

CHAPTER 6

Conclusions, Recommendations, Limitations and Future work

In the research study, having deliberated all aspects of Vocational Education and comprehensive research of ground realities in the country and lessons drawn from successful practices of industrially advanced countries, following action plan is proposed to establish an effective Vocational and Training system to tone up the Power Sector which has performed poorly over last five decades, It shall also serve as Role model to design a Vocational Education System for universal application at National level. The final implementation is summarized under following headings

6.1 CONCLUSION

6.2 RECOMMENDATIONS

6.3 LIMITATION

6.4 FUTURE WORK

6.1 CONCLUSIONS

6.1.1 Focus on Human values and Social esteem of Vocational skills

Following aspects merit attention-

- Foremost need is to Focus on Human Values/ Build Social Esteem in Positioning VE in our Society so as to attract talent in Vocational careers. Important steps are
- Urgent need to bring in change of mindset / outlook in positioning VE in terms of Career growth, Social esteem, Compensation comparable with academic streams so as to motivate bright students to opt for vocational careers.
- Building positive work attitude by imparting Soft Skill Training as integral part of Curriculum and also during plant training so as to develop a sense of team work , and to create environment of excellence .
- During personal visits to Japan, Korea it was observed, it is through focus on Human values that they have taken lead in creating one of the highly motivated, productive and Patriotic Work Culture to meet the global competition-ours is exactly the reverse situation, needs a top down cultural orientation to remedy this.

- Improving the Social image of Vocational Careers. In India, over 75% of Vocational Education is under bureaucratic control, and projected as low cost, low Quality and wage profession, considered as a last career option by students resulting in low morale and a vicious cycle of low efficiency.

6.1.2 **Career opportunities comparable with other professional careers**

Following aspects merit attention

- Growth opportunities of Vocational Careers Comparable with academics, To achieve this, we have designed VE structure starting from 9th standard onward along with academic subjects with full mobility structure to move to highest level of vocational education to enhance employability.
- Change of mind set at Senior levels- During the study it was observed that except for handful of senior persons administering the scheme majority look down upon VE as a inferior career channel it is therefore important to organize a total reorientation of change of mindset of all levels of functionaries in appreciating the critical Role of skill building activity in economic growth of country.

6.1.3 **Capacity matching of skills-Quantitatively and Qualitatively**

Urgent need for Capacity matching at national level –sector wise, region wise Despite over 50 years of policy making, as a nation we have totally failed in evolving a workable system. We are caught in a trap- on one hand, our unemployment is continuously increasing due to surplus manpower, on the other hand we have acute shortage of skilled manpower Roadmap of Vocational training capacity of 15 m/pa by year 2015 of different Streams to be achieved over next 2-3yrs has been tabulated in the study starting from Vocational schools, ITI,ITC, Polytechnics Junior Colleges, Senior Colleges, Industry training and apprenticeship. Based on the lessons drawn from stakeholder’s survey and comparative analysis of international practices we have designed a pragmatic program to address our Needs at all levels of implementation.

Key to the success is sincerity and commitment in implementation through involvement of stakeholders and proper monitoring system.

6.1.4 **Creating structural changes to improve implementation.**

Following aspects merit attention

- Implementation through industry, Government and Professional bodies

The study clearly shows that the current model of bureaucratic implementation and control has totally failed in achieving the targeted goals. Following structural changes are recommended for course correction

- Delink VE from Bureaucratic control and Hand over implementation/monitoring to professional bodies. Government to deal with conceptual frame work and financial aspects. For effective Implementation create four independent Skill Development corporations to control major business segments namely-
Manufacturing and Engineering Industries
Service Industry
Agro and Agro Industries
Management of Technical training institutes
- Program implementation in each corporation, shall be carried out through sector skill councils set up as PPP model with respective industries, these councils will design the programs, curriculum and organize delivery and assessment with the help of specialists in respective fields. These councils will also assist in industry training and placements.
- Respective ministries at state and central levels will provide policy guidelines, infrastructure and funding to meet the targets.
Training institutes to be brought under the umbrella of SDC / SCC and managed professionally with help of industrial association/ private bodies
- VET through NSDC/SSCs to regulate Skilling of 150million in 10 years through short programs for workers in unorganized/organized Sector/unemployed ones.

6.1.5 Strategy to improve Industry participation in Vocational Education

Our Research clearly shows that Major reason of success of V E in industrially advanced countries is due to close participation of industries in hands on Training as a universal Practice.

In India, we have outdated apprenticeship act of 1961

Under which only large industrial units employing 500 and above are obliged to impart plant training, major part gets wasted due to poor administration. To overcome this following strategy is recommended

Expansion of Industrial training scheme-, Act to be amended to extend facility to small, medium scale industry and service organizations this will take training

capacity to 2 million/per annum from existing of 0.25 m/pa, with Quality assessment under overall umbrella of NVQF Board.

For different levels of education - vocational schools onwards Quality Standards to be maintained, including ITI's, ITC's, Polytech's, University Vocational programs, NVQF Board to regulate quality standards like in Japan, UK IT industry like TCS, Infosys and others have shown ways how to do it.

6.1.6 Industrial houses to be mandated through statutory and monetary measures like tax incentive to set up training centers for conducting vocational courses of world standard, MNCs in India are following similar practice and putting prospective employees through behavioral training to build positive attitudes at work. Through Policy initiative Government needs to encourage this.

6.1.7 Involvement of Private Educational Institutes/Universities/Social Groups which are providing quality education to nearly 65% of academic streams. Through monitory/Regulatory measures to actively Participate by allocating certain capacity for VE Say15- 20% for imparting Soft/Service /IT Skills which will create a capacity of 2 million per year comprising nearly1/3of skill demand in country by year 2015.

6.1.8 There is need for foreign universities through FDI in training field to set up world class facilities as JVs to meet domestic and global demands in the service sectors, like retail tourism, hospitality, financial services etc. These services are growing around 10-15% pa and estimated demand by year 2015 is 2.0 million trained hands.

6.1.9 Funding and Financial viability of Vocational education as explained in the study, most of Vocational schemes are run by Government as highly subsidized, low cost programs which end up into low quality/outdated skills. Govt. spends nearly 2 lac crores annually on Social Subsidies like employment Guarantee schemes of minimum 100 days per year, food, Fertilizer Subsidies etc., again major part of funds get drained in corruption and do not contribute much to value addition to system.

As a part of Research study, it is strongly recommended that a small portion of these funds say 25% be allocated for imparting skills to persons below poverty line (BPL)so that it adds earning Skills, helps in crossing poverty barriers which is major aim of Social Schemes. Translating data, assuming we allocate Rs10000 per annum per capita for Skills, 25%subsidy can help in imparting Skills to 0.5 million, making major contribution in reducing Poverty levels and improving career opportunities

6.1.10 **Special areas of Focus for successful NVQF**

Provision for Lateral/Vertical mobility between degree, diploma, certificate courses to facilitate Lifelong learning for continuous growth

Establish National assessment and accreditation Council to formulate Standards for curriculum Quality and evaluation starting from SSC onwards

Special courses for Rural, Agro Sectors to improve employability

Establish Separate streams of Vocational Universities, Vocational Boards at State and Regional level with independent Governing Bodies to ensure efficient working in imparting Quality education at all levels.

Faculty Training/ Development, so as remain up to date .Career growth comparable with other Professional Streams

6.1.11 **There is a need for an integrated Approach**

With participation of Business and industry to make Vocational Education an instrument of Development to harness Human Capital for Domestic and Global opportunities to cope up with fast changing Business Environments it is mandatory that the system is appraised periodically by stake holders and upgraded to remain competitive.

6.2 RECOMMENDATIONS

Based on the finding of our research study, following steps are recommended, for implementation of proposed system –

6.2.1 **Foremost need is to set up an effective National Vocational Qualification**

Framework as per proposed Structure with full Participation of major players like Government, Industry, Trade Unions and Educationists. Under umbrella of NVQF, Sector Skill Councils to closely monitor all programs for curriculums, course delivery, evaluation and certification to ensure uniform and standardization .our research study reveal that advanced countries have strengthened skill development by building a strong system with involvement of all the stakeholders

We need to replicate this Philosophy in letter and Spirit. It is equally important to regularly update the system as per changing Business environments. Special focus is in following activities

6.2.2 **Monitoring through Professional bodies** so that system remains tuned to market

needs on regularly updated Market information system

Create and offer employment oriented courses of shorter duration especially for service industry on one end, extending upto diplomas, degrees covering wide spectrum of market needs.

6.2.3 Modi Govt. has taken initiative to set up a Skill Development and entrepreneurship Ministry at Central level to channelize corporate social responsibility (CSR) fund of 2% of net profit approximately Rs. 20,000 crore a year which has potential to train nearly 1 million workers every year. Along with NSDC they are collaborating to achieve a target of training/re-training of 500 million workers in next 10 years which is an ambitious and massive task- this is a great initiative.

Another initiative taken by Modi Govt. to amend labor laws – Factory Act., Apprentice Act and Labor Law Act with nearly 54 amendments which will go a long way in removing some of the irritants which the industry has been facing for the last 60 years detail are given under chapter 5. This will improve the working climate in the industrial sector.

6.2.4 As against current practice of paper qualification, Focus on hands on training, practical skill and proficiencies by multi tasking system and schemes by offering online, lifelong learning models

Have credit banking and transfer systems with multi entry, exits

Credit accumulation system to be permitted for part time programs,

6.2.5 Special focus on unorganized sector which constitutes largest size of workforce in the country nearly 80%, mostly in Level 1,2 by organizing

Effective training system through Modular/ employable skills schemes (MES)

Under umbrella of NVQF, NSDC and sector SSCs to organize Part time/ weekend programs of 3 to 12 months., through ITIs, ITCs, Vocational institutes Polytechnic, Local industries, associations, NGOs with proper evaluation/ monitoring/ certification to upgrade the skills , productivity and quality there by improves overall efficiency.

6.2.6 Trained professional from industry to teach and impart practical orientation- this practice is widely used in foreign countries in different types of Vocational programs. Remuneration Structure at par with comparable Professions to attract right persons/talent generally the remuneration in teaching profession is far less than the

industry resulting in low caliber people adopting this as a last resort in their career/profession.

6.2.7 Industrial Associations/Industrial Houses/Educational institutes to be brought on Board of Institutions for active participation. Industrial Policy/Liberal tax incentives to encourage industries to set up vocational training centers like in foreign countries. We have a successful model of IT industry like TCS, Infosys, Wipro and MNCs who have attained success by setting up world class training center, Power Sector and other segments of economy, need to replicate the example in their work culture.

6.2.8 Overall Summation- system need to be continuously reviewed by stakeholders so that it remains tuned to market needs and fulfills aspiration of employees and employers as working together to achieve common goals

This is highlighted in the research report through analysis of Japanese and Korean models which have achieved remarkable success in India in units operated by them- why can't we do it -we need to follow with sincerity and commitment-we need to create the right Culture and Work environment in which Human Development is an important factor and this is the subject matter of our research report.

6.3 LIMITATIONS

For want of time and resource limitation, only power distribution sector has been studied for skill requirements and Vocational Education and Training Programs in distribution utilities both in public as well as private sector.

6.4 FUTURE WORK

After exhaustive data collection and analysis, followed by stakeholder survey and study of international practices, we have summarized the findings in this chapter as conclusions and recommendation.

However it is pertinent to point out that the research was primarily limited to power distribution system and to carry the study forward, it is recommended that further work may be done in generation and transmission sectors, so that the entire power segment which is vital for our national economy gets fully studied. However the generic factors analyzed in this research report would remain valid and therefore the current study would give reasonably representative overview of NVQF concepts and

serve as a sound base for developing a practical system comparable with global practices for implementation in the country.

India is progressively growing into largest global hub of young workforce of over 600 million hands in the world by year 2025. With proper skill policy and implementation program in place as recommended in the research report, there is a potential to meet the global shortage of nearly 56 million skilled manpower with a earning potential of over 200 billion dollars annually-which is nearly 70% of our total countries annual export currently - a great opportunity knocking at our doors we as a nation must work towards tapping this business proposition of great Potential.