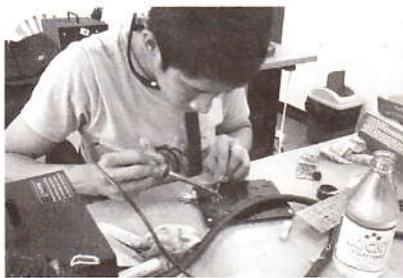


Skill Development: Imperative for India's Growth

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An egalitarian society where the focus is on social reform, economic growth of the downtrodden and the protection of cultural diversity of the natives in India is expected to benefit all. This is truly possible only when every child in this country is educated and eventually finds a meaningful job.

The National Skills Mission would truly make this happen

India's informal sector constituting 90 per cent, though some experts peg even larger, is both a boon and a bane for the economy. Boon, since it meets the aspirations of a population where disparity between haves and have-nots in education is massive and a bane since it hits the formal economy where it hurts the most.

Are there sufficient jobs at every level to meet the populace at least half way through, is the big question.

The above two scenarios would need the academics and the education administrators to seriously rethink the supply chain for education as a necessary indigence to address various incongruencies that have crept in the system. Should the school and higher education follow the current jacketed path where further pathways are narrow and delineated or new avenues explored that can provide expectations and opportunities to the denizens of this great democracy?

Semantics apart, it is time to take a relook at the education paradigm and the consociate it has with employment and employability. Though these are two attributes, we need to address

them with poise and equanimity since the demographics points out that more than 50 per cent of the population is slanted towards the younger generation in the next ten odd years whose fire in the belly and yearning can conflagrate a Nation on the move.

Lack of education and lack of skills is a pestilence that we need to overcome in our current system and the faster we do this, the better for all concerned. Education certainly opens the doors to lead a life of liberty but skills makes that liberty meaningful by allowing one to achieve prosperity.

We need to map the available job opportunities in various sectors at disparate levels and make a conscious effort at improving the job markets in all the three employment markets. This improves economy and growth in GDP and has a cascading effect on employment opportunities.

I would like to see India as the 'Skills Capital of the World' by creating a skilled and productive workforce matching international standards of quality and productivity demands through integration of Skills and Training along with Education. This has the ability to drive the "Make in India" paradigm that will promote entrepreneurship and aid

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start-ups and new Job Markets. Digital transformation of India through new technologies that centre on internet of things (IoT) will create the ecosystem for a massive growth.

Vocational Education and Training (VET) is an important element of the Nation's education initiative where there is an urgent need to redefine the critical elements so that the training is flexible, contemporary, relevant, inclusive and creative.

India has a population of over 1.267 billion and a workforce of 474.1 million out of which 336.9 million are rural workers and 137.2 million are urban workers as per the last survey of NSSO conducted in 2011-12. The unemployment register had 40.17 millions registered in 2010. Providing meaningful employment to all with unemployment rate at 8.8 per cent and a population growing at approximately 1.5 per cent every year is a daunting task indeed. In terms of demographics, almost 35 per cent of Indians are younger than 15 years of age, and almost 50 per cent falling below 25 years of age. The median age of India is 24 years, which makes it one of the youngest populations in the world.

Adding to the unemployment figures, dropout rates also greatly stress an already stressed system. As per the Annual Status of Education Report (ASER) 2013, there were 229 million students enrolled in different registered urban and rural schools from class I to XII. Estimates peg 430 million children below the age of 18. Drop out occurs due to inability to fund education and due to a general lack of interest. These children support their families by working and helping their parents in whatever they do.

The value for school enrolment at the secondary level (per cent gross) was 63.21 as of 2010 and 20.0 as of 2014 at the tertiary education level. Further in 2013-2014, whereas 164.75 lakh students appeared in the X Board examinations, 128.33 lakh students passed and 36.42 lakh

students (34 per cent) failed and probably dropped out every year and in 2013-2014, whereas 119.234 lakh students appeared in the XII Board examinations, 95 lakh students passed and 24.23 lakh students (22 per cent) failed and probably dropped out every year.

In summary, 60 per cent of India's workforce is self-employed, many of whom remain very poor. Nearly 30 per cent are casual workers. Only about 10 per cent are regular employees, of which two-fifths are employed by the public sector. More than 90 per cent of the labour force is employed in the "unorganized sector", i.e. sectors which don't offer the social safety and other profit of employment that are available in the "organized sector."

Since jobs are not growing at the same rate as the potential workforce and thereby breeding unemployment, this in turn breeds discontent. Before these issues snowball into large scale discontent, they need to be expeditiously and effectively addressed.

India has one of the lowest levels of per capita income and productivity. The per capita income is 30,000 US dollars in Japan, 879 US dollars in Sri Lanka while it is only 433 US dollars in India. Currently India's per capita income is 7.5 per cent of the per capita income in developed countries. As per experts, this needs to be increased to 80 per cent in half-a-century.

Skills: Void & Implications

A survey of graduate students across the country, conducted by Aspiring Minds reveals that India produces 50 lakh graduates every year. However, we are unable to bring marketable workplace skills to the table. This results in excessive demand for white-collar jobs that are unavailable in the numbers required. This skewed demand-supply situation results in under employment. Since

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Impediments in the Path

Lack of quality vocational skills that aid productivity, a mind-set of Indian parents and students acquiring only degree qualifications without work place skills are all serious impediments. Over indulgence in service sector economy and the inability of the primary and secondary employment sectors to sustain a steady growth further amplify the problems.

Opportunity

Skills are needed to those currently in colleges for them to be better employed. This is a small number, about 20 in 100, compared to the group who drop out from colleges who also need skills for being employable. Upgrading work place skills just provides a much needed opportunity. With most of the developing economies having a sizeable ageing population, we have a huge opportunity. According to a recent newspaper report, these numbers in the coming few years are as large as 8 mn in Japan, 17 mn in USA and almost 4 per cent of the entire European population base. Should India not be looking at exploiting this, we could see this opportunity pass on to countries like China, Sri Lanka, etc.

What Needs to be Done?

Mainstreaming Skills in Education both in schools and colleges is one way to go. Multi, point entry and exit from the formal to vocational education systems and the job markets with an option to acquire only skill certifications, soft skills and recognition of prior learning will provide some options.

Creating new job opportunities and markets to counter unemployment and

realise “Make in India”, paradigm is the larger goal.

Way Forward

Setting up a National Skills University (NSU) with stated objectives that integrates all skill initiatives of the Central Government with those of the States would be required. This will off course work on common standards for an optimal return on investment.

Creating a “Make in India” hub for productisation that promotes massively new products in various verticals like defence, railways, infrastructure and agriculture is another such initiative. This will facilitate a plethora of new jobs and new skill requirements.

Skill: Standards and Policies

Success of skills depends on the general level of economic growth, the extent of FDI, the degree to which exports are composed of higher value added items, the degree to which there are skills mismatches, and the rates of growth of productivity. Estimating skill mismatches is critical. Setting standards would be imperative.

NSU would set policy directives and standards for skill training and education as per NSQF, enroll students in the country, provide skills and training, award certifications, diplomas and degrees at various certification levels, create sub centres, allow any existing college / ITI / Polytechnic to conduct skill programs. It would also create Skill content and pedagogy in all languages and models of delivery, interface with other relevant bodies, would also help Entrepreneurship cells, estimate skill gaps, opportunities for CSR initiatives, conduct skill research, local and foreign collaborations, a robust LMIS, Skill Trainers and trainee accreditation processes. Integration with MSME sector for creation of new jobs would also be done as also, execution “Make in India” campaign, skill roadmap for the next 10 years, establish community College networks, promote work integrated training models, create skill

integrated scholarships, and anchor all this in a complete e-governance framework with payment gateways, all very important in creating a credible system. A large number of verticals like Automobiles, IT, Communications, Paramedical, Manufacturing, Construction, Retail, Healthcare, Tourism, etc. need to be nurtured. These can be short duration, focused, modular, credit based, in multi languages and flexible.

“Make in India” and Skills

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Thousands of Ph D’s per annum are needed but with mandated research that helps the Industry deliver. A clear mandate for the CSIR/DRDO labs, IIT’s has to be innovations that aid in job creation. Several IPR – Patent – Entrepreneur cells in every one of the above institutions need to be developed. This adds to the research potential as well as connects with the national agenda. Promotion of niche technology areas like oil exploration, mining, agriculture, power, water resources and infrastructure should be high on priority and should receive the best of funds.

Promoting sustainable development for environment, climate change and protection through innovation in energy, bio-sciences, bio-engineering and genetics need to be the next level of priority. The innovations should drive several downstream activities in each of the areas enumerated. 100 model cities to

come up under the new government is a master stroke for revving up the infrastructure sector growth and fuel newer job markets. This in turn will rev up the skills market.

Systems approach to defence related equipment manufacture / indigenisation and import substitution of equipment like Combat Recovery Vehicle (CRV), Unmanned Aerial Vehicle (UAV), Snow mobiles, Bullet proof jacket, automatic weapon systems etc., through collaborations with EME schools, DRDO labs, premier institutions and selected industries is the way forward.

A system like a CRV can be discretised into mechanical, electrical, control and other sub systems. The Sub centers of the NSU located in each State and a handpicked industry can recreate the subsystem to our specifications. The NSU will be the integrator by amalgamating the subsystems to create the substitutions / indigenisation that we need. The NSU can create studies to forecast technology growth, foster innovation and indigenisation, conduct research in guarded areas with purposeful collaborations, with the best in the world like CSU, MIT, and Stanford, Imperial College, Humboldt University, Helmholtz Association etc.

A serious attempt will be needed to create Fraunhofer-Gesellschaft like research centres around the NSU in a chosen few cities in India. This would give a great fillip to focussed research that aims at self-reliance, provides inputs for productisation and process improvement and consequent job creation in all three primary, secondary and tertiary employment markets.

The entire process has immense potential to create newer jobs and new skill initiatives not to speak of a great saving in foreign currency with a new confidence in the local capabilities and self-reliance. For then will we be able to live and strive for the unity and welfare of the world, and stand before the world as a self-confident, resurgent and a mighty nation.

An egalitarian society where the focus is on social reform, economic growth of the downtrodden and the protection of cultural diversity of the natives in India is expected to benefit all. This is truly possible only when every child in this country is educated and eventually finds a meaningful job. The National Skills Mission would truly make this happen.

We also need to realise that our adolescents coming from the kind of financial means that they have, would need to be sustained on some minimal financial incentive to pursue skills for employment and hence we need credible financial models to sustain education for a burgeoning youth. Let me suggest a model for our planners. Out of more than 11500 institutions that we have in the technical education space, even if we select 5000 under the community college framework as a subset of NSQF, for the conduct

of VET programs, the opportunities indeed are gargantuan.

A new division added in schools that advocates vocational education would provide a colossal addition in GER and be a feeder route to our colleges further in the supply chain. Expanding the archetype, if 100 students are trained in competency based skills, fifty a batch, thrice a week for three hours a day for 48 weeks in a year, at least half a million would be trained every year with an increase of 5 points in GER. If each of these students, assumed poor, is provided Rs. 50 / day to take care of travel and food for the period of the conduct of the program, the Grant required on account of this will be Rs 720 cr / annum. With an annual grant that may be provided to institutes that train these students amounting to Rs. 150 cr / annum, the total project

cost could be estimated at Rs. 870 cr/ annum, a small sum considering the employability potential of the scheme notwithstanding the yet untapped political gains that accrue.

We need to inspire, achieve and engage our youth, wean them away from divisive forces, build them into a formidable force to pitchfork the economy to a higher plane and of course create a WIN-WIN for everyone and this is certainly not esoteric cosmology.

Don't wait to exploit the demographic dividends; instead make a road or make a vehicle that is faster, safer and trendy. Above all, remember to strengthen the existing systems and compose ingenious innovations for creating new ones. Skills and skilling is certainly one such initiative for a great nation on the move. □

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National Skill Development Mission

The National Mission for Skill Development was launched on July 15, 2015 to provide the overall institutional framework to rapidly implement and scale up skill development efforts across India.

Mission Statement : "To rapidly scale up skill development efforts in India, by creating an end-to-end, outcome-focused implementation framework, which aligns demands of the employers for a well-trained skilled workforce with aspirations of Indian citizens for sustainable livelihoods."

Mission Objectives The Mission seeks to:

- Create an end-to-end implementation framework for skill development, which provides opportunities for life-long learning. This includes: incorporation of skilling in the school curriculum, providing opportunities for quality long and short-term skill training, by providing gainful employment and ensuring career progression that meets the aspirations of trainees.
- Align employer/industry demand and workforce productivity with trainees' aspirations for sustainable livelihoods, by creating a framework for outcome-focused training.
- Establish and enforce cross-sectoral, nationally and internationally acceptable standards for skill training in the country by creating a sound quality assurance framework for skilling, applicable to all Ministries, States and private training providers.
- Build capacity for skill development in critical un-organized sectors (such as the construction sector, where there few opportunities for skill training) and provide pathways for re-skilling and up-skilling workers in these identified sectors, to enable them to transition into formal sector employment.
- Ensure sufficient, high quality options for long-term skilling, benchmarked to internationally acceptable qualification standards, which will ultimately contribute to the creation of a highly skilled workforce.
- Develop a network of quality instructors/trainers in the skill development ecosystem by establishing high quality teacher training institutions.
- Leverage existing public infrastructure and industry facilities for scaling up skill training and capacity building efforts.
- Offer a passage for overseas employment through specific programmes mapped to global job requirements and benchmarked to international standards.
- Enable pathways for transitioning between the vocational training system and the formal education system, through a credit transfer system.
- Promote convergence and co-ordination between skill development efforts of all Central Ministries/Departments/States/ implementing agencies.
- Support weaker and disadvantaged sections of society through focused outreach programmes and targeted skill development activities.
- Propagate aspirational value of skilling among youth, by creating social awareness on value of skill training.
- Maintain a national database, known as the Labour Market Information System (LMIS), which will act as a portal for matching the demand and supply of skilled workforce in the country. The LMIS, will on the one hand provide citizens with vital information on skilling initiatives across the country. On the other, it will also serve as a platform for monitoring the performance of existing skill development programmes, running in every Indian state.