (The Catholic Church in the Vatican/

Rome) and yet himself stands above all religions – reminds me of Guru Nanak.

The essences of the Pope's Addresses, Conversations, Prayers and Homilies have encompassed: (1) the need for solving the problems of pollution of the **Global Environmental**, and the accompanying need to harness policies and actions to direct **Climate Change** in the right direction; and the equal urgency to **Redress Poverty** by helping the poor by a collection of processes **Educational and Distributive**. He also dealt with the need for commitment to treating immigrants and refugees with respect; and paid attention to the Protection of Family. He did not forget those in Prisons and Correctional Facilities.

In his own special way, he repeats the following Themes: (i) Religious Freedom is a Precious Possession; (ii) Environment is a Fundamental Good; (iii) Work for Common Good; and (iv) Avoid Polarization and Division.

In USA recently, while talking to the Congress in Washington, D.C., about the Refugee Crisis, Pope Francis said: "We must not be taken aback by their numbers, but rather view them as persons, seeing their faces and listening to their stories, trying to respond as best as we can to their situation."

Pope on Climate Change and Environment

While addressing the 70th Session of the General Assembly of the United Nations, Pope Francis made **Climate Change** central to his concerns: proclaiming the "**Right to the Environment**" and pleading with countries to stop abusing it. In this largest gathering of world leaders, he blamed environmental degradation on a selfish and boundless thirst for power and material prosperity that caused untold suffering for the poor who are cast off by society."

Returning again to the "Right to Environment", Pope Francis asserted "that a true right to environment does exist, for two reasons: (1) because we human beings are part of the environment and since the environment itself entails ethical limits; and (2) because any harm done to the environment is harm done to humanity, resulting from "today's widespread and quietly growing culture of waste."

Environment, he said, is a “fundamental good” in all religions, and that a “selfish and bondless thirst” for power and wealth harms the planet and the people alike. The poor suffer the most from misuse of natural resources: they are part of today’s widespread and quietly growing culture of waste – and victims of it too.”

To redress the injustice to the poor, he offered the challenge of Three-L’s — No wonder, he is called the Slum Pope!

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INDEX

Mahatma Gandhi: A Biographical Sketch

Mohandas Karamchand Gandhi (who later came to be called Mahatma Gandhi) was born in India on October 2, 1869 in Porbandar, Gujarat, India.

His father was quite well-placed, serving as the Chief Minister of Porbandar, which explains how Mohandas Karamchand Gandhi could imagine and afford to leave for London to study at the Union College, London at the age of 18.

Gandhi's mother was dedicated to Jainism, infused by Jain pacifist teachings, of mutual tolerance, non-injury to living beings and vegetarianism.

Gandhi married Kasturba Makhanji, both were 13 years old when they wed. She bore him the first of his four sons.

Following his admission to the English Bar, he returned to India. But found it difficult to find any exciting work in India.

Firm Convictions, World as the Stage

Gandhi grew up to be a man of firm convictions, but was not entrenched in a particular location, indeed moving across, continents and countries. To begin with he had moved from Gujrat to London, and from London came back to India for a very short while. In 1883, from India he decided to go test his fortunes in Natal, South Africa.

In the main Text of the article, we have told the story of Gandhi Ji being thrown out of the First Class Carriage of the train by White Guards simply for being “Brown” and his contesting of the doctrine of Apartheid. But the violent Push out of the Train on to the Platform below was not the end of the story for Gandhi Ji. He made a political and moral cause out of the event and swore to do something consequential against the injustice of racial segregation.

To follow up on this and other causes, Gandhi Ji founded the Natal Indian Congress, and developed his ideological belief in “Non-Violent Civil Protests” as a tangible political stance.

1916: South Africa to India

On his return to India, Gandhi developed his ideological/theoretical belief in non-violent civil protests into a tangible political stance still further into what came to be called the “Non-Violent Civil Disobedience. It worked so well that British controlled police with batons on horsebacks went literally crazy when those being beaten up by them made no violent responses at all!

1918: Gandhi Became Mahatma Gandhi

By 1918, he was leading strikes and protests with such composure that he earned the name of “Mahatma”, the “Great Soul.”

By 1921, he was demanding “Swaraj”

By this time, Gandhi was leading the Indian National Congress, asking for Swaraj, or complete Political Independence from the British Raj. Mass Civil Disobedience was the tool.

Other Steps on the Way

In 1928, there was the campaign for “Dominion Status” for India.

In March-April 1930: Came the famous Salt March

A 250-miles march, by thousands of Indians, led by Gandhi Ji himself from his retreat in Ahmedabad to the Arabian Sea coast, to flaunt the law imposed by the British claiming that it was the for the State to collect and sell the salt from the sea.

Equality for the so-called “Untouchables”

Gandhi Ji's acceptance of so-called “Untouchable” was a Moral Act of immense Dimensions and Depth on which scores of books have come to be written and published.

Equality for Women and Alleviation of Poverty

These were two other Moral acts whose consequences continue to reverberate half a century later, in Indian life and indeed in the nooks and corners of today's Global Village.

Died in New Delhi, India, 30 January 1948

Mahatma Gandhi, was shot dead by Nathuram Goddse, a Hindu fundamentalist, in the Prayer Hall attached to Birla Mandir, New Delhi.

Vocational Skill Development Training and Economic Development

M.C.Reddeppa Reddy

Introduction

The economies of the World are changing into knowledge based economies. The changing face of technology requires an individual to be specialized in a particular skill. Only a person who is skilled in a particular field can get a livelihood. The Vocational Education/Training is about the skills training and development of competencies (knowledge, skills and attitudes) needed for a specific occupation or group of occupations. It develops 'skill culture' in contrast to pure academic culture and preferences for white collar jobs and 'to serve simultaneously the 'hand' and the 'mind', the practical and the abstract, the vocational and academic'. Skilled workers and technicians enhance quality and efficiency of production and also supervise and train the new workers, who have lesser skills. Vocational Education/Training enables the trainees to acquire knowledge and skills that are demand in the labour market. The vocational education/training courses aim to offer diversified courses in the sectors such as agriculture, Health and Para-medical, Art & Craft, Administration, Business and Commerce, Engineering & Technology, Home Science, Humanities, Science and Education etc.

An attempt has been made in this paper to explain about the role of Vocational Skills Training in economic development of the country and establish the relationship between different vocational sectors and economic development based on the literature review. Prior to it, the paper also explains about the concept and different types of Vocational Skills Training sectors, Status of vocational skills training in India. The paper also provides suggestions for accelerating the economic development by strengthening the vocational skills training courses in India.

Concept of vocational skills development training

Training that emphasizes skills and knowledge required for a particular vocation (such as data entry and programming) or a trade (such as carpentry

or welding) is called Vocational Training. Internationally, the terms 'Vocational Education' and 'Vocational Training' are used interchangeably or the use of a combined term 'Vocational Education and Training' (VET). However, in the Indian context, education and training have been traditionally separated. It is argued that the elementary education must impart usable technical knowledge and vocational education can be used effectively to combat dropouts and develop the skills. Thus, education and training are powerful instruments for developing human resources, for bringing changes required to achieve the key objectives of economic development i.e., to create more employment and thereby increasing income. Among the others, Vocational training and skill development is one very important component of human resource development.

Skill development may be defined as a process to acquiring and sharpening capabilities to perform various functions associated with their present and future roles (Tripathi, 2003). Moreover, literature suggests that human capabilities can be improved through better education and training (Haq, 2002). It is no coincidence that the term "skills development" is increasingly displacing that of "vocational training". Skills development refers in general to rather narrowly defined ways of preparing for jobs and is normally used in a de-contextualized form without taking account of the inter-linkages between training, the labour market's structure, social policies, the social organisation of labour and overall issues of power (Allais 2011: 2). Skills development is intended to prepare for a job, rather than for an occupation (in the German sense of "Beruf"). As such, the prominence of the term in the international debate may be interpreted as a reflection of an increasingly fragmented and flexible labour force (Allais 2011: 7).

Types of vocational skills training sectors

Vocational education training can be provided for a number of sectors like agriculture, business and Commerce, trading, travel & tourism, engineering and technology, home science, health and para-medical, art & craft, administration & services, and other courses in humanities and education sector. These sectors can be further classified into specialized courses. Some of the sectors and their corresponding courses are presented hereunder:

- **In agriculture**, the courses such as Crop production, Dairying, Poultry Farming, Farm Mechanic, Fishery, Horticulture, Plant Protection, Seed Production Technology, Sericulture, Floriculture, Landscaping and Bee-

keeping, Sheep and Goat Husbandry, Agro-based Food Industries, Veterinary Pharmacist, Agri-business etc.

- In **Business and Commerce**, the courses include Accountancy and Auditing, Banking, Cooperation, Insurance, Marketing and Salesmanship, Office Management, Purchasing and Store Keeping, Taxation Practices, Rural Informatics Management etc.
- **Travel and Tourism** - Transport Service Management, Curator, Organisation of tours, Ticketing etc.
- **Engineering & Technology** - Air Conditioning and Refrigeration, Audio-Visual Technician, Auto Mobile Engineering, Building Maintenance, Cell Repair Technology, Electronics Technology, Drawing and Drafting, Lineman, Maintenance and Repair of Electrical Appliances, Printing and Book Binding, Software Applications, Rural Energy Management, Computer Assembly and Maintenance, Installation, Operation and Maintenance of Telecom System etc.
- **Home Science** - Cooking, Food Preservation and Processing, Bakery and Confectionery, Catering and Restaurant Management, Institutional Housekeeping, Garment Designing and Making, Textile Designing, Creche and Pre-school Management, Interior Design, Food and Nutrition, Beauty Culture.
- **Health and Para-medical** - Health/Sanitary Inspector, Hospital Document, Record Keeping, Hospital House Keeping, Multi - Rehabilitation Worker, Medical Laboratory Technician, Ophthalmic Assistant, Physiotherapy and Occupational Therapy, X-ray Technician, ECG and Audiometry Technician, Bio-medical Equipment Maintenance, Physiotherapy Technician.
- **Humanities, Science and Education** - Library and Information Science, Commercial Art, Photography, Classical Dance – Kathak, Instrumental Music – Tabla, Hindustani Vocal Music, Entrepreneurship Development etc.

Status of vocational skills training in India

According to the recent NSSO data, only 5 per cent of the population

between the age group of 19 to 24 years in India has learnt skills through the vocational education stream. While 90 to 95 per cent of the youth in developed and developing world learn a skill or competence or trade between the ages of 14 to 35 years. For example, Russia (60%), China (55%), Chile (40%) and Korea (31%) have ten times more secondary students taking Vocational Education & Training (VET) subjects and all these countries have a robust and qualified workforce. Through this over-emphasis on university graduates as the desired outcome of the education sector, India has neglected the opportunity to develop respectable VET programs with formalized pathways to vocational careers from the lower secondary level. With regard to the earnings, an average Indian has an income of US\$1,100 per year compared to an average South Korean (US\$ 19,000).

According to the NSDC (National Skills Development Corporation) Report (2012), India will need 83 million skilled workers across different industry verticals by 2015. Unfortunately with our current training capacity, India will produce only 3 million. In India, vocational education is imparted through Industrial Training Institutes (ITIs) and polytechnics. India has about 5000 ITIs (Ministry of Labour) and about 7000 Vocational schools (Ministry of HRD), while China has about 500,000 senior secondary vocational schools. The corresponding figure for Korea is as high as 96 per cent, it was 75 per cent in Germany, 80 per cent in Japan, 68 per cent in U K and there are several countries, which have figures above 60 per cent.

According to the Eleventh Five Year Plan, only 10 per cent of the Indian workforce has received skill training in the form of technical or vocational training, which is very low compared to international norms. Of the 10 per cent, only 2 per cent received formal training and 8 per cent received informal training of various types. This is despite the fact that in 2008-09, India had an annual skilling capacity of 4.3 million, against 12.8 million youth joining the workforce annually. Thus, 80 per cent of the entrants (8.5 million) into the workforce in India do not have the opportunity for skill training.

In order to link skills developed into actual productive use thereof including self-employment, steps were taken in the Eleventh Five Year Plan by launching National Skill Development Mission, providing adequate incentives not only monetary but in terms of skill and entrepreneurship development and forward and backward linkages to finance, marketing and human resource management, to those who are or seek to be self-employed to

enhance their productivity and value addition, making it an attractive option, rather than be an option *faute de mieux* as at present.

Role of vocational skills training in economic development

Skills development is an increasingly important factor in adapting societies to changing economic and environmental conditions. It can bring innovation, enhance productivity, stimulate economic competitiveness and underpin inclusive approaches to development. It's true that skilled workforce, impacts positively on economic growth, raises productivity levels and reduces unemployment. Development of vocational skills is needed for economic competitiveness, and the fostering of social inclusion and cohesion. Clear and direct links are made between inclusion and economic prosperity in the 'vision of a society where high skills, high rewards and access to education and training are open to everyone' (DFEE, 2001a, p. 6).

Vocational Education and Training (VET) is a means of securing higher economic growth and national prosperity as well as achieving equity goals (Wößmann, 2008). Wolf (2002) claims that the policy emphasis on education and skills as the main driver of economic growth overstates the importance of human capital investments and that a major function of education is as a sorting device and to some extent a social discriminator. In making policy about education and training, it is clearly important to understand these potential economic returns to education and training to the individual, firms and the wider economy. More specifically, it is believed to be an effective answer to reduce unemployment and migration to urban centres.

Skills and knowledge are the engines of economic growth and social development of any country. Countries with higher and better levels of knowledge and skills respond more effectively and promptly to challenges and opportunities of globalization. India is in transition to a knowledge based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively. Role of vocational skills training in economic development has been analyzed in the present section. The research studies established the relationship between the vocational skills training and economic development, improving the non-cognitive skills of adults, enhancing of job skills and preparing the youth for vocations, enhancing human capital formation, reduction of unemployment and improved job opportunities, promotion of labour productivity, increase of productivity and earnings, increased mobility of workers and promotional

channels, provides permanent workforce/employment, promotion of entrepreneurship/self-employment, impact on good agricultural practices and production, improved health, employment and income etc.

Studies on the relationship between vocational skills training and economic development

The economic competitiveness of a country depends on the skills of its work force. The skills and competencies of the work force, in turn, are dependent upon the quality of the country's education and training systems. Vocational education is perceived as one of the crucial elements in enhancing economic productivity (Min, 1995). Based on social efficiency theory, schools should prepare and supply future workers with appropriate knowledge and skills to enhance their productivity and, therefore, promote economic growth (Finch, 1993).

Nevertheless, vocational education has sometimes become a tool for addressing the economic, political, and social crises that are threatening the political and economic stability of some nations. Rising unemployment, lack of skilled workers, high dropout rates, and the changing demographic nature of the work force have placed the issue of workforce education high on the educational reform agenda (Giroux, 1991). Traditionally, vocational education has prepared students for specific skills. However, in the post-Taylor's work environment, workers are expected to perform more broadly-defined jobs (Hirsch & Wagner, 1995). In the new economic environment, vocational education is expected to produce an educated, skilled, and motivated work force (Mustapha, 1999).

The economic argument in favor of vocational education is linked to the perceived need to orient the formal educational system to the needs of the world of work (Middleton, Zideman, & Adams, 1993; Neuman & Zideman, 1989). It is based on the assumption that economic growth and development are technology-driven and human capital-dependent (Pedro Carneiro).

Both the vocational training and skill development are the most important factors for the development of the country. Tripathi (2003) stated that, Training in general and skills development in particular, play a vital role in individual, organizational and overall national economic growth. Haq (2002) also suggested that human capabilities can be improved through better education and training. Anders Nilsson (2010) in his study stated that the vocational

education and training are the most important factors for economic growth as well as social inclusion in the country.

Basically, it is to be assumed that vocational training measures only help in producing better employment opportunities if a corresponding economic demand for labour exists. Easterlin (1981) established a significant correlation between vocational/technical training and economic growth in Botswana. Further, he noted that the mass education in contrast to elitist academic education is conducive to economic growth. He asserts that the modern economic growth is mainly the result of the diffusion of new technology, which depends on the level of formal education. Studies confirm that the productivity benefits of education are large-just one additional year of education can increase productivity in wage employment by 10 per cent even after controlling of other factors.

Improves the cognitive and non-cognitive skills of adults/children

Perhaps focusing on just economic returns may miss an important part of story (Wößmann, 2008). VET could improve the non-cognitive skills of low-skilled adults which will in turn impact on the early cognitive and non-cognitive skills of their children and as a consequence their life-time skill acquisition. Alternatively it might be that training that is not typically valued or supported by government (e.g. that doesn't provide qualifications or is directly work-related) may affect non - cognitive skills of adults that will in turn have an impact on the cognitive and non-cognitive skills of their children which may have long term benefits that are typically not evaluated or measured. These potential inter-generational benefits of VET are much more difficult to measure and have not as yet been proven to be important. In fact, some evidence from Australia suggest that whilst degree and higher level VET qualifications were associated with better health outcomes, lower level VET qualifications were not (Stanwick et al. 2006).

Enhances job specific skills and prepares youths for vocation

Vocational Skills Training provides the job specific skills and contributes to career success. It imparts specialized knowledge and skills, which are the need of the hour today. It offers a wide range of options to the youth and prepares them for a vocation of their own choice and creates interest by providing a diverse range of subjects. In terms of the employability of vocational graduates, educators and employers believed that the completers

of vocational programs had better employment opportunities than completers of academic programs. Further, educators and employers indicated that vocational graduates possessed more than adequate technical skills. Thus, the student gets a job faster, is able to support and provide for his family and self, becoming a responsible citizen of the society instead of an unproductive burden. These courses will equip students with all the practical knowledge and social skills necessary for them to take on a productive role in the economy, by training for a specific career or business. It is also an essential tool to educate the employees for better performance and to earn profitable outcomes.

With the changing face of technology, the world requires an individual to be specialized in a particular skill. Only a person who is expert in a particular field can get a good job. Vocational training helps them to become independent at a particular age. After completing a vocational course, the trainees possess the right temperament, skills, qualities and education for the job.

Promotes entrepreneurship/self-employment

Research studies established the statistical relationship between self-employment and economic development and explained this relationship that is grounded in theory. Small firms and self-employment are the dominant forms of business enterprise. Those individuals with the highest entrepreneurial ability will become full-time managers, while those with the lowest levels will work for wages. People with intermediate levels of ability can split the difference. Self-employment allows them essentially to be part-time workers and part-time managers. The opportunity cost of foregone labor is lower than for full-time managers, but the size of their firms is limited in a way that makes this option unattractive for the most highly skilled managers.

In certain cases, the completion of vocational course provides the learner with a license to allow them to start working immediately. The individual is also equipped with enough skills to start his own business. The small firms and entrepreneurship are examined as a crucial part of a well-functioning of regional economy. Research has demonstrated the close relationship between entrepreneurship and regional / local development. Innovativeness developed within local inter-firm networks both supports existing firms and presents opportunities for starting new businesses in order to serve newly

identified markets. Networks of firms complement and sometimes substitute for a firm's own technological capability.

Enhances the human capital formation

The dominant paradigm in the economics of education is Human Capital Theory, which suggests that education and training are investments that make individuals genuinely more productive. Individuals who are more productive will, according to this theory, also have higher earnings and be more employable. The private economic return to investing in education or training, i.e., the gain to the individual, can therefore be measured by the net gain in lifetime earnings accruing as a result of their investment in education or training.

Vocational Skills training is one of the most important factors of human capital development of a country. It provides an instrument for the promotion of worker employability through the enhancement of human capital and for productivity improvement and competitiveness at the level of a firm or nation. Manpower shortages can cripple economic growth. It can escalate wage rates, thereby reducing the competitiveness of the country. It reduces the cost and improves productivity of trading, services and manufacture by providing skilled Man Power. It runs the country with a higher efficiency, lesser wastage and lower cost of operation.

As stated by Becker (1975) and Mincer (1974), the vocational training and skill development have been considered as main factor of human capital from which life time earning and indirect positive benefits are found for an individual. Haq, Khadija (2002) also represents that human capabilities can be improved through vocational education and training. According to Amjad (2005), the skill development and vocational training impacts on national products and competitiveness. He concluded that educated and skilled labor force assists countries in transformation of the economies from the labor intensive to skill intensive.

Reduces unemployment and improved job opportunities

Skill development through education has been identified as a key determinant of comparative advantage and manufacturing export performance. For poor people, education can serve as a bulwark against volatility, even the fundamental skills learned in primary school can make a

critical difference for the survival of families when government services fall short or during times of economic crisis. The widening of educational access thus can help to eradicate poverty even before it begins to yield returns in the labor market (Stern 2001). Georg (2006: 515) describes the paradox that vocational training is most effective when unemployment is low in an economy, whereas it increasingly forfeits credibility in the opposite case.

Vocational Training courses offer a wide range of job opportunities in the fastest growing sectors like Retail, Hospitality & BFSI and would need 20 million skilled candidates by 2015. Specialized sectors like Auto and Hair & Beauty are projected to need 5 million resources while the Construction sector alone will require over 15 million skilled workers. Further, these courses increase the number of small businesses, which further increase employment, thus reducing the stress on the government to provide jobs for the unemployed youth. Kazmi [10] in his study pointed out that vocational training and skill development are the tools to improve the productivity of the labor force of any country. Accordingly, under the BMZ strategy entitled "Vocational training and the labour market in development cooperation" effective employment promotion comprises three dimensions: 1) improving the employment prospects of the workforce through professional qualification (supply side of the job market); 2) creating jobs by promoting the private sector, which includes financial system development (demand side of the job market), and 3) effective mediation between supply and demand, which is called "matching".

Improves labour productivity

Many employers complain about the lack of skilled workers with technical qualification and demand the implementation of vocational training as an essential pillar of the labour market needed for economic development. The skilled workers / technicians enhance the quality and efficiency of production and also supervise and train the workers with lesser skills. Vocational Skills Training enables the trainees to acquire occupational knowledge and skills that demanded in the labour market. Generally, the enhanced skills enable the individuals to be more productive and spawn more money. It not only raises the rate of return on investment and increases the employability but also ensures the implementation of various development projects in the time (Booth and Dennis, 1996). To summarize, vocational education and training are indispensable instruments for improving labour mobility, adaptability and productivity, thus contributing to enhancing firms'

competitiveness and redressing labour market imbalances. Further, the skill and capital are complementary. With the emergence of globalization, there is an increase of capital inflow from developed to developing countries implying that even without technology imports, capital output ratios in developing countries would rise and, given the complementarities between capital and skill, this would raise the relative demand for skilled labour.

Increases productivity and earnings

Although the effects of vocational skills training on productivity are, on average, positive as expected, they are lower than usually reported in the research literature. According to Booth and Dennis (1996), professional training and skill development enable the human more productive and increase their earnings which help in expansion of the economy. Solow (1956) in his study pointed out that vocational training and skill development are the tools to improve the productivity of the labor force of any country. When taking into account the heterogeneity of companies, the effects of vocational training are greater on wages than on productivity. For example, regarding productivity, companies that offer vocational training show productivity levels that are 8% higher than those of companies which do not offer training. The average productivity drops to 0.67% when comparing only similar companies. In terms of the effects of training on wages, the results have revealed that in companies offering training, average wages are 3.9% higher than those in companies offering no training.

Provides permanent workforce/employment

The proportion of permanent workers in the company introduces a significant change in the results in terms of productivity and wages. When the company has a lower proportion of permanent workers, the effects of training on wages are likely to be negative. Only when there is a higher proportion (above 60%) of permanent workers is the impact of training on average wages likely to be positive. The effects of contracts are even more significant in terms of productivity. The impact of vocational training on productivity is only likely to be positive in companies where 70 per cent of the workforce is permanent workers.

Increased Mobility and Promotional channels

Vocational training has always had an impact on the increased mobility

of workers, leading to 13 per cent greater mobility, on average, or a 5 per cent increase when comparing similar companies. Another positive effect of vocational training is the small rise in the probability of a worker moving from a short-term to a permanent employment contract – which increases by an average of 0.6 per cent, or by 2.8 per cent when comparing similar companies. In addition, vocational training has a significant impact on the probability of a greater number of merit-based promotions in enterprises: on an average, the probability of promotion based on merit increases by 74 per cent. When comparing companies with similar characteristics, this differential amounts to 24.7 per cent, which is still a high value.

Promotion of good agricultural practices and production

Vocational programs can be secondary or post-secondary in nature, focus on direct training for producers or training for individuals who support farmers and contribute to the post-production process. Agri-businesses and self-employed farm entrepreneurs play different roles in the agricultural system. Clearly producers – farmers, fishers, herders, foresters - whether self-employed or on contract, work in the agricultural sector. In addition to support in production practices, they can ‘create’ their own jobs (Rivera and Alex 2008).

Huffman (1974) analyses the role of education in Midwestern US Farmers’ use of nitrogen fertilizer in corn production. He observes that farmers with more formal education are more adaptable to new knowledge in farming. Supporting linkages across different types of VET, including but not limited to agricultural skills, could reduce out-migration from rural areas by providing young people with a broader range of marketable skills, both on and off farm (Herren et al. 2011). There is a great opportunity for Agricultural, Technical Vocational Education and Training (ATVET) to play an integral role in training the individuals for a wide range of agriculture-related jobs (ILO 2012). ATVET has the potential to be demand-driven, responding to the current needs of both employers and employees in the changing field of agriculture, and the combination of agricultural value chain growth and workforce development will provide myriad opportunities (Maguire 2011). ATVET programs have the human resource capacity to offer training in these areas (Jacobs and Hawley 2008). Also related to value chains is the possibility to incorporate many formerly informal or non-formal economic and occupational sectors in the agricultural system, and ATVET programs will have the opportunity to leverage their experience working with a range of

students at a range of educational levels (Chamel and Hartl 2011). Agriculture is a growing and diversifying aspect of many developing country economies, which provides the opportunities for ATVET to contribute to changes in livelihoods for rural people and communities (Brooks et al. 2013).

Improved health, employment and income

The structure of employment in low income economies is such that work often relies more heavily on strength and endurance and therefore, on good health. The literature indicates that some health problems (such as malnutrition) can become debilitating at extremes, and the bio-medical evidence highlights the potential importance of thresholds, below which poor health can have dire consequences for functionality. This suggests the labour market consequences of poor health are likely to be more serious for the poor, who are more likely to suffer from severe health problems and to be working in jobs for which strength (good health) has a pay off.

According to the Rural Health Care Survey Report (2009), the Rural Sector added around 1500 Health sub-centres in the last 5 years and general employment opportunities for around 28000 nurses and midwives. As per the above report, primary health centres in the country grow by 84 per cent. Similar trends are expected to continue in the coming years. In view of this and already existing shortage of trained manpower in Health and Para-Medical sector, the short duration skill development vocational programmes in the above sector has gained economic value. Further, in developed countries, there is a shift from hospital-based care to home and community-based care for economic reasons. Therefore, various health-related vocational courses e.g., nursing assistant, home based health care attendant, ambulance attendant and operation theatre attendant are being conducted globally. The persons trained in these courses provide support to medical and para-medical professionals for delivering quality health care services at right time and at right place.

If better health is associated with improved functionality, and therefore productivity gains, then individuals, families and even society will invest more income in health than would be implied by its value in purely utility terms. As productivity increases, so income of people will increase and that additional income may be invested in health. This would generate potentially important feedbacks between health and income.

Suggestions for accelerating the economic development by strengthening the vocational skills training

If the Indian economy is to be developed on the back of a strong industry and service sector, the high quality specialized vocational skills training will be essential. Government has to redefine its role in reforming and strengthening vocational education and training, clear policy for facilitating capacity expansion through private sector participation, make investment in vocational training institutes, promote industry and academia interaction to narrow the existing gap between the demand and supply of the skilled manpower. To improve the productivity of Industry, Trade and Services as well as to make India more competitive, we have to take up the Vocational Skills Training with all the State Authorities, the Ministry of HRD, Labour & Employment and all the Chambers of Commerce in India as well as the All India Business Associations such as Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI), Associated Chambers of Commerce and Industry (ASSOCHAM) etc. Based on the results of the studies, the following recommendations for policy, practice, and future research are offered:

1. Ensure that 95 per cent of the population in the age group of 14 to 50 years goes in for some sort of relevant Vocational Education & Training, to learn a skill, or trade or competency.
2. All the 7000 existing Vocational Education Institutes/Schools under the Centrally Sponsored Scheme on Vocationalisation of Education, which cater to the needs of about 10 lakh secondary students, may be strengthened and restructured keeping in mind local/regional market demands, generic and specific vocational skills.
3. Skill development in organizational planning, entrepreneurship, safe and environmentally sound procedures related to materials and equipment, importance of safe working conditions, first aid training, etc., as an integral part of all VET programmes should be promoted. Further, to capture job opportunities available in the international job market, VET on international standards should be facilitated through setting up of International Skill Training Hub.
4. A system of life-long learning for acquiring skills through VET Institutions, Colleges and Universities should be developed for the working class and those who are working in informal sector. Access through Open and Distance Learning (ODL) mode to those who

- live in rural, tribal and remote areas and those who could not avail the benefit of VET, will be enhanced.
5. Quality research and dissemination to increase understanding in pedagogical, technical and managerial aspects of flexible VET and learning should be promoted. A wide range of pedagogical innovative and developmental projects should be carried out to emphasize the importance of finding new ways of organizing the students' learning possibilities in VET.
 6. About 92 per cent of India's workforce is employed in the informal sector, their educational and skill levels and resultant productivity are extremely low. Skills Development in informal sector should be equipped by using available facilities and mobilizing community resources for up gradation of skills of workers. Dr Bhalchandra Mungekar, Member, Planning Commission once said that there is a need to formulate a package that enhances skills development in the informal economy, solve the problem of unemployment and increase the availability of credit for informal sector enterprises.
 7. VET Institutions/Centres in collaboration with the existing institutions/ organizations like Industrial Training Institutes, Polytechnics, Technical Schools, *Krishi Vigyan Kendras*, rural development agencies, primary health centres (and their auxiliary services), S & T Laboratories, cooperatives, and engineering, agricultural and medical colleges may also be established.
 8. Strategies for involvement of civil society institutions, NGOs, communities/ public and private sector industries in VET should be evolved. The government should work collaboratively with the private sector to provide effective leadership, to maintain and expand vocational education and training. In particular, the government should draw upon the resources of employers and solicit private sector investment in vocational education and training.
 9. The government, especially the Ministry of Human Resources Development, should seek inputs from numerous stakeholders, such as educators, business/industry personnel, parents, students, academicians, and other professionals, before formulating major policy decisions regarding vocational skills training and the National Skill Development Mission. Policymakers should introduce legislation related to new reform initiatives such as school/business partnerships, school-to-work activities, technology preparation, and workforce development to sustain

- employer and private sector commitment to education, training, and human resource development. Further, Centre, state, and local bodies should provide a clear vision and mission for vocational education and training. The government should reduce bureaucracy and increase the efficiency and effectiveness of vocational training programs by giving freedom to the institutions and experts.
10. A balanced approach should be emphasized in the school curriculum through the integration of technical, employability, and generalizable skills in vocational skills programs. In addition, vocational curricula should be flexible and responsive to the present and future needs of the nation. The course structure of the training institute should be regularly updated by keeping the changing technology and the fundamentals of economy. The students are also provided with internships and apprenticeship training. They are also provided with stipend for their internships. This gives motivation to perform better and excel in their jobs.
 11. Guidelines for competency based training of teachers/trainers may be developed. Based on the guidelines, training programmes for teacher/trainers may be organized with the help of professional institutions/organizations and industries.

Conclusion

It is imperative to impart sound and quality vocational skills training to all the people who are in the age group of 14- 50 years to enable them to be part of the productive workforce in the interest of the growth of the economy. In this paper, the concept and different types of vocational skills training are presented along with the status of vocational skills training and different vocational skills training sectors in India. The role of vocational skills training in economic development of the country and the relationship between the different vocational sectors and economic development are mainly discussed. At the end, a few suggestions were given for accelerating the economic development by strengthening the vocational skills training in India for the government at different levels and reforms to be brought in VET.

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National Skill Drive and the Universities of Yesteryears: Can Lifelong Learning be the answer?

Sayantan Mandal

Introduction

On the occasion of the first ever World Youth Skills Day on 15 July 2015, Prime Minister of India, Shri Narendra Modi launched the project 'Skill India' aiming to address the issues of skills shortage among Indian youth. Considering utilizing the demographic dividend India enjoys, the policy document titled 'National Policy for Skill Development and Entrepreneurship 2015' starts with a promising deliberation of the Prime Minister. "Today, the world and India need a skilled workforce. If we have to promote the development of our country then our mission has to be 'skill development' and 'Skilled India'" (Ministry of Skill Development and Entrepreneurship, 2015). He also emphasized on international competition and the potential in the youths of India. However, the initiative to upgrade skills started much earlier and gained popularity along with the notion of international competition in late 2000. The UPA government also launched the skill development programme and National Skills Development Corporation. Analyzing the major policy reports published during the UPA (I and II) and the present NDA government, it is evident that over the last two decades, development of skills has come out as an unavoidable mandate in all spheres of education and work.

The structural shift in global economy and the technological development are driving demand for highly skilled, innovative knowledge workers. Along with it, the proliferation of internal and international market competition has changed the situation in a complex manner where traditional skills development seems not enough. Most sectors are replacing mass labor with a boutique, high-tech workforce (FICCI, 2014). This creates an increasing demand to the national higher education as well, to train and build well equipped and skilled human resources prepared to face the competitive world of work. However, it repeats the story of limited success in imparting employability skills in Indian youth graduates. The educated unemployment rate is staggering. One in three graduates in India (up to the age of 29) is unemployed (Labour Bureau of India, Third Annual Employment & Unemployment Survey 2012-13). Several reports have also raised their

concern about the quality of science and technology graduates in India. 75% of technical graduates and more than 85% of general graduates are unemployable by India's high-growth global industries, including information technology, according to the National Association of Software and Services Companies' (The Wall Street Journal, 2011).

This is certainly not favorable news for the present and future learners of higher education and universities of the country. Why, in spite of an unprecedented increase in the number of higher education institutions, many of which claim to be world class, is the issue of skills deprivation not addressed properly? In answers, it is often said that the universities in India are largely outdated (Agarwal, 2009; Tilak, 2004; 2006, 2011, 2012; Jayram, 2006; Altbach, 2006). However, what are the core components, which are hindering the skills development in the Indian universities? And finally, how can it be addressed in a sustainable manner? The massifying higher education of India needs to find answers to address these issues, which are indeed related to the future of millions of aspiring youths and the reciprocal to national economic growth and social development.

To explore the issues, this paper takes a critical stance towards the Indian notion of skills development and perceives it in the sphere of national higher education systems. It analyses the issues of skills shortage and the role of Indian universities in this regard. It also examines why, irrespective of the demographic dividend and massification of higher education in the country, the nation is unable to meet the skills demands of the present and future economy. In this process, it argues that the education system, especially the higher education system needs to upgrade itself continuously. However, due to the rapid technological improvement and frequent shifts in the market it is perhaps difficult for the universities to keep pace with the changing contents of the world of work. Hence, a specific approach of learning could be used to address the issue. In the process, the paper poses several arguments forward and analyses, why using Lifelong Learning (LLL) with a specific focus on skills development could be considered as an effective solution.

The next section of the paper discusses the Indian demographic situation and provides rationale for the skills drive by the recent governments. This section is followed by a discussion on the Indian universities where the paper intends to highlight the major drawbacks of the university education in imparting skills to the youths. Section four deals with some trends in the

international arena to develop skills of the youths, while section five attempts to capture some of the core components drawn from the overall discussion. These can help to set the focus on certain aspects of lifelong learning, which can perhaps be utilized to reform the Indian higher education, addressing the issue of skills development. The final section makes some concluding observations and puts forward areas of further researches in order to form a sustainable strategy and plan of action for the betterment of the youth and national situation.

Context

India is soon to shed its tag of second most populated country and become the largest populated country by the year 2030. More interestingly, it will also have the largest youngest population in the world by then with a median age of 32 years, which is far lower compared with 39 in the US, 42 in the UK and 43 in China (source: Higher Education in India: Vision 2030). This means, if India can tap the young human resource of the nation, it can pace ahead in economic development in the emerging knowledge economy, where human resource development is valued the utmost. The overall statistical projection also shows that Indian economy is expected to grow at a Compound Annual Growth Rate (CAGR) of 6.7%, the fastest in the world. Following the present trend, the majority of the development will be contributed by the service sector and that means, more demand for highly skilled people and more demand for higher education.

The beginning of the change we can witness even today. The higher education sector is expanding rapidly and the progress in the recent past has been very impressive. During 2000, the enrolment increased from 8.8 million in 2001-02 to 28.5 million in 2011-12, making it one of the fastest growing sectors. The number of universities/ higher education institutions (HEI) has grown a whopping 7 fold in the last four decades with 665 universities and 35,829 colleges and 11,443 stand alone institutions in 2012-13 (Source- FICCI Higher Education Reports 2012 and 2013). Much of this expansion happened in the post 2000 period alone. Looking deeper into the courses offered by the HEIs, it can be seen that although a majority of young Indians are enrolled in the general degree/ diploma programmes including science, commerce and arts (67%) compared to that in the professional programmes such as engineering, medical, law, management and other vocational courses (33%). However, the demand for professional programmes are increasing at a steep rate of 20% compared to that of the

general courses (6%) (2007-2012). Since majority of the new-age study programmes are job oriented, their demands are also high. However, it comes at a higher cost. Such course in the booming private higher education institutions can be up to 10 times more expensive than a traditional university degree (British Council, 2013). Interestingly, irrespective of the steep cost, the willingness to invest in higher education is escalating. As per the Indian Market Research Bureau, the middle class expenditure has risen significantly. The proportion for the budget for education has increased from 7% in 2008 to 10% in 2010 and 15% in 2013. This indicates that parents are aiming at employability of their graduate offspring and expect to upgrade the situation further by investing on the intellectual capitals.

Observing the demographic trend, the potential of youth and the demand for higher education, the government has taken certain significant steps. The Tenth and Eleventh Five Year Plans, the National Knowledge Commission (2006-2009) and the Yashpal Committee Report (2009) are the milestone policy initiatives by the government which addressed the issue of higher education with great importance. Consequently, the policy push resulted in the Rashtriya Uchchatar Shiksha Abhiyan (RUSA), establishment of central and State Council of Higher Education (SCHE), National Skill Development Corporation (NSDC) etcetera. The recent initiatives such as the National Policy for Skills Development and Entrepreneurship 2015 and focus on skill India also deserve notable mentions in this regard. However, in the process, the government has also been withdrawing itself gradually from its traditional role of providing higher education. As a consequence, the public funded universities and colleges are lacking up-gradation in qualitative aspects and the mushrooming private higher education sector is less influenced by the government mandates. In essence, market is taking control. The government however, recognizes the influence of the market in the national higher education arena and rather tries to play a governing role instead.

In all recent reports, the Government has mentioned about the importance of the market compatibility. The reports also stress on the issue of skills, in line with the many other major reports published by the business houses, corporate journals etc. This adherence to the market principal seems accepted as India is steadily moving towards a neoliberal market capitalist mode. The associated socio-politico shift towards a more dynamic post- industrial knowledge driven economy has set new aspirations in the society and resulted in higher demands from the higher education system.

To meet the demands of the market, higher education is also becoming more segmented and specialized. At the same time, the labour market has become more flexible in valuing skills and experiences rather than degrees and diplomas. This has created a mismatch between the market demand and supply from the academia, as academia in traditional practice, did not prioritize on workable skills development. This alleviates the existing structural inequality and a need is felt at all levels that higher education needs to metamorphose (Archer et.al.2003).

The market and government both also demand accountability from the contemporary higher education. As per the market, it is expected from the HEIs to regulate skilled labour flow to match the supply of the graduates leaving colleges and universities to their actual demand and utility (Bowers-Brown and Harvey, 2004). The universities are therefore encouraged to leave their 'ivory towers' and change the perception of perceiving 'knowledge for knowledge sake' and become more utilitarian. They are expected not just to create experts but make sure that the experts are relevant to the society. Since the society is increasingly becoming intertwined and international, the outcome of the university learning in the form of human resources should also be competitive at global level. The HEIs are therefore have to foster innovation, flexibility, high standards, market awareness and harness knowledge in such a way which provides returns in long run. However, these are perhaps a mammoth demand to the traditional HEIs (Universities and colleges) of India. However, the question is why is it difficult for the HEIs to change? Is it because the traditional Indian higher education institutions are not used to function in a rather 'market-friendly' way? Or there is more to it? The next section tries to find some of the answers.

Universities of yesteryears and the demands for tomorrow

It is mentioned before in the paper that experts think that the higher education system of India is largely outdated and needs overhaul. The British Council of India Report (2015) highlighted the following reasons for it:

- ♦ Outdated curricula, which are not reflecting the requirement of the dynamic market.
- ♦ Shortage of faculty, which is very high in central and state run universities. This is substituted by ah-hoc appointments of low paid teachers and quality is overlooked.

- ♦ Low focus on research. Indian government spends only 0.9% of GDP on research and development. A majority of researches are not of high standard and hence unable to create an impact. Lack of research collaboration is also another bottleneck in streamlining research (British Council, 2015).

There could be many more reasons for the underachievement of Indian HEIs. However, since this paper is focused on 'skills' in higher education, it discusses the issues in the light of skills development (or the lack of it). Even from the observations of the British Council (2015), it seems that the skills deprivation is rooted back from the design of the curricula, which are mostly outdated, to lack of highly qualified faculties to low focus on up-gradation through research. Nevertheless, Indian higher education system is diverse and the entry of the private players made it immensely complex as well. In addition, there are few public institutions, which are performing well above the rest. Hence, generalizing may not provide critical analytical insights.

The paper therefore, divides the following discussion into three subsections. In the first section, it discusses why the dilemma of change is deep rooted in Indian higher education system. The second subsection discusses how the long-haul lack of focus on skills is causing dear to the learners or the potential human resources. Thirdly, it discusses why the Indian HEIs needs to change its culture and include skills as a prime agenda.

Dilemma of change in Indian universities

The traditional universities of post-independence India were established with an elitist approach, where the idea was to nurture the knowledge and be at the epitome of knowledge creation. The institutions were mostly public and the access to higher education was limited and the enrolment was below 5% (source: NIEPA, 2005). The idea to link the nation's self reliance through economic development resulted in niche educational institutes like Indian Institute of Technology (IITs), Indian Institute of Management (IIMs), and medical colleges, apart from general universities and colleges established for the best students. Over the years, mostly up-to 80s the HEIs grew in number, but the elitist culture didn't change much. As a result, the universities were producing graduates, who are few in numbers and the educated unemployment rate was not alarming.

The universities of that time followed a rather early development model. The concept of human resource development, championed by the human capital theory, came later, which emphasized more on individual characteristics and thus, focused on marketable skills, over theoretical education. In other words it clarifies that more institutional education does not necessarily mean better productivity (Carnoy, 1987). This school promoted the idea of demand and supply both for employees and employers. However, the universities did not change rapidly according to the changing technological progression and especially, emergence of neoliberal open market economies. Moreover, it is perhaps notable that one reason of becoming a successful HEI is its signaling effect to the job market. It prepare (at least intend to) students for the changing market. Whereas, without a handful of exceptions; most traditional universities do not perform this signaling effect. They are primarily designed to prepare student for the public and social sectors and not for this fast changing market economy. Indian higher education system here represents a mostly top-down, less flexible approach. Due to the rigid nature, students are in a sense locked into their respective institutions and more specifically, in their respective disciplines (Agarwal, 2011). To shift from this tradition and step into a more demanding environment is a challenge in itself.

Hence, the demands of creativity, innovation and flexibility have been difficult to meet by the universities today. They mostly continue to focus on theoretical knowledge without linking it thoroughly with contemporary practices. As a result, “too many of our universities are producing graduates in subjects that are not required by the changing job market, and the quality is also not what it should be” (Planning Commission, 2013).

Sudden focus on ‘skills’ and the confusion in HEIs

Due to the recent technological development, globalization and neoliberal market principals the notion of skills has received greater importance. However, since it is not just any skills and rather focuses on ‘employable skills’ the economic returns of education comes at the forefront. The students (or the consumers of educational services) now have the right to demand the value for money. However, due to the sudden intrusion of ‘skills’ in the popular lexicon, neither the users nor the providers of the educational services have clear ideas on the type of skills required, the process of transferring skills and so on. This however, does not stop the HEIs (mostly private, but also public), to advertise their courses using ‘skills’ and ‘employability’ as popular buzzwords.

In practice this over emphasis and less preparedness on 'skills' also result in poor quality higher education. This creates trouble for the students. The risks are twofold. First, the lack of idea about contemporary skills in the HEIs could lead them to operate in more or less the same manner with increase importance, but low practice of skills. Second, the students, without having much knowledge about the complex linkages of changing skills and market could get lured by the loud advertisements of the HEIs.

Recently, according to the Associated Chambers of Commerce and Industry of India (ASSOCHAM) paper, more than 180 Business-schools have already been closed down in 2012 in the major cities in India, and many more are struggling for survival. The major reasons are, according to the secretary general of ASSOCHAM, are mushrooming of several business schools across the country based on a business model to earn money, with no quality control, improper infrastructure, less competent faculty and high fee structures compared to the service provided. Most of these schools offer their courses based on the provision of campus interviews and expected salary packages their students can get after the completion of the study. They often lack the expertise and vision to transfer the practical skills needed (ASSOCHAM, 2013).

This practice to cash in the buzzwords, and operating with a business model, is however not new in any other enterprise in the competitive market economy. Interestingly, it has its own risks, when the same principal is applied in higher education (or in many cases education as a whole). Bok (2005) explains that the differences lie at a very basic level of the *modus operandi*. Normally, an enterprise operate thorough its cost-benefit analysis among many, like change in stock price, cost per unit of production, inflation, changing market demand in small intervals etc. All of these are tangible and provide concrete results, and in turn, guide the organization to assess and progress. However, universities are far less able to measure, in absolute tangible terms, the value of its research output, learning outcome, efficiency of their teachers etc. Moreover, an organization periodically review its results (often weekly) based on short-term results obtained from the market. It helps to make necessary changes to reduce cost, increase productivity, correct mistakes and help the organization to learn constantly and stay flexible. On the contrary, these short-term measures are difficult to perform in a university system. It often takes longer (a semester or two in general) to evaluate and make necessary incremental changes. Moreover, there are middle and long-term results associated with higher education, which could take very long

time to measure. Therefore, a simple cost-benefit analysis will often fail to yield clear answers about how universities should respond to tempting commercial opportunities (Bok, 2005). As a result even the so called 'skill oriented' HEIs fail to perform.

On the other hand, students are not like experienced corporate leaders and are often less prepared to judge the real value (both in economic and other terms) of the course they intend to take. Hence, it is not justified to consider them as informed buyers (of educational services) in an open market setup. This mismatch and underprepared nature of students and institutions are causing serious tensions, even if it is seen from a purely economic terms. The ambitious higher education with the dream of skills, employability and rapid economic growth, based on free market principles are trapped under some of its own flaws. It puts the future of the learners (or consumers of the services) at risk and may also drag the future of the higher educational institutions in danger.

Way forward

It may seem from the above discussion that some of the main flaws are associated with the introduction of market in higher education. Although how much market should be allowed in education is a debatable issue, but looking it from a pragmatic point of view, is it possible to divorce from the market in today's society? Moreover, is it practically feasible to build enough philanthropic institutions (both private and public with optimum quality and flexibility) to support the colossal demand for higher education? How far is it possible for any HEI to change frequently to match with the market demands, also considering the fall of demands from the market and the risks associated with it? What curriculum to follow when world of work demands new knowledge more frequently than ever? From the discussion so far, it is perhaps difficult to provide an easy answer. Nevertheless, it can certainly be said that the challenge in front of the HEIs is not just to improve excellence, but also improving the expansion and equity and aim for a knowledge society while staying within the major economic pathways of neo-liberalism in a competitive globalized world. So the strategies have to be flexible enough, yet robust to cope with the harshness of a complex and volatile market.

Here, it seems worthwhile to mention that this paper does not support the abolition of moral social values for the market sake alone. It also

condemns the narrow view of practicing only marketable knowledge. Rather, this paper tries to establish the point that there is a gap in demand and supply and an acute co-existence of graduate unemployment and shortage of skills. The contemporary higher education is largely responsible for this paradox, which is causing tensions and often putting the future of the students at risk. Notably, the study of Washer (2007), Hayward & Fernandez (2004) (among others) show that change in the higher educational institutes to foster skills needed for the contemporary society does not contradict with the idea of a holistic development of its pupils. Moreover, it can also be argued that in developing countries, where graduates have to compete for jobs soon after (sometimes before or during) the completion of their higher education, probably does not allow them the luxury of such a debate (Mandal, 2012).

Lifelong Learning as a solution

From the above discussion, it is evident that the universities need up-gradation and focus more on building skilled human resources. However, it seems also clear that the word 'skill' needs further discussion. The present definition, although rich in theoretical substances, lacks in operational aspects when we relate it with the fast changing market demands and rather smoggy practice of it by the HEIs. A simple question is which are the skills required and how can universities play their role in this regard? However, a critical question may be how the skills are to be transmitted by the universities? Importantly, how far is it feasible for any HEIs to change constantly with the ultra dynamic market and without putting the future of the existing learners in jeopardy? What can be a frugal approach in this regard, which can focus on skills, without getting overwhelmed by the market itself?

To answer the question on what kind of skills required, it seems important to ask the employers first. Based on review of literatures, it can be inferred that graduates from colleges and universities are expected to be open to adapt to the new, diverse and changing working environment(s), have skills in critical thinking, problem solving, able to communicate effectively with experts and non-experts, use of ICT etc. One important demand is that the graduates should be able to perform multitask and above all, the graduates should be open to learn continuously. These employable skills can again be divided into two or more broad classifications. Some are more generic and some are more subject/ area specific. It is also found that the generic skills are also related to attitude, which takes long time to build. These are related

to family situations, social environment and education from early schools. On the other hand, the subject/ area specific skills are more industry relative and there are intra-industry variations as well. Because of these specificities, industries are willing to train the fresh graduates according to the specific job requirements. Here, higher education is expected to make a learner trainable and compatible with the modern work environment. Moreover, higher education should also engage in re-training and up-skilling of employees in collaboration with the industries and form a synergy between education and the world of work.

It is however evident that higher education alone cannot bring all the necessary changes and make someone employable in a few years time. Moreover, it is less capable of teaching subject/ area specific skills which are rather narrow and varies in with specific industries. Hence, in the midst of changing job markets, demands and gap in supply of skilled human resources, higher education needs a renewed focus. Instead of focusing on the content, the main focus should be on imparting competence, which will help learners to learn new skills on their own or as and when required.

Competence is a combination of knowledge, skills and attitudes. There are several internationally recognized frameworks to define specific competences (Gedye & Chalkley, 2006; Birnie, 1999). The competence based lifelong learning oriented frameworks work in a dynamic way. They measure learning outcomes, understand the demands of the society, translates them into required competencies, suggest changes to the educational institutions and other stakeholders and engage in contact research and development. Among them the works by the TUNING educational framework, The European Key Competence Framework, Association of American Colleges and Universities (AACU), AHELO (Assessment of Higher Education Learning Outcomes), PIAAC (Programme for the International Assessment of Adult Competencies), TALIS (Teaching and Learning International Survey), Australian Learning and Teaching Council deserve special mention.

The generic or core skills mentioned are almost similar across all frameworks. These set of skills are mostly soft-skills and the aim of university teaching is to empower learners - for instance, the inquiry and analysis, critical thinking, communication, quantitative and information literacy, teamwork and problem solving come under the intellectual and practical capacity, whereas, civic knowledge, intercultural knowledge, ethical reasoning

and action fall under personal and social responsibilities (Finley, 2012). The TUNING framework divides it in three major subsections, namely, instrumental skills and competence, interpersonal skills and competence and finally, the systemic skills and competence. Instrumental competences include cognitive abilities, methodological abilities, technological abilities and linguistic abilities. Interpersonal competences refer to individual abilities like social skills (social interaction and co-operation). Finally, the systemic competences stress upon abilities and skills concerning whole systems (combination of understanding, sensibility and knowledge; prior acquisition of instrumental and interpersonal competences required). AHELO and PIAAC are on the other hand measures learning outcomes and competences and compare them. Interestingly, the methodology is different than that of regular university evaluation, where it tests mostly knowledge.

This change in perception from education to learning, from information to skills and then to competence brings the learner at the centre stage. It differs from the concept of limited span of individual education and spreads the boundaries of learning across the lifespan. This in turn also welcomes the non-formal and informal learning rather actively, in addition to the formal education. As a result, it champions lifelong learning and thus, more than content, it focuses on the most important aspect- learning to learn. This in turn points at the skills and competences, which are much broader than acquiring information. Simultaneously, it also puts more responsibility on the individual and makes him or her pursue skills up-gradation at a regular basis. In a formal educational set-up this trait of continuous up-gradation is applicable for both students and teachers. These discourses are closely related with the renewing perspectives of lifelong learning. This notion of lifelong learning is however, different from viewing it almost synonymous to adult and non-formal education, as in India. The concept of competence based learning is dominating the discourse of lifelong learning in many developed and developing countries. Through constant research, the competence based model is establishing a strong ground for itself and influencing teaching, learning, curriculum design, evaluation methods of HEIs.

Conclusion

The competence based notion of lifelong learning is revolutionary in many ways. Most important among them is that it may provide the necessary solution to these ever changing demands of new knowledge and instead

prepare learners to acquire the knowledge. Implicitly, it also infers that the role of higher education is not merely to work as a training cell of the market, rather the role is complementary, where HEIs would work to prepare the base for skill-development. However, it is not an easy task. First of all, the higher education institutions in India are largely outdated. Starting from the curricula, the infrastructure, ICT facilities, teaching-learning methods need major overhaul. Moreover, there are disparities in qualities of higher education among regions, streams and educational providers, funding patterns, governance mechanisms and so on. As a result, there is considerable amount of regional disparity in graduate employability skills. Gender and social disparities in graduate employability skills are also coming up as a serious concern. These indicate that higher education, if not properly carried out, is less effective where the degrees alone remain insufficient to generate desired outcome.

This very lack of awareness that more degree certificates do not necessarily result in better jobs is perhaps one of the major bottlenecks in reforming higher education. It spreads well beyond the sphere of institutional education and spans across the growing middle class, who are ready to invest, but not sure which is more important, to the government, which are focusing on expansion and quality, but less specific about which areas needs acute attention. As a result, with ever increasing segmentations, market plays its role, mostly as a profit-making mechanism and increasing number of youths are accumulating in the pool of poorly skilled graduates. The dilemma is therefore twofold. One is related with the actual shortage of skills and how to overcome it and second is how to regulate the inefficient (and sometime corrupt) practices of cashing in on the word 'skills' and not actually providing it.

The competence based model of lifelong learning may bring a different outlook and may prove effective to change the situation. However, only introducing a framework and not building the proper environment will increase the burden of skill depreciation further. Extensive macro and micro scale research is therefore required to identify the skills, the process in which they should be imparted and so on. As the competence focuses on building attitudes in addition to skills and knowledge, the role of entire education sector needs to be tuned. It is a long term collaborative initiative which includes lifelong and life-wide learning. It is certainly not possible by the higher education alone, although it should play its role in a dynamic way and should not confine itself in its traditional cocoon of teaching and research. More

than anything, it needs to learn and evolve and the direction should be based on strong empirical research evidences and not just on popular perceptions of more skills equals to better national development.

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Vocational Training in Unorganized Sector— Need for Standardization

Asoke Bhattacharya

Introduction

The term unorganized sector is defined by National Commission for Enterprise as ‘...consisting of all unincorporated private enterprise owned by individuals and households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers.’ Definition apart, unorganized sectors as we find them in our day to day experience are small scale industrial organizations where workers like fitters, turners, electricians etc. are engaged ; enterprises like transport where drivers ,conductors ,operators are employed; in the communication business people who repair mobile phones, repair and assemble computers etc. ; and there is the whole gamut of cottage industries where carpenters, weavers of textile, workers who do cane and bamboo work, workers engaged in pottery, toy –making etc. ; women engaged in stitching and embroidery , beauticians, masseurs etc who are either employed or self-employed. These people constitute the overwhelming majority of the work force in our country. In most of the cases they have neither formal school education nor any formal training in the trade in which they are engaged. But they know their work since they learn the same while working as untrained persons but gradually pick up the tricks of the trade. In many cases they are quite skilled. But their skills are not tested and certified due to which they can claim no recognition and proper remuneration. It is high time that the skills in the unorganized sector be properly recognized for the benefit of the skilled person as well as for the community.

A survey should be conducted to identify various skills available in the unorganized sector. Some of these skills should be clubbed together to form a trade. Proper syllabus, practical and theoretical, should be framed for each trade. Institutions need to be identified which have proper infrastructure to impart training and conduct tests. An All-India Committee may be formed with regional and local bodies that will standardize the syllabus, training and certification. Since the trades are many, there will naturally be regional and local differences.

Standardization is the process that brings uniformity. According to definition, it is the process of developing and implementing technical standards. It can help to maximize compatibility, interoperability, safety, repeatability or quality. This is required for training and certification. It ensures proper recognition as well as remuneration. Training and certification bodies should be standardized too. Only a properly standardized institution can offer proper training and certification.

India has launched a 'Ministry of Skill Development and Entrepreneurship'. It is responsible for co-ordination of all skill development efforts across the country, removal of disconnect between demand and supply of manpower, building the vocational and technical training framework, skill upgradation, building of new skills and innovative thinking for jobs. The sector which accommodates 85% of the Indian work force should come under active consideration of this Ministry.

Vocational Training

Right after Independence, the Government of India awoke to the fact that if India has to claim her position in the community of nations, she needs to have a strong industrial base. New Industrial townships sprang up all over the country: Durgapur, Rourkela, Salem, Bhilai, Bokaro were dotting the country. The then Soviet Union, Germany – both East and West, United Kingdom, United States of America and France were the main industrial nations which came forward to help India to realize its dream. Along with steel plants, large power projects including captive power plants were being implemented. Not only thermal but also hydraulic sources were harnessed. Thus Bhakra Nangal, Damodar Valley Corporation and many others were being constructed. These paved the way for making available irrigation water to the agricultural fields, tractors, power tillers, pumps and various other industrial implements made their way into the agricultural sector. Downstream industries, mostly medium and small scale became the order of the day. But India with 14.7 percent literacy, poverty stricken and thoroughly underdeveloped could not meet the huge demand of technical human resource. It was necessary to establish engineering colleges and technical schools as well as vocational training centers to cater to the ever increasing demand of skilled labour. Thus Indian Institute of Technology was established at various locations of the country, Polytechnics sprang-up to supply middle level technicians and Industrial Training Institutes were created all over the country to supply the requirement of skilled working population. Various

trades like turners, fitters, electricians, masons, carpenters etc. were opened. The Railways had their own institutes to cater to their requirements. In fact, most of the public sector companies had their own training establishments. Thus most of the organized sectors had well-developed training units.

But beside the organized sector, there was a large unorganized sector where the majority of the urban and semi-urban work-force was employed. These workers were mostly employed in privately owned factories. Their workers were not only economically over-exploited but also educationally starved as they were forced to work in the same area in the same industry for years. Many of them, by dint of their own perseverance, managed to learn quite a lot on-job but there was no way that they could claim that knowledge to earn a decent certificate and use the same for better working condition or remuneration. What was even more distressing was the fact that many of them were illiterate and therefore had practically no scope for self-study. By any estimate, they constituted around 85 percent of the total work force. Plus there were an overwhelming population who were engaged in agriculture. For all these people there was no scope of vocational training worth the name. On the other hand India began to experience an economic boom from 1970s onward. Thus industry proliferated. Green revolution in the late 1960s also demanded a more skilled agricultural work force including agro-industrial workers. Since economy demanded more skilled workers, the poor and the underprivileged began to throng these factories as unskilled labour. Various new trades developed: electronics, chemical, construction, instrumentation etc. The organized vocational training centres widened their trades. But it was a drop in the ocean. Most of the trades remained outside the ambit of the organized vocational training imparting institutions.

From the 1980s, new trades appeared. The computer industry, the digital printing industry, the mobile telephone industry, the photographic industry etc. The appearance of digitization industry completely revolutionized many trades. But the organized vocational training centres had practically no scope to incorporate these newly developed areas into their fold. Therefore mushrooming of privately-owned training centres took place. Anyone desiring to enter this sector had to pay very high fee to learn the basics. Digitization industry also demanded not only literacy in the mother tongue but also a smattering of English. Therefore any decent job in these sectors was a far cry for the poor and the underprivileged.

Over the last three decades, these industries have entered almost every nook and corner of the country. Thousands of people are now working in these trades. But those who are doing fine had to invest a lot of money in learning the trade. Those with less education and financial resources are kept outside the orbit of this burgeoning market. Even those who enter these trades have no government recognized certificate. Various companies impart these trainings and issue certificates but the syllabus and examination procedure leave many things desired. Call centre jobs, jobs like medical transcription etc. require certain degree of fluency in English and some other requirements. Some even learn the trade on-job. Therefore these people cannot demand any recognition for their skills. Then there are mushrooming of repair trades of computer, mobile phones, digital watches and other such gadgets. One has to learn this trade on-job. There is no facility to teach these trades.

The automobile industry has also proliferated. Beyond the repair workshops of the established brands, there are thousands of garages where the cars and vehicles are repaired. Those who do this practically have no formal training. They learn the trade on-job. But neither they are unionized nor they have any formal training. They go from garage to garage in search of better working condition and higher pay. But these are wild goose chase. These people are mostly illiterate. It is always advantageous to employ these people because lack of training and certification make them most vulnerable.

Medical Laboratories have grown like mushrooms. There are good brands and not-so-good ones. The tests are done mostly by non-certified people. There are very few institutions that teach the subject. Therefore most of the people learn the job while working. Therefore clients find that the results vary from laboratory to laboratory. Most of these technicians are extremely ill-paid.

So, there are hundreds of trades where thousands work but who are untested and uncertified. The end result is that quality suffers enormously. It is high time that the Government should take stock of the situation and devise a method so that people working in these trades have proper training and appropriate certification.

It would be appropriate to delve into how such condition could be improved.

Training and Certification Bodies

At the very outset a central body has to be formed composed of experts of diverse disciplines. This body should identify the various trades presently in practice. On the basis of a nationwide survey, disciplines would be identified and trades defined. Each trade should have modular syllabus. The course content and the number of hours required for learning should be developed.

There are hundreds of institutions in this country which have the required expertise to impart training, conduct examination and award certificate. Technical universities, colleges and Industrial training institutes exist in all parts of India. Regional bodies could be formed which will co-ordinate with the academic institutions on behalf of the central body. The institutions desirous to impart training in a particular trade may be identified. Their infrastructure should be examined by the regional body. Once that infrastructure gets approved by the regional body and in its turn by the central body, the institution will be thus recognized. Both public and private institutions may opt to have this kind of facility. Students desirous of obtaining such certificates have to enroll themselves. Those unable to undergo regular training may opt for distance mode. Even technicians who consider themselves skilled enough may sit for the examination by paying a certain fee. Those who qualify will get certification recognized by the central body.

This will ensure quality of the program and give value to the certificate holder.

It is a crucial need for industry today. For recruitment of their skilled labour force, they can ask for persons who have required training and certification. It is also a crucial need for the untested workers. Many of them have the requisite skill but they cannot compete for these jobs because they have no formal certification. Therefore career prospects of these workers and technicians are totally blocked. They have to perpetuate as unskilled labour force in unorganized sector. Many foreign companies are now opening their factories in India. These companies are extremely quality conscious. They also pay handsome salaries. Uncertified workers therefore are deprived of the opportunity to compete for these jobs. At the same time, the training centres that we are hinting at, have the potential to train and certify millions of workers throughout the country and thus can have access to trained workforce for their own needs. It is a hugely prospective area crucial for

industrialization of the nation itself. Certified skilled workers with handsome remuneration will also boost the local and national economy. Since these skills cannot be acquired without basic literacy, the literacy scenario of the country will also register a significant improvement. It is a process by which the whole country will come out of darkness. A literate and skilled person earning a decent salary is also a fighter against all obscurantism.

The trained and tested personnel having standard certification can move all over the country and abroad. The world is becoming smaller. Many industrialized foreign nations are suffering from lack of trained personnel. Standardization of the training process will open to these workers access to such jobs in foreign countries. This will also help the country because of the handsome remittances from abroad. Our country earns quite a lot of foreign exchange through remittances from the countries of the Middle-East as well as other countries of Asia, Africa, Europe and the Americas. From whatever angle we may look at, standardized training procedure and certification will help this country enormously. It is high time that effective efforts are made so that in the near future we can catch the bull by the horn. This is the need of the hour. "Make in India" slogan can only be successful if such endeavour is made in right earnest.

Such standardization will also help the unorganized sector. The quality of their products will also improve. In fact a large portion of our population consumes products and services of the unorganized sector. Standardization of training and certification will also help this sector to excel.

Importance of Skill Training in 'Make in India' Programme

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Genesis of the Campaign

As an integrated initiative of Government of India 'Make in India' campaign/ programme was launched by the Prime Minister on 25th September 2014 in New Delhi simultaneously at national and state levels as well as in the Missions abroad. The basic idea behind this campaign was to attract both foreign and domestic firms to invest in India so that the state of monotony persisting in entire economic sector of the country is invigorated and the overall growth rate of the country be improved. The Prime Minister, therefore, invited business barons across the world to come to India while assuring them best ever possible cooperation. He also solicited the CEOs of domestic firms to invest in India and asked them to utilize the scope and opportunities available here and shine as MNCs instead of leaving the nation. Above all Govt. of India wanted to chart out a new path wherein business entities will be extended red carpet welcome in a spirit of active cooperation. Make in India was an obvious outcome of this concern and commitment of the Government towards economic benefactors.

Through this single strategic move government planned to cross many hurdles in a single leap. At one end it wanted to ensure a hassle free pathway for Foreign Direct Investment (FDI) to fuel the prime engine of infrastructural growth and progress in the country, on the other end it desired to boost the morale of its own citizens for entering into the arena of business and industrial world not as a job seeker but as an entrepreneur who would prefer to run their own ventures to sustain themselves and also to provide job opportunities to many of their own fellow citizens. Govt. of India also attempted to garner Indian industry a global recognition by making India a global hub for manufacturing, manufacturing design, innovation and financial inclusion, thereby creating a large number of jobs to satiate the ever growing rate of domestic unemployment. Precisely, it focused itself on the domestic manufacturing industry which was still lagging behind even after introducing a number of important measures to that effect.

Modus operandi of Make in India

This very ambitious campaign which acquired the importance of a flagship programme of the government was launched with great fanfare. The Department of Industrial Policy and Promotions (DIPP), Ministry of Commerce and Industry engaged a creative agency for the campaign. The logo designed by the creative agency was showcased in a tableau in the Republic Day parade 2015 and also in a stall specifically set-up in Davos at World Economic Forum as part of promotion of the programme.

The government and policy planners knew it well that in due course people would be assessing the achievements of this campaign/programme against certain basic questions like:

- *Whether this campaign has been able to push India's manufacturing growth any further?*
- *Has it increased the share of manufacturing sector in the country's GDP? If yes, to what extent?*
- *India Inc has been able to gain the confidence of the global business community?*
- *To what extent the infrastructural facility available in the country has been increased any further?*
- *Has the campaign been able to motivate people to enter market and industrial arena as entrepreneurs and are able to get hassle free business environment in the country?*
- *Has the campaign succeeded in attracting investors substantially?*
- *Whether quality has emerged as a vital concern of the nation, be it in the field of education, research, innovation or in the services offered and goods manufactured?*
- *Has the skill quotient of the nation has improved further?*
- *Whether Indian nationals are able to occupy the opportunities available in the global job market in a better way?*
- *Can the domestic market and industries are able to create ample number of job opportunities to quench the thirst of employment seekers?*
- *And finally whether the fruits of these developments are trickling down to gleam the face of last man of the country?*

Hence, the entire government machinery came forward to support the campaign and all the efforts were synchronized. The Prime Minister himself took immense interest in popularizing the campaign. In fact, he missed no opportunities and left no stone unturned to sell the message of the campaign.

Government took a number of initiatives to improve ease of doing business in India. Rules and procedures have been simplified and a number of products have been taken off licensing requirements. In order to create conducive environment government intends to provide a robust infrastructure to business through development of industrial corridors and smart cities along with state-of-the-art technology. To roping in FDI, policy in Defence Sector has been liberalized and FDI cap has been raised from 26% to 49%. Cent percent FDI has been allowed in Defence Sector for modern and state of the art technology on case to case basis and same (100% FDI) under automatic route has been permitted in construction, operation and maintenance in Rail Infrastructure projects. This programme laid the foundation of India's new national manufacturing policy and rolled out the red carpet to both domestic and international industrialists with an aim to make India a manufacturing hub that will in turn boost the employment and overall growth of India. Twenty five industry related ministries namely Auto Components, Automobiles, Aviation, Biotechnology, Chemicals, Construction, Defence Manufacturing, Electrical Machinery, Electronic System Design and Manufacturing, Food Processing, IT and *Business Process Management* (BPM), Leather, Media and Entertainment, Mining, Oil and Gas, Pharmaceuticals, Ports, Railways, Roads and Highways, Renewable Energy, Space, Textiles, Thermal Power, Tourism and Hospitality and Wellness were identified for target specific approach and each of these ministries are working on sector specific targets as per their identified action plan for the next one to three years. In order to underline the attitudinal shift in policies relates to investors an Investor Facilitation Cell has been created by the government with a dedicated team to guide and assist the first-time investors.

Recognising skill as pivotal need for sustaining the campaign

The need of skill education in the country has not been emphasized for the first time. The Planning Commission (now renamed as NITI Aayog) has time and again underlined the essentiality of providing skill education to unemployed youth and also to enhance the quality of skill possessed by those who are employed specifically in the tertiary sector. Almost all the

previous governments, in tune with the recommendations of Planning Commission, have reiterated their commitments to invest more, develop suitable infrastructure and programmes to widened the scope of vocational and skill education in the country in order to accommodate the growing number of youth and adults who have never been the part of skill oriented market or industry in the past. However, much has not been achieved. The reason lies with the inadequate investment made by government on this sector. A cursory look at the overall investment made on this aspect of education and training during last Eleven Five Years Plans (see the Table - 1 below) shows that on an average around 12.52% of the total allocation on education has been diverted towards technical education. Now, for sake of calculation and drawing a wider picture if we consider that India has utilized an average of 4% of its GDP on education then the allocation on technical education comes to around 0.5% of the total GDP of the country. This has been the ground reality till the end of Eleventh Five Year Plan.

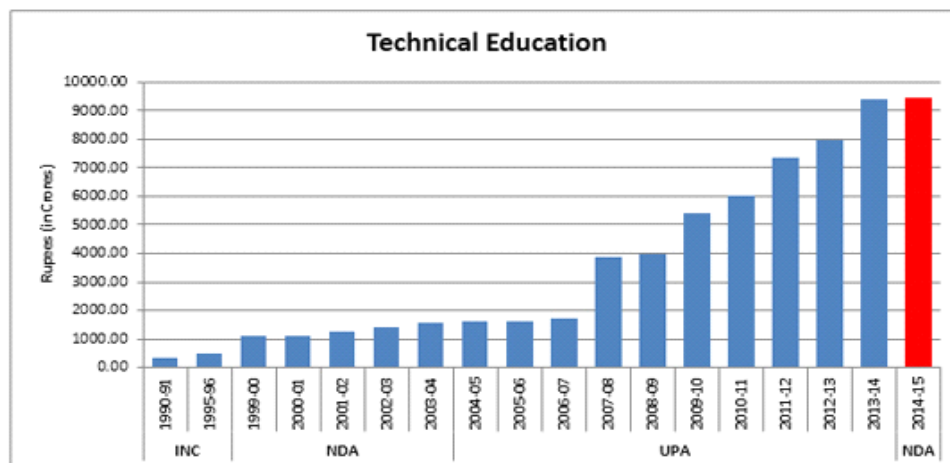
Table – 1: Allocation for different sectors of Education in Five Year Plans

(Figures in percent)

Plan	Elementary	Secondary	Adult	University	Technical	Others
First Plan (1951-56)	57.6	5.5	0.0	7.8	14.2	15.0
Second Plan (1956-61)	34.8	18.7	0.0	17.6	17.9	11.0
Third Plan (1961-66)	34.1	17.5	0.0	14.8	21.2	12.4
Fourth Plan (1969-74)	50.1	0.0	1.7	25.2	10.5	12.5
Fifth Plan (1974-79)	51.7	0.0	2.1	27.9	9.4	8.9
Sixth Plan (1980-85)	32.1	20.4	5.9	21.4	10.4	9.8
Seventh Plan (1985-90)	37.3	24.0	6.2	15.7	14.2	2.6
Eighth Plan (1992-97)	47.7	24.0	5.2	9.6	10.1	3.4
Ninth Plan (1997-02)	57.1	21.3	1.7	8.7	8.1	3.0
Tenth Plan (2002-07)	65.6	9.9	2.8	9.5	10.7	1.5
Eleventh Plan (2007-12)	46.5	19.8	2.2	15.5	11.1	4.9

From Table- 1 it is clear that fund allocation for technical education under different Five Year Plans was not progressive which clearly indicates that this sector could not get the much needed encouragement. However, within the allocated amount in the Eleventh Five Year Plan a considerable emphasis was given to vocational and technical education due to which there was a gradual increase in the expenditure on this sector (see the Graph below).

Expenditure on Technical Education



The new political dispensation at the centre which initiated the Make in India campaign not only continued the same trend but gave a lot more emphasis on it. This was precisely in view of garnering the dividends of India's growing young population, domestically sustaining the demand of trained manpower supposed to be created by the projected growth of manufacturing industries, balancing the unemployment factor and also to utilize the vacancies created for skilled labour in the global market in favour of India's economic growth.

The Policy Planners at the centre could strike the right chord by underlining the need of an all encompassing approach towards the campaign. There seems to be unanimous understanding about the fact that sans skill ability country would not be able to harvest the dividend of its active youth population. Hence a separate ministry was created to look after the skill interest of the youth in the country. The Ministry of Skill Development and Entrepreneurship is responsible for co-ordination of all skill development efforts across the country, removal of disconnect between demand and supply of skilled manpower, building the vocational and technical training framework, skill up-gradation, building of new skills, and innovative thinking not only for existing jobs but also jobs that are to be created. The Ministry also aims to skill on a large scale with speed and high standards in order to achieve its vision of a 'Skilled India'. In these initiatives it is aided by its functional arms – National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), National Skill Development Fund (NSDF) and 33 Sector Skill Councils (SSCs) as well as 187 training partners registered

with NSDC. The Ministry also intends to work with the existing network of skill development centres, universities and other alliances in the field. Further, collaborations with relevant central ministries, state governments, international organizations, industry and NGOs have been initiated for multi-level engagement and more impactful implementation of skill development efforts.

It is a welcome step that the interest shown by the government in vocational and technical development is also suitably corroborated by the financial allocation. The Table - 2 shows that apart from the general allocation on education government allocated a total of Rs.1,543.46 crore to the Ministry of Skill Development and Entrepreneurship for the year 2015-16. It also increased the allocation to Ministry of Labor and Employment by Rs.931.22 crore for the same period.

Table – 2: Skill development - Allocation under different Ministries/Departments

Department/ Ministry	Actual 2013-14			Budget 2014-15			Revised 2014-15			Budget 2015-16		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
Department of School Education and Literacy	43,684.41	3,171.93	46,856.34	51,828.00	3,287.10	55,115.10	43,517.90	3,287.10	46,805.00	39,038.50	3,181.00	42,219.50
Department of Higher Education	14,182.83	10,282.34	24,465.17	16,900.00	10,756.00	27,656.00	13,000.00	10,700.00	23,700.00	15,855.26	11,000.00	26,855.26
Total	57,867.24	13,454.27	71,321.51	68,728.00	14,043.10	82,771.10	56,517.90	13,987.10	70,505.00	54,893.76	14,181.00	69,074.76
Ministry of Labour and Employment	1,586.90	2,636.24	4,223.14	2,438.32	3,158.76	5,597.08	1,420.25	2,879.60	4,299.85	2,116.51	3,198.71	5,315.22
Ministry of Skill Development and Entrepreneurship	---	---	---	---	---	---	---	---	---	1,500.00	43.46	1,543.46
Source: India Budget 2015 crore										Figures in Rs.		

Setting Skill Agenda for coming Decades

In order to meet its own forecast of a significant requirement of skill manpower over the next decade, the Government of India has set a target to impart necessary skills to nearly 500 million people by 2022. However,

the Institute of Applied Manpower Research (IAMR), a government think-tank, has computed new skill gap figure to arrive at a “realistic” overall target. According to IAMR’s analysis the total number of people who need to be trained by 2022 ranges between 249 and 290 million across differing skill requirement scenarios.

Federation of Indian Chambers of Commerce and Industry (FICCI) in collaboration of Ernst and Young (EY) LLP has recently brought out a report entitled ‘Reaping India’s promised demographic dividend - industry in driving seat’. This report also states that ‘India faces a considerable skill development challenge and around 12 million people are expected to join the workforce every year over the next decade. In contrast, the country has a total training capacity of around 4.3 million, thereby depriving around 64% entrants of the opportunity of formal skill development every year. Moreover, net enrolment in vocational courses in India is estimated at around 5.5 million per year, while that in China is 90 million and in the US 11.3 million. Clearly, the country faces a major challenge of imparting “employable skills” to its growing workforce over the next few decades’.

The Twelfth Five Year Plan has embarked on a relatively modest target of skilling 80 million people until 2017, which leaves around 400 million people to be trained in the Thirteenth Five Year Plan period by 2022. Hence, developing a suitable network of institutions and industries having adequate scope and infrastructural facilities for providing this large number of new entrants to the work force becomes the pertinent agenda before the country.

Developing network for Skill Creation

With a setup of various types of organizations, both at national and state levels government have successfully initiated the process to scale-up skill development efforts across the country. Now, with the government at the helm of affairs, a number of agencies - around 17 ministries, two national level agencies (NSDA & NSDC), several Sector Skill Councils (SSCs), 35 State Skill Development Missions, and several trade and industry bodies are putting their best foot forward to push the national skill development agenda. National Skill Development Agency has been launched with the Cabinet approval and has subsumed the functions of three key organizations – the Prime Minister’s National Council of Skill Development (PMNCSD), the National Skill Development Coordination Board (NSDCB) and the Office of the Advisor to the PM on Skill Development in order to achieve better

coordination at the apex level. The agency has been mandated to meet the increasing need for skilled population, in both the public and private sectors. It would also be responsible for coordinating with all central government ministries involved in skill development initiatives and to develop and monitor an overarching framework for skill development, and anchor and operationalize the National Skill Qualification Framework. The National Skill Development Council will continue to work with the private sector. So, with the setting-up of NSDA, there will be two agencies where the NSDA will monitor the NSDC's functioning.

The Key responsibilities of NSDA are to drive the National Skill Development Mission and meet skilling target, to coordinate and harmonize the efforts of various stakeholders, to anchor and operationalize the National Skills Qualification Framework, to monitor and evaluate skill development schemes and to raise extra-budgetary resources from various sources. Whereas the NSDC is entrusted with the work of developing ultra-low cost, high-quality, innovative business models, to foster private sector initiatives and to provide support services.

In line with the Coordinated Action on Skill Development, the majority of the state governments or Union Territories have formed their own State Skill Development Missions (SSDMs) for adopting a focused and synergized approach for skill development in their respective states. The formation of SSDMs will also solve the specific problems pertaining to multiple interfaces in applying for both central and state schemes on skill development. SSDMs are set to play a vital role in promoting skill development, as they are involved in identification of important sectors for job creation, and coordination with relevant government institutions, as well as industry and private training organizations. Each state has implemented a SSDM that best fits their local requirements and the state vision for skill development. While some states have decided to form the SSDM as a society or corporation under the Chief Secretary or Chief Minister, others have positioned it under relevant state government departments such as Labor, Human Resource Development or Planning. Apart from this, several state governments have started setting year-wise targets and allocating budget for skill development.

With guided synergies and robust processes, these organizations have the potential to achieve the ambitious skill development target by 2022.

However, certain issues pertaining to the existence of multiple actors in the skill development mission need to be resolved to keep the agenda on track. Some of the issues are mismatch between national and state level plans, and conflicting agendas of central ministries. To ensure the synergistic delivery of various federal and state programmes, the Government has appointed the National Skill Development Agency (NSDA) to play a key role in harmonizing the efforts of various institutions and enhance the current institutional framework. The NSDA lays special emphasis on industry engagement and aims to involve private players across various links of the skill development value chain, such as curriculum design, apprenticeship, certification, competency assessment and placement linkages.

Role of Jan Shikshan Sansthan in the Network of Skill Creation

Vocational skill training is imparted by many institutions, both in the organized and unorganized sectors, in which Jan Shikshan Sansthans occupy a place of pride. They are run under the recognized NGOs and funded by the Department of School Education and Literacy, M/o Human Resource Development. The Sansthans organize vocational training programmes of various skills and duration suited to the needs of out of school youths and particularly non-literates, neo-literates and persons with rudimentary level of education. The curriculum followed is a standardized one drawn from the established vocational institutions, specially prepared by National Institute of Fashion Technology (NIFT) and by the Directorate of Adult Education, Govt. of India with a lot of emphasis on practical (65%) along with theory (25%) and an important component of Life Enrichment Education (10%). In view of cost effective quality training the vocational courses conducted by the Sansthans are popular and also are always in demand. Till date 271 Sansthans train lakhs of persons every year in which females benefit more.

Now with the creation of Ministry of Skill Development and Entrepreneurship which has the responsibility of coordinating all skill development efforts across the country some questions have surfaced about the locus standi of all these institutions, the role to be played by them in the new set-up and also about the financial allocation made for them. It may appear a bit awkward to hear that the 'National Skill Development Mission - A Framework for Implementation' document issued by this Ministry maintains a studied silence over the issue. In the Mission Objectives this document emphasizes to 'Create an end-to-end implementation framework for skill

development, which provides opportunities for lifelong learning. This includes incorporation of skilling in the school curriculum, providing opportunities for quality, long and short-term skill training, providing gainful employment and ensuring career progression that meets the aspirations of trainees.' Again, referring to the enablers of skill training it says that it will be promoting states to open 'Kaushal Vardhan Kendras' (KVKs) to increase outreach and provide training linked to local needs. Unfortunately, Jan Shikshan Sansthan which are already functioning as vocational training Institutions like KVKs from 1967 are nowhere in the canvas of skill training. In case, by mistake the role of Jan Shikshan Sansthan is left out as one of the skill training institutions, it is high time that they are recognized, strengthened with more fund allocation or they can be converted into Kaushal Vardhan Kendras. Since, the Secretary to Govt. of India, M/o Human Resource Development is also a part of the Steering Committee formed for execution of the Mission along with the Secretaries of Ministry of Finance, Rural Development, Labour and Employment, MSME and Agriculture, it can be brought before the committee for necessary action.

Conclusion

Fifteen months (September 2014 - December 2015) is too less a time for analyzing the impact of any national level programme which is implemented in mission approach. However, with all said and done there exists no doubt that this programme has gathered a huge response from business houses both in India and abroad. It has succeeded well in apprising the business entities across the world about India's willingness to invite them and extend them an atmosphere surcharged with a sense of active cooperation. It has successfully created an optimistic environment in and around the country and thereby motivating a large number of Indian citizens to come forward for new start-ups as a result of which we see an upgradation of six ranks in India's position in the Global Entrepreneurship Index (GEI) – 2016 (the rank of India was 104 in 2015 and it is 98 in 2016). This rank is calculated on the basis of scores achieved on 14 'pillars' viz. Opportunity Perception, Startup Skills, Risk Acceptance, Networking, Cultural Support, Opportunity Startup, Technology Absorption, Human Capital, Competition, Product Innovation, Process Innovation, High Growth, Internationalization and Risk Capital. Government's provisional GDP estimates for 2014-15 has shown India's manufacturing sector to have notched-up a healthy 7.1% annual growth for the fiscal, and a heady 8.4% in the last quarter. This was against the corresponding year-on-year growth rates of 5.3% for 2013-14

and 4.4% in January-March 2014. This indicates that the domestic manufacturing sector too has a catalytic impact of the programme. So far as its impact on skills creation is concerned it may be concluded well that this programme has made 'skill creation' - a buzz word of the day and resulted into the creation of a separate and dedicated Ministry for skill creation which has brought all the isolated efforts made for skill education and training in the country under a single umbrella. However, much remains to be done at the ground level. Imparting skills to neo-literates and non-literates is equally important but institutions operating in these areas are yet to receive the attention of the policy makers which certainly pose a note of interrogation before the whole exercise.

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Vocational Education in Higher Education System

L. Raja

Introduction

Vocational skill development is very important in all spheres' of life. In order to improve and cope with the technological changes coming fast in the world it is appropriate that individuals, industries, agencies, government and non-governmental agencies urgently and systematically upgrade their technical levels to cope with the new skills which include computer, satellite, information and communication technology and such other things. In fact vocational education as a discipline has been taught (practiced) in many parts of the world for many years. The Australian Qualifications Framework (AQF) is a quality assured national framework of qualifications in the school, vocational education and training (VET), and higher education sectors in Australia. In Germany two-thirds of young people undergo vocational training in the dual system. The United Kingdom's vocational qualifications (NVQs) practice vocational skill manpower. The Singapore National Skills Recognition System (NSRS) deals with their development. The European Centre for the Development of Vocational Training (Cedefop) works for employment upgradation. UNESCO Dakar works to keep TVET high on the political agenda of African governments, regional economic communities (RECs) and financial partners. The other organizations are the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and the International Labour Office (ILO).

This paper deals with some of the major frameworks that are available internationally which are always referred by countries for drawing their national policy for skill development.

Australia

The Australian Qualifications Framework (AQF) is a quality assured national framework of qualifications in the school, vocational education and training (VET), and higher education sectors in Australia. The AQF comprises:

- National guidelines for each of the current national qualifications issued in the senior secondary school, vocational education and training and higher education sectors
- Policies and guidelines for articulation, credit transfer and recognition of prior learning register of authorities empowered by governments to accredit qualifications
- Register of institutions authorised to issue qualifications.
- Protocols for issuing qualifications, and
- A governance structure for monitoring the implementation of the AQF and for advising Ministers, including recommendations for change.

Germany

VET is regarded as the pillar of the educational system in Germany. Two-thirds of young people undergo vocational training in the dual system. This training would ideally last for two to three and a half years, depending on one's occupation. It is described as a 'dual system' as training is carried out in two places of learning: at the workplace and in a vocational school. The aim of training in the dual system is to provide a broad-based basis to advanced vocational training and impart the skills and knowledge necessary to practice a skilled occupation within a structured course of training. Those completing the training are entitled to undertake skilled work in one of the 35 recognised occupations requiring formal training. The only requirement is that the student should have completed full-time schooling before commencing vocational training. The key success factor for the German system is the added focus on apprenticeship.

United Kingdom

The National Vocational Qualifications (NVQs) were created in response to the felt need of the people for qualifications made flexible but rigorous and nationally recognised. NVQs are also part of 'Modern Apprenticeship' which is funded through work-based learning. The funding varies between occupational sectors and by age group. The national framework covers general, secondary and tertiary education, VET, work-based learning and prior learning. Accreditation of Prior Experiential Learning (APEL) describes the process of giving formal recognition to learning that derives from personal experiences often gained in employment or voluntary work situations. At the industry level, Sector Skills Councils (SSCs) have been licensed and social partners are also engaged. SSCs are tasked with drawing-up occupational

standards for their sector that will feed into the national reform of qualifications. The Government expects each SSC to draw-up a Sector Skills Agreement in which employers and unions identify skills and productivity needs in their sector and the necessary actions to meet those needs.

Singapore

The National Skills Recognition System (NSRS) is Singapore's national framework for establishing work performance standards, identifying job competencies and certifying skills acquisition. It is implemented by the Standards, Productivity and Innovation Board with the support of the Ministry of Manpower and the Ministry of Trade and Industry. This has helped the industry train skills-standards consultants and assessors, as well as to develop On the Job Training (OJT) blueprints for the skills-standards established. Assessment centres have been set-up to assess the workers who can be certified at the centralised assessment centres, work place or a combination of both. Supporting the NSRS implementation framework are promotional activities and financial incentives for the industries. NSRS is promoted at four levels, i.e., national, industry, company and workforce, in collaboration with employer groups, industry associations, economic agencies and unions.

European Union and Vocational Education and Training

Member countries of the European Union were convinced that better vocational education is vital if Europe is to respond adequately to its challenges of global competition, high numbers of low-skilled workers, young unemployed persons and ageing populations.

The role of the EU Commission acts together with EU government's employers and workers' groups and countries outside the EU to strengthen vocational education across Europe. The basis for this is the Copenhagen Process. In 2010, 33 countries agreed a package of common goals in vocational training for the period 2011-20, backed-up with concrete national measures and EU support. This package is known as the Bruges Communiqué.

The EU Commission's work on vocational education is supported by two agencies and they are European Centre for the Development of

Vocational Training which provides information and analysis of education & training systems, policies, research and practice and the second one is European Training Foundation (ETF) which works on the development of education & training systems in EU partner countries, strengthening cooperation and coordinating funding. The Leonardo da Vinci programme, one of the EU's lifelong learning programmes, funds a wide range of vocational training measures, ranging from placements abroad to cooperating for/with projects between training organisations in different countries. These include 'mobility' initiative enabling people to train in other countries, co-operation projects to transfer or develop innovative practices and network focusing on topical themes in the sector. The people able to benefit from the programme range from trainees in initial vocational training, to people who have already graduated, as well as VET professionals and any one from organisations active in the field. Leonardo da Vinci enables organisations in the vocational education sector to work with partners from across Europe; exchange best practices and increase their staff's expertise. It makes vocational education more attractive to young people and helping people to gain new skills, knowledge and qualifications, the programme also boosts the overall competitiveness of the European labour markets. Innovation projects are key to the programme. They aim to improve the quality of the training systems and developing and transferring innovative policies, courses, teaching methods, materials and procedures.

In order to attract young people for vocational education and training the EU has turned its policies for improving the quality of training - initial education and continuing development and of teachers, trainers and other professionals in the sectors and made the courses more relevant to labour market for which the methods adopt include Work-based-learning , skills competitions and improvement of national systems through the European quality assurance frame work for vocational education(EQAVET).

The EU Commission also developed a new strategy for education reform with a number of initiatives in the field of vocational education and training to support smart and sustainable growth. As part of the strategy it has developed a working document called "Vocational education and training for better skills, growth and which indicates a lot on the strategies, outlines, suggestions for reforms of the VET sector, proposed workshops on vocational excellence to smart and sustainable growth which will bring together stakeholders from all over Europe background documents and synthesis report, a report on

“The role of vocational excellence for smart sustainable growth and another report on US community colleges.

In order to strengthen the vocational training programmes, the EU Commission brings together expert from different countries to exchange good practices in teaching training and support reforms in the national systems apart from other few steps taken at its own end like working group on vocational trainers, peer learning activities for vocational trainers and studies on vocational teachers and trainers.

European Union Lifelong Learning & Study/Training Abroad

Under its Youth on the move and Youth opportunities initiatives, the EU has set a target of 6 percent of learners in initial vocational education to undertake part of their training abroad. It has also launched in 2012 a quality frame work for trainees with clear legal and administrative information on study periods abroad and encourages the employers to offer high-quality work placements. The EU Commission is also encouraging employers to offer European traineeships, which is accompanied by action to improve the quality of training, including their feedback tools and more cooperation between business organisations and education/training institutions.

The Commission works to facilitate **collaboration** between the **providers of vocational education/training** and **drivers of innovation** (innovating companies, design centres, the cultural sector and higher education) – by encouraging all sides to streamline their capacities within Knowledge Alliances and Sector Skills Alliances. The European Business Forum on Vocational Training promotes creativity, innovation and entrepreneurship in the sector. Generally, entrepreneurship initiatives in initial and ongoing vocational education as well as the use of ICT in training are high on the EU's agenda.

As part of equality and social cohesion it ensures access to training for individuals and groups at risk of being excluded, i.e. the low and unskilled, people with special needs or from disadvantaged backgrounds and older workers, etc.

Vocational Education and Training in Africa

Technical and vocational education and training (TVET) is a challenge

for all countries in Africa. In most countries the enrolment rate in formal TVET at secondary level is 5 percent or less. Non-formal TVET is predominant and often highly fragmented. Learning opportunities at the workplace, non-formal learning, private provision, and initiatives under various non-education sector ministries all tend to operate in a non-coherent way. Governments and international institutions are paying increasing attention to TVET. It is one of eight priority areas in the African Union's Second Decade of Education (2006-2015). But despite an increase in the number of African students in TVET, only a few governments in Africa are able to finance TVET at a level that can support quality training. The demand is enormous. Three out of five unemployed in sub-Saharan Africa are young people, mostly surviving in the informal economy.

UNESCO Dakar works to keep TVET high on the political agenda of African governments, regional economic communities (RECs) and financial partners. The Office initiated in 2009 the so-called "Abuja process" to revitalize the area at regional level, in collaboration with the Community of West African States (ECOWAS). In 2010, a working group (better known by the acronym of IATT for 'Inter Agency Task Team') was set up to strengthen the coherence of action and provide more support to countries in developing skills for youth employment. It comprises several UN agencies and institutions (UNESCO, UNDP, ILO, UNEVOC, etc.) and other partners such as ECOWAS and the Association for Development of Education in Africa (ADEA).

Current priorities are developing certification frameworks' (national and regional) to enhance TVET in terms of recognition and harmonization of diplomas. This is expected to improve the necessary linkages with the labour market and skills mobility within and between countries, 'Testing innovative approaches' - UNESCO Dakar supports for example the reform of TVET policy in Senegal. One experiment is Mobile Training Units comprising trucks, tents, trainers, materials etc. to provide short term courses in disadvantaged areas. Initial results in Northern Senegal have encouraging and have generated much interest in Gambia, 'Improving monitoring and statistics' - UNESCO Dakar, together with the UNESCO Institute for Statistics, works on developing and disseminating quality statistical data and indicators to be able to identify more clearly the needs in the various sectors of TVET in African countries.

WHAT IS IVETA?

IVETA is an organization and network of vocational educators, vocational skills training organizations, business and industrial firms, and other individuals and groups interested or involved in vocational education and training worldwide. IVETA is dedicated to the advancement and improvement of high-quality vocational education and training wherever it exists and wherever it is needed.

IVETA is working to create a new era in communication among vocational educators around the globe. Members include practitioners, researchers, and students in the field of vocational education and training as well as institutions, organizations, and companies actively engaged in human resource development. IVETA strives to accomplish these purposes.

European Union

Building a dynamic future

Top-quality education and training are vital if Europe is to develop as a knowledge society and compete effectively in the globalised economy. Education policy as such is decided by each EU country, but together they set joint goals and share best practices.

The EU funds programmes that help citizens make the most of their personal development and the EU's economic potential by studying, training or doing volunteer work in other countries.

Vocational Education in India

Today, India is one of the youngest nations in the world with more than 54% of its total population below 25 years of age. Its population pyramid is expected to "bulge" across the 15-59 age groups over the next decade. It is further estimated that the average age of the population in India by 2020 will be 29 years as against 40 years in USA, 46 years in Europe and 47 years in Japan'. In fact, during the next 20 years the labour force in the industrialized world is expected to decline by 4%, while in India it will increase by 32%. This poses a formidable challenge and a huge opportunity. To reap this demographic dividend which is expected to last for next 25 years, India

needs to equip its workforce with employable skills and knowledge so that they can contribute substantively to the economic growth of the country.

The Country, however, has a big challenge ahead as it is estimated that only 4.69% of the total workforce in India has undergone formal skill training as compared to 68% in UK, 75% in Germany, 52% in USA, 80% in Japan and 96% in South Korea. While the debate on the exact quantum of the challenge continues, there is no disputing the fact that it is indeed a challenge of formidable proportion.

It is observed that today the total workforce in the country is estimated at 487 million, of which approximately 57% is in the non-farm sector. If the workforce with higher education without formal skill training is excluded, the balance workforce is estimated to be 450.4 million. Of these 256.72 million non-farm workers, a maximum of 5.4% would be formally trained and skilled (3.61% is based on 2011-12 NSSO survey and includes both farm & nonfarm). Approximately 241.86 million would either be unskilled or skilled through non formal channels. Out of these, it is estimated that approximately 170 million would be in the age group of 15-45 years. This workforce will need to be mapped through recognition of existing skills and then provided with necessary skilling, re-skilling and up-skilling to increase productivity and provide a livelihood pathway. Similarly, in farm sector, this figure works out to be 128.25 million.

The vocational education, training and skill development are imparted by different institutions run by the Government of India (GoI), Local body, Private aided and unaided.

All India Council for Technical Education (within the MHRD portfolio)
 Advanced Training Institute (within the DGET portfolio)
 Accredited Vocational Institutes(s) (administered under NIOS)
 Board(s) of Apprenticeship Training (administered under MHRD)
 Basic Training Centre (s) (administered under DGET)
 Central Advisory Board for Education (within the MHRD portfolio)
 Central Apprenticeship Council (within the DGET portfolio)
 Central Board for Secondary Education (within the MHRD portfolio)
 Confederation of Indian Industry
 Centres of Excellence (under establishment in ITIs with funding from the central and state governments)
 Community Polytechnic(s) (within the MHRD portfolio)

Centrally Supported Scheme of Vocationalisation of Secondary Education
 Central Staff Training and Research Institute (within the DGET portfolio)
 Craftsman Training Scheme (administered under DGET)
 Directorate General of Employment and Training (within MoLE)
 Employment Assistance Centres (related to National Renewal Fund)
 Federation of Indian Chambers of Commerce and Industry
 Institute of Applied Manpower Research
 Indian Institute of Technology (within the MHRD portfolio)
 Industry Training Centre(s) (private institutions affiliated with NCVT)
 Industry Training Institute(s) (public institutions affiliated with NCVT)
 Joint Council for Vocational Education (within the MHRD portfolio)
 Jan Shikshan Sansthan (Community Education Organisations)
 Khadi and Village Industries Commission
 Ministry of Human Resource Development
 Ministry of Labour and Employment
 Ministry of Skill Development and Entrepreneurship

National Apprenticeship Certificate (administered under DGET)
 National Board of Accreditation (within AICTE)
 National Council for Educational Research and Training (within the MHRD portfolio)
 National Council for Teacher Education
 National Council for Vocational Education (within the MHRD portfolio)
 National Council for Vocational Training (within the DGET portfolio)
 Non Government Organization
 National University of Educational Planning and Administration
 National Institute of Information Technology (within the MHRD portfolio)
 National Institute of Open Schooling (within the MHRD portfolio)
 National Institute for Technical Teacher Training and Research (within the MHRD portfolio)
 National Trade Certificate (administered under DGET)
 Open Basic Education (offered through NIOS)
 Pandit Sunderlal Sharma Central Institute of Vocational Education (administered under NCERT)
 Statutory Apprenticeship Training Scheme (administered in separate parts by DGET and MHRD)
 State Council(s) for Vocational Education (administered by respective state governments)
 State Council for Vocational Training
 Skills Development Fund (established in Singapore)

Secondary School Leaving Certificate

Support to Training and Employment Program (under the portfolio of MHRD of GOI)

Technical and Further Education (Australia)

Total Factor Productivity

University Grants Commission (within the MHRD portfolio)

Vocational Education and Training

However, according to a NSSO report vocational training is received by only 10% of persons aged between 15-29 years. Out of this only 2% receive formal training, while non-formal training constitutes the remaining 8%. Out of the formal training received by that particular age group only 3% are employed. According to the planning commission report for the 11th Five year plan there are about 5,114 industrial training institutes (ITIs) imparting training in 57 engineering and 50 non-engineering trades (Vocational Education in India-2008). Based on this the Confederation of Indian Industry-Tamil Nadu State Council (CII-TNSC) urged the government to start Vocational University to meet the increasing demand of the skilled workers in the job market (The Hindu-3.12.2012).

The present Central Government takes a lot of initiatives to implement the vocational and skill development to provide job to the Indian youth. Recently, Ministry of Skill Development and Entrepreneurship, Government of India has brought out the National Policy for Skill Development and Entrepreneurship 2015. The Ministry of Human Resource Development and University Grants Commission have been having very close collaboration with National Skill Development Corporation (NSDC). National Skill Qualifying Framework (NSQF), National Skill Sector Council (NSSC) is jointly operating to mitigate unemployable skill and unemployment problem in India.

A National Skills Research Division (NSRD) will be constituted with in NSDA at the national level. The role of the division will be to conduct skill surveys including aggregation of the environmental scans done by SSCs, study emerging demand trends, operate the LMIS and other skilling platforms and databases. This body will have close involvement of private sector subject experts and will be the strategy think tank for MSDE. It will also keep a close watch developments taking place internationally in these areas and align our policy response to enable engagement with various stakeholders in the skilling ecosystem and ensure that skills sets of our

people are also aligned with international requirements/benchmark, ensuring their global mobility.

Vocational Education in Gandhigram Rural Institute – Deemed University (GRI), Gandhigram

GRI was established in the year 1956 with objectives of taking higher education to the doorsteps of the rural areas, with focus on skill development through the Gandhian principles of rural industries training and production. It has rich experience in organizing skill oriented training for the rural dropouts, pass-outs, non-students youth, women, artisans, farmers and physically challenged people.

The Department of Lifelong Learning and Extension (earlier it was the department of Adult Continuing Education and Extension) has been imparting training on vocational based skill training ever since 1986.

The following training programmes are offered:

Mobile phone services, Computer Hardware, Electrical wiring, Domestic Appliances, Fan, Motor Coil Winding, Two wheeler Mechanism and Maintenance, Air condition and Refrigerator, Digital Photography, Digital Videography, 2D animation, Computer Literacy, Desktop publishing, Tailoring and Type writing.

This department also has an accredited centre for National Institute of Open Schooling (NIOS) through that also vocational training, secondary and senior secondary level education is imparted for the needy people. The department is closely working with the partner industries and has signed MoU with ITI's and other technical institutions in and around Dindigul District. It does collaboration with private industrial training institutes, professional bodies. Liaison with corporate skill development centres like Murugappa Groups under CUMI training institutes, Hosur. We identify the candidates and send them to CUMI, Hosur for training. During the training the trainee gets free boarding and accommodations, uniform, cycle, shoes and value education. Apart from that they also get monthly honorarium of Rs.3000/- and in the second year Rs.4000/- per month and in the third year Rs.6000/-. The successful candidates get employment in the industries itself.

The department has been instrumental for getting Community College worth of Rs. 54 lakhs to GRI based on its previous experience. As a result of this the UGC has sanctioned two B.Voc courses to GRI under Deen Dayal Upadhyaya Kaushal Kendras. Yamaha Motors established a skill training school at GRI to train rural youths to become self-employed. Dr. APJ Abdul Kalam always desired youths in India to be employment providers instead of employment seekers. There are a number of success stories who have become entrepreneurs by self-employment. A few are Shri Ramesh of Chinnallapatti village who got training from GRI in Cell-Phone Mechanism has established a repairing centre in Chinnallapatti itself provides employment for others also. He also got training in Photography and Videography due to which he has become a professional in that area and earns a good amount of money apart from providing employment to others. The same way Shri Balamurugan and Shri Kalidas, Auto drivers have become entrepreneurs in the nearby town Madurai.

Conclusion

It is always felt that education is important but mere degree or diploma in general education in no way guarantees employment without skill. Skill varies differently – life skills and vocational skills. Life skills enable a person to live a perfect life adjusting one's self to family, neighbours, community and society at large. At the same time vocational skills provide strength to person to work and earn money for livelihood. In the days of international competition, vocational skill is equally important to compete in the employment market so that one can get a decent wage in return or engage in self-employment and become an independent entrepreneur. GRI tries its level best to provide side by side the vocational skill training alongwith general education to the rural youths so that they look after themselves instead of depending on others.

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IIALE is now a Study Centre for IGNOU Programme

International Institute of Adult and Lifelong Education (IIALE) is now recognized as a study centre by Indira Gandhi National Open University (IGNOU) (Centre Code: 29049P) which will function from 17-B, I P Estate, New Delhi – 110 002. The Centre will start function soon and the courses to be offered are:

1. Master of Arts in Adult Education (MAAE)
2. Post-Graduate Diploma in Adult Education (PGDAE)
3. Post Graduate Certificate in Adult Education (PGCAE)

Students interested to enroll themselves for the above courses can contact the Programme In-charge Smt. Kalpana Kaushik on the following address:

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