Technical and Vocational Education and Training Development Journal

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Technical and Vocational Education and Training Development Journal

July 2010

A booster for the promotion of TVET

This is a matter of pride for us to publish the 10th issue of **Technical and Vocational Education and Training (TVET) Development Journal**. Council for Technical Education and Vocational Training (CTEVT) has been publishing this journal every year. However; the journal could not be published for the last couple of years due to technical reasons. Twenty four articles in various subject areas written by the authors with national and international repute have been included in this issue. The articles have broadly been categorized into five major areas: TVET policy, Training and Employment, TVET Management, Curriculum and Quality Assurance, Training and Employment and Equity and Access.

Education and training journals are considered very important resources for the intellectuals, authors, researchers and other stakeholders for study and research. Quality journals in education sector are scarce particularly in a developing country like Nepal. Moreover, specific journals in sub-sectors such as TVET are difficult to find. In this context, CTEVT as the apex institution of TVET in Nepal, has been putting its endeavors to bring out quality journal in the sector. For achieving such noble objective, it is indeed a very challenging task. The authors of the sector with high repute generally do not have time to spare for writing the requested articles due to their busy schedule. The dedicated CTEVT personnel particularly from Research and Information Division, involved in publishing this journal shed a lot of sweats and constantly kept their touch with the authors. Moreover, the editorial team tried to make inclusive by capturing the articles of authors from various segment and identity which is beauty of this journal. Whatever the difficulties, it is hoped that the result will pay off.

The robust and splendid thoughts and ideas captured in the articles of the established authors are expected to guide the future direction and pave the way for the people who are engaged in the field of technical education and vocational training. The editorial team believes that this journal will be a booster for TVET development in Nepal and everywhere. The intellectuals, researchers, students and other stakeholders who need TVET information can obtain much of it from one piece document.

The editorial team would like to express its heartfelt gratitude to all the authors who have contributed by providing relevant and valuable creations. The team would also welcome articles from the intellectuals, professionals and others in various areas relevant to education and TVET sub-sector for the next issue of the journal.

It is believed that one more brick has been added for constructing the building of TVET sub-sector by means of this journal. We always look forward to receiving constructive suggestions from the readers that will inspire the editorial team for further improvement of the journal in the issues to appear in the years ahead.

Editorial Team

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Need for SAARC Standards

Tirth Raj Khaniya, Ph. D.[1]

Nepal has been striving for educational reform involving both internal and external resources for more than two decades. Despite expending enormous amount of money in education, our people still have the feeling that their children have not learned what they would like them to learn because they have not been properly taught. By such expressions, one would get the impression that they are not happy with the standard of education the students have achieved. In other words, the standard of achievement of student is not satisfactory. But the question is: do we have any idea about the standard of our education? On what bases they are formed? Is there any standard set for our students so that we understand the gap between what is expected of them to achieve and what the students have actually achieved? Are any of our educational degrees like SLC, HSEB or B. SC or BA and MA defined in the way that we all understand what they mean in terms of skills and abilities? Similarly have we clearly described the standards of the skills and abilities that a trainee at Council for Technical Education and Vocational Training (CTEVT) must achieve in order to get a certificate in the given area? The obvious answer is no.

Such kind of debates on standards of education invites attention of the people involved in education. On different occasions, it is common to find people who show concerns about the declining standards of our education. In many countries, people get engaged in such a discussion because national and international assessments compare performances of students from one country to another based on certain well-worked out standards. In Nepal, however, without any evidence people tend to have the feelings that our educational standard is going down. In a way, they may be right but often there is absence of evidence to support their argument. The reason for why people are worried about the standard of education is that they think that their children do not have learned the expected skills and abilities that they need to compete with the rest of the world. Not only that the students have not achieved sufficient knowledge and skills necessary for them, their achievement level is lower in comparison to the people elsewhere. They do not demonstrate necessary skills and abilities they need to cope with even within the country, let alone how they would cope with the rest of the world. Many business houses, professional organizations, industries complain about under performance of many of our students, and it could be because of that, there are instances of these organizations rejecting graduates from some universities.

Like in construction, drinking water, or food, standards are applicable in education as well. Standards are defined as a measure of what is adequate; degree of excellence required for a particular purpose, and a socially or practically described level of performance. The dictionary definition of standard is "each of the recognized degrees of proficiency, as tested by examination, according to which school children are classified". In many countries, the department that deals with this component is given high importance and thus has been given a separate structure. Standards of education can be described in measurable terms, and then we can gauge whether standard of education in any country is improving or declining. Quite often, decisions at high level are made on educational reform with the intention of promoting the standard of their system of education. It is argued that standards can be helpful in improving achievement of students because they clearly define what is to be taught and what kind of performance is expected of students.

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[1] Author is the Member of National Planning Commission and he has written thought provocative article.

The setting of standards for student performance involves identifying one or more threshold or more threshold scores on a total mark scale, which define levels or grades corresponding to the intervening range of scores. This is another way of defining a degree be it SLC or Bachelor or Master in terms of skills, abilities and knowledge so that people understand what it means by completing a specific level of education and having a degree. Some countries have gone even further and passed an act, like United Kingdom, to determine the standards. Places that set standards in education present educational goals in a measurable manner.

Establishing standards can be of much help for letting the people know the expectations of the country. It is always useful to work on it. In addition, setting standards have several advantages. It provides a framework for educational improvement. It sets goals for students for achieving. This also helps teachers who seek a model and processes for designing standards-based units of study to use in their own classrooms. Standards are a good tool for good learning because they express clear expectations for what all students should know and be able to do.

Standards set clear performance expectations for students. This process is helpful for students as well to understand what they need to do to meet the set standards. Setting standards and striving to achieve them will offer more challenging and rewarding experiences for students. It is useful also for teachers. Standards set at national level require teachers and curriculum designers, and testers to design curriculum, instruction, and assessment around what is important to learn. Once parents know what their children are expected to learn, it would be helpful for them to create environment conducive for achieving the desired outcomes. This is how teaching and learning can be made more intentional and focused. Once standards are set, institutions or districts and schools can strive for learning by exemplifying them in action so that learning is facilitated. For them, standards give some clues on what to be focused for developing new ways to organize curriculum contents, instructional delivery systems, and assessment plans.

Standards work as a common language for talking about the processes of learning and teaching. It also helps monitor how students are progressing in achieving them. This process helps parents, business people, and community leaders become more effective partners in young people's education. Employing agencies will have better understanding of what the prospective candidates can do and what not and whether or not they can serve their purposes.

Basically standards are expressed at two levels: Content standard and performance standard. Content standards specify the essential knowledge, skills, and habits of mind that should be taught and learned in school. Essential knowledge involves the most important enduring ideas, issues, dilemmas, principles, and concepts from the disciplines. Skills are ways of thinking, working, communicating, and investigating, and each student should be able to demonstrate those skills. Habits of mind are essential both in and out of school. They include studying, providing evidence for assertions, and developing productive and satisfying relationships with others. This is very helpful in producing democratic citizens.

Performance standards bring out the degree or quality of proficiency that students are expected to display in relation to the content standards. They answer questions about quality and degree, whereas content standards define what students should know and be able to do.

Even in our case, there are some people who always tend to argue that the standard of the Nepalese education is deteriorating though they do not have adequate evidence to justify the statement. We do not have sufficient studies carried out to look into this issue. Some studies have been done which offered mixed results. There are indications that some improvements in our education have been accomplished. However, there are also some studies which argue that progress is there only in the supply side of the reform, such as more classrooms built, more

teachers received training, more supervisors hired, but there is lack of evidence to support the argument that the quality of learning has been enhanced. In any case, more studies with rigorous exercises are needed to provide competent evidence. Generally standards are described in measurable terms. One of the reasons why people may have got the impression that the standard of our education is deteriorating is because we have not clearly defined our standards and described them in ways that people understand them in the same way. We also do not have set any standards of our education in a meaningful way. In absence of such explanations, we have not assessed achievement levels of students in measurable terms. So we have difficulty in explaining whether or not the standards of achievement of our students are improving. So we have no way to argue whether our education is deteriorating or improving because we do not have an established reference point for the scrutiny of the system. In absence of a set benchmark and well-defined standards, people tend to make assertions about the deterioration of education arbitrarily. It is therefore argued that explicit standards in education are needed.

One of the problems with the Nepalese system of educational standard is that no degree is defined in the way that everybody understands it in the same way. Let's take Higher Secondary Education (HSE) examination as an example. What does the HSE pass mean in terms of skills and abilities? Can we specify what a HSE pass can do and what s/he cannot do? Similar can be the case with other degrees like SLC, Bachelor and Masters. This problem is not confined only to HSEB and TU. This is the problem with all the institutions. In this situation, it can be argued that we are not in a position to take an advantage of the energy and power that standards are bestowed with to facilitate learning and making effective communication between who posses the degree and who consume the degree holders. By the same token, it can also be argued that the system has failed to make students, teachers, curriculum writers, evaluators understand the expectations of our education at different levels. We really do not know, in specific terms, what we expect our students to learn at certain level of their study. We want them to pass an exam but we do not know what it means in terms of skills and abilities by passing an exam; it is not clear what in true sense the students are supposed to learn. When we do not make our expectations clear to students and to those who are involved in creating learning environment, how can we say that the standard is deteriorating? This could be, it can be argued, one of the reasons why a large number of students fail in most exams in Nepal. Perhaps the gap between expectations and delivery mechanism is responsible for a high failure rate.

Standards are set in perspectives of local, national, regional and international contexts. What our students should be expected to learn largely depends upon what others at the same age in the region and continent are learning. It becomes palatable, in our case, if the standardization process is keeping all the SAARC countries in perspective. International standards should also be kept in mind while working on it. It can be suggested that we should work on this issue at SAARC level. Once it is done, there is possibility of having joint efforts to maintain, sustain, and promote this standard. This process will facilitate the process of educational reform in our region.

It is also important to have our own standards at SAARC level if we want to avoid getting influenced by European or American standards. We may wish to have the best of the best system but to be realistic we have to be careful about the situation in which we have to work while designing the standards. In this context, it is important that all SAARC countries accept our standards so that internal mobility within SAARC becomes easy both in terms of entering in educational institutions or getting jobs in any country. Once SAARC standards gain credibility and international recognition, the degrees we offer at various levels will have a higher face value. This is how we can reduce the cost involved in international examinations for entry in universities abroad.

All SAARC countries should have a positive attitude towards this move. Once it is done, there should be a joint evaluation mechanism to evaluate the standards as well as to make them up-to-date. If done this way, our students will have little hassle in getting access to international market no matter whether it is for entry for education or jobs. Our educational degrees will have better recognition and higher face value once the standards are well spelled out in terms of skills, abilities and knowledge which will also contribute to improve our system of education.

It should be noted that the European or American Universities do not accept our degrees equivalent to theirs. For example, our students with Master's do not get easy enrolment for Ph.D. in their universities. In order to be qualified for a Ph. D. enrollment in those universities, for example, it is necessary to have either a Master's degree from their university or demonstrate a high level of performance during the course of studies there. The international trend is that the recognition of a degree depends largely on the performance of a college or university and its curriculum, examination and the way it presents its expectations. It is, therefore, important to make clear what an educational institution intends its students to learn as explicit as possible. Further an institution should also be able to make others feel how standard in that institution is maintained and the process adopted for ensuring that. One of the ways for that is to involve external examinations from other universities who have gained a great deal of experience and credibility in that area. To make it explicit, it can be suggested that Kathmandu University should be prepared to involve highly recognized professors from other universities like TU, and TU should welcome external examiners to ensure quality. One of the reasons why universities in UK and USA have gained international reputation is that their process of degree awarding is very strong; external examiners with high reputation are involved in the examination of the thesis and answer sheets.

The advantage of having SAARC standards, and once Nepal becomes able to manage them well will contribute it to attract many students from Bangladesh, India, and Pakistan because of our good climate and attractive locations. Education thus can be turned out to be a very potential source for resource generation. This task is not easy and simple. For making this happen, our political and educational reform should be guided by visionary leaders.

Technical Vocational Education and Training Focusing on Soft Skills in Reference to School Sector Reform in Nepal

Prof. Tanka Nath Sharma, Ph. D.[1]

Abstract

Realizing that neither academic nor vocational education by itself prepare students with knowledge, skills, attitude and habit needed for either continuing post secondary education or securing high wage employment (Non College bound students), current School Sector Reform (SSR) program. The plan clearly spelled out the need for curriculum diversification and flexibility with more options for student and connection between the world of education and the world of work with provision of horizontal as well as vertical mobility. This paper attempted to provide conceptual clarity on "Soft Skills" and proposed soft skills mandatory for all and suggested "Soft Skills associated with Technical and Vocational Education and Training (TVET) as an option at the secondary schools in Nepal. Reviewing the exiting national policies in favor of integrating TVET in school curricula, the paper advocates for the need for blending foundation knowledge, occupational skills and enterprise education as vocational options at secondary level education.

Occupational areas are suggested for soft skills associated TVET in schools are: (1) Agriculture, Food & Natural Resources focusing on agro enterprises, (2) Arts, Audio/Video, ICT, (3) Public Administration and Legal services, (4) Business Management, Finance and Administration, (5) Hospitality, Tourism and Human Services, (6) Education and Training and (7) Marketable traditional skills. Strategies for implementation of "Soft skills associated TVET" in school education are: Piloting in Selected schools, Strategic development and expansion of Soft skills focused vocational programs, National curriculum framework with local flexibility, Improved Instructional Delivery, Improved Evaluation System, Career Guidance and counseling Service, Integrate soft skills at all levels of school education, Focus on self employment, Train and develop teachers/professionals/Experts, CTEVT as Technical support wing, Decentralize management of schools with full operational autonomy, and Partnership in governance and financing.

Introduction

Globalization as well as existing in socio- economic situation of Nepal has placed new expectations and demands for developing the capabilities of Nepalese children to face the emerging challenges of 21st century. As the purpose of Education is to prepare individual for life and successful adulthood and work is an essential part of life, Our school education should prepare children to face emerging challenges and land in a successful adult life for which they require strong academic foundation with marketable skills that help them to integrate smoothly in highly competitive market and complex social structure. Rapidly changing (technological & Economical scenario) and highly competitive market (National and International) will require human resource that are equipped with conceptual, work, and human skills in order to function effectively, efficiently in the work place. Also not all the students who graduated from secondary education continue post-secondary education, most of them want to enter job market. Therefore single track curricula without flexibility of preparing young people for the career of their choice in secondary school system is not serving the needs of majority of non-college bound youths as well as the current demands of job market and social structure.

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[1] Author is the Professor at Kathmandu University and TVET expert.

Current School Sector Reform (SSR) program (MOE, 2009) realizes that neither academic nor vocational education by itself prepares students with knowledge, skills, attitude and habit needed for either continuing post secondary education or securing high wage employment (Non College bound students). It clearly spelled out the need for curriculum diversification, flexible with more options for student and connection between the world of education and the world of work with provision of horizontal as well as vertical mobility. And to meet the challenges of new context in education, SSRP has introduced policy direction that supports the flexible learning approaches to respond to the diverse needs of learners. The plan has provided with the option for students at secondary education in set its goal as to meet the national development needs by preparing competent and productive human resource and to provide a sound foundation for tertiary education. In its policy direction to secondary education it specifies the introduction of soft vocation skills in secondary education. Therefore the current demands and SSRP directions calls for developing an appropriate model of curriculum integration in Secondary and higher education giving more flavor of generic flavors of generic (soft) and occupational skills useful in the world of work along with strong academic inputs. However, there are several issues, challenges and unanswered questions that need to be addressed for smooth implementation of Technical and Vocational Education and Training (TVET) aspects of education reforms intended by SSR document. This paper will focus on soft skills in school education and curriculum, education and work, TVET curricular issues, identify occupational areas involving soft skills, identify implementation modality and develop an action plan for smooth implementation of TVET aspects school education envisioned by reference to SSR.

Context

About two third of labor force in Nepal has not completed school education nor have skills for productive employment. Similarly for various socio-economic and cultural reasons, majority of the school age children do not complete 12 years of schooling and they join labor market without having employable skills. Since these youths do not possess education and skills for productive employment they will not be able to obtain remarkable value of production as they remain unemployed or under- employed and at time under paid if employed. Not only in national front but also in international front which is also providing the platform for economic advantages created by globalization, Nepal is facing similar problems.

Nepalese population is constituted of youth between the age of 15 -24 and majority of them are non-college bound youths at the crossroad of transitioning from childhood to adulthood, school to work or from unemployment to employment. This highly energetic mass of young population can bring rapid change in socio-economic transformation and contribute to poverty reduction, sustainable peace, political stability and national prosperity if they are appropriately trained and transitioned to productive employment. School education can lay foundation for training students for productive employment in future.

Based on the assumption that Rs 2696 per year average income is the poverty line, Living standard Survey (NLSS) (2004) reported that around 30.85 percent population is still found below the poverty line. Likewise, the same survey, around 24.1 percent population is found living below poverty line in terms of purchasing power parity (PPP), which was calculated on the basis of an income of one US dollar a day.

The scenario described above including the analysis of national, internal labor market conditions, existing economy and employment market, political change, and concerns for equitable access to meaningful education and training called for reform in school education to address the individual's learning and earning needs and society's needs for social and

economic transformation. In response to people's expectations in the current context, an urgent need has been realized for developing human capacity and potentials through appropriate school education addressing diverse learning needs of individual and society including work preparation programs accessible for all without any type of discrimination.

Soft skills associated occupational education in schools has a special role to play in providing the knowledge and practical skills that empower people to improve quality of their lives. Linked with adequate employment opportunities, vocational education can assist people increase their skills, raise their productivity and increase their personal incomes leading to overall raised living standards and stronger, competitive economies (King, 2007). Appropriately trained human resources can speed up the development process be it social, economical or industrial. Skills and competence acquired through appropriate training would be meaningful for both individual and society. Individual is benefited from employment and earning and the nation will be benefited through the increase in skill, productivity and income (King, 2007). School education could focus its education programs developing cognitive abilities, occupational skills and soft skills useful to the world of education or work.

Current Policy Provisions

SSR core document (MOE, 2008) has clearly spelled out the need to include vocational orientation at the basic education (grade 1 – 8). The purpose is to orient students about work and occupations. It has given special emphasis for vocational preparation at the secondary level (grade 9 – 12) by introducing soft skills associated occupational programs. It has also provision for alternative modes of schooling up to the secondary level with equivalent status as formal education through national assessment for the purpose of recognizing learning by less formal means (non-formal and informal means).

Overall goal of secondary education stated in SSR is "to meet the national development needs by producing competent and skilled human resource and to provide sound foundation for tertiary education". This goal lays the foundation for education for work by incorporating vocational exposure in secondary school curriculum.

The SSR Plan (MOE, 2009) provides policy directions for both general and vocational components in secondary education so that the opportunities for skills development will be expanded across the country. in Basic education SSRP has introduced policy direction that support the flexible learning approaches to respond to the diverse needs, also in secondary education the goal is set as "to meet the national development needs by producing competent and skilled human resource and to provide a sound foundation for tertiary education" and its objective as "To equip secondary level students with TVET soft skills". In its policy direction for quality and relevance it includes "Introduction of soft vocational skills in secondary education" and under alternative programs in strategic intervention it specify the "Expansion of alternative programs such as open and distance learning and flexible schooling to cater for the diverse needs, on a cost sharing basis, by also utilizing the knowledge generated by CASP experience and "introduction of technical education, with a focus on vocational skills through alternative arrangement". It also specify under structural integration "Introduction of TVET in secondary schools, including soft skills, on a pilot basis with subsequent integration into school education". For TVET program SSRP set the goal "To equip students with employable skills, which will assist and accelerate their transition from school to work and help them explore a variety of career opportunities that are available inside Nepal as well as in the neighboring countries and in the global market." And objective as "To equip secondary level students with TVET soft skills"

Apart from educational, labor market and psychosocial outcomes of education, the school sector reform agenda have captured the global concern of twenty-first century characterized as the protection of human rights and child rights, demand for peace, emphasis on gender and social equity, protection of the environment, and global flow of information and communication. These characteristics of the twenty-first century have called for a broadening of the vision of education. Under this broad vision, education is regarded as the fundamental right of all people, an investment for economic, social and political advancement, a tool for empowerment of disadvantaged groups, a route to the spiritual, moral, social, cultural, physical and mental development of the individual, a foundation for culture of peace, and an avenue for developing a lifelong learning society. Hence, improving access, equity, relevance and quality of education have become the focus of the twenty-first century education (MOES, 2008).

Similarly, National Curriculum Framework (NCF) (CDC, 2006) has envisioned two essential soft skills-related TVET components that have been emphasized in school level curricula. These two components are (1) integration of life skills or life supporting skills in school curricula, (2) integration of knowledge, skill and values based TVET in school curriculum that connects education with the world of work. These two components have strong focus on thinking skills, communication skills, social skills and self management skills which are essential dimension of soft skills and are expected to be developed during occupational orientation and occupational preparation schemes of school level education.

Recently endorsed TVET and skill development policy by the government of Nepal also advocates for the provision for the occupational preparation at the secondary school levels in Nepal (MOE, 2007). The focus of school level vocational education as stated in the framework is to prepare students for entry level occupations in line with vocational skill standards level II. Since the secondary schools are in operation all over the country with geographical coverage, offering vocational options can substantially increase access to preparation/orientation for/to work for all aspiring students even if they are reside in remote location.

Concept of TVET

Technical and vocational education and training is a general term covering a multitude of education and training which is distinguished by levels, objectives, subject matters, nature and length of training and so forth. In the Nepalese context, Technical Education and Vocational Training programs (TVET) include all education and training programs, which prepare people for work. It includes from skill training programs, vocational training programs, and technical training programs of shorter duration, to secondary and post-secondary vocational/technological education programs (Sharma, 2006).

UNESCO/ILO (2002) defined Technical and Vocational Education and Training as to those aspects of the educational process involving the study of technologies and related sciences, and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (UNESCO/ILO, 2002). UNESCO/ILO further clarified the scope of TVET as (a) an integral part of general education, (b) a means of preparing for occupational fields and for effective participation in the world of work, (c) an aspect of lifelong learning and preparation for responsible citizenship; (d) an instrument for promoting environmentally sound sustainable development; and (e) a method for facilitating poverty alleviation.

SSRP and TVET

Integration of vocational skill in school level curricula is associated with the preparation of young people for life and connecting education with the world of work. Even though

vocational education in the school level is proved to be useful, its effectiveness has been low in countries having poor economy and weak resource base. Considering this reality, based on the experience of the past and experience from other countries, MOES initiated wider consultation and discussions with national and international experts concerning vocational education at the school level.

Followed by such consultations, SSR plan (MOES, 2009) has been further revised especially in TVET sub-sector programs stating "introduction of TVET in secondary schools, including soft skills, on a pilot basis with subsequent integration into school education (p. 24)" in its structural integration section. The SSR Plan has recognized the importance of soft skills to be introduced in school curricula. In this respect, the SSR Plan has developed its objectives, policy directions, key results and implementation strategies. While the core technical and vocational skills (hard skills) are expected to be continued through the current arrangements under the CTEVT, soft skills or occupations involving soft skills are expected to be developed and introduced gradually in the schools.

However, there still need further clarification concerning TVET and soft skill and the purpose of soft skills in school education. The plan requires further clarity about whether association of soft skills in schools is for occupational preparation or for orientation. This clarity is expected to facilitate smooth implementation of TVET component of SSRP. Therefore, there is a need to understand soft skills, their relation with occupational orientation or preparation and expected outcomes of such skills in schools. Similarly, developing curricular frameworks, identification of key traits, capacity and infrastructure support required, preparation of instructors, financing and governance for its effective implementation are a few areas that require further clarity, careful assessment and planning. In this connection, this paper has attempted to seek answer to these concerns.

Concept of "Soft Skills" or Generic skills or Employability skills

Soft skills are generic skills such as communication, decision making, creativity, team work and personal attributes which are preferred by employers. The emphasis on soft skills required by employers varies depending on the type of job role to be carried out within an organization. However there has been some consensus of opinion on the importance of "Soft" "transferable" or "employability" skills for employees. These skills refer to certain personal abilities of an individual, which can be taken from one job role to another, used within any profession and at any stage of their career. These career and employability skills, also known as "workplace basics" or "workplace know-how skills" (Hollenbeck, 1994) – include areas such as managing resources; communication and interpersonal skills; teamwork and problem-solving; and acquiring and retaining a job.

Evans and her colleagues (2001) showed that there are different interrelated skills that contribute to a successful change in an individual's career, "involving self steering capacities, and integrated social cognitive and technological dimensions together with life-long learning. These skills were termed as soft skills and were organized into 5 clusters: (1) Methodological Skills; (2) Social Skills; (3) Skills related to Values and Attitudes; (4) Learning Skills; and (5) Technical Skills. Such skills are taken as "interlinked and interdependent of human actions" (Evans, 2001). Therefore, these soft skills implies a holistic perspective of skills with growth, movement and future development and it was named after starfish as the Starfish Model (Evans, 2001). The Starfish model proposed by Evans (2001) was organized into four "Soft Skill" clusters:

a. Methodological Skills (Problem-Solving; Systemic Thinking; Personal Management; Creativity),

b. Social Skills (Communication, Assertiveness; Interpersonal Relationship; Teamwork)

c. Skills related to Values and Attitudes (Persistence; Responsibility; Integrity and Ethics),

d. Learning Skills (Motivation to learn; Openness to Change; Pursuit of Quality and Excellence; Knowledge Management).

It is said that employers look for vital soft skills in graduates that are obtained during study and periods of work experience, rather than degree-specific knowledge" (Zinser, 2003). There seems to be general consensus that career education and employability skills (soft skills) should be taught in high schools. The recommended basic workplace skills needed by all students for better job performance comprise a three-part foundation of skills and five competencies (SCANS, 1999). The five competencies include (a) identifying, organizing, planning, and allocating personal resources, (b) effective interpersonal relations with others, (c) acquiring and using information, (d) understanding complex system relationships, and (e) selecting, applying, and using a variety of technologies (Frantz, 1997). To attain these SCANS competencies requires a foundation consisting of (a) basic skills in reading, writing, computing, listening, and speaking, (b) thinking skills used in decision-making, creative thinking, solving problems, meta-cognition, and reasoning, and (c) personal qualities such as individual responsibility, self-esteem, sociability, self-management, and integrity. Some other variants of such skills have also been recommended (Chi-Kim & Lewis 1998; Gow & McDonald, 2000; Zinser, 2003).

Indiana Department of Workforce Development (In Context, 2007) identified12 skills, including soft skills which are in highest demand from 2004 to 2014. These identified skills were: (1) reading comprehension, (2) Active listening, (3) critical thinking, (4) Speaking, (5) Coordination, (6) Active learning, (7) Instructing, (8) monitoring, (9) Writing, (10) Time Management, (11) Learning Strategies, and (12) Social Perceptiveness.

There are other variations of such skills from around the world. Even though the labels are slightly different, the descriptions and lists of the skills overlap by perhaps as much as 80 per cent. For example, the Mayer Committee (1992) in Australia developed a set of "key competencies" to provide young people a firm foundation for entering the workforce. Gow and McDonald (2000) took this one step further in their study by identifying "virtual attributes" that graduates will need to succeed in future organizations. The attributes include adaptability to changing work environments; cross-cultural competence; accountability (self management); and business management skills. The study of employers in Hong Kong by Chi-Kim and Lewis (1998) also found that children need strong general skills to be able to adapt to whatever jobs the near future may hold; their list includes communication, organizational effectiveness, and personal management.

Soft Skills in the Nepalese Context

Soft skills are essential aspects of work and extremely valued by the employers in the job market of 21st century. However, soft skills are not developed in isolation; they are developed during the occupational preparation programs in schools. Selection of relevant occupational programs, provisions for students to select these programs based on their aptitude, interest and ability and provisions for work-based learning are extremely important while offering such soft skills associated programs in schools.

Soft skills in the Nepalese context are competencies essential for effective participation in the emerging patterns of work and work organization. They focus on the capacity to apply

knowledge and skills in an integrated way in work situations. Soft skills or Key Competencies are generic in that they apply to work generally rather than being specific to work in particular occupations. These skills are transferable and useful in any occupation or in adult life for better functioning, therefore are also termed as transferable skills. Soft skills or Key Competencies are not only essential for participation in work, but are also essential for further education and in adult life in general.

Soft skill focused TVET in School

"Soft Skills" are different than course competencies in that they are not course-specific. They are not taught in "lessons." Instead, they are broader skills that run through courses and lessons. Some of the soft skills are developed from experiential learning (on-the-job) learning as well. Soft skills are not developed in isolation; they are developed along with occupational preparation/orientation programs or during general education course work. These skills "enable learners to perform job-related competencies." Therefore soft skills associated TVET for Nepal will have the following three essential components in which soft skills are crosscutting and infused within those components:

1. Strong foundation of general education (National language, English, Science, Mathematics and Social Studies)

2. Soft skill focused career preparation/orientation programs at the secondary level and career exploration and career planning supplemented with practical arts and crafts skills at the basic level,

3. Enterprise education focusing on self-employment and entrepreneurship development (modernization of traditional skill will be included as enterprises)

These components including "Soft Skills" can be expressed in the following figure (Fig.1). A detail curriculum framework is given in part II.

Fig. 1 Integrated model of TVET - Soft
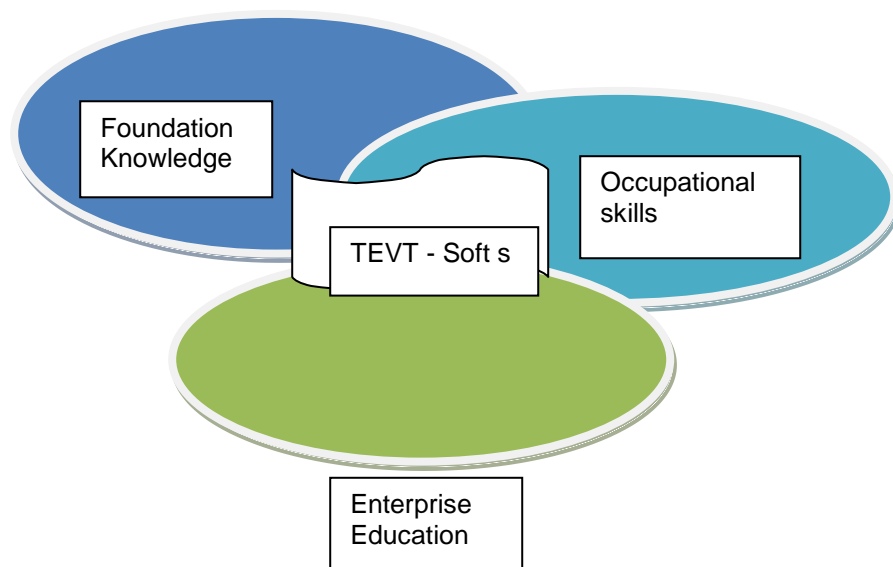
Soft skills associated TVET are those occupational areas which are offered as specialization focusing on demands of the employment market. Such occupations will have employment demands as well as high potential for self-employment. Soft skill associated occupational preparation will require minimum investment for equipment, physical facilities, consumption of raw materials and teacher preparation. TVET involving heavy investment in equipment, workshops and other infrastructure will be the responsibility of Technical Schools and Polytechnic institutions under CTEVT. The following occupational areas are suggested for soft skills associated TVET in schools as optional subjects for occupational employable skill development:

1. Agriculture, Food & Natural Resources focusing on agro enterprises,
2. Arts, Audio/Video, ICT,
3. Public Administration and Legal services,
4. Business Management, Finance and Administration,
5. Hospitality, Tourism and Human Services, and
6. Education and Training
7. Marketable traditional skills

Some of these vocational subjects are being offered in secondary and post-secondary levels of school education even these days. These occupational areas will (a) not require substantial investment, (b) be easy to find and train trainers, (c) be easy to integrate in existing curriculum framework, (d) not require much consumable training materials, electricity and other utility, and (e) be easy for schools to implement and offer these occupational preparation programs. The detail description of soft skills associated TVET is provided in part II, curriculum framework.

Soft skills associated TVET are those occupational areas which are offered as specialization focusing on demands of the employment market. Only those occupations that have employment demands as well as high potential for self-employment will be selected. Soft skills associated occupational preparation will require minimum investment for equipment, physical facilities, consumption of raw materials and teacher preparation. TVET involving heavy investment in equipment, workshops and other infrastructure will be the responsibility of Technical Schools and Polytechnic institutions under CTEVT.

Rationale for Soft Skills associated TVET: Opportunities Ahead

Opponents of TVET integration in school education are viewing the existing context from the perspective 1970s. There have been substantial changes in the labor market situation in recent years. More jobs relevant to the high school graduates are emerging both at national and international job market if they are provided with skills relevant to their needs. Job opportunities in the international employment market are increasing substantially. It is estimated that about three million Nepalese workers are in overseas employment and demand of such jobs particularly for skilled workers and knowledge workers. These opportunities were not there at the time of past vocational school education in 1970s and early 1980s.

Growing service sector in Nepal has opened up employment opportunities for youths having soft skills associated occupational skills. Growing informal sector demands more skilled workers and entrepreneurs, which can be developed through school education.

Recent government policies are strongly supporting for the massive expansion of the skill development opportunities for Nepalese youth to enhance their employment and earning potentials. Current policy documents such as SSRP, NCF, TVET policy, Interim Development Plan, and recent annual government programs are directed towards skill development and employment promotion. Integration of TVET soft in schools will contribute to fulfill the expectation of recent national policies. Recently endorsed TVET and skill development policy

Skill development opportunities are confined in city areas and urban centers. Integration of TVET in schools helps to promote access and equity in TVET. Students residing in remote areas will have opportunity to learn employable skills and engage in high income agro-based enterprises. Since school network is evenly distributed throughout the country, vocational skill development programs can reach in desired location with government support.

School level skill development will also be instrumental to support government developing and expanding this sub-sector in the country. The policy and programs for FY 2008/09 entail the 'Youth Self-Employment Fund', making special provisions and demonstrating government's commitment to developing a demand-based TVET programs. Similarly, youth skill development policy, enterprise development policy and skill development and employment policies endorsed by other sectoral ministries will pave the way for demand-based skill development in schools.

More than sixty percent of Nepalese live on agriculture. Agriculture is the part of life of rural Nepal. Modernization and commercialization of agriculture is important poverty reduction strategy for Nepal. Agro-based enterprises are viable means of income generating in rural areas. Enterprise education and TVET in schools targeted to the expansion of agro-based enterprises for the promotion of self-employment will strengthen rural economy, generate employment locally and reduce growing internal migration from rural areas to urban center for employment.

Jobs in service sector such as Hotel, tourism and food service, information, secretarial services, are rising in Nepal and abroad. Similarly, business and finance sector is also growing. Therefore, jobs such as sales, marketing, accounting, computing are in rise. Students equipped with such soft-skill focused occupations will have employment opportunity in this growing labor market.

Employment market for Nepalese workforce has been increasing within and outside Nepal. For example, about 3 million Nepalese are employed overseas. Overseas employment is in rising trends in recent years. Therefore, Nepalese workforce has adequate chance of high wage employment and earning in the international job market provided that they are appropriately trained. A small work-related input in the schools may make school graduates employable with higher earnings.

CTEVT is currently offering technical education through annex programs in secondary schools. The experiences gained from the school based annex program are encouraging. The annex schools have received high priority in the national program. Expansion of Annex programs will create avenue for the expansion of TVET associated with soft skills in schools under SSRP.

There is a growing demand of the private sector involvement for the development of TVET. Numbers of privately managed technical and vocational training centers are on the rise. Moreover, the FNCCI has also come forward in operating some trade schools in collaboration with the CTEVT under the aegis of the Ministry of Education. These initiatives

show positive signals for public private partnership potentials, opening avenues for placement in the job market, and providing a basis for expanding and consolidating school-based TVET programs.

Implementation Challenges

Even though TVET is included within the overall framework of school education, certain characteristics of vocational and technical curriculum distinguish it from the rest of the educational milieu.   These characteristics represent a curricular focus that may be best associated with curriculum building, maintenance, and immediate and long-term outcomes. Whereas each of these characteristics is, to a greater or lesser degree, associated with other curricula (e.g., general or academic), their influence on the career and technical and technical curriculum development process is important to note.   The basic challenges of incorporating "TVET Soft" in school curricula are as follows:

Employability and work performance: The ultimate success of a vocational and technical curriculum is not measured merely through student educational achievement but through the results of those achievement-results that take the form of performance in the world of work. The challenge is how Nepalese schools that are not being able to accomplish desired level of students' academic achievement can orient themselves to have added responsibility of ensuring the success of students in the world of work?

Changing needs and flexibility: Unlike general education, the TVET curriculum is based on identified occupational needs of a particular locality. Continuing supply of graduates in the same occupational areas saturate the demand of skilled workforce, especially in the rural community. How to make technical and vocational curricula, facilities and inputs flexible to address the changing needs and requirement of the labor market and prepare skilled workforce that are always in demand is another challege;

Curricular Focus and organization of learning activities: The TVET curriculum deals directly with helping the student to develop a broad range of knowledge, skills, attitudes, and values, each of which ultimately contributes in some manner to the graduate's employability. The issue is how schools will be made capable of maintain curricular focus and organize the learning environment and activities by making provision for student develop knowledge, manipulative skills, attitudes, and values, as well as the integration of these areas and their application to simulated and realistic work settings.

Maintaining in-school success standards: This requires expertise among teachers on continuous performance assessment. How MOES arranges preparation of TVET teachers who can plan, deliver and assess instruction for maintaining in-school success standards? How learning materials, equipments and hands on learning opportunities are to be arranged for maintaining in-school success standards.

Out-of-School Success Standards: A TVET curriculum must also be judged in terms of its former students' employment or educational success. Periodic assessment of the success should be mandatory to ensure graduates' success in a college or university and in the world of work. Thus, there is a major concern on how to monitor Out-of-School Success Standards, and maintaining School-Workplace--Community Relationships;

Government involvement and commitment **-** The extent to which government involvement affects the curriculum may constitute a distinct asset or a liability. To what extent the government should control the operation, management and quality assurance of these programs is also an area of concern which require clarity;

Relevancy and Responsiveness: Another basic area of concern of the vocational and technical education curriculum is relevancy and responsiveness to technological changes in our society. How schools can address changing needs of labor market and maintain high percentage of graduates' employability is a major challenge for of school sector reform is a challenge.

Logistics: Bringing together the proper facilities, equipment, supplies, and instructional resources is a major concern to all persons involved in the implementation of vocational and technical education curricula. The logistics associated with operating a vocational and technical education curriculum are indeed complex, challenging and these complexities and challenges need to be taken into account when a soft skill associated TVET curriculum is being established and after it becomes operational.

Cost for arranging sustainable funding for smooth implementation of TVET curricula: Substantial funding is also required for developing physical infrastructure, purchase of equipment, training and developing trainers, vocational experts and teacher trainers. Additional funding is also required for developing a system of national qualifications; assessment system, arranging transitional support to students, information support to curriculum developers, placement and employment support services, coordinating world of education and the world work and many more. Arranging sustainable funding for smooth implementation of TVET curricula in schools is one of the major challenges of SSR.

Way Forward

Adequate preparation is required to implement the soft skill associated occupational curricula at the school level. The following implementation strategies are suggested for successfully implementing Soft skills Focused TVET in the Nepalese schools.

Piloting in Selected schools: Sufficient preparation should be done by selecting 10 - 20 secondary schools for piloting Vocational education involving soft skills and apply the scheme of developing work-related competence. Annex schools will be appropriate for piloting such scheme of integrating soft skill focused occupational orientation in schools.

Strategic development and expansion of Soft skill focused vocational programs

Develop need responsive curricula consisting of four essential components: academic foundation, occupational-specific skills, soft skills (employability skills) and entrepreneurship skills. Allow about 25% of the instructional time to select content and skills relevant to the local situation.

National curriculum framework with local flexibility: Develop need responsive national curriculum framework consisting of four essential components: academic foundation, occupational-specific skills, soft skills (employability skills) and entrepreneurship skills. Allow about 25% of the instructional time to select content and skills relevant to the local situation and needs.

Improved Instructional Delivery: Since Nepalese youth of the twenty-first century will be part of a global community of restless young persons, who belong to a 'questioning generation' and who will have sources of information and seeking knowledge other than parents and teachers, teaching at the secondary level will have to move from mere telling to guiding, from passively listening to teachers to the teacher joining the learners in exploring, and from blind acceptance of handed down knowledge to discovery through creative inquiry.

Improved Evaluation System: A competency-based continuous assessment system will be applied in schools offering Soft skills associated TVET. Occupational qualification will be acquired only by demonstrating competence in foundation knowledge, soft skills associated occupations.

Career Guidance and counseling Service: Career guidance and counseling service will be provided to help students to select specializations and relevant optional courses to prepare themselves for further education or work based on their ability, choice and interest.

Integrate soft skills at all levels of school education: Students cannot excel in soft skills in one grade; they have to be gradually developed from early schooling to secondary levels

Focus on self employment: Schools will develop entrepreneurship skills in student through enterprise education and facilitating to set up and run small enterprises in school under the guidance of vocational teacher.

Train and develop teachers/professionals/Experts: MOE may utilize NCED, TITI and polytechnics, technical colleges and university to address such need. Outsourcing of experts, trainers and curriculum developers may require at the initial phase of preparation and implementation of the program.

CTEVT as Technical support wing: Utilize CTEVT system as a technical support wing for implementing soft skills associated TVET curricula as an optional subject in the selected schools.

Decentralize management of schools with full operational autonomy: MOE will facilitate and capacitate the schools and community through DEO to take full operational autonomy for effectively implement education reform envisioned by SSRP including soft skills associated TVET.

Partnership in governance and financing

Central government, provincial/district and local municipality will join hand together to generate funds through building partnerships**.** Partnership, management contract and operational autonomy to schools and community will be governance modalities of such schools. These governance modalities will be tested during initial piloting phase and will assess the effectiveness of each of these modalities of school governance and financing.

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CTEVT Act and the Mandate

Govinda Gajurel[1]

Abstract

It took a lot of hard work to bring CTEVT into existence. Introduction of vocational education in main stream education policy in 1971's National Education System's Plan (NSEP) was a break through towards vocational education in Nepal. After NSEP's withdrawal in ten years of its implementation, vocational education had already left some marks in the mindset of the intellectuals, educators and commoners of Nepal.

The CTEVT Act came into existence in 1989 which provided ample autonomy to CTEVT so that it could function as an umbrella organization of TEVT sector in Nepal. In the year 1999, National Technical Education and Vocational Training Policy were passed by the CTEVT Assembly to enhance coordination among various stakeholders but it did not bring expected result.

The four leg mandate of CTEVT aimed to encourage coordination, formulate policies, assure quality and provide services in order to accomplish the responsibilities assigned by the TEVT Act 1989. CTEVT, with its long history and good name as service provider, could do well with quality training and policy formulation.

The mandate of CTEVT was highly appreciated by the educators of repute and the stakeholders of TEVT. The Act has given lots of authority and responsibility to CTEVT. It has been mandated to take every necessary action to producing basic and mid- level technical workforce by itself or through others. So far, the Act of CTEVT has undergone three amendments.

Some resistance to accept CTEVT as an umbrella organization of TEVT has been observed. But this can be attributed to some basic reasons like existence of the public training providers before CTEVT. However, CTEVT has not been pro- active and cautious enough to fulfill its responsibility. It is heavily engaged in the management and operation of its own technical and vocational training institutions. But since the end of the 1990's CTEVT has already envisaged its future directions, set its policy guideline and thought of paradigm shift, as a result it is now moving towards less implementation and more coordination. It is anticipated that CTEVT will be able to accomplish all of its responsibilities mandated to the organization by the Government and expected by the professionals.

The History of TEVT in Nepal

Formation of Council for Technical Education and Vocational Training (CTEVT) was not just one stroke event; it took several years for CTEVT to come into existence. Introduction of vocational education in main stream education policy in 1971's National Education System's Plan (NSEP) was a break through towards vocationalization of education in Nepal. The NESP 1971-76 made vocational education an integral part of the total secondary education system in Nepal. (Belbase, 1999, p. 44)

Although NESP was silently withdrawn in ten years of its implementation, vocational education had already left some marks in the mindset of the intellectuals, educators and commoners of Nepal. Not to leave the past efforts into vanish, based upon the lessons learnt from its implementation, a separate wing was established in the Ministry of Education (MoE) for the development of technical and vocational education and training. It was further strengthened with the establishment of Technical Education and Vocational Training Directorate as a separate

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entity that was given the responsibility to take further steps for the development of technical education and vocational training in the country with a new focus.

Establishment of CTEVT

The CTEVT Act came into existence in 1989, few months before the people's movement of Nepal 1989. The Act provided ample autonomy to CTEVT so that it could function as an umbrella organization of TEVT sector in Nepal. In the year 1999, National Technical Education and Vocational Training Policy were passed by the CTEVT Assembly mentioning that "As mandated by the Act, in the capacity of advisory body of the Government, this policy paper has been prepared and passed by the Assembly. Therefore, all the TEVT programs and the TEVT providers are abide by the provisions made by the following general policy statements. All the TEVT programs both in public and the private sector should be directed toward achieving these policy statements." (CTEVT, 1999 p. 3). Although this policy was supposed to be mandatory as mentioned in the paper itself, it had limited impact on the TEVT providers, both public and the private.

The Mandate

The four leg mandate of CTEVT aimed to encourage coordination, formulate policies, assure quality and provide services in order to accomplish the responsibilities assigned by the TEVT Act 1989 (Council for Technical Education and Vocational Training, 1999, p 10-12). CTEVT could do well with policy formulation. It has a long history and good name as service provider because of the graduates from its own technical schools that have good reputation in the job market. The quality of CTEVT products through its own technical schools has never been questioned, although there is always room for improvement, but the products from private TEVT providers need special attention of CTEVT for quality assurance to the people. So far the most lagging part is coordination for which CTEVT needs to work hard.

Appreciation of the Act and the Mandate

The mandate of CTEVT was highly appreciated by the educators of repute and the stakeholders of TEVT. The leading figure of CTEVT establishment Dr. Sharma writes – "The legal mandate given to CTEVT appeared fairly, broad and the tasks given to, were also fairly heavy."(Sharma, 2001, p. 78)

He further explains the need of an umbrella organization and its key role. "In Nepal too, about a decade ago two important needs emerged: the need to expand the base of the skill development and the need to co-ordinate and assure quality of the developed workforce. The Council for Technical Education and Vocational Training (CTEVT) was created in 1989 as an apex body primarily responsible for the two roles mentioned above. The new body was also given a role to take over all the training programs of basic and middle levels from the university system and prepare tens of thousands of skilled workforce to help the ambitious programs of skills for poverty alleviation or skills of employment generation. (Sharma, 2001, p. 78)

In another context Sharma highlights the composition of the Council and Assembly that ensures a wide range of representation and coverage and hopes that it will help coordinate all TEVT programs in the country. "This high level Council has been constituted to formulate policy and coordinate in producing basic and mid level technical workforce. This has been a high profile institution because it is chaired by Minister for Education, the involvement of secretaries of the ministries that are heavily involved in skilled workforce production such as industry, labor, and education; high level representation of the organizations that are directly related to employment

policy formulation and employing agencies such as National Planning Commission, Public Service Commission, Federation of Nepalese Commerce and Industry (FNCCI) has made the institution prestigious." (Sharma, 2000, p. 106-107)

Another educator of repute Lamichhane has also similar opinion in relation to the establishment of CTEVT. "Higher Secondary Education Board which has the mandate to run 10+2 program and Council for Technical Education and Vocational Training which is responsible for the operation of technical education and vocational programs are two leading institutions in the education sector. Actually these institutions have the mandate to make policy decisions, design and implement programs conduct examinations and accredit successful students." (Lamichhane, 1999, p. 46)

CTEVT Council and Assembly both are chaired by the Honorable Minister or State Minister of Education. The Act has given lots of authority and responsibility to CTEVT. It has been mandated to take every necessary action to producing basic and mid- level technical workforce by itself or through others (CTEVT Act 1989, Article 6.16). In accordance to its mandate, CTEVT has so far focused on producing basic and mid- level technical workforce through its institutions or affiliated institutions. The CTEVT Act has already been amended three times. In the first amendment 1993 the major change was the modality of management system and elaboration of the roles and responsibility of the Council. The position and functions of "Executive Director" was divided into two positions and functions. Vice Chairperson's position was mainly meant for policy matters where as Member Secretary's position was created for the implementation of the policy and programs (CTEVT Act, 1993 Amendment).

The Amendments

Next amendment was not a Parliamentary Bill but was an Ordinance and expired in 6 months made two major changes. One was going back to the management system of 1989 Act i.e. Executive Director's position for both policy and implementation; and the other was CTEVT's paradigm upgrade from 'basic and mid level skilled workforce production' to 'basic, mid level, and highly skilled workforce production'. The paradigm upgrade was continued by the CTEVT Act 2006 where as the management mechanism has been continuation of the Amendment 1993. (Council for Technical Education and Vocational Training Act, 2006 Amendment) It has been only a couple of years that CTEVT has its own mandate to go for higher education in technical and vocational sector and so far it has not started its own program in higher education. Before having the mandate to implement higher technical education, CTEVT's sister institution Training Institution for Technical Instruction (TITI) has started higher courses for instructors' preparation affiliating those programs to Kathamandu University. To move ahead with this mandate CTEVT might use its strengths of having historical institutions like Balaju School of Engineering and Science (formerly Mechanical Training Center and then Balaju Technical Training Center) and young polytechnics like Manmohan Memorial Polytechnic or Nepal Banepa Polytechnic. These are, including others, potential institutions to run higher technical programs. To begin with CTEVT might utilize the experiences of TITI for higher technical education scheme.

Existing CTEVT Act continues and even emphasizes the mandate of CTEVT to coordinate among various training related programs (CTEVT, Act, 2006 Amendment, Article 6.9) and here is a great lapse between the mandate and the action. Thousands of short term training providers are providing training without any consultation with CTEVT and the Council has never tried to intervene. The main reason is its capability. With less than 1000 staff member capacity (including those working in 17 technical institutions and of course CTEVT headquarters), CTEVT will not be able to implement its mandate that covers a wide range especially monitoring

the private TTPs and assuring their quality. This mainly applies to the private training providers but there are hundreds of training providers in public sector as well, mostly in line ministries.

Acceptance of the Mandate

Although CTEVT has the mandate, there is a problem of acceptance to the CTEVT as an umbrella organization of TEVT sector as envisaged by its Act. The resistance to accept CTEVT as an umbrella organization seems to be due to some basic reasons. Firstly, most of the public training providers were into existence before CTEVT formed through its Act. Secondly, CTEVT's line ministry is Education Ministry that is one of the Ministries on equal foot to other ministries like Ministry of Industry, Ministry of Labor, Ministry of Agriculture, Ministry of Tourism, and others. CTEVT, headed by Minister for Education is not by any means superior to any other ministry. So, CTEVT has not been easily accepted by others for its mandate.

This issue was foreseen long ago. According to Dr. Belbase, "The line ministry for CTEVT is the Ministry of Education (MOE) because CTEVT includes the word 'Education' and has a past history of being a part of the MOE. This naturally raises a question as to whether CTEVT should remain affiliated with the MOE alone or ought to move out under a ministry such as Labor, Industry or even under the patronage of the Prime Minister in view of its cross- sectoral character." (Belbase, 1997, p. 13)

Steps taken up and to be taken

Another constraint on the part of CTEVT is that it has not been pro- active and cautious well enough to fulfill its responsibility. It is heavily engaged in the management and operation of its own technical and vocational training institutions. In the recent years CTEVT has been more involved in the accreditation/ recognition of private institutions that provide technical/ vocational training. This day- to- day business of managing its own schools and supervising private schools has jeopardized CTEVT's role of coordinating all TEVT providers' especially public providers. Looking into the future, CTEVT had already envisaged its future directions and had decided to move its emphasis as follows.

- institution-based training → → → community and industry-based training
- long courses   → → → long and short courses
- government training centers → → → non government training center

                                                    (including private)

- training courses for primarily

  government employment   → → → training courses for government

                                          employment, private employment and

                                          enterprise development

                                                    (Quesenberry, 1997, p. 6)

As per this policy guideline and thought of paradigm shift, CTEVT is now moving towards less implementation and more coordination that might give CTEVT more space for acceptance by other line ministries and TTPs.

Sharma asked the following question regarding CTEVT's capability to implement its mandate to himself and others more than a decade ago and it is not fully answered till today. "When Council for Technical Education and Vocational Training will be capable of doing everything regarding the production of mid level workforce in technical education?" (Sharma, 2000 p. 152).

The Technical Education and Vocational Training Skills Development Policy 2007 approved by the government of Nepal is an affirmative action to facilitate the role of CTEVT as the coordinator of TEVT programs throughout the nation. The policy emphasizes on expansion, inclusion and access, integration, relevancy and funding as its five major objectives. (CTEVT, 2010). From which CTEVT can take advantage and enhance its coverage and move forward to fulfill one of its mandate.

Conclusion

The coverage that has been given to CTEVT by its Act can really be considered as an umbrella Act that covers almost everything that an umbrella organization would like to have in it. By fulfilling its Vision Statement "No Nepali should be unemployed due to the lack of access to TEVT" CTEVT will be able to fulfill its mandate and all of the activities of CTEVT should move towards this mission.

We all, who are involved in technical education and vocational field or those who take serious concern on the sector are looking forward to seeing CTEVT take full charge of every aspect in fulfilling its mandate.

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Synchronization of TEVT with School Education in the Context of SSRP

Dhruba Raj Regmi[1]

Abstract

Synchronization of TEVT with school education is one of the reformed agenda, which is envisioned by the SSRP (2009-2015). However, there are serious challenges to be faced while translating the policy in to the practice. This article highlights the major issues and challenges in harmonization of TEVT with school education. There are four major issues focused in this article. Initially, the current magnitude of the TEVT in Nepalese education policy are tried to be explored. Similarly, Second part of the article illustrates the dynamics of TEVT policy and practices in Nepalese educational history. New move of TEVT policy in the context of SSRP is deeply analyzed in third part, and finally major issues and challenges of TEVT in synchronization with school education are analyzed and highlighted at the end of the article.

Context

School Sector Reform Plan (SSRP, 2009-015) is driving policy and plan of education sector development. Technical Education and Vocational Training (TEVT) as sub-sector, it has been prioritized by SSRP with new move. This policy states that secondary level (9-12) will integrate vocational/technical education component as an option in its curricula (SSRP, 2009). However, to translate the policy into the practice several preliminary arrangements are needed which are invisible in current policy and plan. Obviously, legal backup for policy implementation, arrangement of required human and financial resource, linkage of curriculum with market demands, access of disadvantaged groups in TEVT and quality assurance of TEVT in school education are prime considerations, which demand pre-exercise before implementation.

TEVT is considered as one of the major vehicle for enhancing socio-economic prosperity of the country. It is well accepted that middle level skilled human resources can be supplied through the TEVT as per the requirement for development process of the country. Similarly, individual with the skill and knowledge for employability is another rational of evolving TEVT as major development agenda of the country (MOE, 2009). Thus, as educational sub-sector, TEVT has been prioritized by the national policy and plan.

Nepal's five years' periodic plans (8th, 9th, 10th and interim plan) and sustainable development agenda (2003) have emphasized technical education and vocational training as a main strategy for human recourse development, poverty alleviation as well as meeting the learning needs of the youths and adults. After the peoples' movement, (2006) TEVT has been viewed with right base approach. Interim Constitution of Nepal (2006) has guaranteed the right of employment, equal opportunity and right to social justice (part 3). Three years' interim plan (NPC, 2007) has made vision of massive, expansion of TEVT for development of the skilled work-force and creating employment opportunities.

At present, whole TEVT in Nepal have been governed by the Council for Technical Education and Vocational Training (CTEVT), which has been executing technical education and vocational training programs base on the provision of TEVT Act (1989). However, TEVT has been tried to be synchronized with school education by introducing Annex program in government funded secondary schools in key venues of the country. Although, the annex programs are not adequately fostered by the school curriculum as well as accessibility of needy youth on this program yet to be ensured.

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Dynamics of TEVT in Nepal

TEVT in Ancient Period

Rich art and crafts are major evidence of prosperous technical education of earliest period in Nepal. We can see the witnesses of ancient art and culture in preserved heritage. Similarly, practices of medicine and the agriculture are also examples of earliest technical and vocational education. However, TEVT in early Nepal was spontaneous and informal. A family based or cast based traditional apprentice system was the oldest form of occupational skill training that was widely used in Nepal. However, transfer of technical skill and knowledge were developed by the earlier government differently. One of the earliest references of skill acquisition in Nepal appeared during the 14th century regime of King Jayasthiti Malla (1382-1035). At that time he divided the entire population of the kingdom into 67 occupational groups and sob groups (MOE, 2009)

During the Rana regime, there were no any national policies, commitment and guideline in line with technical education and vocational training. However, few technical education programs like Aurvadic, Medicine and veterinary training existed (Sharma, 2005). In the case of vocational training, there were few practices adopted with the especial interest of the Ranas.

TEVT after Democracy

After the democracy (1951), for visioning the education, Nepal National Planning Commission (NNEPC) was constituted in 1954   by the government. Major emphasis of the commission was to introduce the vocational education in school with the concept of multi-purpose school. Practical and technical oriented courses were harmonized with the academic course. "The multi-purpose school system had objective of developing technical and practical oriented courses as well as quality program in academic education, so that students could choose to continue academic education or take employment in occupation for which they are trend" (MOE,2009). Similarly, Vocational courses were offered in the field of agriculture, industrial education, Secretarial science and Home science in multiple-purpose schools (Thapa, 1977,) sited in MOE (2009). The student had to choose one particular field as their major area of study in which they were required to spend one third of the learning time in vocational subjects. However, irrelevant curricula, low employment outcome, unmeet students' career aspiration and poor social image of vocational education (Aryal 1970, MOE; 1974, Reed 1979, Belbase, 1981, MOE 2009) were the major weakness of the multi-purpose school system.

TEVT after NESP

In the education history of Nepal, the National Education System Plan (NESP, 2071) is the major turning point of school education. In this plan, TEVT has also experienced in new model which was intergraded with the general education. Realizing the role and importance of TEVT in national development process, it was linked in secondary level. At that, time secondary schools were divided in three categories; first was general secondary school, second was Vocational secondary school and third was Sanskrit secondary school (Sharma, 2004). In the vocational secondary education, 34 vocational subjects were listed by the government and among those subjects; schools were free to choose one subject as vocational subject. Twenty percent of instructional time was allocated for vocational subject in general and Sanskrit and forty percent time for vocational schools (MOE, 2009). In order to vocationalization of secondary education it was the exemplary national initiation made by the government "however such added impetus could not sustain long and within a decade, the program of vocationalization of school education

was taken back again disintegrating TEVT from the general education system in the country " (MOE, 2009).

Midterm evaluation of NESP has identified several shortcomings of implementation in synchronizing technical and vocational education with school education. Basically, cost, quality, equipment and human resource were felt inadequate. Similarly, employability of the graduate and linkage of curriculum with higher education was also the problem of vocational school system. Hence, a separate wing of TEVT was recommended for advancing the skills in particular technical subject and to increase employability of youths.

Based on the recommendation of the midterm evaluation of the NESP, new provisions of TEVT were introduced that was reflected in sixth Five Year Plan (1980) and TEVT act (1978). According to the new provision of technical education, there were two level of schooling. Students, who completed the primary level, were eligible for two years' lower secondary technical school and who completed the lower secondary level, were eligible for three years secondary school. In addition, one year on the job training was also mandatory for secondary level technical education. Then they could attain the Technical School Leaving Certificate TSLC. Similarly, students who have TSLC qualification, they were eligible for higher education (MOE, 2009). There were limited technical schools which could not address the national need of technical education.

New Move of TEVT after Democracy (1990)

Replacement of Technical and vocational Education Directorate by Council for Technical Education and Vocational Training (CTEVT, 1988) was another turning point of TEVT in Nepal. New move of TEVT was further systematized by TEVT Act (1988). The major purpose of the TEVT was to prepare basic and middle level technical human recourse for the country. Strengthening TEVT, accessibility and quality were major objectives. After restoration of democracy, Nepal reviewed overall education policy including TVET. In the context, after amended CTEVT act, the following policy reforms were made in TEVT sector. (MOE, 2009)

1. TSLC curriculum were changed from 7+3+1 years to (a) 10+2 years+ 3-6 months on the job training (OJT) for students with 10th grade and ; (b) 15 months + 3-6 months OJT for student with SLC pass. Most of the public institutions are adopting *option* (a) and private schools option (b).

2. Transfer of basic and technician level program from TU to CTEVT was initiated CTEVT took over CMA, ANM, HA, JTA, JT, program from TU.

3. Liberal promotion of private sector in TEVT resulted in significant increase in private TEVT institutions from three prior to 1991 to 110 in 2000.

4. Development of polytechnic institutions, expansion of technical diploma programs, initiation of annex programs(annexing technical education in general schools), exemplary vocational training and community development program for literate rural population, development of trade schools program in partnership with FNCCI, significant increase in sponsored vocational skill training programs were some innovation in TEVT.

5. To cope with budgetary constraints public technical schools were encouraged to generate funds, free-ship reduced to 50% and even less in some schools and introduced fees in public institutions. (p.67).

Concerning on harmonization of TEVT with school education, the annex program is an evidence of past effort made by the government. The annex program was introduced in government

funded community secondary schools, which was conceptualized since 9th five year plan. However, it has not been expanded based on need and demands of the country. Only there are 1688 students (CTEVT, 2008) benefited from this program.

Regarding integration of vocational education in general schools, major shift in TEVT policy from integration to disintegration and from massive expansion to strategically development of well equipped technical schools in key geographical location, which had already taken place in 1980 by introducing technical school system replacing vocational education system. This system was further expanded and developed during 1990s and onward under the new structure of CTEVT.

Partnership has been considered as major policy to increase accessibility of TEVT in the country. Translating policy in to the practice TEVT have been implementing its programs in partnership with industrial organizations, concerned departments of the government and private providers. However, access and equity are always been questioned because of expensive fees, lack of stipend and scholarships and absence of recognition of prior learning and access to advance skill training or further education for vocational training completers (MOE, 2009).

Technical and Vocational Education in SSRP

As continuation of previous plan and program of education sector, the School Sector Reform Plan (SSRP, 2009-015) is a contemporary leading strategic plan of education sector. However, it has focused to accelerate the different activities related to the school education. Regarding TEVT, SSR Plan and policy document has given a separate component for its harmonization with school curriculum.   .

Along with existing policies and program of TEVT, the SSRP provides additional policy directions for both general and vocational components in secondary education. It has been claimed that through this new policy the opportunities for skills development will be expanded across the country. "To identify appropriate models and approaches, SSRP aims at testing and piloting different schemes for TEVT Soft skills and intends to continue the on-going programs. However, the SSR fund will not be used for heavy equipment and construction in secondary schools. Based on the experiences gained and lessons learned from the pilot-testing, further expansion of TEVT will be worked out in secondary schools" (p.33).

Accepting TEVT as major threshold for employability of youth, SSRP (2009) has envisioned the goal; "To equip students with employable skills, which will assist and accelerate their transition from school to work and help them explore a variety of career opportunities that are available inside Nepal as well as in the neighboring countries and in the global market". There is strong rational behind prioritizing the TEVT in present context. SSRP highlights the three major opportunities; firstly, TEVT policy that has paved the way for developing and expanding this sub-sector in the country. Secondly, CTEVT is currently offering technical education through trade schools, and annex programs. The experiences gained from the school based annex program are very positive. The annex schools receive high priority in the national program (MOE, 2009). Finally, there is good practice of collaboration among the CTEVT, other technical training providers including FNCCI, Department of Labor and private providers.

As policy direction of TEVT implementation, there are three major strategies have been proposed in SSRP. (a) Under the SSR framework, soft skills and preparatory courses will be offered, in school curricula, in some key technical/vocational areas, offering choices in view of individual students' aptitudes and opening ways for developing their career paths. (b) Vertical and horizontal links among technical and vocational channels will be established with the general stream of education, providing mobility from the non-formal/technical to formal modes of

learning and vice versa. (c) Under the TEVT policy framework as approved by the government, CTEVT will continue to plan, implement and coordinate TEVT activities in consultation with relevant authorities and institutions.

In spite of several positive environments, there are some challenges to be faced in line with effective implementation of TEVT. "Frequently changing market demands for technical and vocational skills pose a continuing challenge in assessing needs and making timely provision of such skills" (MOE, 2009) is the major challenge that should be responded if the TEVT is considered as avenue to address the market demand. Similarly, availability of trained and qualified instructors, supply of adequate equipments and instructional materials, appropriate physical facilities and availability of adequate fundings are other challenges.

Major issues and Challenges in synchronization of TEVT in School Education

High sounding scheme is envisioned in policy and plan documents of SSR. However, in translating the policies in to the practices, there are plenty of shortcomings. Some issues are crucial and they carefully need to be addressed for implementation. In line with synchronization of TEVT in school education, following prime concern over the issues are highlighted.

Legal backup for synchronization: SSRP has made the provision of adopting technical and vocational education as a wing of secondary level education. Although, the provisions has not been replicated in Education Act.

Governance: till date, whole TEVT sector is governed by the TEVT Act (1988) and governing all types of TEVT programs under the CTEVT. If school education will have separate technical and vocational wing, who will responsible for executing governing the programs? Does CTEVT have capacity to design and implement those programs? Alternatively, can existing capacity of MOE/DOE system will able to manage the whole technical and vocational education in synchronization with school education? These crucial questions are unanswered in the SSR policy and the plan.

Accessibility: most of existing technical institutions are located in urban area of key venues in the country. Even annex programs have also not been extended in remote places. Now, TEVT has been considered as an avenue for employability of youths but there is not any scheme of government to ensure the access of all needy youths from disadvantaged communities. If technical and vocational education is priority agenda of the SSRP, clear mapping and need based scheme are essential.

Arrangements of human resources: SSRP (2009) deals with TEVT as a major component. There are plenty of provisions envisioned in line with synchronization of technical and vocational curriculum in general community schools. However, the plan does not explore the ways to make available technical teachers for executing the technical and vocational curriculum in the general schools. There is little scope to train the existing teachers working in the secondary level but curriculum of teacher training, eligibility of technical and vocational teacher to be trained, institutional setup for providing training are major considerations.

Priority of TEVT in SSRP: SSRP has 15 key indicators to be achieved by the end of 2015, but targets related to TEVT are not indicated in the list, while TEVT is placed as a separate component in SSRP. If TEVT is priority agenda of the plan, obviously, like number of the technical /vocational schools, number of students, geographical coverage and others could be mentioned as indicators.

Linkage of the curricula: SSRP has proposed to offer soft skills and preparatory courses of technical/vocational subjects in secondary level but the nature and scope of soft skills are yet to be defined. Similarly, SSRP tents to establish vertical and horizontal linkage of TEVT curriculum

with general curriculum ensuring career paths but the criteria and procedures for linking curriculum is yet to be specified.

Equipments and materials: obviously, technical and vocational education cannot be practiced without equipment and materials which requires additional recourse as well. However, implementation of technical and vocational subject in school curriculum should be designed arranging prerequisite as required.

Conclusion

TEVT is considered as the best choice in education for producing middle level skilled human resource in order to enhance national economic development as well as personal growth of the youths. Like other developing countries, Nepal has also been fostering TEVT with national priority since couple of decade. However; accessibility of needy youths, quality and linkage with job markets are to be ensured. In the context of SSRP, TEVT is accepted as a major reform agenda and placed as a separate component with new vision of synchronization of TEVT in school curriculum. However, there are several lapses for translating policy provisions into the practice. If TEVT is accepted as an avenue for changing individuals' productivity, social prosperity and national development, deep concentration on the agenda is still needed. Consequently, designing and implementation of TEVT with school curriculum still demands additional attention of the government.

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New *Lahure* in Nepal: Foreign Labour Migration

Ganesh Gurung, Ph. D.[1]

Abstract

Migration of Nepalese for foreign employment has a long history. Since late 1800, Nepalese youths known as Gorkhalis migrated to the city of Lahor to the northern region of Punjab and started to work as laborers knowing themselves as Lahure. Later on, Nepalese youths joined Brish army and Indian army fought the World War I and II. Labour and Employment Policy 2006 and Interim Constitution of Nepal 2007 have considered the varying realities of labor markets and management of the labor workforce in the country. Parliament has approved the bill to amend the Foreign Employment Act in 2007 in order to promote the foreign employment market. As a result, Department for Foreign Employment was established in 2008. Government of Nepal has also issued Foreign Employment Regulation (2007). Data from Department of Foreign Employment shows that Middle East countries like Qutar, Saudi Arabia and United Arab Emirates are the main destination countries, followed by Malaysia, Brunai, Combodia and other countries of East Asia. Nepali workers working in foreign countries are not only contributing to generate revenue, but also in improving the living standards of workers themselves. Undocumented labour migration, 'Not to encourage women' policy of Department of Foreign Employment, highest number of unskilled and skilled labourers, unauthorized agents of recruiting agencies and climate change are found some of the causes for the problems of foreign employment.

Background

People's movement from one place to another has a long history. With globalization, improved transportation and communication the mobility from one place to another, from one region to another and across borders in search of better life, better opportunities or to escape from poverty, war and famine is increasing. Furthermore, international labour migration has become a survival strategy for men and women of many least developed and developing countries. People from developing countries are moving towards the developed countries in the form of migrant workers. The flow of information, skills and remittances has dramatically changed the nature and scope of international migration today. In fact, international migration has redefined the relationship between the state and the people in terms of growing acceptance of dual citizenship, multiple properties and voting rights which proves that the states now are no longer territory-based.

Nepal's geostrategic location between India and China and its evolution as an entrepot of trade between India and Tibet was one of the most important factors leading to migration. During those days migration was basically for trade. Mobility associated with trade was a part of lifestyle of the people who lived in high mountains. This type of migration, which is also called trans-Himalayan migration for trade (Furer-Haimendorf, 1975; Tulachan, 2001), is still there but its magnitude has declined.

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Lahure is nick name of those who went to army and it comes from Lahore city of Pakistan because the first Nepali soldiers were stationed in Lahore, Pakistan.

Migration for labor employment also has a long history. Since more than 200 years ago, Nepalese were moving out from their homes and villages in search of employment opportunities or for resources like land. In the period from around late 1800 to early 1900, men from the hilly areas known as Gorkhalis migrated westwards to the city of Lahore in the northern region of Punjab.

Nepalese Labor migrants working as foreign armies, especially in British and Indian armies, is another type of labor migration from Nepal. The geopolitical situation of the country and historical circumstances also led to recruitment of Nepalis in British-Indian army since 1816 (Pemble 1971:348). Despite initial resistance from the government to allow Nepalese to work in British-Indian army, this was later on promoted by the government itself. As a result, a large number of them fought in both World War I and World War II.

Legal Framework

The Interim Constitution of Nepal 2007 has established employment as one of the elementary rights for the Nepalese citizen. It also bestows for the formation of a Labour Commission in order to identify the problems faced by the labourers and recommend instruments for the resolution of the problems.

The Labour and Employment Policy published in February 2006 by the Ministry of Labour and Transport Management that replaces the National Labour Policy of 1999 takes into consideration the varying realities of the labour market and integrates the pledges made by the Government during the Second Labour Conference held in 2005.

The legislative parliament approved the bill to amend the Foreign Employment Act on May 31, 2007. This act is chiefly designed to amend and integrate the existing legislations with a view of promoting foreign employment, making the profession dignified, and protecting and promoting the rights and interests of the migrant workers and the recruiting agencies. While a separate Department for Foreign Employment has been established in 2008, with the objective of promoting foreign employment enterprise, make it secure, organized and dignified, and initiate measures deemed essential to promote the rights and interests of foreign employment agents.

In addition to the Act, the Government has also developed and issued Foreign Employment Regulation (FEA, 2007) for the promotion of the foreign employment sector. The most significant provision of the regulation is about the protection of the interest of the women migrant workers. The provision of returning the orientation fee paid by the women and establishment of child care centre for the protection of the children of the migrant women workers are themes that should be upheld.

People Going For Foreign Employment by Months In 2009
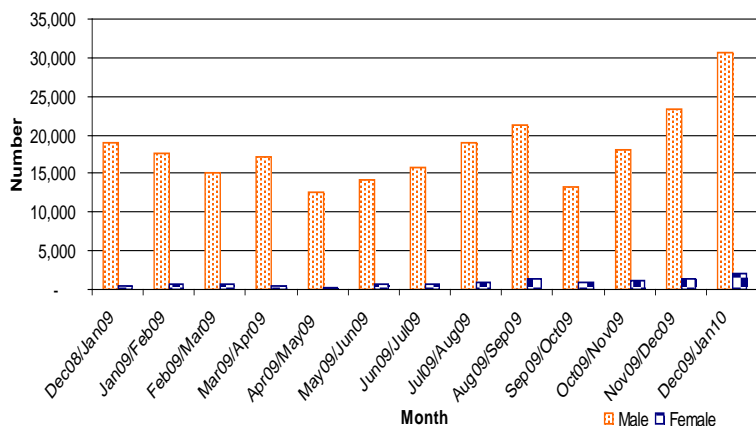
Trend

According to the data from Department of Foreign Employment the Middle East still remains the top destination for Nepali migrant workers. Qatar, Saudi Arabia, and United Arab Emirates (UAE) were the main destination countries in the Middle East. However, amongst the three major destination countries listed here, there has been a slight decrease in number of migrant workers getting final approval from the DoFE in comparison to figures of last year except for Saudi Arabia. In 2009, these countries hosted a total of 192,225 documented Nepali migrant workers. Hence 2009 saw a decrease in number of migrant workers in comparison to 2008 data for those embarking to Middle East for foreign employment. This was followed by East Asia which received a total of 50,344 Nepali migrant workers. Malaysia retained its top position in being the major destination country in East Asia region. Others included Brunei, Cambodia, Hong Kong, Laos, Macao, Philippines, Singapore and Thailand. The SAARC region countries (other than India) such as Afghanistan, Maldives, Sri Lanka and Pakistan had 1,841 official migrant workers from Nepal in 2009. There has been a decrease in numbers of Nepali migrant workers to other Asian countries (1,642), Central America (26) and Oceania (47) while an increase has been recorded for those going to Europe (551), North America (466) and Africa (915) in comparison to official figures of 2008. Among the African countries, Libiya has been the major destination country. DoFE's figure shows that the official number of female Nepali migrant workers has increased in 2009 in comparison to the past data of 2008. The figure reached to 11,507 out of the total 248,057 in 2009 while it was only 316 in 2007 and 11,007 in 2008. Female migration has been consistently increasing despite the unofficial restrictions to Nepali workers in the Gulf countries mainly in Saudi Arabia as well as Malaysia.

Volume of remittance and its contribution

Migration is one of the historically existing phenomena in Nepal, but its contribution to the economy and society has increased significantly in the past one and half decades. It is after the political change in 1990 that long distance migration has increased in Nepal. Government's liberal policy with regard to foreign travel is mainly responsible for this type of migration. There is now a growing recognition of importance of foreign labor migration and remittances. Nepal Rastra Bank data shows a total of NPR 217,903.7 million on migrant workers' remittance for the year 2009.

From the available data it seems that foreign labour migration has declined in the last three years, which is mainly because of global financial crisis. But the adverse impact is comparatively less than what was expected initially. The data reveal that there is a slight decline in out-migration rate in 2008/09 (i.e. until mid June 2009). This period to some extent, is considered to be the period of recession. The flow of foreign migrant labourers has not declined in the remaining months of 2009.

Despite the global crisis, remittance flow to Nepal seems to have increased consistently. There is a rapid increment in the remittance in 2007/08 to 2008/09. On the surface, this seems paradoxical, because it is seen that there is a decline in number of migrant labourers in 2008-09 as compared to 2007-08. But remittance has been increased even in 2008-09 (Figure 7.4). The reason could be many. It is largely argued that workers sent their savings in the view of their expected return to Nepal. Another reason could be that as this is an official flow of remittance, the amount might have been increased because of rapid increment in remittance business agencies in 2008-09.

The ratio of worker's remittances to GDP is gradually increasing except 13.8 per cent in the FY 2006/07 as compared to 14.9 per cent in the FY 2005/06. It has registered 21.8 per cent in the FY 2008/09 as against 17.4 per cent in the FY 2007/08. Similarly, the contribution of

remittances to the economy as compared to transfer income is very high. Transfer income includes tourism income as well as foreign aid.

The Nepali workers working abroad are not only contributing to foreign exchange earnings of the country, they also are contributing directly to the government revenue in the form of passport fee and Value Added Tax (VAT) on passenger service charge of NPR 1,000. The other form of direct contribution on the government revenue is the fees paid by the recruitment agencies.

The Foreign Labour Industry also contributes towards generation of local activities through which local people also earn income.

Issues

Undocumented labour migration has always been a problem associated with safe migration process and ensuring the rights of migrant workers in their destination countries. Furthermore, the exact number migrants has also been difficult to assume and has often been speculated. Thus, it seems that obtaining correct and updated information of potential migrants is very difficult and almost impossible task in Nepal. It is reported through media that the embassies can do very little for the undocumented labour migrants.

'Not to encourage women' policy of Department of Foreign Employment prohibits women from going to Gulf countries namely; Saudi Arabia, the UAE, Qatar and Kuwait so permits to women are not issued if they do not have guardians in Gulf countries. Embarking to Malaysia for foreign employment has also been an issue. Recently, Lebanon has also been added to the list of countries where labour migration is not encouraged.

Most of the Nepali migrant workers were found to be unskilled (69.1 percent) while that of semi-skilled and skilled were 27.1 percent and 3.4 percent respectively. Highly skilled were found to be only 0.4 percent (NIDS, 2004). Considering the level of skills that most Nepali migrant workers have while they embark for foreign employment together with the environmental conditions and work load at destination, many are prone to

unexpected problems and risks. Pre-departure orientation and proper skill training is yet another issue that has to be taken seriously. Providing entrepreneurship training to rural women is the must for facilitating them to encourage in making decision of their own whether to migrate or not and choose the country they want to migrate.
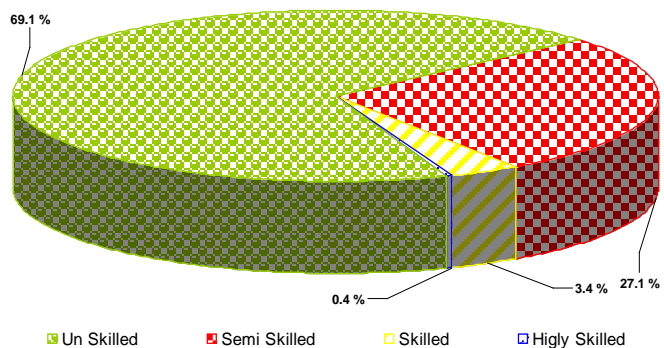
The negative implications of such ill consequences of migration are often filled with melancholy. For instance, women working in various countries in the Gulf region as domestic servants and maids are subject to physical and mental torture. They are not paid for their work but are instead subjected to physical exploitation. Death due to accident at the work place has also been reported through various media. There were also some cases where employers had not insured their workers though Foreign Employment Act (FEA) 2007 under Section 26, which states that insurance of the workers must be done before the license holder sends them for foreign employment.

Cases of fraudulences have often been associated with unauthorized agents of recruiting agencies. While the FEA 2007 under Section 74 has provisioned for opening of branch

office and appointing agents for proper implementation of the Act. Besides, strict monitoring is also greatly felt.

As per data gathered from DoFE, in 2009, the total number of personal complaints reached to

449. Organizational complaints reached to 451 while there were only 75 complaints registered in the District court.

Bilateral agreements and MoUs are never made public. It is important that suggestions are gathered from all stakeholders before such agreements are inked.

Climate change is another important reason of migration. As different media have reported that people of Mustang who have been forced to migrate from their native land because of the impacts of climate change. In the first recognized case of climate change refugees in Nepal, the entire village of Dhe, located in Surkhang VDC of upper Mustang, is being resettled in Thangchung in lower Mustang. Hence the NAPA (National Adaptation Plan of Action) process has to recognize this as well and bring it up for open discussion.

Conclusion

It is the established fact that it has become a survival strategy for men and women of many least developed and developing countries to migrate for better opportunities. However, labor migration is not free of various challenges in terms of social and cost factors. But, given the options for alternatives in lesser amount, it has become the MUST for viewing the challenges as opportunities developing a mechanism to channel remittances and skills into constructive endeavors which helps in contributing to the national economy. Foreign labour migration is not a desire of Nepal rather a compulsion during conflict situation and even in post conflict situation of Nepal. Thus, Nepal should minimize the risks and maximize the benefits in foreign labour migration.

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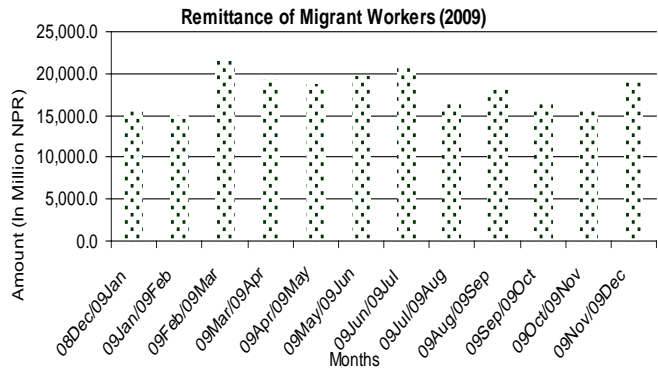
Initiatives and Practices in Technical and Vocational Education and Training (TVET) for Poverty Alleviation in Nepal

Jay Bahadur Tandan, Ph. D.[1]

Abstract

In spite of considerable progress achieved over the past decade, poverty in Nepal is widespread with one fourth populations of Nepal still lives below poverty line .Its prevalence and intensity is deep-seated with wide variations of poverty levels in terms of urban-rural, gender, caste and ethnic groups. It is more severe in rural area than urban area and among women and Dalit. Since the poverty is a complex and multi-dimensional phenomenon there are no easy and quick solutions to solve it. Nepal Government seriously concerns the poverty reduction measures through its highest priority in consecutive national development plans. However due to complex socio-political situation over the past few years, Nepal has created considerable insecurity in many part of the country, made difficult to carry out development activities in such areas. There are several underlying causes for present poverty situation in Nepal .In order to reduce the poverty level; Nepal has initiated several efforts through different measures such as planning measures, policy reforms, community development/mobilization/empowerment, institutional development and income generation activities etc. However, this paper mainly concerns to examine the Technical and Vocational Education and Training (TVET) initiatives to poverty reduction in Nepal.

The report indicates that about 400, 000 new labor-forces per year enter into the job market and also revealed that 3.6 million people aged 15 and above are underutilized (30% of labor force). Among them 253 thousands (2.1% of labor force) are unemployed and 801 thousand (6.7%) are underemployed. Out of total number of employed and underemployed people, 974 thousand had inadequate earnings (8.1%) and 1588 thousands had irrelevant skills (13.2%). The facts indicate that there is an alarming situation of labor force in Nepal. The imbalance between the increase in labor force and lack of job opportunities indicate Nepal as an under developed state. Prevailing unemployment among the youths causes to increase poverty and other social and economic problems. Each year more than 600 thousand people go to overseas for employment. Among them more than 95% are unskilled labors. The total remittance contribution from the overseas employees is significantly increasing each year and covers more than 20% GDP of the country.

In order to further gear up the contribution of the remittance for national development and poverty reduction, competent skilled workforce should be prepared for national and international job markets through massive expansion, standardization, quality assurance and relevancy of skills training. In this context TVET and skills training are priority areas of the government's Three Year Plan Strategy Paper (2010/2011-2012/2013) in terms of poverty reduction strategy has initiated emphasis on TVET programs through inclusion and access of TVET to remote and disadvantaged people, strengthening Council for Technical Education and Vocational Training (CTEVT) capacity through its re-structuring and separating Technical Education and Vocational Training stream into two wings, increasing investment in TVET through public and private partnership, developing National Vocational Fund and integrating and regularizing funding mechanisms under the fund, mandatory provision of National Skill Testing Certificate to the semi-skilled, skilled workforce for foreign employment purpose, provision of soft loan for skill

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development, income generation and entrepreneurships development activities, and integrating of national literacy program together with skill training and income generation activities. Furthermore recently, the cabinet has constituted a national committee under the chairmanship of Minister of Education to provide suggestion for implementing the TEVT policy effectively. The committee has already prepared the report and is about to be submitted to the government for approval. Once the report will be endorsed, much detailed TEVT policy will be available to stakeholders for implementation.

Since the technical and vocational education and training program is one of effective means to achieve the poverty reduction goal, the Government of Nepal has been started various technical education and vocational training programs through CTEVT and providing various types of scholarships such as special scholarship, classified scholarship, Dalit and Muslim girls' VET special scholarship and others for socially and economically disadvantaged groups.

Moreover, CTEVT has been providing market oriented short term training through Skill for Employment Project. The project aims at increasing access for 80000 people to market oriented skill training for employment or self employment specially for women, socially excluded Dalit, disadvantaged group as well as poor socio-economic group in general . The project is expected to reduce unemployment rate from its 2002 level of 17.4 % to 16.5% by 2012. In addition, ministries and departments as well as non-governmental organizations and agencies are also providing vocational and livelihood training. However, some issues and problems still need to be addressed to make the program efficient and effective.

Background

Nepal falls amongst the least developed countries having 27.5 million people, of which 25.4 percent living below absolute poverty (CBS, 2008). The young population below 15 years of age is about 42%. Over 80% of people are dependent on agriculture. The pressure of increasing population on limited cultivating land and little potential to expand it has caused large scale of unemployment and under employment in the agriculture sector. By occupation, agriculture sector alone employs 81 percent, industry and service sectors 3 and 16 percent respectively. However three quarter of the labor force working in agriculture are underemployed and rest are self employed. (MOF, 2003)

On the other hand, about 400, 000 new labor-force per year enter into the job market. The imbalance between the increase in labor force and lack of job opportunities indicate   Nepal as an under developed state. Prevailing poverty and unemployment among the youths are the most important root cause of conflict/insurgency in Nepal (CBS, 2008).

The poverty alleviation is the highest priority of the government. Poverty reduction can be achieved through sustained high and broad based economic growth particularly on rural economy, accelerating appropriate human development for effective delivery of basic services and economic infrastructure, pursuing good governance and assuring social and economic inclusion of poor, marginalized groups. In this context, the public and private sector partnership in various economic sectors is essential for effective implementation of the initiatives.

As a result of political instability and conflict, the country has to face series of challenges for its development. The root cause of conflict and instability includes poverty and its manifestations in terms of regional, gender, ethnic and related inequalities, inadequate governance and facilities to rural communities and marginalized groups (TEVT Policy platform, 2005). In order to overcome the conflict issue, an immediate measure should be taken addressing problems of poverty and social exclusion.

A large number of youths who are unemployed and underemployed are serious concern to be addressed for gainful employment. It is estimated that around 85 percent youths who do not complete 10 years of school education enter into job market without any skills. For a meaningful economic regeneration, the population has to have some marketable skills, through which they can secure employment and self-employment (Sharma, 2006)

Poor, women, *Dalit,* disabled, out of school people and other disadvantaged people do not have easy access as well as affordability to skills training (CTEVT, 2004). It has been realized that new measures are required to increase the number of people for skill training that leads to increase their income.

Nepal Labor Force Survey (CBS, 2008) reveals that 3.6 million people aged 15 and above are underutilized (30% of labor force). Among them 253 thousands (2.1% of labor force) are unemployed and 801 thousand (6.7%) are underemployed. Out of total number of employed and underemployed people, 974 thousand had inadequate earnings (8.1%), and 1588 thousands had irrelevant skills (13.2%). The facts indicate that there is an alarming situation of labor force in Nepal.

Majority of economically active people are still engaged in agriculture and other informal sectors. However, most of them are seasonally employed. Moreover, due to the open border with India, the basic and middle level Indian skilled workers have captured the lucrative employment areas both in formal and informal sectors. On one hand, thousands of unskilled and skilled Indian workers have been working in Nepal; on the other hand, most of the Nepalese who are unskilled go to India and other countries for low paid jobs. Such people going out to seek jobs are under school education. In this context, out of school and drop out youths need to be addressed for skill development training for gainful employment, although equitable access for training is not adequate. (NPC, 2002)

Current Poverty Situation

Poverty and unemployment in Nepal are not only social but also economic and political problems. Because of these problems a large chunk of people (31%) still live below poverty line. (CBS, 2008).

The magnitude of poverty and its segments are widespread in the large areas of the country without basic infrastructure. There is a wide variation in poverty level based on unemployment, cast and ethnicity, geography, modern facility, affordability and others. The following diagram shows the interrelation between poverty and unemployment contributing each other. The major factors include: social inequality, high population growth rate, poor investment in social sector, traditional technology especially in agriculture sector, natural degradation, conflict (Maoist War), traditional society, inadequate government policy, little employment opportunity, dignity of labor and low level of skills and knowledge.
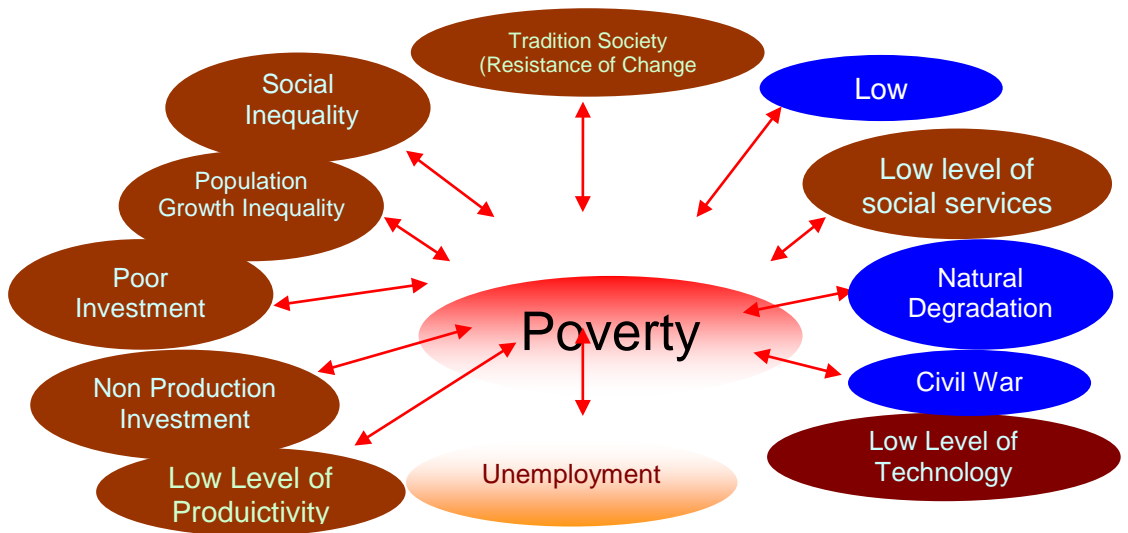
 Although poverty contributes in increasing unemployment, there are various causes of unemployment in our context. The causes of unemployment identified in the context of Nepal are: little opportunity in TVET, Lack of policy/strategy, lack of information, civil war, dignity of labour and low level of skills/knowledge. The following diagram depicts how different factors contribute in increasing unemployment.
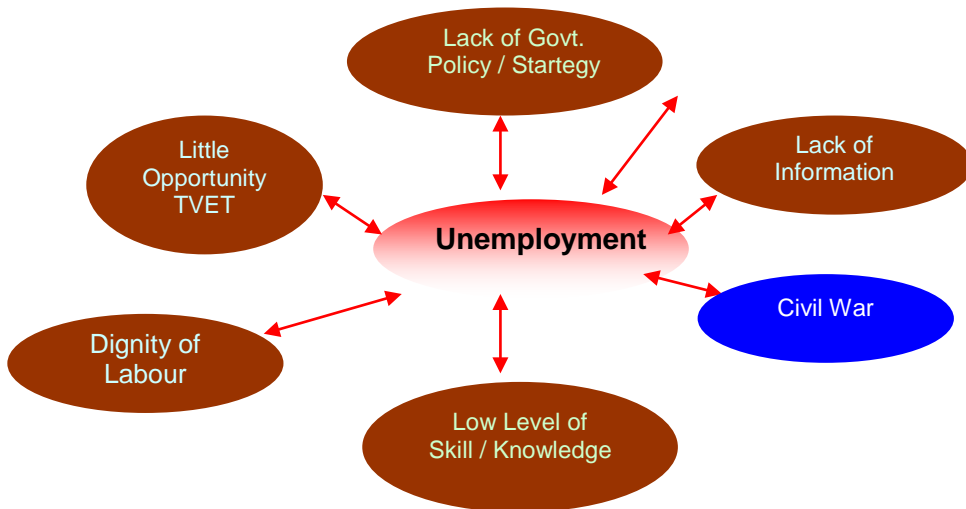
Poverty in Nepal is significantly two times higher (44%) in rural area compared to urban area (23%) with a national average poverty 42% (1995/1996). Presently it came down to 25.4 in an average. However it still remains severe in rural part of the country. Whereas in Kathmandu Valley (people have high level income and also use more resources), people living below poverty line in Kathmandu Valley is only 4 %. Over 90% of the poor live in rural areas. Poverty was seen the highest in mountain zone (56%) followed by 42% in terai and 41% in hill (NPC, 2002). These data show that geographical variation and disparity in caste and culture are the

major reasons of poverty. In this context female participation in paid employment is limited compared to male. NLFS 2008 report has revealed that the percentage of paid employment of male is three times higher (76%) than female(24.1%) in Nepal (CBS, 2008).

Initiatives for poverty alleviation through TVET

Organized education system in Nepal started only after the Rana autocracy in 1951. During Rana regime no attention was paid to general, technical and vocational education and level of education. By then, Nepal had only 203 primary schools, 200 middle schools, 11 secondary schools one college and one technical school (Rame, 1992). Integration of skill training in school education started in 1945 in the form of basic schools. Basic education system lost its effectiveness in ten years and did not make any substantial contribution to the development of vocational education in Nepal . With the recommendations of National Education Planning Commission of 1954 some secondary schools were developed into multipurpose high school. These schools were much better equipped and designed for basic vocational subjects: Home Science, Secretarial Science, Trade and Industrial Education. At the peak of multipurpose education program in 1970, there were 29 multipurpose schools in existence and one National Vocational Training Center at Sanothimi to provide training to the vocational teachers (Ramse, 1992).

Since the inception of National Education System Plan 1971 more emphasis was given on vocational education and attempts to establish vocational subjects' wing in every secondary school was made. 20 percent weightage was given to vocational subjects in general schools whereas 40 percent weightage was given to vocational subjects in vocational schools. The concept of integration of general and vocational subjects into general education curricula prevailed until 1979 when it was realized that the majorities of those trained in vocational areas were not obtaining employment. It was also realized that if those with vocational training were to exist employable, their training would need to be more skill intensive and that the system could not be implemented on such a massive scale.

After evaluating the efficiency and effectiveness of the vocational education program in 1978, the integration of vocational education in general stream was phased out and replaced by technical school system (CTEVT, 1999). The formal system of technical and vocational education evolved after 1980 when Karnali Technical School was established as the first technical school in Nepal. After the withdrawal of New Education System Plan, a Technical and Vocational Education Committee was formed with the responsibility of managing technical schools. This was followed by the establishment of Directorate of Technical and Vocational Education (DTVE), which was a division of Ministry of Education (Tandan, 1995).

The directorate's functions were to coordinate the training activities of technical schools, design curricula, conduct final examination, certify successful candidates, approve the programs of each technical school and allocate resources. Before establishment of Council for Technical Education and Vocational Training (CTEVT), some technical schools were under the DTVE and some were under the Tribhuvan University. Later, the need of coordinating and facilitating body for the overall development of National Technical and Vocational Training system was realized. Thus, after series of efforts, the CTEVT was formed legally under the Technical and Vocational Training Act in 1989 (Karki, 2005).

Technical and Vocational Education and Training (TVET) has a crucial role of increasing employment and earning potential of individuals, which ultimately contributes to scio-econoic development of a nation through poverty alleviation. Hence TVET in Nepal is expected to prepare competent technicians and skilled workers who can compete in the local and

international labor market for higher paying jobs as well as contribute to the national economy by harnessing opportunities created by globalization of economy and open market policy. Considering the facts and need for national building process, economic regeneration and poverty alleviation all needy Nepali citizens are expected to have equal access to opportunities inclusive to all marginalized population such as conflict victims, bonded labor, Dalit, disadvantaged indigenous people, disabled groups, women and remote areas people without prejudice, to participate in TVET programs regardless of their socio-economic, cultural and geographical background. In order to translate these expectations into reality and contribute to make Nepal a prosperous nation with improved quality of life of its citizens, a comprehensive "Nepal TVET and Skills Development National Policy" was formulated in 2007.

TVET Policy Directives and Strategies for Poverty Alleviation

In order to make social upliftment and poverty reduction, TVET especially skills training is an important means to prepare citizens to be able to contribute to socio-economic development. If this can be translated into practice the contribution of TVET in the development of the nation will be meaningful. In addition the main goal of TVET is to produce human resources capable of competing in the national and international level by properly adjusting knowledge and skills. The interim educational plan (2007/2008-2009/2010) for the education sector has been prepared with a view to ensure proportional and equitable access to school, higher and TVET education to make it useful and relevant for life.

Nepal TEVT Skills Development Policy, 2007

The TVET sector was highly fragmented and duplicated due to the absence of national TVET policy. Realizing this, government of Nepal introduced TEVT Skills Development Policy, 2007 as endorsed by the cabinet. The policy has adapted the major five areas: massive expansion of training opportunities, inclusion of and access for all citizens who need training, firm integration of various training modes and pathways, enhanced relevance of courses and competences and sustained funding and mechanism. Recently, the cabinet has constituted a national committee under the chairmanship of Minister of Education to provide suggestion for implementing the TEVT policy effectively. The committee has already prepared the report and is about to be submitted to the government for approval. Once the report will be endorsed, much detailed TEVT policy will be available to stakeholders for implementation.

TVET Policy Strategy of National Interim Three Years Plan 2010/2011-2012/2013

TVET and skills training are priority areas of the government in terms of poverty reduction strategy and has initiated emphasis on TVET programs. Recently National Panning Commission has formulated the following main strategies on TVET and skill training: i. Expansion of TVET programs, ii. Inclusion and access of TVET to remote and disadvantaged people, iii. Strengthening CTEVT capacity through its re-structuring and separating Technical Education and Vocational Training stream into two wings, iv. Increasing investment in TVET through public and private partnership, v. Developing National Vocational Fund and integrate and regularize funding mechanisms under the fund, vi. Making mandatory provision of National Skill Testing Certificate to the semi-skilled, skilled workforce for foreign employment purpose, vii. Provision of soft loan for

skill development, income generation and entrepreneurships development activities, and ix. Integrating of national literacy program together with skill training and income generation activities.

TVET and Skills Training Providers

The Council for Technical Education and Vocational Training (CTEVT) is the apex body for the purpose of formulating TEVT policies, coordinating programs, developing and expanding TEVT and ensuring quality of TEVT in the country under the act 1989 (amended in 2006). Besides, Trbhuvan University, Katmandu University, Department of Cottage and Small Industry (DCSI), Cottage and Small Industry Development Board (CSIDB), Department of Labor and Employment Promotion (DOLEP) are also other potential TVET providers. Other line agencies/ ministries, non-governmental organizations and private sectors including Employment Fund, F-Skill, Winrock International, and Alliance Nepal are also providing skill training.

Council for Technical Education and Vocational Training

In order to strengthen the technical education and vocational training in broader perspective, the CTEVT was established in 1989 under CTEVT act 1989. The highest policy making body according to CTEVT Act 1989 is the CTEVT Assembly, which comprises members of 24 persons having Minister of Education as a chairperson. The Council under the Assembly is given executive power of running TEVT programs and activities in Nepal.

Having the vision of no Nepali should be unemployed due to lack of access to TVET program CTEVT has taken the responsibilities of preparing skilled workforce required to the job market. Major functions of CTEVT are: policy and program formulation, coordination and facilitation, quality control, and program implementation. One of the responsibilities of CTEVT is to formulate policy in TVET. CTEVT coordinates and facilitates to TVET service receiver through research and development, curriculum development, standardization, instructors training, affiliation and developing new programs. Quality is ensured by supervision and monitoring, examination and certification, accreditation and skill testing. CTEVT has implemented some of the programs for expanding access and equity for poor and disadvantaged people. CTEVT is performing these functions through 18 constituted technical schools and 2 VTCD program, 4 public private partnership schools, 30 annex and 329 affiliated private technical schools and colleges.

Poverty alleviation through TVET special program under CTEVT

Skill for Employment Project is launched by the government to reduce poverty by increasing engagement in wage and international employment and self employment which is jointly funded by government of Nepal and Asian Development Bank. Furthermore, the project aims to improve access to employment or self employment for women, socially excluded *Dalits*, and disadvantaged groups, as well as poor socioeconomic groups in general. The Project targets the poor and will have at least 60% of the trainee beneficiaries representing women, *Dalits*, or disadvantaged groups, while ensuring that at least 50% are women and at least 25% are *Dalits*. This targeting by social grouping, as well as awareness-raising of gender equity and social inclusion issues among institutions, is expected to contribute to conflict resolution efforts, by

addressing some of the primary root causes, i.e., poverty and social exclusion. About 80,000 trainees will directly benefit from skills training under the Project. The project is expected to reduce unemployment rate from its 2002 level of 17.4 % to 16.5% by 2012 (ADB, 2004).

Special Program for Dalit and Poor Muslim Girls

The government has tried to address inclusive need of the country especially for women from deprived group. The government has launched special program to uplift their socio-economic status of Dalit and poor Muslim girls through TVET in eight terai districts. Currently, 750 girls from these communities have been studying in certificate in Nursing and TSLC courses in Nursing, Agriculture and Engineering Trades those who have completed SLC and 10th grade.

Scholarship program for Disadvantaged Groups

One of the major concerns of CTEVT is to create equitable access in TVET program by applying various measures. In this regard, CTEVT has taken a policy measure to bring all type of people in the stream of TVET. To address this policy CTEVT has made mandatory to affiliated institutions to provide scholarship to women, disable, Dalit, Janjati, Madeshi, people living in remote and other disadvantaged people. In this way, these groups of people studying diploma/certificate level programs are receiving intelligent and classified scholarships. In addition, government has provided special scholarship to those who cannot afford training cost and studied in community schools arranging Rs. 5000 per months for covering the tuition and accommodation cost. Similarly, TSLC level students are also receiving scholarships especially those who study in constituted technical schools. Besides, demand-driven short-term skill development programs are also being provided at free of cost, but these programs are to be massively expanded.

Government training providers

Department of Cottage and Small Industries (DCSI)/ Cottage and Small Industries Development Board (CSIDB)

Under the Ministry of Industry, Commerce and Supply MOICS, Department of Cottage and Small Industries (DCSI) and Cottage and Small Industries Development Board (CSIDB) are offering vocational training in various skill areas. DCSI and CSIDB are responsible to operate skill training in 27 and 48 districts through its district level offices across the country. Main emphasis of both agencies is to facilitate self-employment and employment creation through skill training. Expansion of small enterprises and engaging people in income generation is a viable strategy for poverty reduction. They are playing a major role in expanding the skill training and facilitating the trained individuals to operate small enterprises or income generating activities through their training network in all districts.

Ministry of Labor and Transport Management (MoLT)

Under MoLT, Directorate of Vocational and Skill Development Training provides vocational and skill training courses from its Kathamndu based and other 11 Training Centers across the country. These centers provide courses such as general mechanics, electric wiring, welding, plumbing, beautician, computer and many other with objective to provide skills for the unemployed youths (CTEVT, 2010).

Other Line Agencies

Ministry of Culture, Tourism and Civil Aviation has its own training center called the Nepal Academy for Tourism and Hotel Management (NATHM). It provides vocational short course trainings in hotel and tourism. Similarly Ministry of Agriculture, Science and Technology and Environment, Women, Children and Social Welfare, Local Development, Land Reform and Management also provide vocational training programs.

Others

Many I/NGOs and private training providers engage in providing skill development training program. In addition, UN agencies and other international organization such as UNDP, ILO, UNFPA, UNESC, GTZ, SDC, SNV/Nepal are also involved in supporting and implementing TVET programs.

Issues, problems and recommendation

Foreign employment is one of the main concerns of Nepal because of political instability and low economic growth. As a result, about 600 thousand workers each year mostly without having skills go to overseas for employment. The data shows that almost 2.5 million people are working in overseas. Out of them, there are only 2% skilled workers. These workers have contributed to national GDP by 20-24%. They could contribute more, but the country should provide skill training before they depart to employment destination. Providing skill training for huge number of people is not easy task because of limited budget and resources in TVET. It is a great issue that investment in TVET sector is least prioritized. Resolving the issue resource allocation to TVET from 1% to 5% of education budget should be increased as well in national budget. By creating national training fund fragmented and duplicated TVET programs should be channelized and made effective.

Limited skill trainings facilities need equitable distribution which is a challenge for TVET program implementers. One of the difficulties is to identify desperate poor and needy people which affect effectiveness of equitable access and to uplift socio-economic condition of target people. Central Training Management Information System (TMIS) should be made functional and effective to control duplication and mismatch of efforts and resources. In addition, training facilities for the target people need to be increased and expanded.

Over 80 % people depend on agriculture; however, the scientific development in agriculture is not possible without developing technical human resources. Among poor, 90 % of them rely on subsistence farming of agriculture which can not contribute to economic development. Therefore, community-based farmers' orientation and training is necessary to increase productivity in agriculture sector. In addition, mechanization in agriculture is also another remedy to reduce poverty which contributes to uplift economic condition of large segment of poor population.

Without empowering a large section of people poverty reduction is just a dream. These large section of people especially farmers and poor people need to be empowered through skill development as well as other various livelihood skills. For example income generation and other value added skills can help them come out of vicious circle of poverty.

Finally, state restructuring and the creation of a new Nepal through adapting new constitution is under process. Recently promulgated Interim Statute 2007 has given high emphasis in education sector (Sinha, 2006). The statute 2007 Nepal ensures the education as the fundamental right of the people and stated free education to all up to grade 10 although TVET has not been addressed by the statute. As general education, TVET should be included as the fundamental right of the needy people up to TSLC level

Conclusion

The initiatives of TVET development in Nepal though had a long history, systematic development began only after new education system was introduced in 1971 incorporating vocational subjects in general education. Since the CTEVT act 1989 brought into implementation, the real identity of TVET was established in Nepal. Technical education and skills development programs were implemented producing basic and middle level skilled workforce especially for formal sector in various subjects such as construction, health and agriculture. Over 80% people rely on agriculture but the sector has not been developed enough to accommodate people for dignified employment. As a result, more than 600 people each year leave Nepal for overseas employment. More than 20 percent national GDP has been contributed through the remittance received from overseas employment. The paradox is most of people going to overseas are not skilled. Nepal by virtue of training facilities is not yet ready to serve the people who need skills as stated in TVET policy. Therefore, TVET should be the highest priority area of the nation with adequate resources allocation and management in order to achieve the target set for TVET in Nepal for alleviating poverty.

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Push and Pull Factors of Migration: A Challenge of Employing Youths in Nepal

Lokendra Prasad Poudyal, Ph. D.[1]

Abstract

Around 700 economically active youths in Nepal are leaving for foreign job every day. Of these out-migrants, around 70 percent are unskilled labour, while the rest are skilled or semi-skilled. Nearly 80 percent of the migrants come from rural areas. They migrate because of the absence of work for almost 7–8 months each year. The agricultural operation temporarily occupies their time for about 3-4 months only during the season. The employment rate has currently declined to 81.7 percent from 84.3 percent recorded in 1998/99. Around 73.9 percent of the employed persons are engaged in agriculture sector related activities followed by 26.1 percent in the non-agricultural sector. Of these employees, around 17 percent are paid workers, while the remaining 83 percent are self-employed.

In the absence of adequate employment opportunities in the country, migration has emerged as an option for earning income in the poor families. The remittance contributes to around 19.1 percent of the GDP with an inflow of over US $ 1.5 billion per year. The per capita remittance for the entire country is NRs. 4,042.

Increased migration in the recent years has become a root cause of labour shortage in the agricultural season. It has made agricultural operations expensive because of increased wage rates at the local level during the agricultural season. Despite its deteriorating condition, the agriculture sector still employs around 72 percent active labour force and contributes to around 38 percent of the GDP. Nepal has good potential for developing agriculture because of varying ecological conditions. Some pocket areas are performing well depending upon their better access to roads, electricity, irrigation water and market connections. The tendency of growing high value crops and raising improved animals are on the rise. The rate of migration is less in these areas, indicating the fact that migration of youths has largely been influenced by the push factor than pull factor alone. If the youths in Nepal would find viable options for employment within the country, they are unlikely to migrate for the foreign jobs.

Introduction

The plight of the majority of poor has remained unchanged even after several years of planned development efforts in Nepal,. The Tenth Plan (2002/03 – 2006/07) emphasized poverty reduction through private sector-led growth, while the Three Year Interim Plan (TYIP) (2007/08 – 2009/10) continued with similar thrust by advocating growth for poverty reduction. It emphasized inclusion of the marginalized groups in the development opportunities. However, limited success has been accomplished on these fronts to-date. Attracting confidence of the private sector in running enterprises and creating more employment opportunities has remained low due to increasing insecurity. Frequent change of the Governments with subsequent change in the policies has affected focus on economic growth and new employment opportunities.

The year 2008 remained difficult for the country with higher rise of petrol price causing subsequent increase in the consumer price index. It made the access of marginalized groups to livelihoods more challenging. As the transportation cost increased, even the poor people remained under the protective cushions of subsidies in the food deficit areas were compelled to pay higher price. This situation desperately reduced their affordability to basic needs.

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Nepal is still one of world's least developed countries. It ranks 136 among 177 countries in terms of the Human Development Index (HDI). It spends around 6 percent of the GDP on the poverty-focused activities. However, its impact on the rural economy is negligible. Poverty is a common phenomenon in the rural areas with representation of 35 percent poor against 10 percent in the urban areas. The incidence of poverty is even greater in the mid-Western region (45 percent), while it is relatively less (27 percent) in the Central region (WFP and EU, 2006).

The role of agriculture sector is prominent in the Nepalese economy. Around 72 percent active labour force is engaged in this sector as their major occupation. It generates around 38 percent GDP. However, the productivity of this sector is lower than what could be expected as a real potential. Therefore, the pace of annual growth of this sector has remained almost stagnant against the rate of population growing at a higher rate. Such situation has led to gradual shrinking of the level of food sufficiency in the recent years. Nepal, the one-time exporter of the food grains in the past, has now been importing food to feed its population. Given the poor performance of this sector and the lack of job opportunities, the Nepalese youths are increasingly migrating out from the country for foreign jobs.

History of Migration in Nepal

Migration is not a new phenomenon for the Nepalese community. It started almost 200 years ago, when the British Government started recruiting Nepalese in their armed force. After independence in 1947, the Nepalese were also recruited in the Indian army. Since then, a large number of Nepalese still cross over to India for gainful employment.

Until 1995-96, migration to India accounted for around 85 percent of the total out-migration from Nepal. This trend of migration to India declined with the opening of migration to other countries. In 2003-04, the share of migrants to India came down to around 65 percent (CBS, 1996) from 85 percent. The decade-long conflict pushed many youths for out-migration from 1996 onwards. Lack of security at home, family debts and the desire to live a better life compelled the youths to look for foreign jobs elsewhere. This kind of tendency doubled the number of out-migrants between 2003 and 2006 (ADB, DFID and ILO, 2009).

Currently, the Government's policy allows Nepalese citizens to apply for official permission for employment in 107 countries (Adhikari and Gurung: 2009). Around 631 manpower companies are established in the country to facilitate such application and travel process. Currently, around 700 youths leave for the overseas employment every day. The process has been eased with the Government's decision of issuing the passports from the district since 2000.

The trends of migration indicates that most of the poor and illiterate youths often select India as their migration destination, while the literates and educated with little better economic background select other countries. Some youths from economically better-off families even migrate to affluent countries like Australia, South Korea, Japan, Israel, Europe and USA as they can afford initial stage investment. The people from the middle and low income groups mostly migrate to Malaysia and the Gulf countries (like Qatar, Saudi Arabia and UAE). The poorest of the poor, who cannot afford much, mostly go to India to work as a labour.

A study done by WFP and EU indicates that around 39 percent migrant households have selected India as their destination, while another 32 selected migration to other countries such as Saudi Arabia, Qatar, Malaysia and Dubai (WFP and EU, 2006). The youths, who prefer to go to India, explain that the proximity of the destination, open-border (no need of passport), familiarity with the local conditions, understandable language, similar food habits, cultural affinity, seasonal convenience, common religion and affordability are major factors influencing their selection of India as a destination for migration.

In the country, almost 15 percent of the total population is absent from home. Nearly 44 percent households have at least one absentee. Around 3 million Nepalese are working overseas.[2] Of them, only around 47 percent have migrated through the official channels (DFE, 2010).

Of the total migrants, 70 percent are unskilled, while the remaining 30 percent are semi-skilled. Around 9.1 percent official migrants are females. The proportion of migrating women could be greater as most of them travel through the informal channel due to Government restrictions. According to a study, the number of women migrated from the mid-hills of Nepal to the Indian cities alone accounts for 300,000 (ONRT and NHRC, 2005).

Agriculture Sector and Effects of Migration

Around 80 percent out-migrants represent rural areas. As the farmers do not find adequate work for most of the months in a year, they tend to migrate outside. Their engagement in the agriculture is often limited from planting to the harvesting season (i.e. from June till November). On the other hand, the return to land and labour is also low due to low productivity. Around 10 to 15 percent agricultural land is left barren in the country, while another 20 to 25 percent is left partially barren. Further, a quick spread of plotting of the agricultural land for residential purpose in the urban and semi-urban areas is increasing for price peculations. Because of all these, the attraction towards farming is declining among the youths.[3] Therefore, such situation has remained as one of the push factors for the search of employment elsewhere. Places where the infrastructural facilities for agriculture (such as roads, electricity, water, communication and markets) are well developed, the rate of out-migration is low (IOM, 2009).

The increasing trend of migration has created labour shortage in the agricultural season, thus making the agricultural operations more expensive due to the increase in the cost of labour. It has led to a situation of abundance of unemployed youths (not interested to work in agriculture), in one hand and the scarcity of labour working for the agricultural operations, on the other. Subsequently, such position has increased the feminization of agriculture in the country. It is revealed from the engagement of women in ploughing the agricultural land. Indeed, ploughing was a socially abandoned activity for women in the past. However, their necessity did not permit them to hold the tradition anymore despite the added drudgery from this activity. Since their male counterparts migrated outside for job, they did not have any choice except to undertake such restricted function and keep their farm cultivated.[4]

Most of the youths migrate despite of knowing the fact that there may be a risk involved in the place of work abroad. They simply ignore the bitter experiences shared by their predecessors and determine to proceed in the hope of bringing-in some remittances for the livelihoods of their family members. In their case, the push factor of migration is stronger than the pull factor. Had

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[2] This estimate does not include migrants gone to the Indian sub-continent.

[3] For example, in the Agricultural Development Office at Bhadrapur, Jhapa, the number of people making enquiries about the training prospects in agriculture and access to the improved variety of seeds and fertilizers have declined in the recent years. The farmers returned from abroad also seemed less interested to pursue agriculture as their major occupation. Out of 57 percent farmers migrated for the foreign jobs, only 44 percent continued working in agriculture (IOM, 2009).

[4] For example, in Ward No 5 of Topgachhi VDC in Jhapa district as indicated in the IOM, 2009 study. Similarly, the women in Rolpa also plough land when their male counterpart is not available to do this job.

the country been prepared with sufficient number of meaningful employment opportunities, the migration of these youths would have been minimized.[5]

Benefits and Costs of Migration

The migration of youths generates both benefits and costs. While it is useful in linking the gains of new employment opportunities, it also encounters some unforeseen negative effects in some cases. Following sections are devoted for the discussion of such benefits and costs.

Benefits at the Household Level

The migration contributes to increased risk bearing capacity among the youths. They benefit from new job experience and skills, which build their human capital. Another benefit for the migrants is the network they establish to know about employment prospects elsewhere (Wyss, 2004).

Their spouses of the migrants benefit from managing the household chores and agricultural activities. They learn new skills and are empowered for making decisions for the family (Kaspar, 2005). The women spouses, who lived within the four walls of their house under purdah (particularly, in Terai) are now socially exposed. As they hold bank accounts, they often visit financial institutions to obtain remittance. In this process, they develop new relations and enhance competence to manage the household affairs better.

The percentage of households receiving remittance increased from 23.4 percent in 1995-96 (Re: NLSS-I) to 31.9 percent in 2003-04 (Re: NLSS-II). The remittance received from India alone increased from 22.4 to 53.3 percent. Average amount of remittance per recipient household more than doubled during this period (from Rs. 15,160 it reached to Rs. 34,698). However, the growth of agricultural GDP for the same period could merely double.[6]

Currently, around 30 percent of the households receive remittance in the country. The average amount received by the rural household is Rs. 59,064. In the case of urban household, it is Rs. 107,234. In the Western region, average remittance is Rs. 79,484 as the highest when compared to other geographical areas. However, in the Far-western region, it is one of the lowest (Rs. 28,412).

The remittances have contributed to increase the level of food security and better access to social services (e.g. health and education). Of the total amount remitted, the recipients spend around 35.2 percent to meet their consumption needs followed by around 20.7 percent for the repayment of loan. The investment in agriculture from this source is very low. It represents only one percent (Ferrari, Jaffrin and Shrestha, 2007).

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[5] For example, a project of CEAPRED / PVSPR entitled "Policy Reform for Sustainability and Replicability in the Promotion of Vegetable Seeds for Poverty Reduction in the Remote Areas of Surkhet" promoted fresh vegetables and seeds production and generated some employment opportunities at the local level. According to an estimate, these activities have helped to reduce seasonal migration of youths to India by 75 percent (CEAPRED/PVSPR, 2008).

[6] WFP and NDRI (2008), Passage to India: Migration as a Coping Strategy in the Times of Crisis in Nepal, Lalitpur.

Benefits at the National Level

The remittance accounted for 4.5 percent of the GDP in 1996, which has currently reached 19.1 percent. The total amount of remittance inflow is over US $ 1.5 billion per year. The per capita remittance for the entire country at present is NRs. 4,042.- (NLFS, 2008).

With increased remittance from 3 to 12 percent during 1995-96 to 2003-04, the agricultural wage of the workers also went up. Its positive influence was reflected in the reduction of poverty from 43 to 33 percent (CBS, 2006).[7] Further, the urbanization process and connectivity of roads have also increased. They have been useful in multiplying the positive effects on the establishment of new enterprises.[8]

Social Cost of Migration

It is not that migration has produced the positive effects only. It has some serious social costs in some families too. The women migrants have often encountered sexual harassment cases (particularly, by those working in the Gulf countries). Taking this into consideration, the Government imposed a ban on the migration of females to Gulf countries on 16 May 1997. It was lifted on 5 September 2007 and has again been banned recently specifying the Gulf countries and Malaysia (NIDS and NCCR, 2008).

The spouses belonging to some migrant families have been found eloped with other partners. Polygamy, though a rare phenomenon until recently, is gradually picking up. Extramarital sexual relations are growing with increased consumption of alcohol. So is the growth in rate of use of the drugs. Prostitutions are growing, though at a moderately low scale now. The children of the migrant workers are facing increased level of psycho-social pressures. Depression among the children is on rise (IOM, 2009). Social crimes are increasing. There are stray cases of suicide among the children due to the absence of their guardians at home. The victims of HIV/AIDS are increasing. Of around 70,000 people infected with HIV virus between the age group of 15-49 years, around 40 percent cases are carried through the labor migrants (Karki and Malla, 2009).

There are also migrants, who are unfortunate in improving their standard of living due to betrayal by brokers and the company they went to work. Such migrants have failed to repay loans. They have become poorer after migration and for the repayment of loan, they were compelled to dispose-off their property. Such migrants have lost everything they had.

It is also evident that some migrants are languishing in Jail as they attempted to flee their jobs when they were not paid pre-agreed salaries and allowances by the company. Currently, almost 20 percent of the migrants in Saudi Arabia are staying illegally (The Kathmandu Post, 18.12.2009).

In view of all these, it is important for the country not only to see the benefits of remittance as a boon to the national economy but also the risk of a bane that may bring with adverse socio-economic implications.

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[7]   CBS (2006), Resilience amidst Conflict: An Assessment of Poverty in Nepal 1995-96 and 2003-04, Kathmandu.

[8]   ADB, DFID and ILO (2009), Country Diagnostics Studies: Nepal Critical Development Constraints, Kathmandu.

Migration Cost and Loans

Study shows that the average migration cost in Nepal is expensive as compared to other countries. In Nepal, it is around US$ 1,500.- per person, while the cost of migration in Sri Lanka is US$ 698.- per person. In the case of Pakistan, it is US$ 1,300.- per person (Khatri, 2009). In addition to the lump sum cost paid, the Nepalese migrants also pay 24 to 36 percent interest on the loans taken to meet this lump sum.

Experience indicates that most of the migrants pay back their loans within one to two years in addition to meeting their regular expenditure for food and other basic necessities at the household. The money lenders often prefer to give loan to the migrants, who go for foreign employment. However, they hesitate to support those, who are willing to run the enterprises in the home country unless they can produce strong collateral against the requested loan.

Lucrative Foreign Jobs Accessed Through Migration

Average earning of a migrant from the foreign employment ranges between Rs. 10,000.- and Rs. 15,000.- per month. It is not so lucrative if compared with the average monthly earning of a paid employee within the country (which is Rs. 5,000.- as reported by the NLFS, 2008).[9]

The skilled workers in the foreign job earn more than the average rate indicated above like the professionals earn the higher rates within the country in their jobs too. Likewise, the earning in the economically affluent countries like in South Korea, Japan, Europe and USA is higher than in the Gulf countries and India.

Current Employment Status of Youths

According to the National Labor Force Survey, 2008, the total number of employed persons has increased to 11,779 thousand from 9,463 thousand recorded in 1998/99. Despite such increase, the ratio of employment-to-population has decreased because of slower economic growth against a higher rate of population growth. From 84.3 percent of the population employed in 1998/99, the employment rate recorded in 2008 was only 81.7 percent. Around 73.9 percent of these employees are engaged in agriculture related activities followed by 26.1 percent in the non-agriculture sector.

Of the total number of employed persons, around 17 percent are paid employees, while the remaining 83 percent are self-employed. Among the self employed persons, around 1.1 percent is employers, who have other regular employees working for them. Another 43.8 percent work for themselves without any employee to contribute to their enterprise, In the case of remaining 55.1 percent, they simply work as contributing family members without any pay in the enterprise.

The number of males paid employees is 1.5 million in the country, while the female paid employees are just over half a million. Of the total paid employees, half a million males and around quarter of a million females are in the elementary occupations. Similarly, while there are around 116 thousand male employees as technicians, only 74 thousand female employees are technicians (NLFS, 2008).

Age factor is important element in the labour force participation. There are differences in the participation trend between urban and rural areas. In the urban area, the decline in the

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9 The average earning of male is Rs. 5,700.-, while for female it is Rs. 3,400. In the professional jobs, there is no rate differentials as indicated by these averages.

employment rate begins earlier than in the rural area. In the case of former, the age of 44 years is the beginning point of decline in the employment rate, while it is 59 years in the case of rural area.

Figure: Labour Force Participation Rates in the Urban and Rural Areas by Age Groups and Sex, 2008
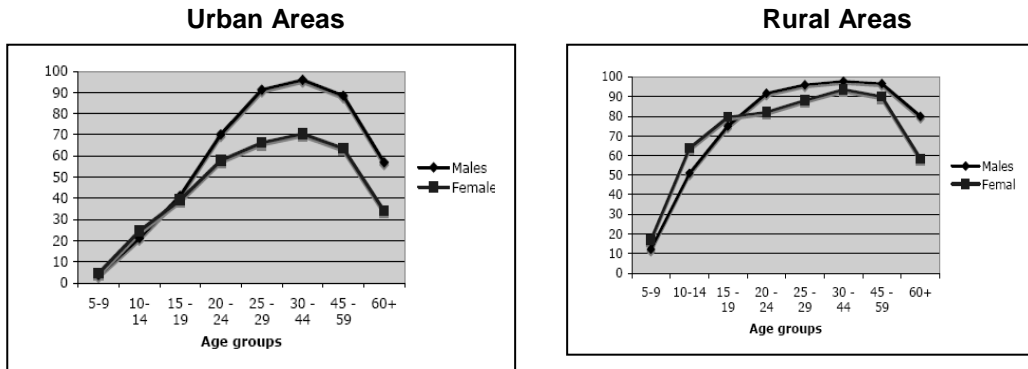
Urban Areas   **Rural Areas**

Source: CBS (2009), Nepal Labour Force Survey Report, 2008, Statistical Report, Central Bureau of Statistics, National Planning Commission, Kathmandu, July 2009.

Underutilization of economically active labour force is one of the problems. Most of them are utilized below 60 percent. The opportunity for active utilization is between 20 to 24 years only. After crossing 24 years, the underutilization process begins in the absence of availability of adequate employment opportunities.

Figure: Percentage of Economically Active Population above 15 Years Who Are Underutilized, 2008
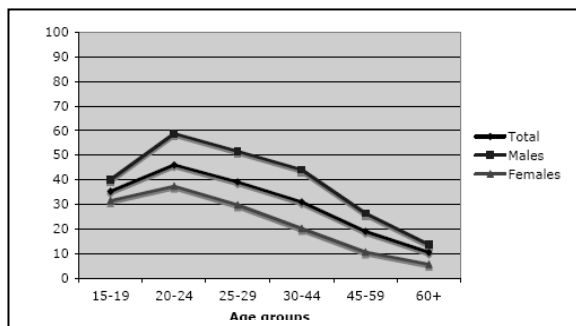
Source: CBS (2009), Nepal Labour Force Survey Report, 2008, Statistical Report, Central Bureau of Statistics, National Planning Commission, Kathmandu, July 2009.

The underemployment rate has increased in the recent years. From 4.1 percent observed for the age group of 15 years in 1998/99, it has reached 6.7 percent in 2008.

Potentials of Managing Migration for National Economic Development

Some agricultural pocket areas in Nepal are performing well due to their better access to roads, electricity, irrigation water and market connections. Crops have been diversified and commercialized. A tendency of growing high value crops and raising of improved breed animals for more productivity have been increased. This situation indicates that the farmers should not

totally lose their interest in agriculture provided that they can be given better access to basic infrastructural support.

It is evident that the area where agriculture is performing well to provide them livelihoods, the rate of migration is less. This situation indicates that most of the youths do not simply migrate due the attraction of pull factor alone but they are highly influenced by the pressure of push factor. The migration is high in the remote areas, where basic infrastructures for agriculture are lacking. This indicates inverse relationship between access to infrastructure and motivation to foreign employment. This is observed by the low rate of migration from the productive pocket areas, where the farmers have attempted to commercialize vegetables farming and multiplication of seeds. This situation reveals the fact that if the youths find viable options for employment within the country; they are unlikely to migrate outside.

Conclusion and Recommendations

There is a serious lack of employment opportunities to engage all economically active youths in Nepal. Therefore, they flee abroad in search of job due to push factor hinging upon the hope of ensuring livelihoods for the family members as the pull factor. Indeed, the country has recently experienced that what the Government could not provide with its planned development efforts for the past many years, at least the remittances brought by the migrants have done to some extent. It has helped many middle class and poor families to improve their quality of life. However, the Government should not simply remain as an spectator of such situation. Rather it should attempt to increase the number of meaningful employment opportunities within the country and reverse the trends of out-migration at the earliest possible.

For the transition period, it should make best use of current remittances for economic development. As remittance contributes to foreign exchange holdings and helps to mitigate balance of payment deficits, the Government should attempt to send more number skilled workers for the quality jobs and higher earnings than the labour. To improve the situation, the Government should invest more on human capital formation with technical training and enterprises development.

Majority of the migrants still fly through the informal channels. The capacity of the Department of Foreign Employment is limited to control such trend. As a result, many migrants fleeing from the informal channels are badly exploited and cheated by their brokers and the companies they work with. Dozens of migrants die in the foreign countries every day because of poor health care. Therefore, organizing migration systematically and making use of its benefits for national development is important.

In view of both positive and negative effects, the country needs two-pronged approach to handle the issue of migration. In one hand, it should reap benefits for the economy, while overcoming the associated social problems, on the other. The Government should treat migration as a transitional activity till the country can locally engage its youths with sufficient employment opportunities created. To move towards such direction, the implementation of following measures would be useful:

Ensure favorable investment environment: More investment opportunities should be created in the agricultural and non-farm enterprises. Necessary infrastructures (such as transportation, marketing and credit facilities) should be developed. The enterprises should be made more market-oriented and private-sector led. Value chain activities should be promoted.

Transform subsistence agriculture to commercial agriculture: Incentives should be provided for farmers to commercialize agricultures. The low-value based subsistence crop farming system (e.g. cultivation of staple food grains such as paddy, wheat, maize and millet) should be

transformed to a high-value cash crop farming (e.g. production of vegetables, fruits, potatoes, tea, coffee and herbs).

Establish forward and backward linkages in the production process: From the agri-business perspective, the production process should maintain both forward and backward linkages for the marketing of inputs and outputs.

Encourage the use of remitted money in generating more employment opportunities: Attempts should be made to generate more employment opportunities by enhancing more investment in agricultural and non-agricultural enterprises. Incentives should be provided for the use of remittance, among other sources.

Enhance financial literacy: Financial literacy should be developed to increase awareness about spending of remitted money on the productive activities. Both out-migrants and their family members should be guided about the best use of remittance.

Training on employable trades: Training should be provided on technical trades. The subject of training should be selected on the basis of their labour market friendliness.

Establish mutual support environment among the job seekers, trainers and employers: Mutual support environment should be developed among the Job Seekers, TTPs and Entrepreneurs.

Research: Research studies should be undertaken on the incomes earned by the migrants, their savings, remittance, expenditure pattern and the investments made. Attempts should be made to explore investment potentials of remittance in promoting business and industries in the country. It should also investigate potential utilization of skills of the returnees in the entrepreneurial tasks.

Minimizing migration: The migration trend should be reduced. Youths should be retained within the home country with creation of new employment opportunities. The jobs should be made more lucrative so that it will discourage the pull factors of migration.

Among other things, the country needs to promote vocational training outside the formal school system to develop skills of the workforce. Over a million (1,030 thousand) people have already been trained outside the school system in the country. The number of such trainees should be increased further. The subjects areas covered by such vocational training might include application computers in work, dressmaking / tailoring, health-related training, agriculture, animal husbandry, teacher training, driving skills, handicrafts, spinning, weaving, electrical repairs, hairdressing, beauty work, health care, crafts making, trade, cooking, food preparation, plumbing, welding, mason work, security guards etc. Of such training programmes, the training like hairdressing, beauty work, dressmaking, tailoring, handicrafts making, spinning, weaving and health care are women friendly.

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Technical Education, Vocational Training and Employment Generation

Bhuban B. Bajracharya, Ph. D.[1]

Abstract

This article broadly sketches the issues faced by the technical education and vocational training. TEVT has now reached to a certain height, and now it calls for review of institutional arrangements for further widening the access to different categories of target groups, streamline the organizations in terms of their functions and strengthening and developing a national framework for horizontal and vertical linkages to ensure systemic linkage between different education streams at different levels. Council for Technical Education and Vocational Training (CTEVT) is responsible for vocational training for secondary and post-secondary level students who opted to get out from the general school education stream – those who appeared in the test examination of SLC and those who passed the SLC examination. However, CTEVT curriculum is still to be linked to higher technical education run by universities. Since it does not have higher level of technical education, students undergoing the technical education under CTEVT system do not have opportunities to pursue higher education, and hence their career prospects are likely to be limited particularly to them with higher aspirations.

Background

Self-employment and small and medium enterprises (SMEs) are two important sources of employment for the estimated 400,000 new entrants to the labor market every year[2]. And they can generate further employment opportunities if they can increase their productivity level, and earn higher level of income and make demand for various other products in the economy. Nepal's labor productivity is one of the lowest in South Asia, and such labor productivity lowers the competitive strength of the country which exports market of various products will be adversely affected. For this, there is a need for enhancing skill level, and be familiar with the use of new tools, new technologies, and new ideas. And they can come from technical education and vocational training. The educational attainment of the workforce is low with 48% of them never attending the school. Even the substantial skilled and semi-skilled labor force are also found never attending a school.

Self-employment covers two important groups of people, one, engaged in works with hands-on skills transferred from older generation and which do not 'necessarily' require to be literate, and second who have acquired new knowledge and skills, and working for none other than oneself, and are literate. And both need to upgrade their skills though approach may not be necessarily the same.

Of recent, one more source of employment is increasingly getting important, and that is overseas labor market. In 2006 alone, some 200,000 people went abroad (other than India) for employment. It reached to almost 240,000 in FY2008. It is not clear in what sort of labor markets, the Nepalese labor force engage. But they vary from formal industrial sector to informal household sector. And there are reports that their skill level is quite low, and they could have earned significantly more than the current wage had they been adequately trained.

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[1] Author is the development economist with extensive experience in education and development.
[2] Nepal Labor Force Survey (NLFS) – 2008 has estimated labor force participation rate for population above 15 years of age at 83.4%.

The rapid change in science and technology has necessitated to timely update technologies to be competitive not just to compete with the products imported from other countries but also to face stiff competition to export our products to other countries.

Several questions could be raised in the context of knowing the skill level and providing the required level – how do we know that an individual has certain skill and what could be the evidence of such skills in the absence of referee, how does an individual get the skill and how is that certified to produce as evidence of having the skill, how can acceptance level of such certification be increased, and in what way skills to be imparted?

System of Technical Education and Vocational Training (TEVT)

TEVT is all about promoting and disseminating technology and skills, and knowledge generation is not its first priority. It could well include skill testing, and vocational qualification framework responding to the need of informal skill disseminating programs even to illiterate people having traditional skills to advanced technical education for an opening to higher education in the fold of knowledge generation and innovation. There are many masons and carpenters having adequate skills from their own inherited profession who may require formal recognition to be established in their labor market, and to be able to work in the modern framework of engineering design. At the same time, there are many highly intelligent skilled people who aspire to contribute to knowledge generation by pursuing higher education. The national vocational qualification framework can respond to these needs of various sections of the people.

Nepal has opted developing two distinct streams of educational development, particularly so at the school level and post-secondary level – general school education, and technical and vocational training. General school education covers early childhood development program to 10th. grade which is now extended to 12th. grade under recently implemented School Sector Reform Plan[3].

Council for Technical Education and Vocational Training (CTEVT) is responsible for vocational training for secondary and post-secondary level students who opted to get out from the general school education stream – those who appeared in the test examination of SLC and those who passed the SLC examination[4]. However, CTEVT curriculum is still to be linked to higher technical education run by universities. Students undergoing the technical education under CTEVT system do not have opportunities to pursue higher education, and hence their career prospects are likely to be limited particularly to them with higher aspirations.

CTEVT does not have any vocational training programs for students of lower grades below 10th. grade nor does it provide higher degree level of certificates. The general school education system has attempted to include some limited vocational component in its school curriculum – in the form of crafts at the primary level, pre-vocational at the lower secondary level, and some vocational papers at the secondary level. However, it has vocational training programs of various coverage (time as well as subject) for people who are not able to continue with higher education and/or who want to gain further/new vocational skills.

There is a growing demand for higher level of technical education programs from CTEVT to provide opportunities to the TSLC and Diploma holders to pursue further education, and to have

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[3] Restructuring of secondary level of education is planned after 2012.
[4] It has 18 technical schools throughout the country with increasing number of private technical schools also offering CTEVT courses of study. There are 4 polytechnics, and 2 vocational training centers getting support from the government through CTEVT.

some sort of qualification framework to provide provisions for opportunity to transfer to general higher education stream. Developing such a framework will also go a long way in consolidating diverse technical education and vocational training programs provided by different agencies into one national system. It will also provide an opportunity for better recognition for the graduates from other training programs.

At the moment, higher technical education is provided by the university system, and entry for the CTEVT graduates is not possible in the absence of linkages between these two systems. In the same vein, with a view to provide vocational subjects to the general school education to facilitate the possible school drop-outs to get absorbed in the labor market, CTEVT has organized Annex Program in a few secondary schools[5], and the school education system has introduced some vocational component in their curricula, including separate paper at the secondary level (i.e. at 9th. and 10th. grades). However, the effectiveness of these programs are subject to question due to very limited coverage (in the context of large number of students in the schools) and unsatisfactory service delivery for several reasons such as vocational component not being first priority of the school education, teachers not well versed in vocational education, limited choice of the subjects for the students due to which they have to make a certain choice by default, limited resources for equipping and updating the workshops, and above all inadequate preparedness on the part of school management to manage the vocational component. For these reasons, the School Sector Reform Plan has proposed to introduce soft skills in the vocational component in the schools which will help prepare the students for the labor market, and also for self-employment. The component of hard skills will then be taken care of by CTEVT system as is the practice right now.

Besides CTEVT regulating technical education and vocational training, it has also skill testing board under it. Being a service provider itself, it is regarded as a conflict of interest, and it is desirable for CTEVT to dispense with this function of testing skills.

Other independent technical education and vocational training programs are offered by other agencies including various government line agencies, one of the major ones being Department of Labor.

Service Providers, Cost, and Government Financing of TEVT

TEVT programs are usually costly because of necessity of having practical sessions, and well equipped workshops to conduct these programs. Moreover, these workshops need periodic and regular updates and upgrades to meet the demand of the labor market. With a view to respond to the market swiftly, private sector training providers are often found successful in providing market oriented training programs. There are countless number of private training service providers such as in the areas of computer operating and word processing, secretarial services, TV/radio repair etc. There are 329 other private training service providers which are more formal and affiliated to CTEVT. However, there are other VET providers which are not affiliated to CTEVT, award certificate to graduates by themselves. These certificates are not well recognized, and if trainees have to take up jobs in the formal organizations they will find it difficult to validate their certificates. But, they are working well when recognized certificates are not required, and when trainees opt for self-employment. In order to broaden their job market, it is worthwhile to have their skill tested and awarded certificates in the context of national vocational qualification framework. Hence, such qualification framework can help consolidate the efforts of these scattered service providers including those by government line agencies. In

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[5] There are only 15 schools with the Annex Program, with 15 more added in 2010.

this context, the existing institution arrangement responsible for skill testing needs to be strengthened for more independent testing and awarding certificates.

TEVT is receiving somewhat low priority at the moment, and of the education budget, only about 1% goes to this sub-sector in the Ministry of Education. There are also government financing in some other technical and vocational training programs provided in an independent way by some other line ministries and government agencies. Their financing is made through annual budget allocation for the respective line ministries. In view of the growing need for formalizing skill level for the diversified labor market, from informal domestic market to formal overseas market, these scattered efforts need to be consolidated and brought under national framework, and in this context Fund Board is one of the options that needs to be given serious consideration.

Way Forward

TEVT is mainly for generating and promoting quality employment. And, demand for skills from different quarters is very much visible such as i) people who have traditional inherited skills but need up-gradation and recognition for broader job market, ii) people who need to acquire new and modern skills even in their traditional professions, iii) school students who need preparation for new structure of job market and management practices, iv) students who do not wish to or cannot continue with higher education and enter into labor force, v) students who like to build careers in technical and vocational stream rather than in general liberal education, vi) students who wish to interchange between technical and general education streams. These categories clearly lead to two distinct education streams with the flexibility of interchange/bridging facilities calling for horizontal linkage between different education streams. At the same time, in order to recognize the skills from diverse sources of service providers and also to recognize the inherited skills, there is a need for strengthening and streamlining the vocational qualification framework and cover new areas for standardization. Hence national qualification framework needs to address both horizontal and vertical linkages.

It also means that CTEVT has to emerge more as a regulating body than a service provider itself and engage in structuring and restructuring the system. In this context, there is a need for reviewing the whole institutional arrangement for i) providing technical education and vocational training, ii) skill testing, iii) financing of the TEVT programs, and iv) developing horizontal and vertical linkages. It will lead towards higher level of institutional maturity. In view of the growing demand for expanding this venue, such a new perspective on institutional arrangement which also can expand this avenue in a wider scale has become absolutely essential.

Conclusion

TEVT plays a critical role in poverty reduction through generating and promoting quality employment. Due to its focused and specialized purpose to enhance skills through practical sessions, it has emerged as separate education stream with its own institutional arrangements for developing policy, providing education and training services, developing and strengthening qualification framework to recognize the skills obtained from different sources. Now, it is time to consolidate these efforts by even revisiting the whole institutional structure to provide TEVT in much wider scale to accommodate ever increasing work force. General school education can inculcate proper mindset for the labor market but would not be able to manage workshop based skills development programs in a scale demanded.

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Total Quality Management in Organizations Involved in the Production of Goods and Services: A Theoretical Perspective

Devi Prasad Ghimire, Ph. D.[1]

Abstract

Transformation of traditional management styles to TQM styles is the warranted need of time for producing quality goods and services for which the demand is tremendously increasing over time. This transformation requires both theoretical and practical knowledge. This paper, however, is the product of mostly theoretical reviews of various theories and models concerning the management.

The review covered a continuum of theories and models ranging from traditional vertical organizational structure to humanistic flat or horizontal ones. . Naturally, it is found that different theories/models view people differently. Most of American companies were using the vertical structures of organizations wherein a little attention is paid to shared values and humanistic elements in managing organizations whereas Japanese companies apply flat or horizontal types of structures wherein cultural and share values are incorporated in the working environment. The later style proved superior to the former one as a result Japanese product threatened the American ones during 1970s and Americans also started following Japanese style.

Most of people are not inherently lazy and laziness is the outcome of working conditions and incentives available to the workforce. Quick decisions for achieving both short and long-term goals, praising good jobs instantly not in absence but in presence of good doers with the reason of the praise and reprimand (push) the bad doers with reason so as to bring them in a right tract are the secrets for successful management of organizations.

Introduction

The 21-century is the age of consumers. The surplus goods and services produced by companies/firms that are not liked and consumed by the consumers not only go waste but also the cost incurred in producing them will be also wasted.

Consumers of goods and services are spread throughout in both domestic as well as in the international markets in the present globalized world. Consumers of different parts of the world have different tastes, interest and demands for goods and services. Whatsoever may be the case, consumers are being more and more cautious over time about their health and are generally ready to pay higher prices for the higher quality products and services. Production of such goods and services, however, requires the application of Total Quality Management (TQM) strategy in companies, firms, organizations, and institutions involved in the production of these goods and services. This paper, therefore, aims at explaining briefly and theatrically the major concepts/definitions, models and theories based on review required for improving TQM of organizations and institutions and transfer them to TQM involved in the production of quality goods and services since **"there is no theory without practice and there is no practice without theory"-** an universal philosophical statement.

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[1] Author is the Vice Chairman at CTEVT.

Definitions/concepts of TQM

The TQM is a philosophy of organization-wide commitment to: continuous improvement with focus on teamwork, increasing customer satisfaction and decreasing costs. It works through horizontal collaboration across functions, departments, suppliers and consumers. It is a revolution in management thinking, a way of getting rid of formal quality control systems, introduction of improving skills of workers and trust on them, a shift from a bureaucratic structure to decentralized control mechanism, and incorporates cultural values in organizational management

A. Models and Theories of Management

There are many models and theories that guide us to better quality management in the institution/organizations. A brief description of some of them is presented in this section.

a. The 7- S Model of Management

Mckinsey Wnit worrking in McKinsey consultative firm developed 7-S Model of Management during 1980s. It describes 7 factors for organizing companies in a holistic and efficient way and is based on comparison between American and Japanese management techniques. The 7 factors or 7-S are divided into "Hard Ss" and "Soft Ss". Hard Ss include strategy structure and systems and Soft Ss include staff, style and skills. The centrally located and encircled S interprets shared values, super-ordinate goals and organizational culture.

Hard Ss or "hardware" are separated on the basis of rational and factual aspects, which are generally followed by American companies. Soft Ss or "Software" management policy is developed on the basis of social and interpersonal behavior and is generally followed by Japanese companies.

The S located at the top of circle in the diagram represents structure and others moving clock-wisely represent systems, style, staffs, skills and strategy. Followers of "hardware", i.e. Americans feared from the results of Wall Street Journal Survey carried some 25 years ago from the result of that survey which reported that 3/4th Americans products were either equal to or superior to American ones. Similarly, NBC documentary entitled "if Japan can why can't we" challenged US standards. Since then managers started realizing the superiority of "software" to that of "hardware". Consequently, US also acknowledged superiority of Japanese horizontal organizational structure than her vertical one. As a result, transformation of management from Fordism to Toyataism was taken place rapidly in the late 1920s. Fig.1 presents the interrelationship of 7-S diagrammatically. A brief description of each S and their meaning is presented in this section.

1. Structure

According to Stoner (1999) organizational structure refers to the way in which an organization's activities are divided, organized and coordinated. The 4 Steps of organizing are division of work, departmentalization, hierarchy arrangement and coordination. Formal organizational structure defines positions with their corresponding authority and responsibility and is generally followed by American companies whereas informal organizational structure refers to behavioral and undefined inter relationships among staff and is generally followed by Japanese companies.

2. Systems

According to Henley (1991) systems refer to formal and informal procedures that allow organization to function. It is a codified knowledge organized in a logical sequence. Systems are processes, rules, technology, and manuals to ensure work done efficiently.

3. Style

According to Hanley (1991) style refers to culture and manager/leader's behavior, "philosophy," values and shared beliefs adopted by managers in use of their power. It is a pattern. There are many styles of a manager/leader major of which are as follows:

   i.   Task-oriented style- it closely supervises employees to ensure task is performed satisfactorily.

   ii.   Employee - oriented style- it emphasizes on motivation rather than controlling sub-ordinates/employees.
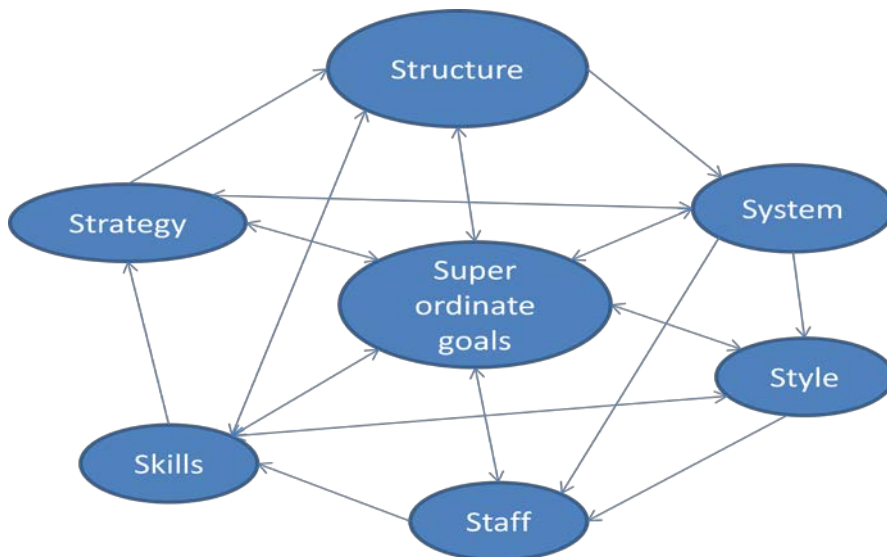
Fig 1: Diagrammatic representation of interrelationship of 7S Model

4. Staff

According to Weihrich & Knoontz (1994) staff refer people in the organization and their socialization into the organizational culture. They are stakeholders employed by an organization/institution. Similarly, according to Hanley (1991) and Stoner (1999) staff mean quality and quantity of people employed who are valuable resources and should be carefully nurtured, developed, guarded and allocated.

5. Skills

Skills refer to competence the organization needs in people in order to perform tasks to a high standard. Major types of skills are as follows:

i.   Technical skill - It is an ability to use knowledge/techniques of specialized field.

ii.   Human skills - It is an ability to work with, understand and motivate people as individuals or

groups.

iii. Conceptual skill - It is an ability to coordinate and integrate all organization's activities and interests.

6. Strategy

Strategy refers to a course of action that explains how an enterprise moves from the business of origin to the business it is needed/consumed. It is a broad program for achieving institutional objectives in response to its environment over time. Major types of are as follows:

i.   Corporate strategy - It is formulated by a top management to oversee the interest and operation of a multilane institution.

ii. Business strategy - It is an unit formulated to meet the goal of a particular business.

iii. Functional strategy – it is formulated for performing functions of a specific functional area.

7. Super-ordinate Goals

Super-ordinate goals (shared values) are guiding concepts, values, inspirations that unite institution in common purpose. They have deep meaning within institutions and rise above profit targets and growth objectives by relating the goals to deeper human needs and principles.

b. Theories of Management

There are number of theories/models that guide managers/supervisors of organizations /institutions to better manage them so as to enable and produce better quality of products in form, time, and quantity as desired by the consumers. This help save time, money and materials for sustainable development of companies/organizations/institutions in the context of present competitive world. A brief description of some of major and important theories/models is presented in this section.

1. Motivation Theories

According to Beltran Zose, ("n.d") motivation refers to an idea constructed by psychologists to explain variation in direction and intensity of action. It causes us to behave the way we do in a given situation. Major motivation theories are as follows:

i. Theory X and Theory Y - These theories are the theories of human behavior developed by Dauglas McGrey while working at MIT Sloan School of Management during 1960s which were published in his book "The Human Side of Enterprise". Theory X contents traditional set of assumption about people. It assumes most people dislike work and will try to avoid if possible, whereas Theory Y implies to more humanistic and supportive approach to managing people. It assumes people are not inherently lazy but laziness, in his view, is a result of employees' experience with organizational environment.

ii. Need Theory - Abraham Maslow working and experiencing during 1940-50s published "His Hierarchy of Needs" in his book "Motivation and Personality" (1954). This theory states that people work hard to meet their needs as long as they are not met. According to him needs are classified as (i) basic or physical and (ii) secondary or social/psychological needs. Primary or physical needs arise from the basic requirements and are important for the survival of human being. Secondary needs are the needs of mind and the spirit. Needs are

not of equal strengths and generally emerge in a certain priority. One goes to upper level needs only after his/her lower level needs are fulfilled. Fig. 2 and 3 represent the "Hierarchy of Needs" in a Pyramid and schematic diagram, respectively.

Being needs

Self-actualization
Capable of using skills to maximun

Esteem Needs
people need to feel they are worthy of work

Belonging Needs
love, belonging ... mix up in society

Safety Needs
bodily and economic security

Physiological Needs
survival needs, i.e., food, fiber, shelter, water, air, sleep

Deficit Needs
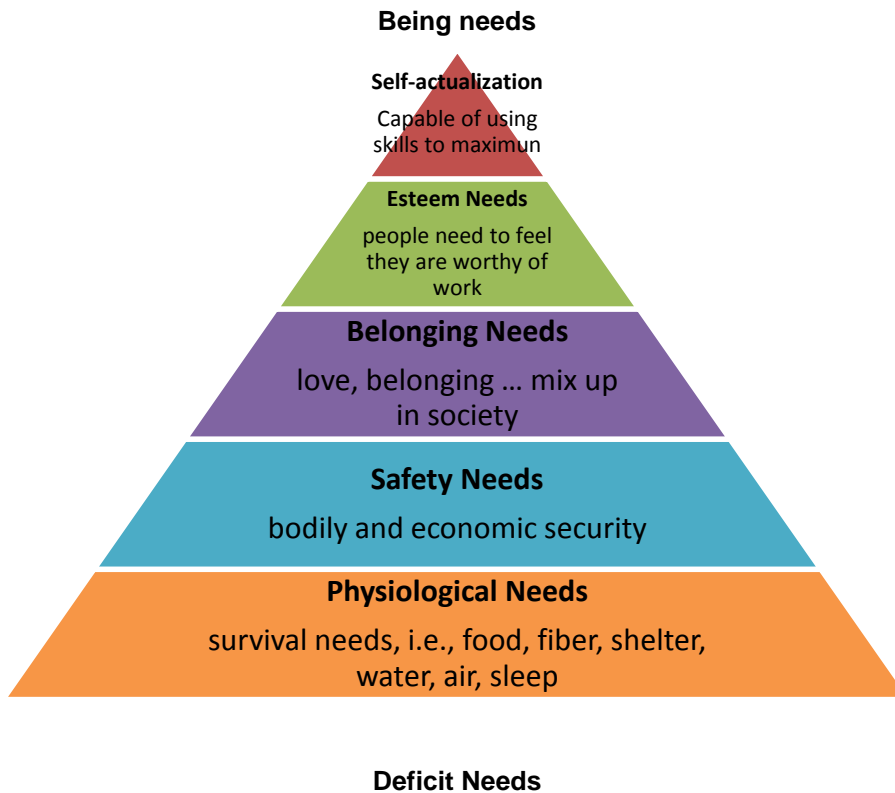
Fig. 1. Maslow's Hierarch of Needs

Hierarchy of needs model suggests that provision of career ladder for employees is the most for prosperity and sustainability of human being whether in organization or outside of them.

iii. Theory Z - It is an integrative model of organizational behavior proposed by William G. Ochi in 1981. It states that behavior prescription for management must be woven with organizational environment. It adopts the elements of effective Japanese management systems to US workforce. Features of this theory are long-term employment, individual responsibility, less formal control system, slower rates of promotion and so on and so forth. It applies horizontal organizational structure and considered to be superior to American vertical one.

iv. Motivation-hygiene Theory - It proposed by Herzberg by collecting data from large number of engineers and accountants. This theory was published in a book "a Motivation and Hygiene to Orthodox" in late 1950s. This theory considers 2 factors for motivating workers to be effective. The first is hygiene or maintenance that operates across a continuum ranging from dissatisfaction to no dissatisfaction. For avoiding dissatisfaction proper policy, supervision, congenial working environment and relations, better salary, recognition of status, provision of

security, etc. must be supportive. The second-class factors are referred to motivators or satisfiers, which are recognition, achievement, challenging work, possibility of growth and advancement.

v. Competency Motivations Theory - American psychologist Herzber wsner and Snyderman developed this theory during 1950s. This theory is assumed to be a drive to do high quality job. It emphasizes on mastery in jobs, development of problem solving skills and strive to be innovative for profit making.

vi. Expectancy Theory - This theory is developed by Vroom (1964) and attempts to explain behavior in terms of individual's goals, choice and expectation of achieving them. It assumes that people can determine which outcome they prefer and can estimate the chance of obtaining them according to which they put their efforts in accomplishing works.

c. The One Minute Manager

This is not a theory but a small book written by Blanchard and Johnson during early 1980s and published in 1985. It became near immediate best-seller but authors perhaps did not know this until a bright young man looking for an effective manager of a most successful sales company which found fullest application of 3 secrets of mentioned in the book. His finding was widespread and most of government and non-government managers of developing and developing countries urged to apply these 3 secrets in their companies/institutions to fully utilize their capacities for the production of quality products and services in form, time and quantity in the contest of present competitive world. A brief description of each secret is as follows:

1. The first secret is "the one minute goals" means there will be quick meeting for setting clear goals and making agreements among parties. Such meeting aims at confirming both short and long-term goals and how each employee must contribute to achieve these goals.

2. The second Secret is "the one minute praising" means that the manager must praise his/her best performer(s) employee(s) immediately not in his/her absence but rights in front of them tell why they are praised/rewarded.

3. The third Secrets is "the one minute reprimand" " means that that one must not hesitate to reprimand immediately with reasons why they are reprimanded so as to enable mistake makers not to repeat the same and come back on the right track.

Conclusion

This paper is the outcome of review results of various theories/models of managing organizations/institutions involved in the production of essential goods and services. The result shows that consumers of 21-century are being more and more attractive towards quality rather than quantity. Such products could, however, be produced in organizations/institutions where TQM principles are fully applied. This requires the transformation of traditional management systems to the modern ones (vertical to horizontal), which include shared and cultural values and is being rapidly done over time.

Creation of inspiration, incentives and encouragement among employees requires quick decisions, instant praising for the good works with reason and reprimand for the bad one done with also the reason are the tips of a successful management. Thus, this paper concludes that the theories and models of management presented in the text if understood well and applied systematically will help better manage organizations/institutions for the production of quality

goods and services that could be made available in time, form, quality and quantity that helps sustained the growth and development.

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Models in TVET

Ram Swarup Sinha, Ph. D.[1]

Abstract

Poverty reduction is the main development goal of the Tenth and Three Years Development Interim Plan and it is expected to accomplish through appropriate education and training system that enhances the employment and earning potentials of people. However, relevant and meaningful education and training programs accessible to all that capacitates people for employment and earning. Many young people who have completed educational programs of various levels are finding difficulty to get a relevant job because education and training they have received is not linked to the world of work. The problems are even more serious among young people who had no schooling or limited schooling.

In Nepalese context, as depicted by the trend till date, people enrolled in grade one by the time reach secondary level only 16 percent get through test examination (district level preliminary exam before SLC.) Rest of the 84 percent either leaves school at primary or lower secondary education level or never gets through test examination. Ironically, this mass of out of school have not been addressed systematically by any entity; be it government or private sector to give them alternative career pathways so that they get an opportunity to become productive human resource of the country. Even the country's tenth and three years interim plans have not been able to address this critical mass pragmatically and systematically.

Of course, there are short-term vocational training courses provided by various entities (technical training providers) offering only livelihood skills rather than career path. Moreover, they are in a scattered form. The technical and vocational education and training (TVET) system of Nepal mostly caters to Test and SLC graduates. This means training programs are focused on secondary level graduates while leaving a vacuum for those who neither can go into the mainstream general education nor the TVET system (no access for vertical and horizontal linkage). However, this is the deprived and excluded masses who are contributing the most in generating national revenue with their employment in foreign countries.

Concept

The issue of Vocational Educational and Training (VET) has been a matter of concern of many countries for a long time. During the post-independence era also arguments have been advanced in favor of VET in developing countries; leaders such as Mahatma Gandhi, Mao and Julius Nyerere have been quoted in support of such educational reforms. VET was viewed as the solution to the educational problems in the developing economies, and unemployment among college and secondary school graduates. These assumptions were based on:

Differentiation of occupation in the developing economies requires secondary school graduates with varied skills. Vocational education can produce exactly this kind of human resources.

The Dakar Framework of Action (2015) stated ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs. The global economic crisis has pushed learning and skills up the political agenda. Youth unemployment is rising from already high levels: the projected rate for 2009 is between 14-15 percent compared with 12 percent in 2008. Government across the world now face the challenges of providing immediate support to the vulnerable while equipping people with the skills they need to re-enter labour market (GMR,2010).

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Vocational education would contribute to such progress, both by reducing unemployment, through creating employment in the fields of pre-vocational specialization and self-employment; and by engendering a higher propensity for labor force participation at the end of secondary schooling, improving productivity, and correspondingly resulting in higher graduate earnings. Vocational and technical secondary education can establish a closer relationship between school and work. (John and Rye, 2002)

Similarly, UNESCO (2002) highlights

Technical and Vocational education is understood to be an integral part of general education; a means of preparing for occupational fields and for effective; participation in the world of work; an aspect of lifelong learning and a preparation for responsible citizenship; an instrument for promoting environmentally sound sustainable development and a method of facilitating poverty alleviation."

General and vocational education

John P Keeves and Rye Watanabe (2002) state that

> *This is a "tough choice" in many developing countries (Yang, 1998, p. 289). In the human capital framework, general education creates 'general human capital' and vocational and technical education 'specific human capital' (Becker, 1964). The former is portable across one's life and from job to job, while the later one is not and hence many advocate general education, as more suitable to the flexible labour force that can change task and even the type of work; but the later one has an advantage, imbibing specific job-relevant skills, that can make the worker more readily suitable for a given job and would make him/her thus more productive. Hence both are important, and education systems in many countries therefore include both general and vocational streams of education in varying proportions."*

This above system should be directed to abolishing barriers between levels and areas of education, between education and the world of work, and between school and society through appropriate integration of technical/vocational and general education at all levels; the creation of open and flexible educational structures and the taking into account of individuals' educational needs, the evolution of occupations and jobs recognizing work experience as a part of learning.

Different Models of TEVT in Various Countries

The UK

In the UK Vocational Education and Training (VET) includes commercial, technical and professional development. All of these require **knowledge, understanding and skills** which together we call **competence**. Competence is the key to economic success in a competitive global economy.

Brunai

The duration of schooling at lower secondary level is three years. At the end of the third year, students sit for the Penilaian Menengah Bawah (PMB) or Lower Secondary Assessment examination. On completion of the PMB examination, students will be channeled into a Science, Arts or Technical stream.

China

The system of Vocational Education consists of education in vocational schools and vocational training. Vocational education in China is provided at three levels: junior secondary, senior secondary and tertiary levels. Basic professional knowledge and skills are provided to workers, peasants, and employees through junior vocational schools.

Solvania

The planning, programming and provision of vocational education are a joint responsibility of social partners (employers and trade unions) and the state. Common aims and goals of secondary vocational and technical education were defined in a common curricular document. This document stresses attainment targets in interdisciplinary fields and interest areas.

The Republic of Korea and Singapore

The long-term economic performance of the Republic of Korea and of Singapore is well known. In both countries, technical and vocational education is based on the solid foundation of a relatively high level of attainment in general education. In Korea, the development of primary education raised the literacy rate from 22 per cent in 1945 to 90 percent by the early 1960s. It is estimated that in the mid-1980s more than 90 percent of young people entering the manufacturing sector had some form of secondary education.

Finland

The structure of VET system of Finland provides opportunities for all the learners for general and technical education up to higher/university education. The knowledge and skill fusion at all the levels of education system is interlinked to the labour market. The figures of VET system of Finland and the population that has attained at least upper secondary education (2008) are given below:
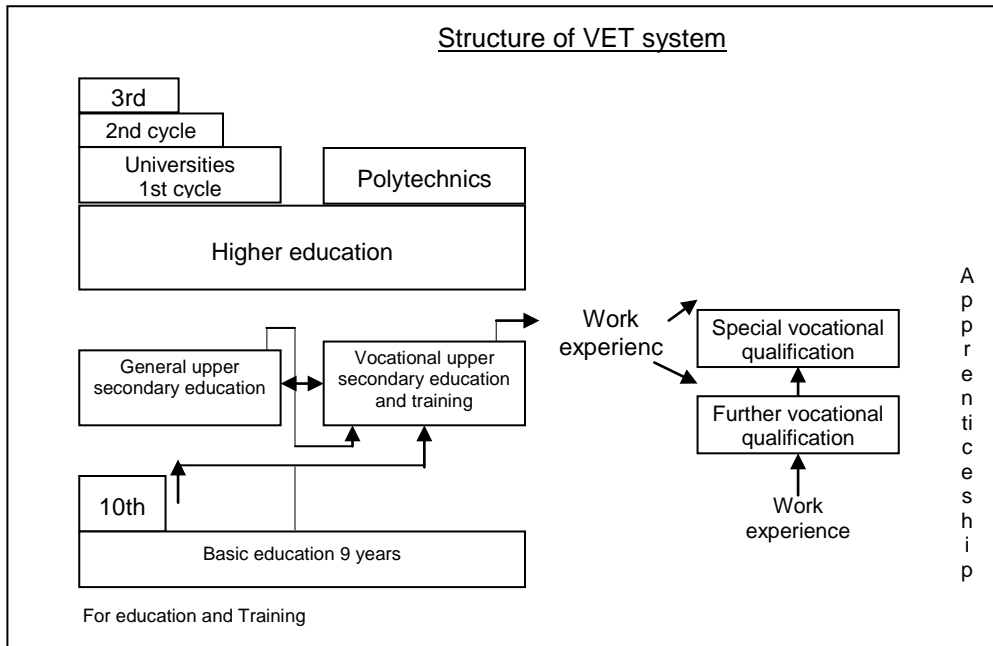
Source: Finish National Board of Education
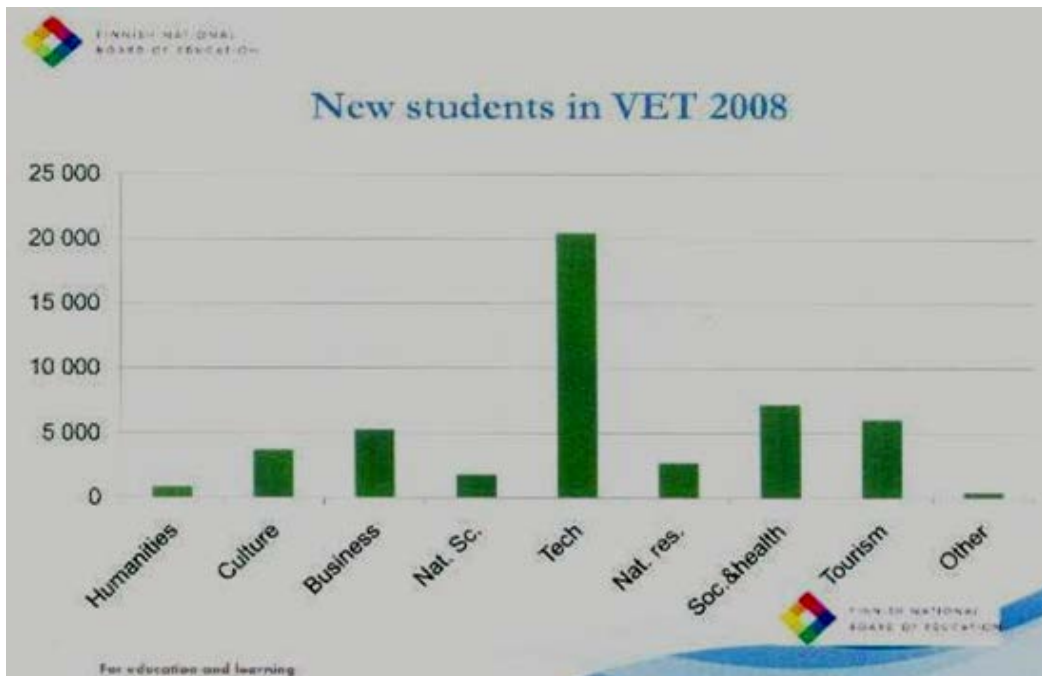
Source: Finish National Board of Education

Norway

The first stage at which VET is provided in Norway is at lower secondary level through Elective programme subjects (utdanningsvalg). These enable 8–10th year students to try out subjects from the different upper secondary level programmes including VET.

Having completed lower secondary education, a student can choose to enter one of the following nine Vocational Education Programmes: Programme for Technical and Industrial Production; Programme for Electricity and Electronics; Programme for Building and Construction; Programme for Restaurant and Food Processing; Programme for Health and Social Care; Programme for Media and Communication; Programme for Agriculture, Fishing and Forestry; Programme for Service and Transport; Programme for Design, Arts and Crafts.

The standard model for VET at upper secondary level is often called the 2+2-model. This refers to the division of the standard four year programme into two years school-based training followed by two years enterprise-based training which corresponds to one year in school. The model carries a certain degree of flexibility depending on the different programmes.

After the first year at upper secondary level in one of the nine programmes, the student has to choose between several specializations in year 12 leading to a further specialization in year 13 when the profession is chosen. The subjects within VET are divided into Common Core Subjects, Common Programme Subjects and In-depth Study Project (prosjekt til fordypning). As the curricula are regulations, the schools and training establishments are bound by their content.

Should a student wish to transfer to a General Studies Programme, s/he may do so by completing a year of Supplementary Studies Qualifying for Higher Education.

Main Model			
2 years in School		2 years in apprenticeship in Enterprise	
Vg 1	Vg 2	Training	Final Examination
		Productive work	

Programmes for General Studies		
Vg 1 in school	Vg 2 in school	Vg 3 in school

→ Certificate of Upper Secondary Education

Supplementary Studies Qualifying for Higher Education

Programmes for VET

Vg 1 in school	Vg 2 in school	Vg 3 in school
	Apprenticeship in Enterprise	
	Apprenticeship in Enterprise	

1 Year	2 year	3 year	4 year

- Trade Certificate
- Journeyman's Certificate
- Certificate of Upper Secondary Education

Experience based Trade Certification
The experience based trade certification scheme has existed since the 1950s and gives adults the right to pass the Trade or journeyman's Examination upon proof of long and relevant practice. The scheme has played an important part in the establishment of new trades and is an important recruitment tool for trainers and members of the Examination Board.

Source: Vocational Education and Training in Norway

Nepalese context

Poverty reduction is the main development goal of the Tenth and Three Years Development Interim Plan and it is expected to accomplish through appropriate education and training system that enhances the employment and earning potentials of people. However, relevant and meaningful education and training programs accessible to all that capacitates people for employment and earning. Many young people who have completed educational programs of various levels are finding difficulty to get a relevant job because education and training they have received is not linked to the world of work. The problems are even more serious among young people who had no schooling or limited schooling.

In Nepalese context, as depicted by the trend till date, people enrolled in grade one by the time reach secondary level only 16 percent get through test examination (district level preliminary exam before SLC.) Rest of the 84 percent either leaves school at primary or lower secondary education level or never gets through test examination. Ironically, this mass of out of school have not been addressed systematically by any entity; be it government or private sector to give them alternative career pathways so that they get an opportunity to become productive human resource of the country. Even the country's tenth and three years interim plans have not been able to address this critical mass pragmatically and systematically.

General Education

- Out of an age cohort about 80% enter primary school and about 57% complete it. (DOE, 2006)
- About 25% of age cohort completes lower secondary education
- Approximately 14 persons out of total100 students enrolled at grade 1 complete secondary education with School Leaving Certificate Examination (SLC).

Formal Technical Education

- About 3% of an age cohort takes part but exclusively in Post Secondary and Higher Secondary levels.

Source : Sharma (2007).

Of course, there are short-term vocational training courses provided by various entities (technical training providers) offering only livelihood skills rather than career path. Moreover, they are in a scattered form. The technical and vocational education and training (TVET) system of Nepal mostly caters to Test and SLC graduates. This means training programs are focused on secondary level graduates while leaving a vacuum for those who neither can go into the mainstream general education nor the TEVT system (no access for vertical and horizontal linkage). However, this is the deprived and excluded mass that contributes the most in generating national revenue with their employment in foreign countries.

Current issues and challenges

In many developing countries technical and vocational education has suffered from a combination of under financing, poor design, negative parental attitudes and weak links to employment markets. The experience of regions differs greatly. The research showed that in developed countries about 16% of secondary students were enrolled in technical and vocational education compared with 9% in developing countries in 2007. The enrollment rate was the lowest in secondary schools in sub-Saharan Africa 16% and South and West Asia 2% work

variation existed (GMR, 2010). These data show that difference of student enrollment of VET and secondary education is significant in some developing countries which are behind in comparison to developed countries.

In a competitive labor market, the quality, efficiency and relevancy of TEVT program offered must be of paramount interest to all technical and vocational institutions. To maximize the employment potential of their graduates should be the main goal of technical schools/institutions in the country. However, TEVT system in Nepal faces the following issues and challenges, which require immediate attention as:

  a. Poor access to education/training

  b. Training irrelevancy

  c. Low quality of education/training

  d. Lack of post-training support

  e. Ineffective co-ordination among TEVT providers

  f. Inadequate attention on basic skill training

  g. Inadequate and inefficient funding

  h. Centralized operation and poor management

  i. Systematic problems

Where to go from?

The success of technical and vocational education programs is highly variable. It also depends on conditions outside the education sector. From the review of Asian experience, a few important lessons, as given below, can be drawn for the development of VET in developing countries like Nepal:

1. Reinforce the links between education and labour force.

2. Plans for VET should be preceded by detailed human resource analyses and forecasts. Though the importance of human resource planning and forecasting process has declined, and governments must adopt and renew vocational programs in the light of changing circumstances.

3. Since both general and specific human capital contribute to economic growth, a balance has to be maintain between size of general education and vocational education. It should also include, like in Japan and Korea and Finland general skills and attributes that are useful across a wide variety of occupations.

4. Vocational and technical skills are to be provided in schools, institutions and enterprise-based organizations.

5. As vocational education is necessarily expensive, the government should make adequate allocation of resources for vocational education. Poor investments cannot yield attractive returns.

6. It also requires linking of vocational education with higher and general education so that vocational education is not perceived as dead-end, with no opportunities to go for higher education and training to be used for transferable credits into technical and general education.

7. Integrate vocational programs into national skills strategies aligned with the needs of high growth sector.

8. Given the experience of many countries in Asia, except Japan, the government has to take a dominant role in promoting VET. Private sector may not be able to provide good quality VET.

9. Last, issues relating to VET are not just curriculum questions, nor are they just economic. They are intricately linked with social, cultural, historical, economic, technical, and political parameters. Hence formulation of sound and effective policies and plans of VET requires an inter-disciplinary development approach, treating VET as an integral part of overall educational planning/system.

Soft Skills in the Nepalese context

These skills "enable learners to perform job-related competencies." Therefore soft skills associated TEVT for Nepal will have the following three essential components in which soft skills are crosscutting and infused within those components:

1. Strong foundation of general education (National language, English, Science, Mathematics and Social Studies),

2. Soft skill focused career planning supplemented with practical arts and crafts skills at the basic level,

3. Enterprise education focusing on self-employment and entrepreneurship development (modernization of traditional skill will be included as enterprise).

These components including "Soft Skills" can be expressed in the following figure.

Integrated model of TEVT - Soft
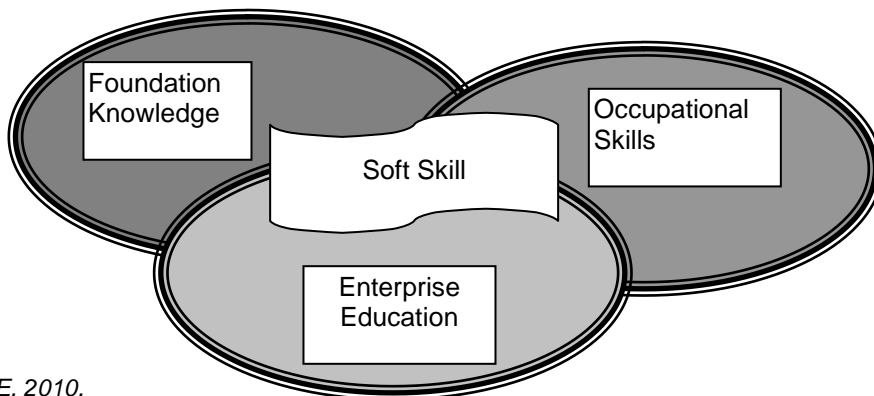
Source: MoE, 2010.

Soft skills associated TEVT are those occupational areas which offered as specialization focusing on demands of the employment market. Such occupations will have employment demands as well as high potential for self-employment. Soft skills associated occupational preparation will require minimum investment for equipment, physical facilities, consumption of raw materials and teacher preparation. TEVT involving heavy investment in equipment, workshops and other infrastructure will be the responsibility of Technical Schools and Polytechnic institutions under CTEVT. The following occupational areas are suggested for soft skills associated TEVT in schools as optional subjects for occupational employment skill development.

1.   Agriculture, Food & Natural Resources focusing on agro enterprise,

2.   Arts, Audio/Video, ICT,

3.   Public Administration and Legal services,

4.   Business Management, Finance and Administration,

5.   Hospitality, Tourism and Human Services, and

6.   Marketable traditional skills.

Some of these vocational subjects are being offered in secondary and post-secondary levels of school education even these days. These occupational areas will (a) not require substantial investment, (b) be easy to find and train trainers, (c) be easy to integrate in existing curriculum framework, (d) nor require much consumable training materials, electricity and other utility, and (e) be easy for schools to implement and offer these occupational preparation programs.

TEVT Integrated Model

The government of Nepal is now implementing the School Sector Reform program (SESP). According to the plan, the following figure can be instrumental in linking work force education and general education:

Workforce Education and General Education Linkage in Nepal
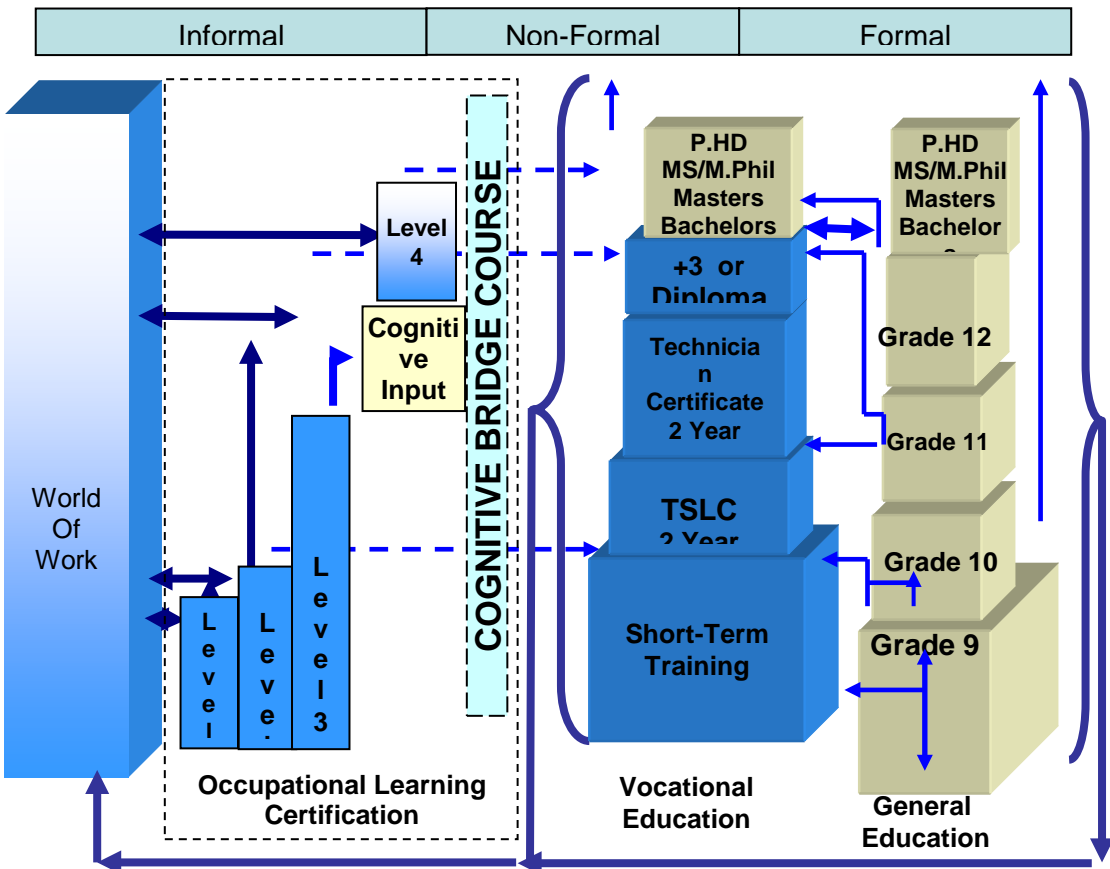
The above figure links formal, non-formal and technical education and vocational training and also certification of general and occupational learning. The program is a changing dimension of the paralleled education system to integrated education system focusing on the opportunities for opening both the entering and exiting doors to all learners. It is expected that secondary education with a focus on both general and TEVT not only helps in preparing competent and skilled graduates for current job market but also in enhancing level of learning to develop their technical know-how, and in making them competitive in the national and international job markets. Similarly, it opens channels for secondary students to enter into non-formal, vocational, and open learning streams. By providing opportunities to secondary students in remote locations, the new structure can be instrumental in addressing equity agenda education system of the country.

Conclusion

Nepal is facing a complex development setting of conflict and political instability because of poverty and its manifestations in terms of regional, gender, ethnic, and caste-related inequalities; inadequate governance and failure to deliver adequate and essential social services and facilities to rural communities and marginalized groups. The existing situation calls for reform in education and training system that has strong connection with the world of work and the national economy**.** Finally, it can be said that there is a complex relationship among education and training, poverty reduction and employment. So, which and what types of models are suitable for an industrial country depend upon their social, culture and economic structure including education system.

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Effective Learning for Sustainable Development

Dhruba Prasad Dhungel[1]

Abstract

Doing with less and conservation is the theme of the article. Human learning should be geared to make the sustainable development giving emphasis on socio-cultural, economic, environmental perspectives and awareness raising. Variation on consumption of natural resources has been dependent upon the prosperities of the countries which is in fact is not sustainable and needs rethinking to share the natural resources consummations in diversified manner making it more inclusive in world scenario. Some world tragedies are enlisted which has challenged the sustainable development of human pursuance. Correcting activities are less efficient once the degradation occurs. Strategies identified in sustainable development are alignment, efficiency, sustainability and effectiveness.

Introduction

Modern world is struggling to control the nature using science and technology as a means. The scientific and technological development has overcome the power of nature on certain aspects but it is far away things to control it significantly. Scientific and technological innovations regarding process and product changes to cope with the nature has definitely eases the life of human beings at the same time the side effects of natural degradation also has been a big concern for people of this planet at the moment.

The knowledge power of human beings has encouraged this creature to go on trying things with new ideas, new process and new materials. Sustainability has the close connection with forestry, during 18th century in Europe as the equal number of trees had to be planted to fell the trees required. In 1970's when there was acute oil crisis, the term expanded with alternative and renewable energy and has its impact on all aspects including teaching and learning.

Sustainability is a visionary philosophy which is receiving increasing attention in business and society. This notion can be traced back to Agenda 21, a global agreement among 160 countries in Rio in 1992. A balance among economic, environmental, social and global factors and interest is the objective.

Learning the approaches to development that balance economic and social progress, address cultural difference, conform to global, national and local needs, and respect ecological values and limits is the key to sustainable development. If this learning can be expanded and used frequently, then it becomes effective learning. It is not a branded and constant approach and might be quite different from country to country and society to society.

Awareness raising

Sustainable development points towards a realization of the crisis that exits in terms of matters economic, social and environmental and as such requires concise appreciation by way of precise evaluative analysis. The extent of said crisis presents an inherent need to promote and implement SD initiatives in accord to the basic ideological principles, these being:

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1. Doing more with less
2. Preserving rather that depleting
3. Developing meaningful partnership

As with all matters of serious endeavor there has to be a point of embarkation, in terms of SD this most definitely resides with the need for effective Awareness Raising.

Greening curriculum (Woods, 2004) concepts aims to increase sustainable awareness amongst learners and staff, whilst disseminating good practices to other educational establishment and partners. The International Implementation Scheme for the United Nations Decade of Education for Sustainable Development identifies a range of common themes of sustainable development across socio-cultural, environmental and economic perspective, including:

Socio-cultural perspectives

Human right: A respect for human rights is a sine qua non of sustainable development. This approach should inform policy formulation at all levels, leading the right-based approach to development. Effective training and sustainable development must equip people to asset their right to live in a sustainable environment. This may involve lobbying and advocacy, for example to limit forestall destruction of forest habitats by road-builders or the extractive industries, major dams, hydropower etc.

Peace and human security: Enabling people to live in an environment of peace and security is fundamental to human dignity and development. Too often fragile processes of sustainable development are undermined by insecurities and conflicts. These result in significant human tragedies overwhelming health system, destroying home schools and often whole communities and leading to increasing number of displaced people and refugees. Effective training for sustainable development seeks to build skills and values for peace in the minds of humankind.

Gender equality: Pursuit of gender equality is central to sustainable development where each member of society respects others and plays a role in which they can fulfill their potential. The broader goal of gender equality is societal goal to which education, along with all other social institutions must contribute. Gender issues must therefore be mainstreamed from infrastructural planning to material development to pedagogical process. Effective learning should give chance to for changes behaviors for sustainable development to the next generation.

Cultural diversity and intercultural understanding: Many opportunities for education and sustainable human development are undermined by the lack of tolerance and intercultural understandings, upon which peace is founded. The perspective must inform not only the content of educational program but also characterize teacher/learner and learner/learner relationship. Learning situations of all kinds are ideal opportunities for practicing and deepening for understanding of diversity. Local knowledge is repository of diversity and resources in understanding the environment and in using it to the best advantage of current and future generations.

Health: Issues of development, environment and health are entwined-ill health hampers economic and social development triggering a vicious cycle that contributes to unsustainable resource use, and environmental degradation. A healthy population and safe environment are important precondition for sustainable development. Hunger, malnutrition malaria, water borne disease drug and alcohol abuse, violence and injury unplanned pregnancy HIV/AIDS and other sexually transmitted dieses are some of the examples that have enormous implication to health.

Effective learning should have provisions health education and service with stakeholders' and communities.

HIV/AIDS: The ravage of the HIV/AIDS pandemic in Africa and rising incidence in South Asia undermine sustainable development and educational processes. It is urgent to look at alternative approaches to education and training in situations where, orphans, missing teachers the burden of social services make traditional educational dysfunctional or irrelevant. Sustainable development itself takes on an different complexion in such circumstances and will require specially tailored measures and supports. Nevertheless education remains on of the best hopes to stimulate the behavior changes and cooperation needed to stem the pandemic.

Governance: At local, national and international levels, sustainable developments will best promote where governance structures enable transparency, full expression of opinion, free debate and broad input into policy formulation. Such a frame will give the best opportunity for effective learning to bear fruit in terms of the full participation of citizens in setting parameters for sustainable development and good governance.

Environmental perspective

Natural resources: (water, energy, agriculture, biodiversity) Effective learning continues to highlight the importance of addressing. In particular, the link with societal and economical consideration will enable learners to adopt new behaviors in the protection of world resources, which are essential for human development indeed survival. Humanity is dependent on the goods and services provided by ecosystem. Thus protection and restoration of earth's ecosystem is an important challenge.

Climate Change: Effective learning brings to the awareness of learners the crucial need for international agreements and enforceable quantified targets to limit damage to the atmosphere and check harmful climate change. The Kyoto accord, adopted by the UN, committed 160 countries to quantitative emission reduction targets, but remains to be ratified by countries responsible for 25 percent of global carbon ratified by countries responsible for 25 percent of global carbon emissions, Effective learning could be a key means to lobby for emissions. Effective learning could be a key means to lobby for it

Rural transformation: In spite of rapid urbanization, three billion or 60 percent of the people in developing countries in transition, and half of the people of the world, still live in rural areas. Three quarters of the world's poor those earning less than a dollar a day the majority of these female, live in rural areas. Educational activities have to be linked to the specific needs of the rural community for skills and capacities to seize economic opportunities, improve livelihood and enhance quality of life. In developing nations, providing and improved rural quality of life and address problems associated with migration to urban areas.

Sustainable urbanization: Half of the world's population now living in urban areas and the other half increasingly dependent upon cities for their economic, social, and political progress. Factors such as globalization and democratization have increased the importance of cities. Accordingly, it is generally accepted that cities not only pose threats to sustainable development but also hold promising opportunities for social and economic advancement and for environmental improvements at local, national and global levels.

Disaster prevention and mitigation: Sustainable development is undermined where communities suffer disasters or are threatened by them. Past experience and project have revealed enormously positive effects of learning and education for disaster risk reduction.

Economic Perspective

Poverty reduction: This is the overarching concept which guides international commitments of development in the framework of the Millennium Development Goals. The principal instrument of planning and implementation in this regard are Poverty Reduction Strategy Papers (PRSPs) produced by growing number of developing countries in transition. From the point of view of sustainable development, poverty reduction is the central concern of the economic element, but must be understood in relation to other three elements; social, environmental and cultural.

Corporate responsibility and accountability: The growth in the economic power and political influence of large corporations underline their potential contribution to and effect on sustainable development.   Issues of multilateral trades have immense implications for sustainable development and effective learning must build a balanced awareness of theses economic and financial forces and enable learners to take action to increase public accountability and responsible commercial practices.

Market economy: The global market economic as it currently exits, does not protect the environment and does not benefit roughly half of the population of the world.   One basic challenge is to create a global governance system that harmonizes the market more effectively with environmental protection and the goal of equity.   Furthermore, there is a need for advancing a revolution in technology that dramatically increases energy efficiency, the use of renewable energy, recycling and waste reduction.

Consumption and consumerism: Today's consumption is undermining the environmental resource base. It is exacerbating inequalities. And the dynamics of the consumption-poverty-inequality-environment nexus are accelerating. If the trends continue without change – not redistributing form high-income to low-income consumers, not shifting from polluting to cleaner goods and production technologies, not promoting goods that empower poor producers, not shifting priority from consumption for conspicuous display to meeting basic needs – today's problems of consumption and human development will worsen. Because consumption is so central to many economies, and even to the current forms of globalization, its effects therefore are also seen around the world. How we consume, and for what purposes drives how we extract resources, create products and produce pollution and waste. Issues relating to consumption hence also affect environmental degradation, poverty, hunger, and even the rise in obesity that is nearing levels similar to the "official" global poverty levels. Political and economic systems that are currently promoted and pushed around the world in part to increase consumption also lead to immense poverty and exploitation. Much of the world cannot and do no consume at the levels that the wealthier in the world do. Indeed, the above UN statistics highlight that very sharply.

Strategies

The first Alignment and Sustainability on Training and Development (ASTD) conference on UK on March 15th and 16the 2005, identified four key areas that ASTD is beginning to use define the best practice are alignment, efficiency, effectiveness and sustainability (EURO Forum, 2005). These strategies, worth mentioning, are not far away from our realities of training and development in this part of the world too.

Alignment

The training activities should be aligned with the vision, mission, and goals of the organization. Efficient and sustainable learning initiatives can not be effective unless it is aligned with the

goals and mission of the organization. ASTD research shows that "BEST (Award Winning) Learning Organizations have formal process to align short term and long term business strategies with competency, learning, and performance solution needs and priorities. The BEST map learning resources to competencies, individual development plans, job and corporate goals" Brenda Sugrue, ASTD 2005. From organizational perspective and individuals perspective **must, need, and nice** aspect of training should be dealt accordingly.

Some attributers, likely to be looked before training program implementation, can be significant if it is addressed appropriately. As a HR manager must e aware of adherence of vision and mission of the organization by lowest possible level of workforce, what are the key problems associated with performance for senior managers which can be solved by training.

Efficiency

As the term indicates it is doing things rightly mainly focusing economic aspects of training. In this modern world the competitiveness has compelled the training program also to think over this critically. Even though, it will better serve the purpose, if ROI is given priority to SOI. The bases for improving efficiency would be internal process improvement, use of technology, and strategic outsourcing.

The efficiency on training organization and delivery is the next step executives put eye on after deciding the training intervention is the best solution of the context. The measurable catch words like cost per training per trainees are the management is interested and emphasis should be given and communicated if best practice exceeds the bench marks and some significant achievements regarding training cost.

Duplications avoidance, centralize and decentralize approach and also branded TNA practices and output are the factors that can be addressed regarding improvements on efficiency. Automatic and ICT based learning are considered efficient training delivery mechanism in some context and maximizing it should be the activities of HRD.

Effectiveness

The investor of training would be happy, if the bottom line of balance sheet is positive because of the training intervention. Hence effectiveness is the meaningful judgment against learning interventions and to be effective there should be match among learning need of organization, learning need of individual with right approach and right time.

It is wise to define the term effectiveness to suit the organization focusing impact on customer and benchmark and measures for individual, team and organization.

Ensuring the right topics and competencies required through needs analyses, will have high chances for its effectiveness. The process of learning also has its place, so that make the learning in their way rather than your preferred way, if there are alternatives. The integration of learning with job performance support system and linkages with workflows will add required flavor to the learning. The assurance of everyone's responsibilities and establishing SMART objectives would haul the initiatives toward required range of effectiveness.

Establishing KPI and standards would ease the process of measuring effectiveness avoiding confusions and interest conflicts. At last criminalize the achievement and communicate as required to avoid any misunderstanding in due course time.

Sustainability

Unless and until the training culture does not take root firmly in organization and remains brainchild of few proactive executives who know their business, with efficiency and effectiveness it is only the half work is done. It can be sustainable if your organizational culture is close to enshrining best practices in transparent processes and procedures, engaging the whole organization in taking responsibility for the continued success of the learning operation and creating self-perpetuating networks of champions and supporters within and outside organization. To maximize the use of learning post training support should be planned and implemented. Enshrining best practices and documenting with consistency and benchmarked procedures and processes will enable to make the training sustainable. Another critical aspect of sustainable training is avoiding indispensable figures to continue training even after some key personnel or propellers of training are lost. Self propelling mechanism should be in place so that the effective training becomes the part of the organization culture communicating best practices and success stories, and reporting impact of training to shareholder of the company and also publishing in news letter will be significant factor of effective and sustainable learning.

Conclusions

Effective learning itself will not happen merely with learning activities. Many attributions before and after learning experience have to be in place. As pre activities training needs assessment could be one of the crucial factors as no training would effective if it is not according to the need of trainees and its relevancy to its working life or other aspects of life. Similarly the post training environment is important factor as the learning has to be brought into practice thinking the sustainable developmental aspects also. If the learning is applied again and again assuring the resources for future generation, then the learning attains its optimum effectiveness.

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Auditing of Per-Capita Funding

Janak Raj Gautam[1]

Abstract

The basic idea behind this is 'Money follows students' to promote with a view to make fiscal attraction to students at the best possible way for involving in basic education. It is principally concerned with demanding, receiving, distributing, allocating, and using of funds for the purpose of educating children. Pooling and parallel (non-pooling) donors in the educational sectors have been involved as development partners (DP) for educational development in this nation. PCF is to meet non-salary expenses for primary and secondary schools with a purpose of ensuring free text books, educational materials, scholarship, stationary and management cost as per decisions of SMC proposed in School Sector Reform (SSR). PCF grants depend contingently upon accountability, efficiency, transparency and the compliance portion.

Segregation of grants as recurrent expenditure budget is almost borne by Nepalese government and in the next capital one, the most portion of budget is funded by development partners through the approval of the National Planning Commission and Ministry of Finance. Saying goes that strong local government, reliable database, routine monitoring and transparent accounting system are essential to bring the radical changes through PCF in funding mechanism. It is not a standalone grant system but rather additional resources to public schools to create learning atmospheres on an equity basis .The more the number of students, the more amounts the schools receive. PCF brings a departure from traditional system of funding to a new paradigm shift standing on the principles of 'student based funding'.

Background

In the budget declaration for the fiscal year 2009-10, the Per Capita Funding (PCF) should be strengthened with amendments of regulatory procedures and then additional funding should be arranged for such activities. According to the Proviso 192 of Education Rule 2002, Department of Education (DOE) has issued revised form of school grant management directives about PCF covering from class one to twelve gradually for the days ahead. The directives comprise some fundamental principles like fairness, transparency, accountability, strategic implementation of grants. Finally, one of the millennium developments goals (MDG) is to achieve education for all by 2015 worldwide. Paying substantial attention to this global goal, education for all (EFA) program has been launched with pool donors' financial resources like cash grant, commodity grant, technical assistance and soft loans in Nepal since 2004. it would be implemented after the approval of National Planning Commission (NPC) and Ministry of Finance (MOF). However, there is a big problem in understanding this PCF scheme among officials, teachers, school management committee (SMC) and other stakeholders. In this connection, there has been a workshop on school financing held in Kathmandu in August, 2009.

The topic of the seminar was 'Sub–Regional Training Workshop on Educational Cost and Finance: Per-Capita Funding'. One of my subordinates participated in the seminar and I also attended the classes on opening, discussion on paper, questions–answers, closing sessions and I became able to prepare this article from those sources as well as paper presented in the seminar. It has been an immense opportunity to expand working knowledge through

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conceptual, procedural, factual and common sense about PCF. Consequently, it has been a little comfortable to conduct audit of such grant. PCF is a modality of education financing based on the number of students**.** The basic idea behind this is 'Money follows students' or 'average per person' to promote fiscal equalization with a view to make available to students the best possible education. It is principally concerned with raising, distributing, allocating, and using funds for the purpose of educating children. PCF will follow the number of unserved students i.e. more than the prescribed norms. Pooling and parallel (non-pooling) donors have been involved as development partners (DP).

Segregation of grants

Recurrent expenditure budget is almost borne by Nepalese government and the next capital one is mostly funded by DP through the approval of the NPC and MOF. The forms, nature, terms and beneficiaries of grants in budget are presented diagrammatically. Saying goes that strong local government, reliable database, routine monitoring and transparent accounting system are essential to bring the radical changes through PCF in funding mechanism. It is not a standalone grant system but rather an additional resources to public schools to create learning atmospheres on an equity basis .The more the number of students, the more amount the schools receive. PCF brings a departure from traditional system of funding to a new paradigm shift standing on the principles of 'student based funding'.

<u>Snapshot Presentation of Grant</u>
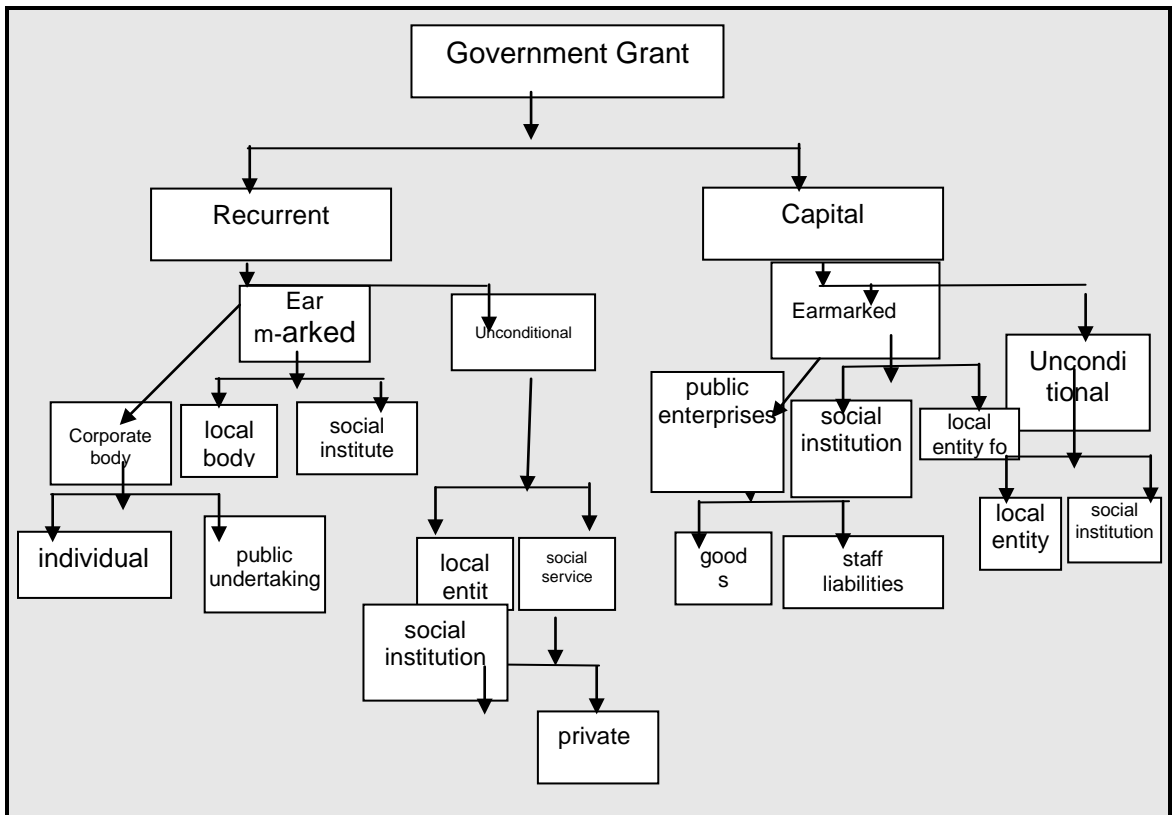
Source- Flowchart is developed by the author himself.

Methods of Per capita funding

At primary level in fiscal year 2008-09, NRs 700 million (i.e.USD 10 million) was allocated in the form of PCF from District Education Offices (DEO) to schools. The variables for the PCF are average salary, student teacher ratio, eco-region, recurrent expenditures and the unit cost. PCF is to be provided as an earmarked grant to community schools has now been a high weightage. Teacher Student ratio is calculated on the basis of number of teachers and students in community primary schools to find out per student allocations. The PCF authority letter initially goes to the local development officer from the DOE, then the former releases the amount to the DEO and finally, such amount are transferred to schools. From the fiscal year 2009-10 , PCF as a non salary grant , are also used for the secondary and lower secondary level in addition to the primary level school.

Now it has been proposed in School Sector Reform (SSR) that it provides PCF to meet non-salary expenses for primary and secondary schools with a purpose of ensuring free text books, educational materials, scholarship, stationary and management cost as per decisions of SMC. PCF grants depend contingent upon accountability, efficiency, transparency and the compliance portion. In this connection, the following conditions to be fulfilled as prerequisites to get such amount as far as my understanding is concerned:-

- School improvement plan should be prepared.
- 90% of the students should regularly attend the schools.
- Eventually 80% of the students should appear in the final examination.
- Community managed school

While calculating PCF, student teacher ratio has been fixed regarding eco-region i.e. Himali, Hill and Terai as well as Kathmandu Valley as placed below:-

Criteria	Himali	Hill	Terai/ Kathmandu
Teacher Student Ratio	1:40	1:45	1:50

PCF is calculated as given below, for example:-
PCF = thirteen months salary per teacher student ratio according to geographical location. As for example:-

For the Himali region,

$$PCF = \frac{6280 \times 13}{40} = 2041$$

For the Hilly region,

$$PCF = \frac{6280 \times 13}{45} = 1814$$

For Terai /Kathmandu valley,

$$PCF = \frac{6280 \times 13}{50} = 1633$$

Level	initial pay scale per month	criteria for per capita funding	per capita funding rate		
			Himali	Hills	Terai/ Kathmandu valley
Primary	6280	81640	2041	1814	1633

A need based formula for funding to school is:-

Unserved students in a school = (Enrollment – (no. of regular teacher + no. of Rahat i.e 'Relief' teacher position) x 40

Suppose 100 students and two teachers are there in a school, using the above formula to make a simple presentation,

Total number of students - (number of teachers x 40) x 2041

= 100- (2 x 40) x 2041 = Rs 40820

As a result, for 20 students the school gets Rs 40820 at once in the form of block grant as PCF mechanism. We can calculate in Hilly and in Terai/ Kathmandu valley as given formula so that the fund shall be:-

in Hilly Region, 105-(2 x 45) x 1814=27210

in Terai/ Kathmandu valley, 113-(2 x 50) x 1633=21229

Problems

In one side, no effective monitoring from DEO and DOE and also on the other hand the appointment of Rahat teachers are politicized. 'Rahat quota' i.e. 'Relief teacher' is an activity created from the fiscal year 2004-05 for temporary way out to reduce the prevailing problem unless a permanent system is established in this respect. There are altogether 92 thousand teachers position in primary level in 2008. Out of them about 12 thousand are the Rahat teacher. There are about 50 thousand relief teachers in primary, lower secondary and secondary levels. DEOs have indicated that PCF modality supports better performing and bigger schools rather than the poor and small schools.

1. The appointed PCF teachers have to be terminated in case the number of students declined.
2. DOE has to achieve substantial progress under challenging circumstances
3. Fund disbursement to schools was delayed due to data inconsistency (i.e. mismatch between DEO data and school data) and condition of community managed schools.

Auditing

Obviously, the end users of the PCF are schools, teachers and students. The assignments of school auditors go to the functions, responsibility and authority as they are appointed by the DEO among auditors who are in the list of Regional Directorate of Education. Auditors need training, exposures and building their capacity to trace out facts, fraud finding, stand on the

verification base and recommend the system to be effective. Auditing system of district education is presented below in the table:-

Nature of Audit	Books of Accounts	Audit carried out by
Statutory audit	District Education Office	Office of the Auditor General
Internal audit	Funds sent to the secondary level	District Treasury Control Office
Internal audit	Funds sent to primary level	District Development Committee
Statutory audit	All levels of Schools	Registered auditors
Internal audit	District Education Office	District Treasury Control Office
Social audit	Sources, application and activities of school	Audit committee of the school

In addition to the financial audit, there is provision of social audit in school to carry out according to directives issued by the DOE under the education rule, 2002. Representatives of the parent teacher association (PTA), SMC members, local stakeholders and teachers of the school shall be the members of the social audit committee. All the social audit reports should be compiled by the DEO and forwarded to the DOE timely. In the workshop there was a suggestion that accounting, auditing, inspection, observation, periodical reporting and investigation should be strengthened in school. Sharing responsibility, ensuring accountability, strengthening capacity and institutionalizing social auditing are the components of school governance.

Conclusion

Eventual**y,** all children, particularly girls in difficult circumstances from ethnic and Dalits communities should have comfortable access to free and quality and compulsory primary education. It follows that DOE is the central agency leading the implementation of the EFA program through different financing modalities merely pooled and parallel formations of development partners during the fiscal year 2008-09. On one hand, ADB, AusAid, EU, Denmark, Norway, UK, UNICEF, WB have supported through the pool funding modality as guided by the Joint financing agreement (JFA). On the other hand, parallel funding donors are Japan, UNESCO, WFP. Clearly, the allocation of foreign sources is a blend of soft loans and grants. It is to be noted that from the fiscal year 2010-11, School Sector Reform (SSR) in education is being implemented with its advanced form as sector wide approach (SWAP). At present, we are in audit of PCF. With this, we would know the actual circumstances, problems, challenges, reliability, authenticity, lack of evidences, irregularities, misuses and real needs of schools. Eventually, we would be able to recommend the useful points for further improvements in this regard. One thing is to remember that school funding will be available through the conglomerate efforts of local, provincial and the federal government of Nepal in the days to come.

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If Training is the Solution, What is the Problem?

Bhawani Shankar Subedi, Ph. D[1]

Abstract

Any vocational skills training intervention should result into livelihood improvement by means of employment or self-employment. Training is a means to an end. It is not an end in itself. The purpose of skill-based vocational training programs is to prepare individuals for livelihood with potentials of earning for their living by being engaged in specific occupation/s in the formal or informal sector of economy. However, reality check shows that most training initiatives are supply driven rather than demand based. Based on the belief that the outcome of skill training must be employment or self-employment, responsive, training interventions must analyze how economy and livelihoods are interlinked and how training can contribute. Economically dependent individuals or groups cannot be self-reliant. Quality and relevance of skills training interventions imparted as preparation for or skills upgrading in occupations must lead to improved employability, productivity and income generating capacity of the target groups. Target groups of vocational skills training programs are generally youth and women who are otherwise economically disadvantaged or socially marginalized. To increase access of a wider population of youths and women to market driven vocational training opportunities, it becomes essential to improve the quality and relevance of vocational skills training interventions. This can be achieved by actively involving stakeholders at all phases of the training cycle-analysis, design, development, implementation and evaluation.

Without adequately involving beneficiaries and other stakeholders, linkages between training and employment or self-employment cannot be ensured. Market analysis of the informal as well as formal sector markets would help establish such linkages. Market analysis involving training providers and beneficiaries should ensure training-job relevance that practically responds to the existing as well as emerging market needs. Vocational skills training programs of any scale can be popular only if flexible mode (brick-approach) of skills training opportunities are designed and facilitated by competent providers for the acquisition of actually needed skills by the users and employers of the informal and formal sectors. Employment and self-employment may require skills tested and certified by competent authority and in a credible manner. Testing and certification of skill levels acquired by the potential as well as the actual workers in the formal and informal sectors will lead to proper recognition of their skills for employment and/or self-employment both in-country and abroad.

Background and context

Nepal is one of the worlds Least Developed Countries (LDC), clearly indicates needs to invest in the technical and vocational training of the country's youth. Youth, referred to as individuals between 15 to 29 years old in the context of Nepal, constitute 28.3 percent of Nepal's population, equaling 7 million young people (National action plan for youth employment Nepal, 2008-2015). The youth population is likely to increase substantially in the years ahead due to the changing demographic structure. Currently, over 300,000 people enter into Nepal's labor market every year, most of whom are youth. In 2007, the total labor force was 11.4 million and is projected to grow at the annual rate of 2.6 percent. Unskilled and underpaid, the youth labor force thus becomes a breeding ground for poverty.

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Vocational skills outside the formal system can play a useful role in developing the skills of the workforce. Nepal Labor Force Survey of 2008 estimated that around 2142 thousand people aged 15 and over are currently employed in the informal sector that amounts to 70 percent of all employment in main jobs outside the agriculture sector.

Only 932 thousand persons (33.3 percent of total non-agriculture employment) have main jobs in enterprises that are not considered to be informal (NLFS, 2008).

Likewise, in the 2008 NLFS phase II, there were 11332 thousand people aged 15 years and above (96.2 percent of total employment aged 15 years and above) who were classified as in informal employment (all industries). Baseline indicates that after excluding the agriculture and fishing industries, the number of non-agricultural informally employed persons was 2655 thousand or 86.4 percent of total non-agricultural employment in the year 2008 (NLFS report, 2008).

The 12% unemployment and 50% underemployment of youth population in Nepal has been the root cause of conflict and poverty. Shrinking job opportunities in the formal sector and lack of needed occupational skills for the promotion of informal sector economy have posed many dimensions of social and economic problems in the country. The government endorsed TEVT policy of Nepal (2007) stipulates in its preamble that 'this training policy is designed to develop and unleash market forces which will put the system on a steep growth path where the number of training opportunities is expected to increase fourfold over the next 10 years.' However, less than 1.4% of the education budget (in 2008/09) has been allocated for this sector thereby limiting the intended expansion of access and opportunities for youths to receive appropriate vocational skills for employment. Likewise, quantitative targets set by the national action plan for youth employment envisaged that 'vocational and skills development training to be provided to 14716 youths in 2007/08 will be increased to 20000 in 2008/09 and 30000 in 2009/10. Similarly, vocational and skills development program for women will be increased from 7500 in 2007/08 to 11000 in 2008/09 and 16000 in the year 2009/10 (p. 247).

Nepal government's TEVT policy (2007) focuses on five elements: expansion, inclusion, integration, relevance and sustained funding to ensure that the TEVT market can take off. Skills for employment project (loan 2277-Nep, 2004-2011) supported by ADB and implemented through the council for technical education and vocational training (CTEVT) aims at increasing market oriented short term training to access 80000 unemployed persons within the next few years in Nepal.

Nepal economic growth assessment (USAID, 2008), in its first two of the top five priority recommendations enlists 'vocational and skill training for poor and disadvantaged youth for local employment and migration' and 'labor intensive work programs aimed at the poor and excluded groups to provide infrastructure maintenance and other needed public works.' Likewise, national action plan for youth employment Nepal (2008-2015) has taken four Es framework- employability, equality, entrepreneurship and employment generation- as propounded by the youth employment network. Likewise, Save the Children Nepal in its mid-term evaluation report of the youth and employment project (ODW 2007-2011) recommended new impetus to vocational skills training for youths with due attention to what happens before, during and after in all aspects of vocational skills training (ODW project midterm evaluation report 2009).

Youths' and adults' access to training opportunities has remained more structured and formal thereby limiting the participation by a wider population of youths in Nepal. Initial training and skill-upgrading opportunities for the existing and aspiring workers in the informal sector have often been ignored due to constraints in the offerings of such opportunities. Most training providers are public funded institutions where workers from the informal sector have limited or

no access. Therefore a flexible approach to training with focus on informal sector should be in place to add a distinct value thereby providing exemplary support needed by workers and employers engaged in the informal sector of the economy.

Purpose and essence of vocational skills training

Nepali youths- no matter whether they have certain level of formal education or not- need employable skills at hand to be engaged in economically gainful activities. Owing to the diminishing civil service positions within the government and propelled by a rather stagnant economic and industrial growth in the country, Nepalese youths are migrating to other countries for economic subsistence. Both in-country and abroad, employers in the non-government or informal sector of economy pay workers for their performance, not only for their implicit competence or tacit knowledge. Education and training systems in Nepal are not always responsive to the existing and emerging needs of employers and enterprises, especially in the informal sector of economy. Agriculture and agro-based businesses and services still occupy a major sector of employment and self employment in the informal sector in Nepal. However, employment or self employment in this sector is largely seasonal and underpaid. Vocational skills training needs of this sector are not adequately addressed.

Nepal's youth employment policy strategy states as its objective 'to reduce unemployment by developing skilled and competitive labor force in accordance with the demand of the domestic and international labor markets' (pp. 245-246). An inability to find employment is likely to create a sense of vulnerability and uselessness among youths. This has led to more marginalization, exclusion, frustration, and low self-esteem among youths. Moreover, urbanization has caused a loss of traditional avenues of employment (such as use of readymade garments, mechanized service sector, institutional retailing) impacting negatively the uneducated subsistence labor amongst which women are a majority. With economic growth rate at 2 to 3 percent, Nepal is unable to absorb the new labor force entrants of an average 0.3 million per year.

Enhancing employability of youths by means of need-based vocational skills and livelihood support should be the essence of vocational skills training. It is because marginalized and deprived youths, especially women who are already vulnerable, are likely to be at a greater disadvantaged condition due to lack of skills at hand for their employability. Without an employment for earning a living for themselves and means of livelihood for their dependents/minors of their families, self-esteem and rights of youths remain elusive. Income generation and means for livelihood and independence are the primary concerns of youths in the country.

The purpose of vocational skills training intervention of any scale should be to equip 'potential' youth and adult workers with essential skills for employment or self employment, and to upgrade the existing levels of skills of the 'actual' workers especially in the informal economy. Such training programs must contribute to improve employability, productivity and income generating capacity of the target groups. Although vocational skills for youth employment and livelihood improvement remain a challenging task for both the formal and informal sectors, it is the only way out for the training policy makers, training providers, donors and funding agencies in country and from abroad who are interested in investing in people. For these to happen in a meaningful way, accessible and affordable vocational skills training programs with high extent of training-job relevance and demand-driven character must be made available to needy youths and adults. Vocational skills responsive to the existing and emerging market needs of the economy need special attention of the government as well as non-government sectors. Such interventions should sufficiently include post-training support strategies to link training outputs to

employment and/or self-employment as the outcome and impact of skills training provisions of all types.

The issue of quality and relevance

If training is the solution, what is the problem? Why do most training interventions fail to achieve the desired results? One answer to such question could be 'training-job irrelevance'. Training for the sake of training is of little or no use. In the global context, vocational skills training programs are measured in terms of training-job relevance, retention and application of the knowledge and skills from the training to the workplace and training's contribution to livelihood improvement. Without involving employers and other relevant stakeholders at all phases of the training cycle- analysis, design, development, implementation, evaluation- training becomes more supply-driven and less market oriented. Thus, by effectively involving partners and stakeholders, quality and relevance of training can be improved.

Linkages between training and employment or self employment can be promoted by means of designing and offering need-based courses for the most appropriate persons identified and included as trainees. Most training interventions fail primarily due to what employers expect from the workers and what they are trained for, especially in the informal sector. Employers in the informal economy pay workers for the actual work performed, not for being listed in the payroll- as is often the case in the government organizations.

Identification of and negotiation with appropriate training providers (institutions or enterprises) that are able and willing to organize and deliver the needed skills training modules for the targeted working youths and adults should be then be the most critical activity for achieving training's results-employment or self-employment. Access is not just bringing in the youths and admitting them for any training. Access and opportunity to gain employable vocational skills include more than physical presence. It includes an authentic assessment of employers and employees needs that often remain dynamic due to emerging changes in the market economy, industrial and economic growth and affordability and achievability of the training opportunities as well. Objective indicators must be determined involving users, employers and providers in advance to effectively measure the achievement in terms of the extent of increased access and opportunities of employable vocational skills training for youths and adults.

Actions needed to improve the current situation

To analyze and envisage what happens (or does not happen!) before, during and after the training is an extremely important activity for linking training to employment or self-employment. Before enrolling the selected potential youth workers in specific occupational training courses or programs, training providers with users and employers must utilize or conduct a TEVT sub-sector analysis. While the training is in progress, monitoring of skills acquisition by the training participants is another critical activity. A functional mechanism to give and receive feedback on learning and performance must be devised and implemented. Facilitating links with potential employers and financial institutions should be another important activity of the program to ensure employment or self-employment. Some graduates may need seed money to start up their own business. This must be taken care of. Follow up of employed as well as self-employed graduates should be yet another important activity for assessment of impact and for the possibility of replication of similar training interventions in the future.

Monitoring and follow up of the interventions will be equally important activities. Some of the participants may need psycho-social counseling or specific support for job reentry or upgrading

of assignments in the workplaces. Enterprises and companies who have employed or will employ the skills upgraded graduates should be involved in the process and be assured that they will gain a good return on investment (of time, money and effort) to get the workers skills enhanced. Rapport and consultations with the users and employers of the training graduates will therefore be essential activities for pragmatically achieving the stated result.

Vocational skills training programs must include marginalized youths and adult workers as the target groups who are or were denied access to education or training due to economic or social reasons. Those who failed to pass the School Leaving Certificate examination, for example, or those who could not afford to pay for their further education are left helpless every year. This number is ever increasing. These are in fact the migrant workers or domestic labor in the emerging cities and suburbs of the country. There are a number of existing as well as emerging occupations in the informal sector on the one hand and the employers are not finding the type of skilled workers they are looking for. Vocational skills for youth employability and livelihood improvement support could be the most appropriate action for this target population.

Vocational skills intervention programs as described must seek to empower youths by means of appropriate vocational skills that would enhance their employability as well as chances of self employment both in the informal and formal work sectors in-country and abroad.

One of the objectives set by the three-year interim development plan (2008-2010) of Nepal states that the objective of national action plan for youth employment is 'to enlist the active participation of all Nepali youth in national reconstruction and socio-economic transformation by providing them opportunity to develop their capacity and potential.' However, an eminent inability to find employment is likely to create a sense of vulnerability and uselessness among youths. 'Vocational skills for youth employment and livelihood improvement' support could be an appropriate intervention to protect and empower youths in terms of capacity to earn a living by getting engaged in productive occupations. Education, gender and caste divides among youths are important factors that need to be taken into account in any effort to facilitate employment. Given the gravity of problems in equipping these youths for labor market, and generating employment opportunities that absorb youths, general employment policies and programs may not be sufficient. Hence, there is a need to focus with targeted interventions to address the youth specific issues and potentials of employment, especially in the informal sector of economy.

Conclusion

Due to prolonged conflict and increasing poverty in the rural areas, thousands of youths are migrating to urban areas in search of jobs and many of them are leaving the country for jobs abroad, especially the gulf countries. Emerging urban and semi-urban areas where indigenous as well as technology-based economic and industrial occupations are already on the rise, market demands for skills-based occupations are certain to be on the rise, too. However, market needs analysis is always necessary. Migrants to urban areas are primarily absorbed in informal sectors, and a large proportion become self employed as a survival strategy. Additionally, urbanization has caused a loss of traditional avenues of employment (such as use of readymade garments, mechanized service sector, institutional retailing) impacting negatively the uneducated subsistence labor amongst which women are a majority.

Demand-driven and employment oriented 'vocational skills training for youth employment and livelihood support' could be a promising solution to the pressing problem of youth unemployment in Nepal. In the process and outcome of vocational skills training interventions, representatives of workers and employers must be involved in all phases of the training cycle- analysis, design, development, implementation and evaluation. Stakeholders to be involved

could include representatives of national youth associations, unions of workers both from the formal and informal sectors and Federation of Nepalese Chamber of Commerce and Industries. This must be seen necessary not only for the successful implementation of the vocational skills training programs but also for the sustained effects of those interventions. Such participatory approach must be maintained before, during and after the intervention that will ensure quality and relevance of the vocational skills training programs.

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Quality Assurance of TVET through Competency Benchmarking

Diwat Kumar Shrestha[1]

Abstract

This article is about the Competency Benchmarking of TVET system. Generally it is focused on the TVET system of Nepal and the experiences of the other countries as well. Benchmarking refers to a standard for measurement of performance that can be used for comparison and to identify where needs for improvement exist. Benchmarking shows the proper pathways for the quality assurance of TVET system. This article covers Issues in TVET sector in Asia and Pacific member countries, Issues in TVET sector in Nepal, The Competency Benchmarks set by CTEVT to address these issues, Benchmarking of Vocational Education/ Training and Short Term Training Providers and their Benchmarking.

Competence has been defined by Epstein and Hundert (2002) as the, "habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served." There are foundational elements required for competence that includes knowledge and skills as well as elements best conceptualized as professionalism (e.g. reflective thinking). Competence also presumes integration of multiple competencies. In turn, competencies are conceptualized as elements or components of competence, which is, discrete knowledge, skills, and attitudes (Kaslow et al., 2004).

A distinction is also made between foundational and functional competencies (Rodolfa, et. al, 2005). Foundational competencies refer to the knowledge, skills, attitudes, and values that serve as the foundation for the functions a psychologist is expected to carry out, (*e.g.*, an understanding of ethics, awareness and understanding of individual and cultural diversity issues, knowledge of the scientific foundations of psychology). Functional competencies encompass the major functions that a psychologist is expected to carry out, each of which requires reflective integration of foundational competencies in problem identification and resolution, (*e.g.*, assessment, intervention, consultation, research).

A benchmark refers to a standard for measurement of performance that can be used for comparison and to identify where needs for improvement exist.

Major Skills Challenges (ILO; 2008) focused on the issues on Asia and Pacific member countries in TVET sector. A number of similar issues or themes were identified by many of the countries. Among them the major issues were; Skills Mismatch, Limited Linkages with Industry, High Youth Unemployment, Shortage of Training Instructors, Lack of Coordination between Government Agencies, Skills Shortages, Rural to Urban Migration, Weak Training Capacity and Large Informal Economy.

Every year 300,000 Nepalese youth enter into job market. However, the majority of them remain unemployed due to lack of employable skills. Approximately 31 percent of Nepal's population is living below the poverty line. A vast number of adults have either not been to school or not received any technical education or vocational training. Nevertheless there is a lack of short and relevant training courses to equip the future workforce with occupational competencies. As a result, Nepal's workforce lacks productivity in domestic as well as in overseas labor markets.

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TEVT needs to expand massively in preparing students for employment opportunities. Key issues and challenges of Nepal's TEVT sector are: Access to Training, Relevancy of Training, Quality of Training and Lack of Post-training Support (ILO; 2008).

There are many activities in Nepal to maintain the Competency Standard in TVET sector to address the above issues. CTEVT is the apex body to formulate policies, to prepare the plan and to implement the activities in TVET sector in Nepal. There are Competency Benchmarks in the activities of CTEVT that is in Pre Training, During Training and Post Training activities.

The most important part in the Pre Training activities is Accreditation. Guiang (2004) mentioned that Accreditation is the assessment of an organization's compliance with pre-established performance standards. An accredited institution undergoes periodic self-studies, inspections and evaluations to certify that it meets the standards of the accrediting body. The areas that are usually looked into by the accrediting body include governance, curriculum, faculty, finances and student services.

Accreditation is an important agenda in the affairs of the country's education system. It is a mechanism aimed at achieving the following:

- Quality assurance- determine that institution or program meets established standards of quality and performance
- Quality improvement - provide a service that is designed to improve institutions and programs through an external review process
- Assist prospective students in identifying acceptable institutions
- Assist institutions in determining the acceptability of transfer credits
- Help to identify institutions and programs for the investment of public and private funds
- Protect an institution against harmful internal and external pressures
- Create goals for self-improvement of weaker programs
- Raise general standards among education institutions
- Involve the faculty and staff comprehensively in institutional evaluation and planning
- Establish criteria for professional certification and licensure and for upgrading courses offering such preparation
- Provide consideration as basis for determining eligibility for government assistance.

There are many steps in the accreditation system in CTEVT. All the steps should be followed with high level of quality. Each and every step will be checked thoroughly by the respective experts. There are benchmarks in every step the experts have to follow. The steps for accreditation are as follows:

1.   Application with prescribed proposals
2.   Feasibility Study by the expert Team.
3.   Preparation of Physical Facilities according to the guidelines of CTEVT.
4.   Get approval to start the program.

Examinations, Supervision and Monitoring activities are the main functions that come under During Training Activities. Examinations are the evaluation of student's performance. There are many Competency Benchmarks to follow in the examination system of CTEVT.

1. Theory Practical Ratio: 20% / 80% in TSLC and 60% / 40% in Diploma programs.

2. Minimum pass marks 40% in theory and 60% in practical.

3. Standards of questions.

4. Standard to conduct examinations in examination centers.

5. Checking standard of exam papers and practical projects.

Supervision and Monitoring is another During Training activity. The tool to measure progress and quality is supervision and monitoring. Resources availability and their proper use, Capacity and its reliability and planning and its application are the main agendas to overview in monitoring process.

Monitoring and Supervision in CTEVT is administrative aspect. The information about the school, the program and their progress of the current Fiscal Year and Financial Condition are the main peruses in administrative aspect.

The second aspect is Technical aspect. Administrative and Managerial capacity, Physical Facilities, Human Resources, Fulfillment of Curriculum Need, Teaching plan and its implementation, Instructors' record and their experiences, Students Evaluation and Tools and Equipment are the peruses in Technical aspect.

After the evaluation of all the above aspects the institutions will be divided in 5 categories: Inadequate, Adequate with recommendations, Adequate, Effective and Highly Effective. According to the categories the actions will be taken to the institutions.

There are not so many activities in CTEVT for the Post Training Support. CTEVT is starting Placement and Counseling Unit in Research and Information Division. So many follow up studies has been conducted to get feedback from the different sector for the improvement of the program. Training Management Information System (TMIS) and GIS is established in CTEVT and Labor Market Information System (LMIS) is established in Department of Labor recently.

There are many problems in TVET system in Nepal. Benchmark with Competency has to be developed in each and every problem. To ensure the successful TVET in Nepal the state will encourage and support training providers' efforts through a liberalized regime, which focuses on training outcomes and facilitates an easy transition into the economy. Financial support will be extended to all citizens who require training but cannot afford to pay for it. Stipends shall be made available for them, to ensure entry into training becomes affordable and accessible. The emergence of new training courses will be organized around a revamped system of Nepal Vocational Qualifications. In this upcoming system most occupational training courses shall be concluded with an official assessment and a certificate. Occupational careers will be open to enrolled trainees through a combination of initial training, subsequent occupational experience and further training of various kinds. All modes and places of learning, formal or informal, in school or on-the-job activities will be utilized. The theoretical aspect of accreditation is very effective in CTEVT but in practice, there are a lot of lapses. There should be transparent system of accreditation where the bad interests cannot play vital role. Strong monitoring mechanism should be developed with necessary power and facilities.

Conclusion

Benchmarking involves 'setting a standard of performance which an effective organization could be expected to achieve. TVET sector also need to set benchmarking in each and every aspect of its activities. There are Competency Benchmarks in the activities of CTEVT that is in: Pre Training, During Training and Post Training activities. There are many opportunities and

challenges in TVET, even though this is only the sector which can generate more employment for the youth of the nation. There are set Quality Benchmarking in pre training and during training activities in CTEVT. But, Benchmarking for post training activities are lacking. CTEVT and TVET organizations should be more pro-active to set the Quality Benchmarking. Transparent system of accreditation and Strong monitoring mechanism developed with necessary power and facilities are very necessary to enhance TVET.

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A Model of TEVT Quality Framework for Nepal

Devi Prasad Dahal[1]

Abstract

TEVT is about preparing people for the jobs they will do today & tomorrow and the careers they embark on for the rest of their lives. The jobs available and created today will be different in terms of types, intensity and the need of the society for tomorrow – thus demands for a dynamic and quality focus. TEVT should pave paths for people in it to move ahead and opening the careers – thus demanding for sustainability and continuity. The crux of successful TEVT is the model that caters all the elements and parts from a well designed and developed 'system perspective' in a dynamic and coherent manner. Quality is agreeing and meeting the requirements of stakeholders; quality is the precision with respect to meeting the target. Quality is the key consideration for sustainability and long term positive impact of a system in effect. Hence, the focus and priority of a nation must be to prepare quality people for quality jobs they do today and tomorrow thus improving productivity of the nation.

Background

Formal education and training system in Nepal is directed towards producing large quantity of graduates with less focus on quality (Vocational Pathways 2006, SDC/KEK/TfE) and especially beyond high school level of education. Universities, Higher Secondary Education Board, Department of Education, Council for Technical Education and Vocational Training being the large providers of education and training operate almost independently without much of coordination at policy and planning to the lowest levels. However, all these providers are under one ministry i.e. Ministry of Education in Nepal and all of them get considerable share of national treasury from the government. The National Planning Commission has less concern on overall planning and policy matters too. The political vision, will, commitment, dedication, responsibility are at far distance towards national common goals, quality standards, coordination, access and equity aspects of education and training for the country. It appears that as many parties are there that many education and training systems are preached by the parties. Schools (government, private, trust, semi-private), colleges (government, private, trust, semi-private), polytechnics (government, private, trust), training institutions (government, private, trust), and higher secondary education institutions (government, private, trust, semi-private) all operate happily with less quality control system in a coordinated and standard manner as they are governed by independent bodies. Civil societies, NGOs, thematic groups and general public raise concern about the quality matters in education in some occasion however it is not in a concrete coordinated manner. This is then forgotten when time lapses. In Nepal about 60% of the skilled workers are from other countries in medium and large scale industries. Nepalese industrialists, big corporate houses, big construction companies, large service providing agencies have been raising concerns of quality outputs of education and training system.

Over three million Nepali youth work in other countries mostly as unskilled workers. Some data reveal that out of the total figure of Nepali workers outside; about 95% are cheap labour without any skills, about 3% are as low skilled, and only about 2% are working as skilled workers.

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Foreign employment findings say that there is hardly any quality concern in the people that go out for the jobs despite there is a high demand of skilled Nepali workers.

The situation of Nepal is different now after it has become a member of World Trade Organization (WTO) in 2004. To get maximum benefit being the member of WTO, to tap the foreign employment demand of skilled workers, and to address the need of its own industries and businesses; the time has come to be really serious about the quality system in all sectors. Quality has become the paramount important need and requirement of every one, every organization, every nation.

Problem statement

The user side (job, employment market) of the output of education and training is virtually ignorant about what happens in the education and training system. The same is the case looking from education and training system side. It is visible that the user and supplier both have very less concerned on the quality required in the output.

Flexibility and independency is such that the graduates of two institutions in the same region of a program with exactly the same curriculum and probably under the similar situation are quite different in terms of their taught knowledge and skills. In other words, their competencies are not even close to each other even though they are given the same input. Job market, in other words user communities of training and education system works for low quality delivery and thus they are less worried to put strong voices on quality demand of education and training outputs.

The political level awareness and national planning system are very weak about the importance and the need of quality standards of education and training. Policy formulation, planning, governance, execution, monitoring and evaluation work are carried out by the persons without much of system know how and competency. There is lack of integration and coordination in the system.

It appears that Nepal has a system of 'no systems' in many cases. More importantly this is prevalent in the education and training system which is in fact the heart of overall development of a nation. Nepal, more or less, has been practicing a fragmented and uncoordinated education and training system for the last seventy five years. All this is because the absence of quality framework with defined links, roles and responsibilities of different elements and parts of the system.

Need statement

The system in discussion is Technical Education and Vocational Training (TEVT) which has very crucial role to play in uplifting the overall economic aspect of the country.

A TEVT system with broad vision, dedicated policy, long term planning, clear development, efficient governance, effective implementation, regular monitoring, timely feedback, fair evaluation and immediate correction is the need of the hour. The development perspective of any nation depends on the quality of its technical workforce. Global as well as national competition and requirements are the prime concerns that must be seriously considered for a system to do a good job. In gist, a well designed quality framework of TEVT utilizing all aspects of a system is the real need of the country.

Importance of quality either in education or in training cannot be ignored and as follows some other countries put like:

"Quality technical and vocational education and training (TVET) help develop the individual's knowledge of science and technology in a broad occupational area requiring technical and professional competencies and specific occupational skills. National TVET systems therefore need to develop the knowledge and skills that will help the workforce become more flexible and responsive to the needs of local labour markets, while competing in the global economy."

Technical Education and Vocational Training for 21st. Century,

UNESCO, ILO 2002

"High quality training has many beneficial outcomes. It ensures employer confidence that the skills of their workers meet current and emerging industry needs. It also provides students with skills which are highly valued and rewarded by employers, ensuring they can enter into and progress within the workforce. Quality is also about catering for different learner needs."

Skilling Australia – Feb 2005, Commonwealth of Australia 2005

"High levels of knowledge, competencies and skills are considered to be the very basic conditions for active citizenship, employment and social cohesion"

European Report on the Quality of School Education

European Commission, European Communities 2001

System focus

What does the system mean? Necessity or the need is the root or foundation of any system. Bela Banethy defines system as: "assemblies of parts that are designed and built by man into organized wholes for the attainment of specific purposes. A system receives its purpose, its inputs, its resources and its constraints from its supra-system. In order to maintain itself, a system has to produce an output which satisfies the supra-system." A system can be defined at any level. It can be a complete educational system, one school, or one department in a school. All systems must function in a larger environment that contain other systems. If the system were one school, the supra-system would consist of all schools and the governing body, in other words, the total school system.

As the discussion is about TEVT, from now on, TEVT will be mentioned everywhere. Root or foundation is the political, societal, public including employment (industries) requirements of TEVT matching with the outer world's need and development. The root becomes the political, societal, public, market (country's) common vision of TEVT to produce the desired outputs (results) for the large market (supra system). Elements and parts of TEVT supra system and system can be very well visualized taking the basis of General System Model.
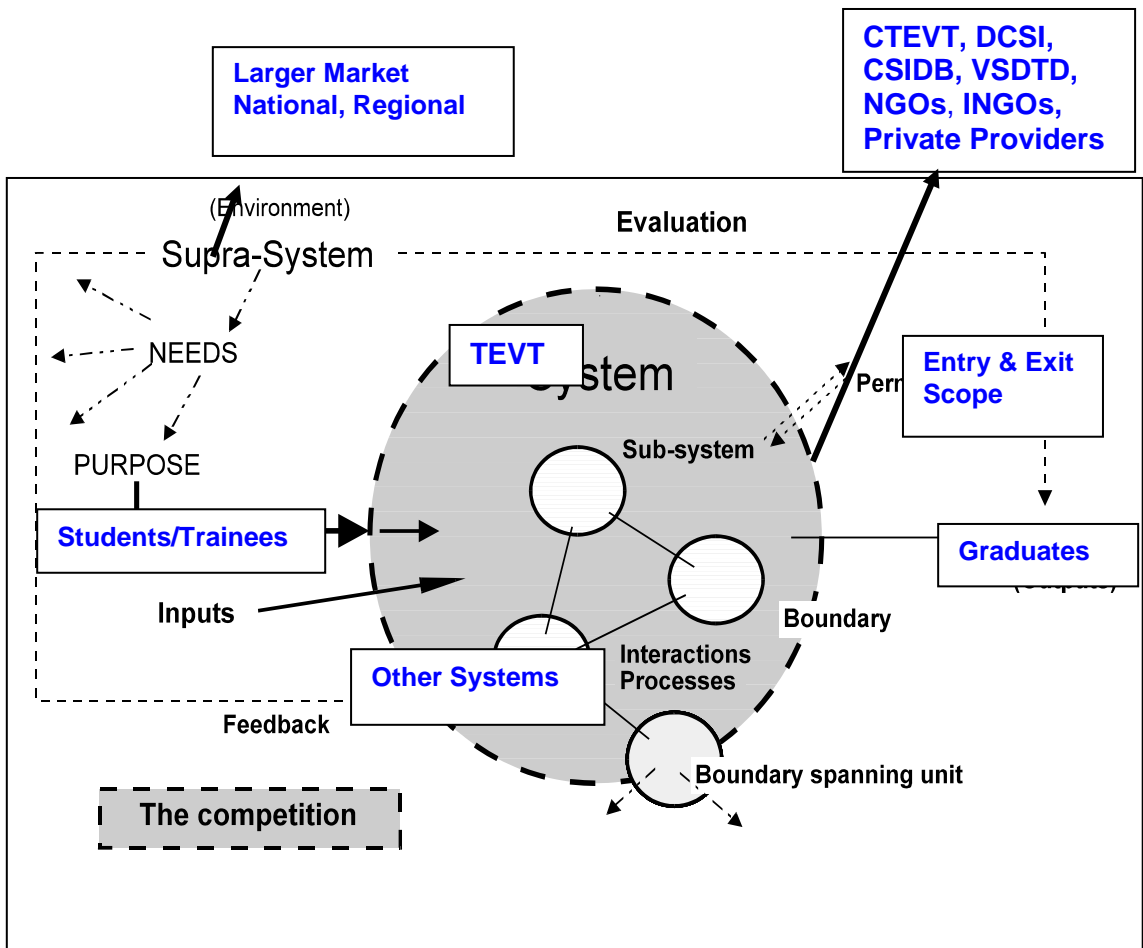
Source: TITI Skill Card

If TEVT is the 'System' that we are concerned; its representation in General System Model can be as shown above in the picture. For TEVT system, larger market needs become the purpose to carry out all activities in the system. All inputs will be according to the system requirements to satisfy the needs and achieve the purpose given by the environment (this is also called supra-system or larger market). Product (this is also called as outputs or the results) is the key or the basis for any system to exist and function. Environment evaluates the product and it must satisfy the needs of the environment. For TEVT, the environment is the business and employment market (government and private) including the investors. There are also other systems in the environment to compete with TEVT. We should have fair knowledge about such systems and devise strategies accordingly to stay intact. What goes on and how it is done within the system as processes are extremely important for any system's sustainability and continuity. There are many sub-systems in a system, there are a number of elements and parts of sub-systems and all of these must have transparent, effective and efficient interactions to produce the desired results. For TEVT as System, other actors like Council for Technical Education and Vocational Training (CTEVT), Vocational and Skills Development Training

Directorate (VSDTD), Department of Cottage and Small Industries (DCSI), NGOs, and INGOs operating for the same environment can be Sub-systems. A system also has a boundary (this is called as operating field). As per the need and development of outer systems, this boundary should work as carrier or vehicle of brining in and giving out information for the system to keep up to date. In the competitive age, any system has to have some kind of flexibility to go out and come into the system with entry and exit scope defined. For example, TEVT system should have its products joining into other education system and vice versa. Supra-system evaluation of the products and feedback to the system are crucial for TEVT to qualify as quality system and to improve timely in its processes if need be.

Thus, for TEVT Quality Framework design the general system model can be well utilized.

General characteristics of a system

a) A system to be qualitative in terms of its usefulness, reliability, timely, effectiveness, efficiency, valid, competitive and sustainable; all general elements and parts of the system must be balanced in such a way that the whole's impact is more than the sum of the individual. That means a significant amount of time must be devoted to design and develop a system considering all internal and external factors. To such a system, none of the parts or elements is less equal than others.

b) Quality is the key consideration for sustainability and long term positive impact of a system in effect. Quality can be defined as "degree to which a set of inherent characteristics (distinguishing features – physical, sensory, behavioural, temporal, ergonomic, functional) fulfills the requirements (need or expectation that is stated, generally implied or obligatory) – ISO 9000: 2000. 'Inherent' means existing in something, especially as a permanent characteristic. 'Generally implied' means that it is custom or common practice for the organization, its customers, others, that the need or expectation under consideration is implied. In other words, quality is a guiding principle we use for ourselves with the help of our clients to develop and continually improve the system. Quality is agreeing and meeting the requirements of stakeholders; quality is the precision with respect to meeting the target. "A world of quality" is where we use the power of systems to continually add value for customers, employers, shareholders, and all parties that have a stake in an organization's impact on the world in which we live (Quality Management International, Inc. 2006). A proven system on quality ground is highly effective and efficient to expand in terms of quantity. So, quantity becomes the secondary consideration of a quality system.

c) Any program, project or work undertaken on the basis of well designed quality framework has maximum chance of success. It also gives high satisfaction to the users/consumers/stakeholders. The core in it is the effective and efficient internal and external (horizontal, vertical, cyclic and multi-dimensional) communications in between and among all the elements and parts of the system in implementation. So, well designed and tested transparent communication tools are very important for a quality system.

d) Once the information and communication quality are standardized for all levels of stakeholders and consumers to use (from general public to the top management and policy makers), the designed output or the results of the environment or the supra system will be easier to achieve both on quality and confidence grounds.

e) In a system model, any problem detected can be analyzed through a systematic approach and possible solution can be found easily. This model can also be utilized as problem

solving tool. Thus, there is a less chance of further damaging the system as any problem detected will be solved efficiently and effectively.

Hypothesis

1. Present Nepali TEVT system does not have quality framework well designed, developed, approved and communicated to all level stakeholders and consumers.

2. Training Institution Heads, Teachers, Students, Employers, and Professionals represent most important stakeholders to provide input to achieve the expected output of the research.

3. Different categories and groups of stakeholders as well as consumers of TEVT may have different expectations and perceptions of quality indicators. However, core will be common to all.

To test the above mentioned hypothesis a quick survey was conducted during 2006-2007 by the author. Summary of survey results depicted above reveal well about the significance of the three hypotheses on quality framework of TEVT in Nepal.

Summary of Survey Findings on TEVT Quality Framework in Nepal

Eight categories of people [educationists, teacher trainers, professionals, training institution heads, teachers, employers, students and graduates (pass-outs)] as key stakeholders of TEVT representing 72 in number were used to find out the responses of the following five research questions.

Research questions

1. To what extent quality is addressed in the educational policies in Nepal?

2. What are the common factors that influence the quality of TEVT?

3. Who are the key actors in determining quality indicators in overall training and education system?

4. What are the key elements of quality TEVT program for you?

The responses of these people were recorded in random order. The list was further refined using the assimilation process for common terms. Further deduction of irrelevant responses was used and a common comprehensive list was prepared.

Simple analysis was carried out by using excel to reflect total count responses in percentage. Simple analysis gave the following results.

Q. 1: To what extent quality is addressed in the educational policies in Nepal?

This question was asked to 14 persons representing educationists, TEVT institution heads and professionals in Nepal. The response of these people was recorded as follows.

93% said that the policy is on paper and 86% response was that it is not in practice. 43% response also came that there is no framework and quality dimension in the policy whatever

may be. 43 % response was for un-clarity of the policy and 36% response was that the policy mentions about monitoring and supervision part on paper.
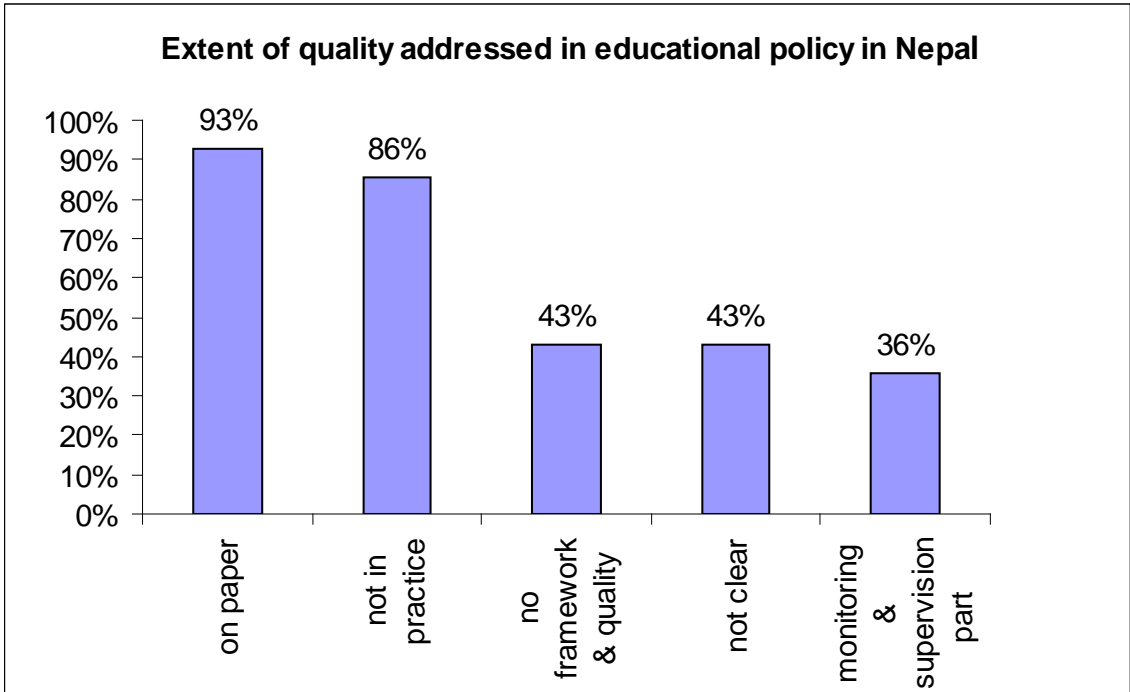
Q. 2: What are the common factors that influence the quality of TEVT?

This question was asked to 66 persons representing educationists, TEVT institution heads, professionals, teacher trainers, instructors, students, graduates (pass outs) in Nepal. The response of these people was recorded as follows.

Important factors influencing the quality of TEVT have been listed 23. Qualities of teachers (68.2%), employment opportunity (53%), quality curriculum & learning resources (42.4%), career opportunity as well as the quality framework of TEVT (40.9%), and the quality infrastructures (31.8%) are regarded as very crucial ones among others.

According to the response; employers participation in training design and development (30.3%), good learning environment and quality management (28.8%), program recognition (27.3%), motivation of students and right program right people (25.8%), demand of the program and clear policy and guidelines (24.2%), scheduled monitoring & evaluation, proper guidance and counseling to the students, quality materials for training, and technologically updated programs (22.7%), affordability and investment (19.7%), practice opportunity of the training (18.2%), and the political commitment (15.2%) are equally important factors which influence the quality of TEVT.

Common factors influencing quality of TEVT
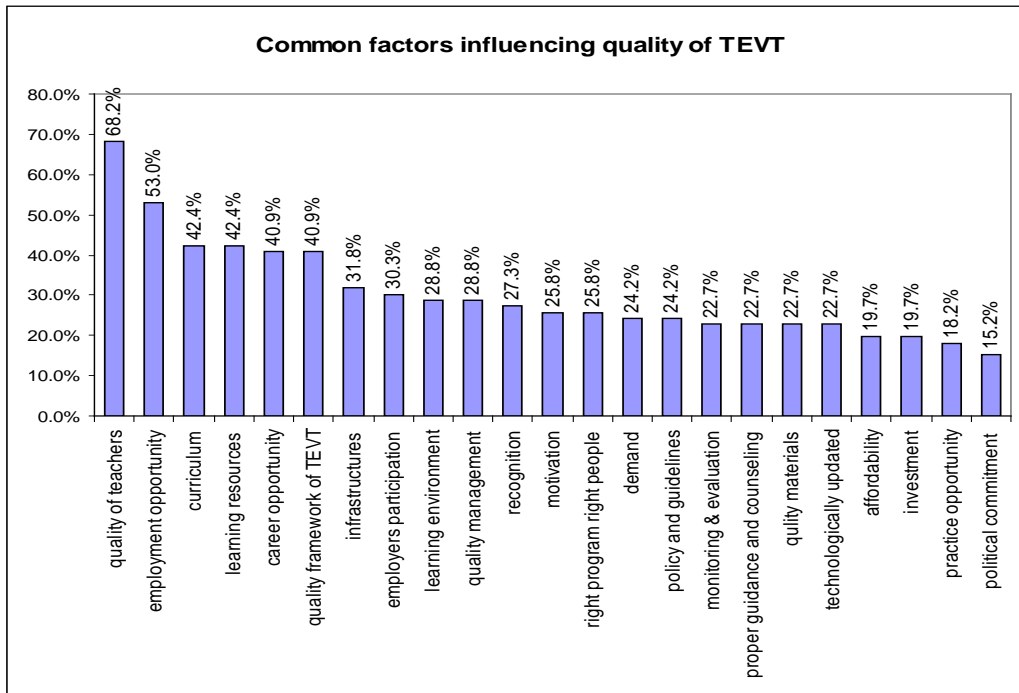
Q. 3: Who are the key actors in determining quality indicators for TEVT?

This question was asked to 36 persons representing educationists, TEVT institution heads, professionals, teacher trainers, instructors and employers in Nepal. The response of these people was recorded as follows.

Important persons determining the quality indicators of TEVT have been listed 12. Employers and experts play major role (77.8%) in determining the quality indicators. Secondly, trainers (69.4%), teachers (61.1%) and the government also (61.1%) contribute a lot. Thirdly, training institutions (58.3%), planners (55.6%) play significant roles. Students (44.4%), curricula designers (41.7%) and the donors (38.9%) have also a high say in this regard. The findings also show that community leaders and parents (22.2%) should not be missed out while deciding the quality indicators.

Key actors to determine TEVT quality indicators
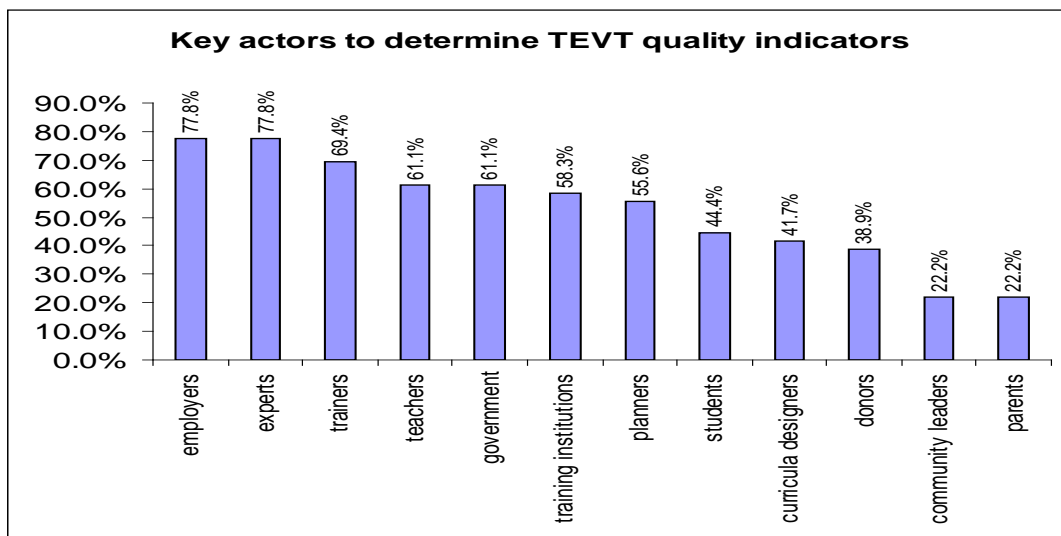
Q. 4: What are the key elements of quality TEVT program for you?

This question was asked to 60 persons representing employers, teacher trainers, instructors, students and pass-outs in Nepal. The response of these people was recorded as follows.

Key elements of quality TEVT program for the respondents have been listed 12.

For a maximum of respondents need based program is the key element (71.7%). Job oriented training (53.3%), good instruction (50%) and on the job training (35%) are second category key elements for quality TEVT program. In the same manner generic skills (25%), balanced theory and practice (23.3%, field visits (23.3%), quality curriculum (23.3%) and the resources (23.3%) are also considerable key elements. Other three elements, staff students' motivation (21.7%), quality framework (16.7%) and affordability (13.3%) should also be counted as key elements of quality TEVT program.

Key elements for quality TEVT program
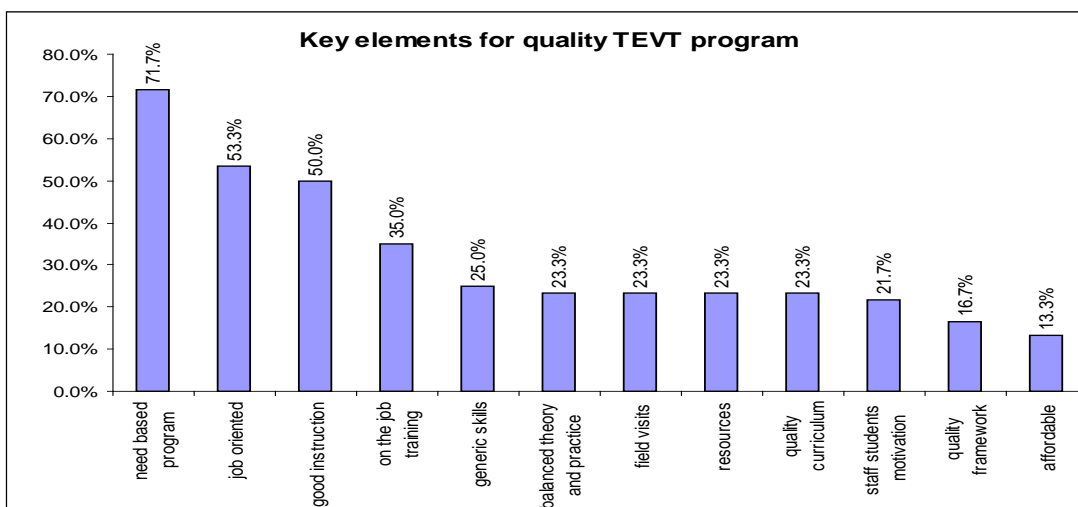
Conclusion

Considering the importance of quality and the need of dynamic system for overall development of TEVT in Nepal, a model of TEVT representing the general system is proposed as follows. If the concern is of sustainable and quality products of TEVT then the model will be quite useful to refer to and proceed further.
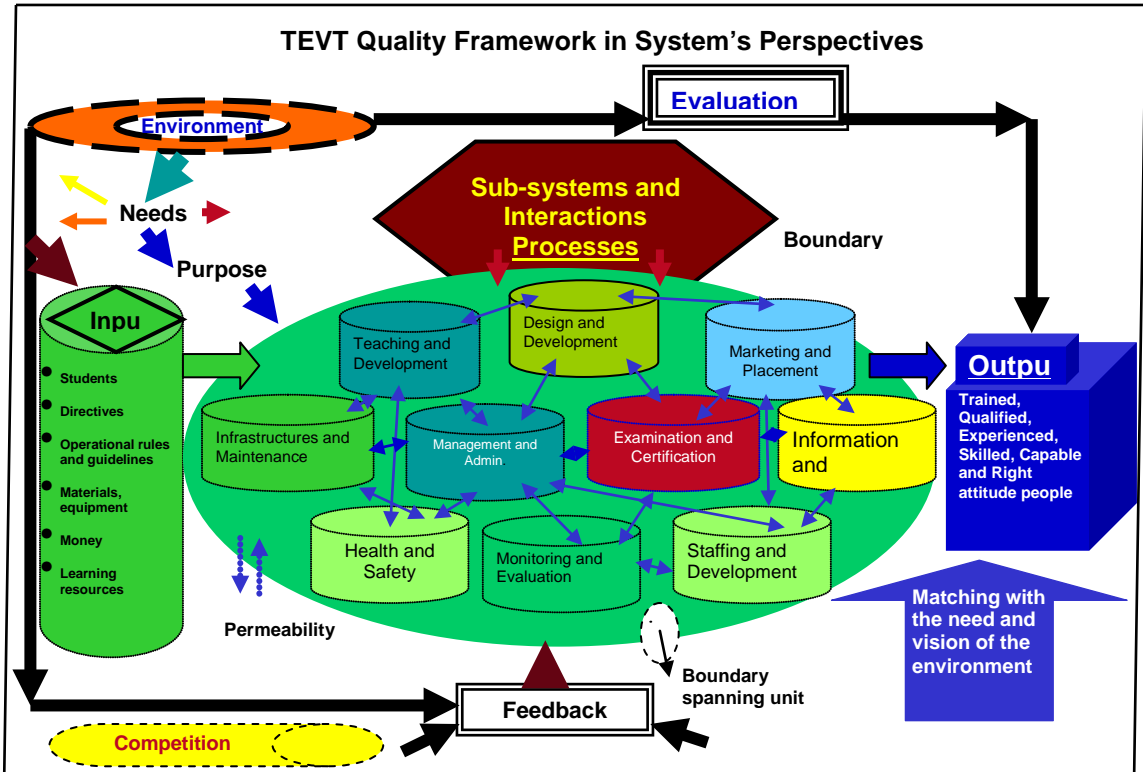
Source: Created by the author himself

The core of TEVT Quality Framework is the end results (output) of TEVT and that must be common to all, thus every one must start from the end. Success indicators for each general elements or parts of TEVT system need to be defined and listed. For a quality work of TEVT, general features of all the elements, parts and steps of the model designed on the basis of general system model should be further defined and verified through detail research. The proposed model of TEVT Quality Framework is suggested for application and tested for further refinement.

Finally, if the focus and priority of a nation is to prepare quality people for quality jobs they do today and tomorrow thus improving productivity of the nation – then it is paramount that TVET is designed, developed, implemented, evaluated and updated from a "quality system" perspective.

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National Vocational Qualifications Framework in Nepal

Rajendra Karki[1]

Abstract

Nepal does not have long history in formal skill training although there is a long history in traditional and informal skills training. Since over eight decades with various modalities of skill development trainings, public and private sector training providers have still been playing vital role in producing skilled human resources. One of the initiatives was introduced to certify traditional and informal learning skills and knowledge through National Skill Testing Board by providing national skill testing certificate since 1983 to limited target groups. National skill testing system is a foundation for developing vocational qualification system. A qualifications framework classifies according to criteria for learning outcomes achieved with quality assurance. There is a challenge for policy makers whether the National Qualifications Frameworks (NQFs) should include all sectors of education and training although most countries usually wish to achieve a comprehensive NQF. Some countries choose one sector of education and training especially for building framework. Most commonly, vocational qualifications framework is seen as a way of addressing many issues and problems in vocational education and training (VET) sector. VET sector in Nepal is also fragmented leading to duplication of efforts and the inefficient use of resources. Various agencies involved in skills development are conducting their programs in a piecemeal approach without being able to refer their activities to a national system of recognized qualifications. As a result there are very few opportunities for semi-skilled or skilled workers to continue their education and training through non-formal or informal means and get their qualifications recognized. Therefore, Nepal has chosen VET sector in the process of NQF development to harmonize various training in a variety of formats. The government of Nepal has started initiatives through TVET – skills development policy, 2007 by envisioning of Nepal Vocational Qualifications. Nepal has long practice in National Skill Testing System which is almost similar as NVQF, but it needs to modify and update in the standard of NVQF. There are number of challenges in designing and implementing NVQF in Nepal which should be addressed for its successful operation.

Historical Development

Nepal is very rich in natural resources and traditional skills, which have enriched the national heritages. Nepalese workers have been practicing different artisanal, agricultural, and medicinal crafts which have been handing over within families since ancient time. King Jayasthiti Malla (1382-1395) during the 14th century divided the entire population of the country into 67 occupational groups and sub-groups, thus formalizing the link between craft and caste which has, to a large extent, continued until this day (Buila, 1984 as cited in Ramse, 1992).

Nepal has not had long history in formal skill training although there is a long history in traditional and informal skills training. It is generally agreed that it began with the establishment of a sole technical school in 1942 for producing sub-overseers (Sharma, 1987). In 1929 an ayurvedic school was established in Kathmandu which trained ayurvedic physicians to qualify as Vaidya. In 1934 a civil medical school was set up to provide training for compounders and dressers (Ramse, 1992). In 1960 Nepal made an attempt at vocationalzing its education system through the Basic schools based on Gandhian philosophy of economic self-reliance (Sharma, 1987).

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Multi-purpose schools were opened in 1961 to offer vocational courses in agriculture, industrial arts, secretarial science and home science as recommendation of National Education Planning Commission. These schools were converted into vocational schools under the New Education System Plan (NESP) in 1971. More than 120 vocational schools were in operation offering vocational training mainly in agricultural, industrial and business occupations by the year 1979.

In 1979 the National Education Committee introduced a Technical School Work plan. The Technical School Scheme emphasized skill training and occupational preparation of the school dropouts, school-leavers and non-college bound youths, including economically poor population unable for pursuing higher education. After numbers of initiatives, the Technical Education and Vocational Training Act, 1989 established the Council for Technical Education and Vocational Training (CTEVT) for coordinating, developing and strengthening Technical and Vocational Education and Training (TVET) in Nepal.

Institutional Framework of Current TVET System

TVET is undertaken by a wide array of institutions in the government and non-government sectors. Almost all leading public sector TVET institutions, whose primary responsibility is technical education under operate the Ministry of Education. As specialized national agency, CTEVT is playing leading role in both technical education and vocational training. In addition, many other departments and boards under Ministry of industry and labour undertake training as an associate function.

Council for Technical Education and Vocational Training

CTEVT is an apex body of TVET in Nepal mandated by Government of Nepal to formulate policies, ensure quality control, coordinate all technical and vocational training programs and provide services to facilitate TEVT activities. CTEVT has been producing basic and middle level skilled workforce for the economic development of Nepal although the third amendment of CTEVT act in 2006 has given a mandate to produce higher level skilled human resources.

There are three types of technical schools under CTEVT: i. constituted technical schools, ii. annex programs in community schools and iii. affiliated technical schools and institutions. These institutions offer both technical and vocational education and short-term skills vocational training. Generally, TSLC and Diploma or proficiency certificate courses are categorized as technical and vocational education and non-academic and short-term skill training are categorized under vocational training. Under CTEVT, currently there are altogether 384 technical schools and colleges. They are constituted 25 Technical Schools/Polytechnics/ Training Centers including 4 under constructing institutions, 30 Annex Schools (technical education and skill development training programs attached to selected community high schools) and 329 affiliated technical institutions (CTEVT brochure, 2010).

Universities

Some universities still offer TVET programs especially in Diploma or proficiency level which have enrolment capacity 1520 (CTEVT, 2010) although this number is about 10 percent of total enrollment capacity in Diploma or certificate level in Nepal. Tribhuvan University is conducting Diploma level program in Engineering and Forestry and certificate level program in medical science. Kathmandu University, National Academy of Medical Sciences, and B.P. Koirala Institute of Health Sciences have been running certificate level in nursing.

Government departments and boards with responsibility in TVET

Following government departments and boards are providing TVET programs in various areas:

Vocational and Skills Development Training Center: The center was upgraded as department under Ministry of Labour in 2008 and different 12 training centers were brought into operation under the center. From 2006, the centers started developing curriculum and operating vocational and skills development training. One of the objectives is to provide skills development training. The duration of trainings varies from 7 days to 6 months.

Cottage and Small Industry Development Board (CSIDB) and Department of Cottage and Small Industries (DCSI): CSIDB, organized as a board, and DCSI, organized as a department under Ministry of Industry, provides support services for the promotion, expansion and strengthening of cottage and small industries. One of the main activities of these organizations is to provide skill and entrepreneurship development training in various areas. CSIDB and DCSI have not specified particular duration for particular training. The same training is conducted from 7 days to 3 months as per the need and demand of the trainees (CTEVT, 2010). These trainings are likely livelihood rather than vocational skill training although there is no clear definition of and demarcation between vocational and livelihood trainings.

Nepal Academy of Tourism and Hotel Management (NATHM): NATHM is a government training center under Ministry of Tourism which was established in 1972 to produce skilled workforce for hospitality and tourism industry. It has been producing basic craft level and supervisory skill oriented training. It provides from 4 weeks to 6 months of duration training in travel, trekking and hotel sector.

Non-government sector training providers

There are a number of TVET institutions operating on fee-levying basis in non-government sector. Some of these institutions are running through affiliation receiving from CTEVT and many others are running through registration receiving respected government departments and offices. In addition, many non-fee levying institutions supported by national and international development agencies are also operating training.

National Skill Testing Board

Skill testing activity was initiated in Nepal in 1983 through an autonomous body called Skill Testing Authority (STA), which introduced a system of occupational classification, development of skill standards, skill testing and certification based upon the guidelines of Asia and Pacific Skill Development Program/ International Labor Organization (APSDEP/ILO). After CTEVT was constituted in 1989, the STA was placed under the umbrella of CTEVT as National Skill Testing Board (NSTB).

Occupational Skill Standard

An Occupational Skill Standard is written specification of the practical skills, underlying knowledge, and experience demonstrated by an individual in a particular occupation.

<u>Skill Test</u>

A skill test is the corresponding performance test based on the occupational skill standard which must be demonstrated by every individual to obtain a "NATIONAL SKILL CERTIFICATE" indicating that the certificate holder meets the requirement of a trade/occupation.

<u>Target Group of Skill Test</u>

Occupational/Trade skills tests are open to all skilled workers and crafts persons. Principally, skill testing reaches out to three different target groups:

  i.   pass-outs from pre-employment vocational training wishing to facilitate their transition to work,

  ii.   experience workers (employed or unemployed) lacking an official certification,

  iii. workers who, at the end of in-service training, seek an upgraded or additional certificate.

Overview of the National Qualifications Frameworks

The development of National Qualifications Frameworks (NQFs) has been a major international trend in reforming national education and training systems. The NQFs were developed in a number of different countries starting in the mid-1980s. The NQFs initially were started from English-speaking countries. Many countries which have not initiated yet are considering the adaptation of the frameworks. They believe that NQFs can help to ensure that qualifications meet the country's economic and social needs, are of good quality, provide flexibility and progression for learners, and enjoy international recognition (Tuck, 2007).

It is important to be clear about the meaning of a qualifications framework. OECD, 2006 (as cited in Tuck, 2007) defined;

> "*A qualifications framework is an instrument for the development and classification of qualifications according to a set of criteria for levels of learning outcomes achieved. This set of criteria may be implicit in the qualifications descriptors themselves or made explicit in the form of a set level descriptors. The scope of frameworks may be comprehensive of all learning achievement and pathways, or may be confined to a particular sector for example initial education, adult education and training or an occupational area. Some framework may have more design elements and a tighter structure than others; some may have a legal basis whereas others represent a consensus of views of social partners. All qualifications frameworks, however, establish a basis for improving the quality, accessibility, linkages and public or labour market recognition of qualifications within a country and internationally.*"

Likewise, Coles (2006) has mentioned NQFs as; "classify qualifications according to criteria for learning outcomes achieved. NQFs, backed by a system of quality assurance, can contribute to improvement in matching workers to industry needs and of individuals to education and training over their working lives."

The above mentioned definitions give general meaning of NQF which is an instrument for classifying the qualification and providing the pathways for the skills and knowledge acquired through formal and informal training and education. However, individual countries can define qualifications framework in a specific way in their own context.

There are two main reasons for developing the NQF: promoting lifelong learning; and quality assurance and recognition (Tuck, 2007). In some countries, notably South Africa, the introduction of an NQF was part of a much agenda of promoting social justice and redress. The scope of NQF is generally determined by successive reforms and initiatives in the education and training by respective countries.

There are three main sectors of education and training with in interests in the NQF: secondary schools; vocational education and training (VET) including work-based learning; and higher education. The boundaries between these sectors vary across countries and the place of VET, in particular, is difficult to define. In some countries, the secondary school sector includes vocational schools; in others, VET is delivered almost entirely through post-secondary institutions. Some countries regard aspects of VET, e.g. higher technician level qualifications, as part of the higher education sector; others would not. Some countries make a clear distinction between formal and informal VET; others regard these types of VET as a single sector (Tuck, 2007). Therefore, it is a challenge for policy makers whether the NQF should include all sectors of education and training. It is likely that most countries will wish to achieve a comprehensive NQF at some stage whereas some countries will choose one sector of education and training for building framework. For example, Australia, Hong Kong, Malaysia, New Zealand and the Philippines have NQFs covering senior secondary, vocational education and higher education qualifications, but there are differences in the framework across the sectors (Fearnside, 2009). In Singapore and Sri-Lanka the framework applies only to VET sector (Fearnside and Piyasiri, 2009).

Some countries have chosen to start with a vocational qualifications framework but with the aim of eventually creating a comprehensive NQF. The obvious advantages of this approach are that it allows a government to focus on the specific problems it wishes to address and avoids involving general secondary schools and universities in issues they see as relevant to their needs and circumstances. The demerits are that building the NQFs will probably take longer (e.g. 20 years in Scotland) and that it may be seen as a VET initiative which other sectors have played no part in shaping at its formative stages (Tuck, 2007).

Most commonly, vocational qualifications framework is seen as a way of addressing many issues and problems in VET sector. National vocational qualifications are the preferred instruments to determine the quality of training programs (sub-academic level) at the outcomes or output level. Though National Vocational Qualifications Framework (NVQF) makes vocational education and training comparable at the output level, there is enough room to improve at the input and process level, e.g. in terms of timing, training venue and methodology.

Nepal needs to reform education and training system to develop and implement NQFs because it is associated with reforms to it to provide for more mobile workforce and to facilitate to participate in education and training over their lifetime. It takes long time for the development and implementation of NQFs by addressing three main sectors of education and training. Even VET sector in Nepal is also fragmented leading to duplication of efforts and the inefficient use of resources. Various government agencies, NGOs, INGOs and development partners involved in skills development are conducting their programs in a piecemeal approach without being able to refer their activities to a national system of recognized qualifications. As a result there are very few opportunities for semi-skilled or skilled workers to continue their education and training through non-formal or informal means and get their qualifications recognized. Therefore, Nepal

has chosen VET sector in the process of NQFs development to harmonize various training in a variety of formats. The government of Nepal has started initiatives through TVET – skills development policy, 2007 by envisioning of Nepal Vocational Qualifications - further development of the activities of the National Skill Testing Board.

Purpose of NVQF

The NVQF provides the opportunity for sustainable, strategic solutions for national training needs as well as for the employment mismatch for both the formal and informal sectors. It provides greater transparency for qualifications, support for skills standards systems, a means of managing quality assurance. The NVQF will easily be able to achieve international recognition for qualifications, skills and knowledge of Nepalese workers in an increasingly globalised and competitive world. The NVQF mainly adapts internationally benchmarked policies and process, so that this will enhance mobility of Nepalese workers nationally and internationally.

The expectations sought from the establishment of NVQF relate to increasing the relevance and quality of TVET, specially there shall be (Piyasiri, 2009):

a. unified qualification framework which is recognized nationally and understood internationally;
b. development of progressive qualifications for career advancement;
c. greater alignment to national goals;
d. strengthened linkages with industry, commerce and other external stakeholders;
e. increased responsiveness to industry competency needs;
f. convenient and flexible access for potential trainees;
g. more proactive education and training strategies;
h. improved international linkages and recognition;
i. collaboration and rationalization among the training agencies;
j. enhanced quality, relevance, performance, effectiveness, efficiency and transparency; and
k. an education and training culture of responsiveness and excellence.

Developing the NVQF shall ensure that all current and newly emerging TVET activities are well coordinated. Competency-Based Training (CBT) curricula and appropriate teaching, learning and assessment materials shall be available in the framework, together with requirements for registration and accreditation for training providers and courses respectively. The whole system shall be underpinned on acquisition of competencies with an emphasis on quality.

Designing and Implementing

There is a need to decide which qualifications are to be considered as 'national qualifications'. Clearly, all qualifications that have been designed and validated through a central national development process will be eligible for registration on the NQF. Most frameworks will also include qualifications developed and validated through well understood mechanisms, such as university degrees, secondary school and occupational/professional qualifications. An NQF may also include qualifications developed by providers in response to specific needs, provided they meet certain national criteria. The stages in developing the system of levels are normally as follows:

i. decide on the scope of the framework,
ii. determine the number of levels,

iii.   develop level descriptors, and

iv.   develop practical guidance on any processes in which the descriptors are central.

The starting point in deciding on the number of levels is the current understanding among stakeholders about key qualifications and their relationship to each other. These key qualifications and the relationship between them are important benchmarks that will help stakeholders to relate to and understand the system of levels being proposed.

The number of levels in an N(V)QF varies. Over the last two decades there have been examples of framework with as many as twelve or as few five levels, but most frameworks today seem to have around eight or ten levels. For example, Australia and New Zealand are practicing 11 and 10 levels of qualifications whereas Thailand and Hong Kong are practicing 5 and 7 levels of qualifications in qualification framework. The table below shows the eight levels that are common to most NQFs. It also takes account of the eight levels adopted by the European Commission in their proposal for a European Qualifications Framework (Tuck, 2007) which is given in following table.

Table-1: Eight most common level descriptors

Level	Examples of qualifications and related competences
8	Doctoral degree; Senior Manager Vocational Qualification (VQ)
7	Masters degree; Specialist Professional Qualifications, Senior Manager VQ
6	Bachelors degree/Honours degree; Professional Qualifications; Middle Manager VQ knowledge-based professional work; management responsibilities.
5	Higher Education Certificate and Diploma; Technician/Specialist VQ; Para-professional Qualification; Advanced Vocational Qualification – highly skilled employment; management training
4	Senior School Exit Qualification; Advanced Craft VQ; Supervisory VQ- fully skilled employment; independent operative; supervisory responsibilities
3	Junior School Exit Qualification; Intermediate VQ – skilled/semi-skilled employment
2	Basic VQ – skills required to function in the workplace
1	Literacy and Numeracy Qualification – skills required to enter the workplace and undertake vocational training.

Sri-Lanka experience can be gainful for designing NVQF in Nepal. The NVQF is in operation in Sri-Lanka since 2004 and has gained acceptance and popularity in public and private sectors. NVQF has been developed based on national competency standards identified by the industry stakeholders. The competency standards include relevant technical and employability competencies (Piyasiri, 2009). The system awards qualifications at seven levels as given in Table-2.

Table-2: Sri-Lanka Vocational Qualification Framework.

Level no.	Qualification	Generalized description
Level 1	National Certificate	Level 1 recognizes the acquisition of entry level competencies
Level 2 Level 3 Level 4	National Certificate	Level 2, 3 and 4 recognize increasing levels of competencies. Level 4 qualification provides for full craftsmanship/workmanship.
Level 5 Level 6	National Certificate	Level 5 and 6 recognize the increasing levels of competencies of technicians including supervision and process management.
Level 7	Bachelors Degree	Level 7 recognizes the vocational/technological competencies at Bachelors Degree level

Nepal is still in infantile stage for the development of qualification framework. However, there are number of measures taken in the pathway of National Vocational Qualification Framework (NVQF). Recently, Government of Nepal has approved School Sector Reform (SSR) which is national policies and strategies of Nepal's school education. It is a policy milestone for development of Nepal's Qualification Framework, which envisions that in order to allow access from vocational to general stream of education. CTEVT will consolidate and prepare appropriate curriculum and course design integrating its current curriculum. It further mentions that the TEVT program will also include the core curriculum of the general stream so that the technical graduates will have easy access to join general stream (MOES, 2008). In addition, government of Nepal has issued Technical Education and Vocational Training and Skills Development policy 2007 and the policy has clearly mentioned, "usual development of new training courses will be organized in a revamped system (National Skills Testing Board) or Nepal Vocational Qualification". Therefore, the policy has provided foundation for developing and implementing NVQF in Nepal.

Nepal has long practice in National Skill Testing System which is almost similar as NVQF, but it needs to modify and update in the standard of NVQF. For example, Nepal has developed National Occupational Skill Standards (NOSS) in various sub-sectors. CTEVT act 1989 and CTEVT regulation 1996 have categorized five levels of skill test which are recognized by government of Nepal for the government and semi government job purpose. Although those who pass skill test examination cannot have a vertical and horizontal access for further academic study, moreover, there is enormous access in job markets both at the government and private sector. Generally, Government of Nepal has given recognition of National Skills Testing Certificate for the job appointment which is equivalent to the respective academic level as given in table 3.

Table 3: Skill testing level

Level	Govt. entry Level (skills holders)	Equivalent academic level (non skills holders)
Elementary	Assistant Level 1 & 2	Up to Grade 8 & 9
1	Assistant Level 3	Grade 10
2	Assistant Level 4	TSLC
3	Assistant Level 5	Diploma
4	Officer-III	Bachelor

In Nepal, NSTB has regulated the transition from one level of competence to the next higher one. Although NSTB has partially been followed vocational qualification system the transition from and to general education has not been addressed in the absence of comprehensive qualification framework. To address this critical issue, major players of VET sector including universities should make common consensus and understanding so that acceptance in public and private sectors will not be the issue. After creating common consensus designing NVQF will be the first step for successful operation. The present challenge of VET sector in Nepal is to due to the absence of proper vertical, horizontal and inter-institutional access even in academic knowledge and skills. The traditional and informal learning knowledge and skills are far behind for access of vertical and horizontal. In this context, policy makers and education planners should have clear vision and commitment to introduce NVQF. Ultimately, the clear visions for the development of NVQF will contribute to develop comprehensive NQF in long-run.

There are many examples that some developing countries have tried to adapt the best features from a variety of existing systems, but they have over-designed their frameworks and find it extremely difficult to get sufficient resources for their operations and maintenance. New and updated national vocational qualification should be developed on basis of economic and social demand of Nepal, resulting in a boarder and deeper coverage of vocational competencies (more levels of competence with a possibility to expand into the tertiary education system).

During designing phase, the number of levels and its descriptors should be decided because levels and its descriptors are very important and key elements for current understanding among stakeholders about key qualifications and their relationship to each other in the national system.

NSTB has carried out five levels of skill testing and clearly mentioned descriptors of each level although these levels and descriptors need to be relevant and suitable in NVQF context. Sri-Lankan models can also be a relevant example in designing NVQF in Nepal because socio-economic and education system in Nepal and Sri-Lanka are more or less similar. Therefore, five to seven levels of NVQF system can be adapted which will be simple, workable, affordable and manageable. The major elements of framework (Sharma and Kohlheyer, 2008) design that should be considered as:

   i.   authority in charge;
  ii.   scope of occupations and competence levels;
 iii.   interface with the TVET/skill development design and delivery system;
  iv.   delineation of qualifications (in terms of their "chunk size");
   v.   creation and format of an occupational standard;
  vi.   assessment approach;
 vii.   interface with general education and higher education;

viii.   costing of services;
ix.   transition from the present skill testing system to a framework and
x.   resources needed for the framework-related services.

There can be an option to update and convert into NVQ system from National Skill Testing System because NSTB has already developed over 205 Competency-based National Occupational Skill Standards (NOSSs) (CTEVT broucher, 2010) which are foundation for the development of NVQF. In this sense, NSTB, which has been performing skill testing and certification of skill holders in various occupational areas can be regarded as a platform for NVQF. The NOSSs are developed in industry, agriculture, health and tourism, including the informal sector. Regarding implementing NVQF in Nepal, NSTB has been authorized by CTEVT act as the national skill testing authority to test skill competency and for certification. Therefore, converting NSTB into the National Vocational Qualification Authority (NVQA) can be the best and suitable option in Nepal by amending CTEVT act because NSTB has rich experiences in competency-based qualification system. Moreover, NSTB has almost familiar with NVQ system so that it is almost able to work as NVQA, but its institutional capacity needs to be strengthened by arranging needed resources for the framework related services.

On the other hand, if consensus could not be developed in line of converting NSTB into NVQA, a separate authorized body can be established as NVQA. For this, separate NVQA bill should be brought for receiving legal authority. However, it will be challenging to set up new authority without having experiences in vocational qualification and receive recognition from national and international labour market because of its credibility and popularity. In addition, it can be costlier to institutionalize and implement effectively.

Issues and challenges

The relation between modern lifestyle of human beings and use of technology and its development is stronger than ever before. Even though vocational education and training has enormously developed in modern age, its base is generally found on academic education and structure related to it. Nepal is facing numerous challenges in the process of development of NVQF which are:

a)   Present challenge in this aspect is to integrate technical skills acquired by different modes of general education stream and provide due respect and recognition to VET. The extremes of the bipolar environment for learning and acquiring skills are formal and informal. The NVQF can be instrumental to interlink between formal and informal sector and also to provide career path for TVET graduates. It can be expected that if it is applied significant improvement can be achieved in TVET sub-sector.

b)   The NVQF is not only the instrument for classification of vocational qualifications but it is also pathways for quality, accessibility, linkages and labour market recognition. For this, successive reforms and initiatives in the education and training are required which is almost impossible before political stability and declaring new constitution in Nepal. Moreover, the country is going to enter into federal state in the process of restructuring.

c)   It is a great challenge for policy makers in most countries whether the NQFs should include all sectors of education and training. In the same way, Nepal will have challenge to choose only VET sector because this sector is very much neglected so that VET graduates usually do not get chance for studying in higher level academic pathways.

d)   VET sector in Nepal is more fragmented leading to duplication of efforts and the inefficient use of resources. There are very few opportunities for semi-skilled or skilled workers to continue their education and training through non-formal or informal means and get their

qualifications recognized. In this context, NVQF only in VET sector may not open the door to general education and vice-versa.

e) The main arm of establishment of the NVQF is the NSTB, but common consensus need to be developed that NSTB can be converted into NVQA. Due to limited resources of the board, it is being limited in performing high demand of traditional skill testing activities rather than focusing on institutional development as well as developing vocational qualifications framework.

f) Another challenge for the development of NVQF is lack of financial resource. Government of Nepal generally allocates less than 1% of total education budget in TVET. Moreover, developing and implementing NVQF is also costly process so that present allocated fund for TVET can design and implement NVQF is questionable.

Conclusion

National Vocational Qualification Framework is in infantile stage in Nepal. CTEVT has long been involved in producing basic and middle level skillful and technical human resources and has been regularly supplying these resources required to the national and international markets. However, developing NVQF giving clear pathway of vertical and horizontal ladder of upgrading the skills to the students is mostly limited in document except some practice made by NSTB. NSTB, which is considered as the platform of NVQF, is made limited only in performing regular works of developing occupational standards and testing skills rather than developing NVQF because of limited resources, which is the burning issue of these days. Though Government of Nepal through various plans, policies and other documents (e.g. TEVT policies, SSR, CTEVT act etc) have given some direction for designing and implementing NVQF, it is not being area of priority in allocating resources. However, various models have been proposed for streamlining the various skills into a single NVQF only for VET sector which will be a useful glimpse for developing NVQF in Nepal.

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Developing the Approaches of Mitigating the Impacts of Climate Change on Human Health in Nepal

Shiva Shankar Ghimire[1]

Abstract

This paper starts with the brief introduction of climate change and its relationship with human health. It is followed by brief summary of interrelationship among human health, climate change and overall environment. The paper further elaborates the discussion of observed and anticipated changes in climate and their likely impacts on human health with the focus in Nepal. It discusses how climate change brings impacts to the people and highlights the consequences of the climate change on human health. The main part of the paper is the summary of health and other initiatives that are supposed to protect human health by mitigating the effects of climate change in a sustainable approach. The paper has offered some of the public health interventions, developmental interventions and educational interventions to protect or safe guard health of the Nepalese people from the effects of global warming. Some of the mitigation measures of climate change such as awareness to the people, inclusion of the topic in educational curricula; expansion & promotion of health services and sustainable development approach are suggested to take into consideration while making the national development plan.

Introduction

Nepal is one of the least Developed countries and does not have big industries, factories and greenhouses. Therefore, Nepalese people have made least contribution to climate change in term of carbon emission. But they suffer disproportionately from the negative impact of climate change. Nevertheless, significant changes have been occurring for the years. The global average surface temperature and global sea level is increasing whereas snow coverage of the mountain is decreasing (Intergovernmental Panel on Climate Change, IPCC, 2007). The precipitation is supposed to decrease during the dry season, but increase during the wet season. This phenomena leads to an increased risk of flooding during heavy monsoon rains, whereas reduced water availability during the dry season. These changing patterns certainly increased the risk of drought and negatively affected crop yields (Cruz et al, 2007).

Many factors work together and cause an impact on human health. That is why; one should not look at health impact from climate change in isolation. Climate change is only one of the driving forces to affect human health. There are other driving forces that affect human society and health. Many of these driving forces are human induced and directly or indirectly related to climate change and human health, such as economic development, population growth, globalization, regionalization, migration, urbanization, social condition, ozone depletion, environment, health system etc (Eriksson, 2008). This article starts with the brief explanation of how climate change affects human health. It further elaborates health problems/ diseases directly caused by climate change and also explain the indirect health problems/diseases caused as a consequence of the climate change. The focus of this article is initiation in public health interventions that the government, NGOs, INGOs need to integrate in their health and development plan

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Fig 1: Interrelationship among human health, climate change and overall environment
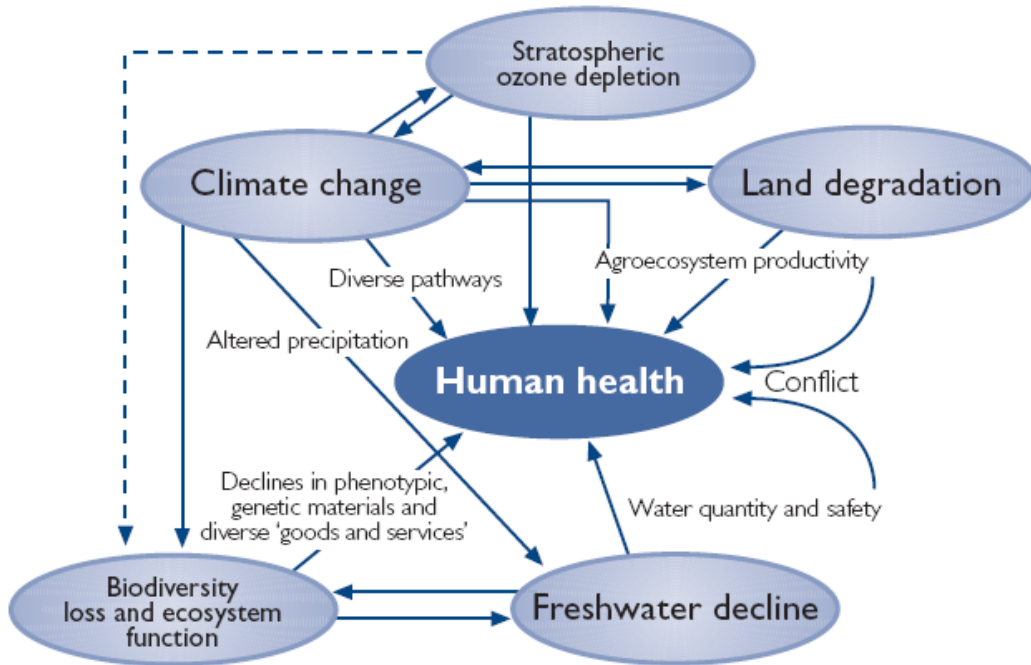
Source: McMichael, 2003.

Fig 1 shows the interrelationship among human health, climate change and environment. The above figure shows interlinks of environment and climate change and both have impacts on human health. For example, land degradation contributes in climate change and climate change also contributes in land degradation. The consequences of climate changes (shown in fig 1) are ozone depletion, altered precipitation, biodiversity loss, low agriculture productivity, the social conflict that ultimately brings problems in human health. Now, it is the need of the day to try to understand the subsequent implication of these forces and to promote a sound response by developing an appropriate approach of adaptation and mitigation. This article is written to add a brick in bringing awareness to public/policy makers about the effects of climate change on human health. It is believed that it will contribute to draw attention of the policy makers to initiate public health intervention in modulating the influences of adverse effects of climate change in Nepal.

Climate Change and Human Health

Hippocrates is the father of modern medicine. He was aware about the relation of the air, water, places to health and medicine in his time. He states;

"Whoever to investigate medicine properly, should process this: in the first place to consider the seasons of the years, and what effects each of them produces, for they are not all alike, but differ much from themselves in regard to their changes."(Lloyd, 1978 p-19)

Health is our well being and needs attention and urgent action to protect from climate change that is threatened by the direct or indirect effects of global warming and climate change. Different people manage changes differently. Nepalese people who are most marginalized (remote communities and ethnic minorities etc) and most vulnerable groups (women, the elderly, children and disabled) suffer the most from the impacts of climate change because above mentioned groups are physically, socially, psychologically more susceptible (Vulnerable) to the impacts of climate change. In the context of Nepal, this is due to high exposure to hazards, inaccessibility to many public services, widespread poverty, pre-existing health problems, limited livelihood options and degradation of natural resources.

Fig: 2   how climate changes cause affect on human health?
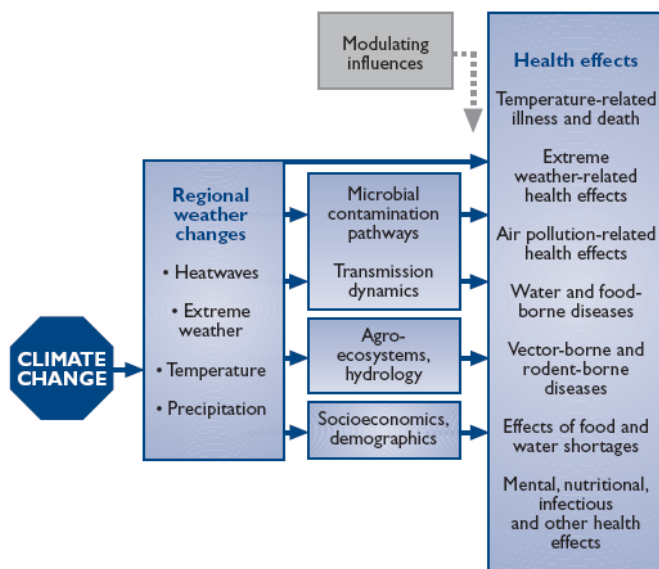
Source: Patz et.al, 2000

As   in fig 2, climate change causes extreme weather, heat waves, rise in temperature and alter in precipitation. These causes facilitate fast growth, multiplication and transmission of micro-organism. In addition, these causes have negative impact on food production, consumption patterns, hygiene and sanitation and social behaviors. The ultimate impacts of all these changes and causes are on human health such as temperature/weather related problems, air, water, food borne diseases, nutritional problems, mental health problems and psychosocial health problems. These impacts can be minimized by modulating influences and public health interventions as shown in fig. 2.

The health of millions of people globally is said to be affected through the global worming and climate changes discussed above. In Nepal, the main adverse health outcomes caused by the climate changes include: (WHO, 2008)

- Change in average temperature, rainfall patterns and heavy precipitation events increase the risk of water and food borne diseases such as diarrhea, cholera. It is estimated that nearly 30,000 people mostly children under five years die every year from water borne diseases in Nepal (WHO, 2008)

- Increase heat waves contribute to deaths from heat stress, strokes; exacerbate respiratory diseases and cardiovascular illnesses related to increased ground level ozone. The most affected population would be children, the elderly and chronically sick persons.

- The increasing energy demands would be met by greater use of fossil fuels that add numbers of respiratory diseases such as asthma. The air/environment pollution further worsens the condition.

- Extreme weather events causes flooding, landslide etc that intensify direct risk of injuries and deaths for example Asian tsunami of 2005. Nepal is facing disaster of landslide and flooding during summer and it causes injuries, losses of lives, damage of houses and agricultural framings.

- Rising temperatures, variable precipitation and increased drought are likely to decrease the production of stable foods, which is increasing the risk of malnutrition particularly for the poor children. The shortage of food, which will cause a number of health issues, including malnutrition, growth retardation in children, low immune-system function, low intellectual development in children, low productivity in adults and susceptibility to infectious diseases in every one (WHO, 2003). Under nutrition was still significant in Nepal, with one in two (50%) Nepalese children

Under five years of age being stunted (short for their age); 13% wasted (thin for their age); and 37% underweight. Moreover, 24% Nepalese, women aged 15-49 years were malnourished (Nepal Demographic and Health Survey, 2006).

- Global warming and climate change bring impact on ecosystems and bio-diversity which affect peoples' diet pattern & nutritional status leading to nutrition related other health problems. Consequently, it creates socio-economic stress and social conflict which may even leads to depression, suicide and conflict related health problems.

- Due to the inadequate availability of the water sources, the general hygiene and sanitation standard of the people will cause skin infection, water & food borne diseases.

- It is tried to look at the diverse aspect of climate change and mental health. The seasonal climate variation, extreme weather conditions and specific climatic disasters lead to psychological impact and other consequences on mental health. The displacement of population and loss of livelihood will increase psychosocial stress in the affected population. The consequences of the psychosocial stress would be depression, mania, hypomania, psychosis and even suicide. The World Health Organization estimated that 20-40% of affected people suffered from short-lasting mild psychological distress whereas another 30-50% of such people experienced moderate to severe psychological distress following the Asian tsunami of 2005 (Chand and Murthy, 2008). The trauma and loss occurs after exposures to severe disaster that may exacerbate previous illness e.g., turn moderate depression into severe depression. Similarly, it may cause severe form of trauma induced common mental disorder.

Mitigation of Health Impacts

The response to climate change has important links with other aspects of sustainable development. The fuel-switching for heating, lighting and cooking could also reduce the work load of women and children in developing countries like Nepal. The development of renewable energy resources can make important contributions to the country's energy. It further facilitates energy access in rural areas through the use of solar energy or energy from agricultural waste. The behavior changes (walking, cycling or use of public transport) and management practices

can reduce emission. The following are some of the initiatives that are said to make significant contribution for mitigating the affect of climate change on human health.

- Strengthen the capacity of health care system: The coverage of health services in remote areas is not at satisfactory level. The low level health care workers are hardly providing low quality of health services. The health care providers are inadequate in number, inadequately trained and no regular system of upgrading skills and knowledge when they enter into the service. The physical infrastructure, tools, equipment and supply are inadequate & inappropriate. In such a situation, the health workers remain unable to tackle additional health problems arising due to climate change. Therefore, strengthening the capacity of overall health care system is the first and urgently needed action of the government.

- Development of national health plan for concrete public health interventions: The climate change has brought additional health challenges. The government policy should address these challenges. In line with government policy, ministry of health needs to develop short term, mid -term and long term plan to intervene these challenges. The health reform and development programs should take climate change and its health impact into account while designing and delivering it.

- Expand existing capacity of health care facilities: The capacity of health care facilities is very poor particularly in remote areas. The services are not accessible to the needy people. The vulnerable or risk groups of people even can not afford the cost. To make the health services acceptable to all people who are on need, the expansion of health facilities with well trained personnel and adequate supply at community level is urgent. The expansion of health care could not be effective without strengthening and upgrading the quality of services.

- Update and train human health resources. Similarly, the issue needs to include in in-service training programs. The health workers are not prepared or trained to tackle emerging health problems of climate change. It is utmost necessary to include climate change and health consequences in all pre-service training programs.

- The health workers, government staff and general public are not aware about the changing pattern of health problems due to changes in the climate. The first and the most important step is making awareness of health consequences of climate changes to the general public, political workers, government staff and health workers need to address by the government as a priority project. The mobilization of electronic and non-electronic Medias, organization of workshops, seminars, discussion programs and social dramas are some of the means that can be mobilized in bringing awareness to these challenging problems emerging as the consequences of climate change.

- It is suggested that the topic of climate change should include into the curricula of schools, colleges and universities. The technical and vocational education system needs to include this topic in its all programs. In this line, Council for Technical Education and Vocational Training has already included it in the curriculum of general medicine and also in some other programs.

- Initiate and use the appropriate approaches to draw the attention of the general public and policy makers

- Promote/support the research/study on the complex and multilayered linkages of climate change and human health

- Empower the local communities and local health facilities. Government needs to develop appropriate mechanism to implement public health interventions addressing climate sensitive diseases at district hospitals, PHCs and health posts level.

- Health sector in isolation cannot bring change. Government needs to initiate multi-sector approach to mitigate the impacts of climate change. Collaboration, co-operation and joint action with other sectors to integrate health aspects in to sector plan is urgent and seek support to address the impact of climate change on health.

- Develop and implement the policy of broader sustainable development and initiate the effective integration of climate change risks into broader development plan and governance system

Conclusion

The simple idea that human health and diseases are linked to climate probably pre dates written history. Global warming and climate change is known to affect aspect of human beings. The health impacts of climate change can occur through direct or indirect modes and the intensity depends on the adaptation and mitigation policies and plans of a country. The major health hazard through direct pathways in Nepal are injuries related to severe weather; infectious diseases related to changes in vector biology; water and food contamination; respiratory and cardiovascular diseases related to worsening air pollution; and nutritional problems related to changes in food production. The indirect health hazards include mental problems and problems arise through the impact of ecosystems and biodiversity. The government has not given equal priority to health sector for developing and implementing adaptation and mitigation policies and strategies anticipating the effects of climate change on health. The health strategies need to develop at national level, regional level and local level to adopt and mitigate the impact of climate change on health. However, human action to-day may jeopardize well beings and health of future generation. Therefore, advocacy, education, social development and sustainable economic development are other areas of concern to address the impacts of climate change.

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The Role and Place of Counseling Services in TEVT

Garry Bargh[1]

Abstract

Vocational Guidance and Career Counseling play a key role in TEVT systems, they operate as client focused services to ensure that students and graduates have access to information that will ensure they select the most appropriate course for their employment preference and future study. These services are institutionalized and are fully incorporated into the TEVT systems. They are regarded as professional services and receive the resources they require in terms of qualified trained staff and financing. They can be conducted in the formal sector training institutions, including technical high schools, in either public or private institutions. Alternatively they can be contracted out to the private sector and operated on a fee for service basis or subsidized by government.

Vocational Guidance and Career Counseling in the TEVT sector is a relatively new concept in Nepal. These services are included in the Nepal national TEVT policy, which was approved by Cabinet in September 2007.

This paper will review the current status of these services in Nepal, look at examples of good practice and implementation options for both the private and public sectors.

The International Experience

Countries with well developed TEVT sectors have long recognized the importance of counseling services in TEVT. These services are institutionalized in the TEVT sector and are conducted through either government funded or private sector services (these can also be government subsidized.)

Some countries have government or private only services or a combination of both.

Counseling services can begin at secondary schools that conduct TEVT courses. Counselors are also found in post secondary TEVT schools, either working full or part time, depending on the size of the school and student body. Quite often counseling is combined with a teaching role.

Ideally counselors have had training either as part of their formal tertiary training or in short courses which focus on skill development. Counselors should preferably have had some work experience, either in the public or private sectors, outside the formal education sector. Having experience in the wider world of work is beneficial in providing counseling services to students.

Vocational Guidance and Career Counseling has the following Objectives:

1. To provide advice <u>pre training </u>to guardians and youth.

   To assist youth in deciding the most appropriate training course given previous education, aptitude and work interests. Advice at this stage could include courses available, locations, training schedules and course costs.

   Information on scholarships, stipends and subsidiaries may also be provided.

2. To provide counseling <u>during training</u> in relation to post training further training or work options.

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To counsel youth if they experience any personal or financial related problems.

This could also include problems with trainers, other trainees, course content, sexual harassment etc.

The purpose of this counseling is to resolve problems and reduce the chances of trainees dropping out.

Counselors often assist with organizing OJT through their employer network contacts.

3. <u>Post training</u> to provide advice on post training options, further study or employment, including self employment.

Job Search Skills Training

- Preparation of curriculum vitae.
- Employer expectations.
- Interviewing skills.
- Sources of job vacancies etc.

National TEVT Policy 2007

The Nepal TEVT policy is in process of finalization and implementation.

The policy contains five key policy areas.

Policy Area 3: Firm Integration of Various training MODES and PATHWAYS. [1]

Career Guidance plays and important role in this policy area.

The policy states:

"CTEVT will make necessary arrangements for the training of selected teachers. There will be a provision of necessary materials and resources to provide career guidance services for the school-going generation and the workforce with special attention to unemployed and underemployed enabling them to start a career of their interest, aptitude and ability.

Employment Support Service Centers will be established by DoL in regions, to facilitate the transition from training into employment.

Private and Public Technical Training Providers (TTPs) will be supported by CTEVT and DoL to provide placement and counseling services to their applicants, trainees and graduates."

Vocational Guidance and Career Counseling in Nepal

This is a relatively new concept in the Nepal TEVT sector.

There have been some independent initiatives that have been undertaken which can serve as role models.

They offer a comprehensive range of counseling and placement services and have been effective in linking training and employment.

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[1] Nepal Government Policy of 2065. Policy Design, Policy Formulation and Implementation Strategies. Page31. Tanka Sharma, Gunter Kohleyer.

Two TTPs that are operating full time Placement and Counseling Unit (PCUs) are:

1. United Children Education Program (UCEP), Sanothimi, Kathmandu, Private, NGO. PCU established in 1999.
2. Balaju School Engineering Technology (BSET), Balaju, Kathmandu. Public, CTEVT. PCU established in 2009.

In the past 12 months (2009/ 2010) there has been a strong interest, by both private and public TTPs in establishing PCUs.

Counseling services are linked with placement services and though they require separate staff experience and skill sets, the services are complementary.

As the TEVT sector moves from being supply to demand driven there is a focus on graduates gaining employment.

Training is being closely linked to market demand, particularly at levels 1 – 2, this demand differs between regions and between urban and rural locations.

Some TTP funding is linked to "employment outcomes" or "employment bonuses", for attaining specified levels of employment.

This has encouraged TTPs to establish, post training support services and PCUs.

CTEVT and Skills for Employment Project (SEP[1]) have been active in the promotion of counseling and placement services through PCUs.

A Placement and Counseling Coordinating Unit (PCCU) has been established at CTEVT, Sanothimi, in 2009 with full time staff.

The PCCU will coordinate activities of the PCUs as well as providing vocational guidance and career counseling to Kathmnadu students.

CTEVT has developed an Action Plan to establish PCUs in all 18 CTEVT Trade Schools and Annex schools with 8 being established in 2010 and the remainder established in the following year.

The PCCU has a separate office within the building with easy access for clients.

The PCCU will also support the PCUs established in CTEVT affiliated schools.

SEP has assisted the PCCU with capacity building, preparing recording systems, work planning and staff training.

SEP partner TTPs are encouraged to establishing PCUs and their staff have been provided with training.

SEP conducted the first introductory course in Vocational Guidance and Career Counseling and Placement in October 2009, Kathmandu. This course was attended by 39 participants from CTEVT, private TTPs and the Department of Labor (DoL) Employment Service Center staff.

A follow on Counseling training course which focused on specific counseling skills was conducted in Kathmandu in March 2010.

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[1] SEP commenced in 2006, is financed by the Asian Development Bank and the Government of Nepal for USD $ 25m. Auspiced by the Ministry of Education (MoE) and the Council for Technical Education and Vocational Training (CTEVT) . SEP aims to train 80,000 disadvantaged young people in entry level TEVT as well as capacity building for key stakeholders.

To date there have been no courses being offered by any private or public training institutions in Nepal for TEVT counselors.

Future directions in Placement and Counseling services

The MoE and CTEVT should take the lead in facilitating the establishment of vocational guidance and career counseling services in private and public TTPs.

CTEVT can directly influence and assist its public TTPs and affiliated schools to establish PCUs.

The necessary resources, both financial and staffing need to be committed. School Principals and management committees also need to be convinced of the value of these services and allocate resources.

This includes private TTPs who in the past have not seen the importance of post training support services and often have a small permanent staff that undertake multi roles within their centers.

Role models such as those listed above should be encouraged to relate their experiences and participate in training sessions.

MoE and CTEVT can take the lead in initiating training for PCU staff. They could encourage TTPs to develop a training curriculum for counselors and provide accreditation for both the curriculum and trainers.

When Career Counseling is acknowledged as an integral component of the TEVT system, counseling will be seen as a good career option.

As the TEVT sector in Nepal matures and the TEVT policy is fully implemented Career Counseling and post training support services will receive the support and status they deserve.

Conclusion

Vocational Guidance and Career Counseling could be said to be in the embryonic stages of development in Nepal.

The establishment of these services is included in the (2007) TEVT Policy and both the government (CTEVT) and some private sector TTPs have been established Placement and Counseling Units. CTEVT has established a coordinating unit (PCCU) at its Head Office in Sanothimi and plans to establish PCUs in all its trade and affiliated schools.

As Nepal moves from a supply to a demand led TEVT system there will be increasing emphasis and demand placed on the services provided by PCU's.

The GoN, MoE and CTEVT need to give high level support to the establishment of these services, provide training and resources to PCUs to ensure they are institutionalized in the TEVT sector.

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Principles and Practices of Curriculum Development in TVET

Binod Badal[1]

Abstract

A curriculum is a structured document that delineates the philosophy, goals, objectives, learning experiences, instructional resources and assessments comprising of specific educational programs. Additionally, it represents an articulation of what students should know and be able to do and support teachers knowing how to achieve these goals. Curriculum development is a complex task which needs a scientific approach for taking many decisions. It is a practical and rational system designed to collect data, determine content, standards and instructional activities, conduct both process and product evaluation and make revisions to occupationally related educational program.

Quality of graduates is assured through scientifically designed, implemented and evaluated curriculum. The curriculum is the constitution of TVET system. Curriculum audit is a process to locate problems in curriculum. It is a systematic and scientific process of designing, implementing, monitoring and reviewing the program. Quality and relevancy of any TVET program lie on the curriculum of the training. CTEVT assesses training needs develops curriculum and disseminates it to the TVET providers. The TVET institutions under or affiliated to CTEVT are mandatory to follow the approved curricula. It is aptly said that an average curriculum if implemented properly will give better results in terms of quality of pass outs. On the other hand a well-designed curriculum if not implemented in the right sprit shall fail to achieve desired objectives.

This paper reveals the concept of curriculum, the curriculum development practices being carried out in CTEVT and provides some mitigation measures of the present issues and challenges of the curricula for preparing the quality workforce as demanded by labour market.

Background

The term curriculum is too familiar to people involved in the education system, as they have all engaged either in receiving or providing the curriculum. However, it does not mean that all may have the same meaning and understanding of the term "curriculum." Mostly, the term curriculum and syllabus are used interchangeably. But there is difference between these two terms. Hence, it is important to define both the terms for clear understanding. The word curriculum has come from the Latin word 'Currere' which means 'race'. Originally and literally this term means to 'run a course'. But the term 'syllabus' is only a part of a curriculum and means what is to be taught i.e.; detailed contents comprising of concepts, principles, procedures and practices to be taught to the students, where as curriculum is a broad term of action of teaching-learning, including student evaluation directed to achieve defined objectives in a stipulated time frame. (TTTI, India 1999)

Concept of Curriculum

The term curriculum is interpreted by many scholars in different ways in accordance with their uses in different situations.

- Curriculum is a written description of the planned learning process. Normally it should include objectives and necessary means to achieve them.

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- According to Tanner Deniel (1980),"Curriculum is planned action for instruction".
- According to Saylor (1966), "Curriculum encompasses all learning opportunities provided by the school."
- A publication of CPSC (1982) stated that curriculum of course has been defined as an educational program designed and implemented to achieve specified educational objectives.
- According to CTEVT glossary of curriculum term (Oct. 1992), "A system containing an orderly arrangement of teaching and learning activities and experiences which a learner has to pursue for the achievement of specific educational objectives."

Here are multiple definitions of curriculum, from Oliva (1997).

Curriculum is:

- that which is taught in schools
- a set of subjects.
- content
- a program of studies.
- a set of materials
- a sequence of courses.
- a set of performance objectives
- a course of study
- everything that goes on within the school
- everything that is planned by school personnel.
- a series of experiences undergone by learners in a school.
- that which an individual learner experiences as a result of schooling.

Hence, from the above definitions, a conclusion can be drawn as that curriculum is a written document of an educational program which states educational objectives, integrated sequence of curriculum areas and detailed contents and methodology of student evaluation for achieving the objectives in a stipulated period for a specific group of learners.

Importance of Curriculum

The following table summarizes the particular needs of different users of the curriculum.

Stakeholders	Uses
Administrators	- Management tool - teaching activity data - confidentiality
Certifying/Accrediting body	- the process of certification and establishment of equivalence. - provision of information at required level of detail and emphasis.
Curriculum planners	overall picture of present curriculum

	• working draft of future changes to the curriculum.
Educational researchers	• detailed information in areas of interest.
Examiner/Institutions	• conduct examinations as per laid table of specification for achieving desired levels of competencies.
Government/agencies	• formulate planning physical, human, informational and financial resources for effective implementation of TVET
Industry/Employer	• understand the type of workforce and competencies possessed by the pass outs from a program. • find the suitability for the workplace.
Instructors/teachers	• ease of access and simplicity of use • general overview of the curriculum with more details relating to the area for which they are responsible. • know what and how to teach • select appropriate learning experience • developing desired competencies to the students.
Learner	• integration with study guides. • A learning tools, e.g.; as an advance organizer. • understand the scope of the study
Potential students and parents	• simple to access • main features presented with no jargon

Characteristics of Curriculum for TVET

The TVET curriculum has certain characteristics that represent a curricular focus that may be associated with curriculum building, maintenance and immediate and long term outcomes. They represent the potential parameters of any curriculum that has as its controlling purpose the preparation of persons for useful, gainful employment. The basic characteristics of any curriculum includes data based, explicit outcome, fully articulated, realistic, dynamic, student orientated as shown figure below.
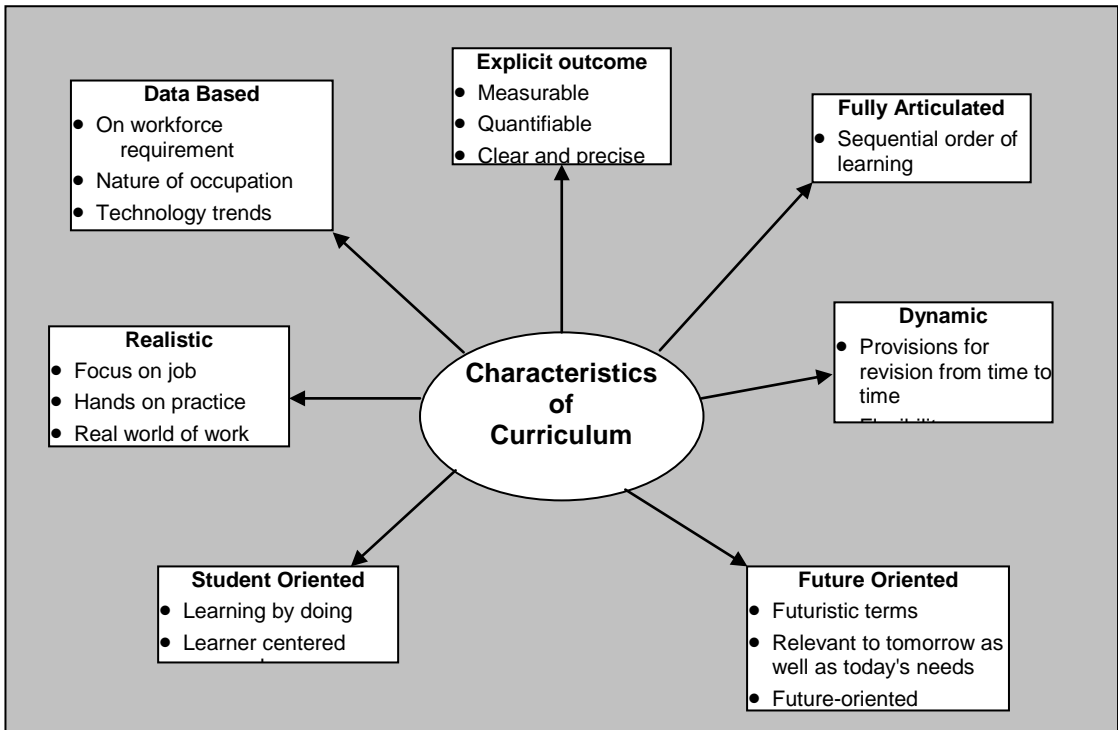
(Source: TTTI, India, 1999)

Curriculum Development

According to Hilda Taba (1962) "Curriculum development is a complex undertaking that involves many kinds of decisions. Decisions need to be made about the general aims which schools are to be pursued and about the more specific objectives of the instruction."

According to CTEVT glossary of curriculum (1992), "Curriculum development is a practical and rational system designed to: gather needs data; make decisions; determine content, standards and instructional activities; conduct both process and product evaluation; and make revisions to occupationally related education program"

Curriculum development needs a scientific approach for taking into account present and future socio-technological development scenario. The following table reveals the different stages, their function and scope for the development of TEVT curricula.

Stages	Function	Scope
Need Analysis	• Conduct market surveys	• to determine employment opportunities.
Design	• Devising or planning the intents of curriculum • Selection of proper methods/media	• Formulate objective • Identify subject areas • Time requirement for imparting desired KSA

	• List of resources required	
Implementation	• Harnessing of resources and their utilization	• Networking with industry & other organization • Sharing resources.
Evaluation	• Monitoring during implementation stage.	• to improve teaching learning process. • to increase the effectiveness.

History of Curriculum Development in CTEVT

CTEVT is established as the apex body for the purpose of formulating TEVT policy, coordinating programs, developing and expanding TEVT and ensuring quality of TEVT in the country. It has got the mandate of regulating and upgrading the standard of TEVT, maintaining coordination among different agencies, imparting such training and determining and certifying the standard of skills. Since the beginnings, a small unit was developed in CTEVT under coordination division with full technical capability to run need assessment & occupational analysis. There were only four divisions formed as planning, technical, skill testing and administrative. The Administrative and technical divisions were the largest of the four divisions and a curriculum section was formed under the technical division till 1993. The prime objective of the section was the development of curricula, materials and texts and teaching aids as needed.

Three day executive level curriculum planning workshop was conducted on Oct 2-4, 1991 at BTTC for training and providing guidance to the curriculum development efforts that was undertaken through the ADB project. The workshop focused on resolving 16 critical issues relating to curriculum development. The Curriculum Development Specialist (CDS) series I to III training was designed to prepare CTEVT personnel to develop their skills in the curriculum development. The first CDS-I training was conducted on October 23 to November 1, 1991. Late Dr. John Collum, Curriculum Development Specialist cum Trainer of ADB project was the pioneer for the development of curriculum at CTEVT. A unit composed with 7 staffs having one unit chief, one curriculum development officer with 3 internees' form CDS-II, one office assistant and one peon was planed for the curriculum development at that time. (Collum, CTEVT)

After the first amendment of the CTEVT act in 1993, ten divisions such as Technical, Polytechnic, Research & Information, Examination, Skill Testing, Administration, Vocational Training and Community Development (VTCD), Policy & Planning, Accreditation and Curriculum division have been operated in 1994 to undertake the mandated tasks of CTEVT.

The curriculum divisional decision was held to ensure the environmental awareness components and basic concepts of entrepreneurial skills; AIDS awareness/prevention training is given to every trainee and include them in all long term courses while revising old and developing new curricula from 1994 onwards.

The Curriculum development related trainings has been organized by TITI to all the CTEVT staffs and others. TITI offers DACUM, Task analysis and training session design training in this domain.

At present, CTEVT have developed 28 Diploma level, 25-TSLC level and more than 85 short term curricula that are available in electronic version too.

Practices of Curriculum Development at CTEVT

The following activities have been carried out while developing curriculum from CTEVT.

1. Obtain the request or need
2. Conduct Rapid Occupational Analysis (ROA)
3. Conduct DACUM workshop to analyze the job
4. Prepare and verify DACUM profile
5. Finalize the course structure
6. Analyze tasks
7. Conduct writing workshop
8. Conduct technical committee meeting for comments.
9. Get approval from curriculum board
10. Disseminate curriculum for implementation.

Problems for effective implementation of TVET Curricula

The quality of any TEVT programs mostly depends on the curriculum if implemented properly as prescribed by the curricula. Similarly a well designed curriculum if not implemented in the right sprit will fail to achieve the desired objectives. Some of the problems facing for the effective implementation of TEVT curricula are listed as follows:

- Many government, non-government and private organizations have been conducting various TVET programs. They have their own curricula. There is no single system in place for the standardized format of curriculum.

- Labor market needs are not well studied while developing curricula.

- Lack of orientation of faculty and staff for highlighting important feature of new/revised curricula for their effective implementation.

- Lack of training of faculty in new and emerging areas as stipulated in the curricula.

- Poor linkage with industry and industrial associations for effective curriculum implementation & placement of students.

- Lack of meaningful linkage with the world of work; i.e.; producing professional & technician without having any kind of professional experience during the course of their studies. This is one of the series lacunas of the system of technical education in the country.

- Industrial/field visits are organized in a limited way; these visits are generally not planned well in advance and ultimately take the shape of excursions. In majority of cases, objective of industrial visit is neither clear to the students nor to the instructors.

- As the OJT scheme is not a part of regular course of studies & teachers are not involved in its planning and execution, the scheme has not brought any improvement in teaching learning process in the technical institutions.

- Students are provided a general exposure by rotating them to various sections/department of some organization during OJT. Students at the end of training are given a certificate of having undergone such training. As the teachers are not

associated in planning and effective supervision, teaching learning process still remains bookish.

- The TEVT system has a single entry and exit point and there is no provision for students to pursue the course of studies according to their interest and emerging areas of technology.

- Weak linkage for collecting feedback from students & teachers for improving teaching learning process and revision of the curricula.

- There are many modular curricula available but they have not been applied and integrated.

- There is weak preparation of horizontal & vertical organization of curriculum.

- The training program deserves recognition of training certificates from national and international agencies. But the bitter truth is that To Whom It May Concern letter issued by CTEVT to own pass outs and 3 months bridge course conducted and certified by parallel organization "Higher Secondary Education Board" reveal either the deficiency in curricula or the lack of advocacy about the programs.

- Lack of sufficient budget for developing quality curriculum and effective implementation.

Factors influencing the quality of curriculum implementation

The weaknesses in each of the following areas need to be studied and corrective action should be taken for achieving the desired results.

- Availability of resources.

- Leadership qualities possessed by the principal & head of department.

- Motivation and competence of instructors/teachers.

- Institute-industry cooperation needs to be established in curriculum design, its implementation, and joint research work.

- Traditions of culture of institute.

- Students' discipline toward learning attitude.

Many studies reflect that the people working in the system consider education-work linkages as an import aspect but when asked to implement, many questions are raised like:

- Will it be possible to provide training facilities for entire student population?

- From where to bring time for industrial training? Should a part of knowledge be deleted from the curriculum?

- Who will plan, implement & supervise the industrial training component?

- Will industry cooperate in curriculum development, implement & evaluation?

This calls for a continuous interaction of technical institutions with the world of work so as to keep pace with industrial developments and to train human resources as per need of industry. (TTTI, India, 1999)

Some key points should be considered for establishing effective linkage between training institutions and industry.

- Organize training of teachers in industry.
- Organize the structured visits of students to industry/field at subject level.
- Organize extension lectures by experts from industry/field.
- Conduct cooperative education programs.
- Provide career opportunity guidance.
- Organize placement services.
- Offer continuing training programs for industrial personnel.
- Introduce research and development and consultancy services.
- Promote industry-institute interaction mechanism.

Conclusion

The curriculum development is a critical process that should satisfy the program objectives and the stakeholders. However, there are a lot of efforts have been made in designing TVET curricula; there are a lot of areas of improvements to be taken into consideration. The quality of graduates is assured through well developed and appropriately implemented curriculum. The curriculum is heart of every education streams; moreover, TVET will not run without properly designed curricula. Quality and relevancy of any TVET curriculum are foundation for the success the training programs. Mostly, CTEVT assesses training needs, designs and develops curriculum and disseminates it to the providers. The TVET institution under or affiliated to CTEVT are mandatory to follow CTEVT approved curricula.

Recommendation

The following general recommendations can be drawn to make the effective implementation of curricula.

- Collect feedback from teachers, students & industry for bringing necessary improvements in the curricula.
- Modify the time requirement for the specified contents/subjects, if the allocated time is insufficient.
- Provide suggestions on instructional strategies or types of learning experiences to students, teachers for desired competencies.
- Allow multipoint entry and credit system to students having different backgrounds and qualifications to enter the programs of studies at different levels.
- Constitute the independent boards under an apex body to ensure quality and transparency in curriculum and learning material development as prescribed by the TEVT policy framework.
- Conduct curriculum audit while designing, implementing, monitoring and reviewing the curriculum processes.
- The development and evaluation of curriculum should be separate because the audit or evaluate function of the curricula should not be carried out by those involved with the development of curricula. i.e.; Regulatory functions should not be combined with support functions. Each should be in separate organizational entities. For more clarification; in the process of having an approved curriculum there is firstly the development phase, which results in a product, the draft curriculum. The next phase is

accreditation, which is largely an audit function on the appropriateness of the curriculum development process.

- Allow restructuring of curriculum and course sequences along the logical & chronological arrangement of the various subjects of a curriculum and the lines of clusters or career paths to integrate TEVT with general education.
- Introduce new and different skills to the curricula including not only job-specific skills but also transferable, generic skills that will help the learners to acquire further education and training throughout their careers for the growing reorganization that the workplace of the future.
- Ensure effective collaboration with employees in curriculum development.
- Update curricula to address the change circumstances.
- Incorporate innovative technologies in curriculum.

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Right Skill with Right Perspective – Need of the Market: Counseling Service for Enhancing Performance of TVET

Srijana Karki Thapa[1]

Abstract

As per the findings of various studies and researches, the majority of Nepal's youth of school age cohort leave school without completing education up to class ten (CTEVT, 2010) . These out of school youth neither resume school nor do they have an opportunity given by system to join alternative to education such as technical and vocational training programs to make themselves skillful enough to be involved in economic activities.

On one side, employers grumble about lack of unavailability of skilled hands and on the other side, there is thousands of youths, sort of being wasted in dearth of access to technical and vocational training opportunities. This gap has to be bridged by the system with formal alternative with easy access to these out of school cohort. Along with proviso of systemic opportunities, it is utmost crucial to make training environment conducive to meaningful learning. Only out of meaningful learning can we expect fruitful outcomes out of any technical and vocational training programs and that are – skilled graduates with right understanding of one's work and the environment they are in. In this competitive age, providing young people with skills only is not just enough. They also have to be guided to choose right career in tune with their nature and aptitude. They also have to be facilitated to help them understand their environment (or psychosocial situation). That is where career and psychosocial counseling comes in the scenario that could be instrumental in shaping one's career and perspective.

The target group for vocational training programs in training institutions is basically young people in prime youth. These young people do have to face challenges when they come to training institutions. Coping in new environment, new set of classmates from diverse background, new technology and curriculum, procedures to implement training programs, shift from rural to urban setting, lack of knowledge and support system to start up own work, lack of information for establishing network with possible employers, finding work after finishing training can make trainees worried and clueless and end up not utilizing the skills as means of livelihood after completing training.

These problems usually surface with the trainees during training period but sadly, it is confined with the trainees and not discussed openly. Even though, there are ways to discuss them, facilitate them to come to terms with problems or resolve them with whatever resources available around the trainees reach. Group discussion based on psychosocial counseling could be instrumental in tackling such situations of trainees during the training period.

Mismatch among one's aptitude, interest and training attended results in no benefit for any of the stakeholders - for nation – it does not get skilled human resource, for training institution – its product is not saleable in the market which eventually not going to help institutions business and image, for funding entity – be it an institution or an individual, investment is not going to give any sort of return and lastly for trainee him/ herself for wasting time and effort in training learning nothing or not utilizing skill learnt during training.

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[1]Author is the expert of Psycho Social Counseling and she works in Alliance Nepal.

Unfortunately, in TVET sector, the word "psychosocial" is often misunderstood by the stakeholders. It is understood as some mental problems of trainees which are not subject to address for any training institutions.

There is hardly a sincere systematic effort to address those "whys "by any stakeholders of TVET sector to add quality dimension to training program which in due course of time enhances the overall performance of TVET.

Counseling services is crucial in helping trainees to be prepared for training of one's vocation and utilize it afterwards for one's career development and economic benefit.

If we could make TVET programs more meaningful in terms of skills, knowledge, addressing their psychosocial situation, aptitude for chosen trade, lots of young people will find a path for themselves which will guide them towards the direction they are supposed to follow. Career and psychosocial counseling as an approach is instrumental in giving the new meaning to TVET programs

Background

As per the findings of various studies and researches, the majority of Nepal's youth of school age cohort leave school without completing education up to class ten (CTEVT, 2010) . These out of school youth neither resume school nor do they have an opportunity given by system to join alternative to education such as technical and vocational training programs to make themselves skillful enough to be involved in economic activities. The situation is more complex when it comes to those young people who have suffered from and survived conflict but been deprived of having normal but productive livelihood CTEVT (2010). Rightfully, it is a responsibility of the state to provide these youth an alternative to mainstream education. But, ironically, apart from scattered short term vocational training programs, mostly funded by various donor agencies, there is no systemic mechanism which offers them an option to mainstream general education. In absence of productive opportunities, mostly such young people often enter into labor market without being adept enough to be taken up as productive human resource and land up in poor paying manual work.

On one side, employers grumble about lack of unavailability of skilled hands and on the other side, there are thousands of youths, sort of being wasted in dearth of access to technical and vocational training opportunities. This gap has to be bridged by the system with formal alternative with easy access to these out of school cohort. Thus it is high time that there should be an expansion of training opportunities and services (technical vocational training and education) which is one of the major five objectives of Technical Education and Vocational Training Skills Development Policy, 2007 of Nepal. Along with proviso of systemic opportunities, it is utmost crucial to make training environment conducive to meaningful learning. Only out of meaningful learning can we expect fruitful outcomes out of any technical and vocational training programs and that are – skilled graduates with right understanding of one's work and the environment they are in. In this competitive age, providing young people with skills only is not just enough. They also have to be guided to choose right career in tune with their nature and aptitude. They also have to be facilitated to help them understand their environment (or psychosocial situation). That is where career and psychosocial counseling comes in the scenario that could be instrumental in shaping one's career and perspective.

Underlying Problems

These typical common remarks quoted inside the box resonates in institutions running vocational training programs. This is more particular in the case of trainees who are sponsored for short term training programs. Institutions running vocational training programs short or long term can identify their day to day situation with above statements. This common experience leads to many questions – "why it is the same for everyone and anywhere in the vocational training institutes especially catering to disadvantaged group or young people aged between16 to 35." "What are their problems "? "Why do they not make the most of free training opportunity and earn livelihood? Why they do not stay in employment after training despite the fact that they did not have to search for the work and work was made available to them through facilitation of training center? Why do they not persevere with the skill learnt? Why they in later stage not gain mastery on trade they started as apprentice? This "why" list goes on and it certainly affects the quality of training, it does affect the output of training and eventually outcome of such programs and projects.

The target group for vocational training programs in training institutions is basically young people in prime youth. These young people do have to face challenges when they come to training institutions. Coping in new environment, new set of classmates from diverse background, new technology and curriculum, procedures to implement training programs, shift from rural to urban setting, lack of knowledge and support system to start up own work, lack of information for establishing network with possible employers, finding work after finishing training can make trainees worried and clueless and end up not utilizing the skills as means of livelihood after completing training. The presence of many young people from various backgrounds in training institutions combined with complex and rapidly changing market demands just underline the importance of career counseling[2] in the training institutions. Often trainees come to training institutions with no determination to purse – they join training either to take advantage of free training or school education is not their cup of tea or just out of succumbing to follow peer pressure. When these confused young lot come to vocational training providers, they generally bring lots of problems along with them such as -

- ✇ Adjustment problems (trainees having difficulty with coping in new environment of training institutions, food, hostel life, Adjustment and coping with the work place culture during OJT or in preparation for the time after the training, adjustment problems of young women who are trained in skills such as auto mechanics or other technical jobs to cope with a male dominated working environment, harassment at OJT/work place etc.)

- ✇ Trainee's over expectation about life after training – thinking too high of themselves as a skilled person and having unrealistic plans or lack of plans after the training

- ✇ Not knowing the importance of saving and generally of keeping a realistic income-spending balance

- ✇ Lack of knowledge about changes and preoccupations of adolescence (many problems that are faced by students and staff in co-ed institutions)

- ✇ Adult women often having issues about organizing their family duties while attending the training

Likewise, if trainees aspire for foreign employment after training, generally, the key issues are - Preparation for the situation in the destination countries – fear of the unknown, starting with the journey, adjustment to the new place ; Protection of their health in the destination countries

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[2] Counseling is defined as a method of identifying practical solutions to life or work related problems. (Burnard, 2004)

(heat-related, HIV/AIDS etc); Separation from their families (homesickness, worries about how the family will cope during their absence, communication) ; Securing the required money to pay for the agents etc. ;Saving issues

These problems usually surface with the trainees during training period but sadly, it is confined with the trainees and not discussed openly. Even though, there are ways to discuss them, facilitate them to come to terms with problems or resolve them with whatever resources available around the trainees reach. Group discussion based on psychosocial counseling could be instrumental in tackling such situations of trainees during the training period.

Consequently, mismatch among one's aptitude, interest and training attended results in no benefit for any of the stakeholders - for nation – it does not get skilled human resource, for training institution – its product is not saleable in the market which eventually not going to help institutions business and image, for funding entity – be it an institution or an individual, investment is not going to give any sort of return and lastly for trainee him/ herself for wasting time and effort in training learning nothing or not utilizing skill learnt during training.

Therefore, career counseling at the beginning, during and end of training always plays a very important role in shaping the right perspective of trainees. The trained career counselor can help these confused young people pursue their true vocation and make the most out of skills learnt.

The young people who are the target group of TVET sector, the psychosocial situation of them can be categorized as -

(i)   Young people are influenced by peers; listen to friends than family members, can develop identity crisis,

(ii) Often have herd mentality, and follow peers rather than follow one's true vocation and often do not think about planning a career

(iii) Neither an adult nor a child – their psychosocial situation of transition phase is often not expressed – neither by family nor by training institutions they are in

> "Trainees do not take vocational training programs seriously despite getting opportunity for free participation."
> "Female trainees in male dominant trades are either weak or do not take up job after training."
> "Trainees are not regular and disciplined at the OJT period."
> "Trainees complain a lot during training period."
> "Trainees drop out in the middle of the program."
> "Trained graduates demand higher salary right after completing training."
> "Graduates do not continue the skill they learnt."
> "Employers grumble about trainee's irregularity on the job"
> "Employers complain about trainee's discipline "

Unfortunately, in TVET sector, the word "psychosocial" is often misunderstood by the stakeholders. It is understood as some mental problems of trainees which are not subject to address for any training institutions.

The word "Psycho– social" simply means interaction between external and internal reality of a person (Mahat, 2009). It is in a way personal empowerment process to deal with psychosocial aspect of an individual in relation to society. Personal empowerment process could be faciliated and relationship of trust between trainees and faciliator is a core factor. Personal empowerment of the trainees helps to support to reflect on their situation, challenges and strengths, it also

helps to develop a vision on life after training and strengthen their capacity in addressing their problems.

Such empowerment process or in other words psychosocial counseling can be integrated in any vocational training programs to help trainees to understand their psychosocial issues that are affecting their goals; enhance confidence to solve the problems; make them better skilled to cope with the stress; help them to better realization of the dreams /goals ; increase mutual understanding and relationship between the student, trainer, management (Institution) ; bridging the gap between management and trainees/students and many more.

Importance of Empowerment in vocational trainings can be listed in manifold and some of the examples are:

- Trainee able to better understand their issues/difficulties (Reduces worries and stress, Facilitate in adjustment);
- Increase motivation and self confidence in the training course (Trainees can search different options for their problems, Different employability options after training-support during OJT is helpful);
- Gaining skills in clear communication with families, friends, teachers and others.

In TVET sector, psychosocial counseling is being used here and there, but still it is far away from being implemented on a larger scale.

This approach was tested in some of SDC funded projects including some other donors funded project. Some of the projects where this approach was tested on a small scale was Training for employment (TfE)- project (2000 – 2008) which is already phased out ; Global Polytechnic Institute, Kathmandu (overseas employment) ; Saathi Traders, Dhangadi (Indian employment); and F-Skill.

The small scale testing on incorporation of psychosocial approach in vocational training programs led to results which were significant and meaningful in terms of guiding trainees to take life sincerely after training. Although done in small numbers of vocational training programs, the outcome produces were encouraging and those were -

- Trainees became more open and confident, coped much better with the realities of the labor market (OJT)

- Number of trainees who made a minimum income after training increased in all TTPs

- Solidarity and mutual support among trainees increased

- Able to find solutions for thier daily life issues, i.e. hostel conditions that were not agreeable, some trainees were helped to find income generation work during training; colleagues helped each other with suggestions

- Changed attitude of staff to trainees – as a result, better placements, better support

- TTPs could make necessary adjustments (i.e. OJT placements)

TVET is concerned with the acquisition of knowledge and skills for the world of work. Work is a major feature in most people's lives. Not only does it provide them with the means of survival in terms of food, clothing and shelter, but also the type of work undertaken by individuals and groups has a major impact upon their self-identity, social status and standard of living.

When learnt skills and knowledge are not transferred to work, it is simply a misuse of resources. Further, skills that are not at the par with market demand, is equally a waste of time. If we analyze the recent trend in TVET sector, then vocational training programs are scattered

everywhere with no consolidated database on training recipients and trained graduates practicing the same skills as a means to earn livelihood.

Objective of every such vocational training program boils down to making people equip with skill and knowledge for taking it up as a profession at the individual level and having enough skilled technical human resources to meet the need of the country at the national level. Thus, effort and investment of sponsors be it an organization or individual, will be down the drain if skill and knowledge not brought into practice.

Such situations are often results of mismatch between trainee and the trade chosen. These are also aftermath of faulty delivery mechanism of TVET programs which does not address trainee's mindset to make them prepare for world of work. It is not only skill and knowledge that is required to sell oneself in world of work but also needed a right perspective and preparedness to make one persist in the world of work.

However, whether a trainee is able to make a livelihood after the completion of a vocational training depends on many factors:

- adequacy of skills for the market – depends on what skills have been trained and whether the training is based on a thorough market research

- quality of his or her skills – depends to a large extent on the quality of training that s/he received; it also depends on how well the person was motivated and able to learn

- support received from TTP in finding opportunities for employment

- ability to identify options and find solutions – problem solving skills

- ability to communicate adequately with employer/customers –communication/negotiation skills and self-confidence.

In order to increase the rate of employment after completion, all these factors play a role. Counseling services alone cannot influence the market relevance and quality of the vocational training and the effort that is extended by the TTP to help trainees find employment. But such services can support the trainees to develop self-confidence, to learn how to look at a problem and identify the resources required solving it and can help improve his or her communication/negotiation skills.

Present Context

There is hardly a sincere systematic effort to address those "whys "by any stakeholders of TVET sector to add quality dimension to training program which in due course of time enhances the overall performance of TVET. So what could be the possible and viable solutions to those whys – Counseling Services that combines career and psychosocial counseling to those target groups of young people in each training center and in each training program could be the most viable option.

At present time, big donor agencies or bilateral agencies such as World Bank, Asian Development Bank, DFID, SDC, UNDP, USAID are funding for vocational training programs (duration of such training programs is usually of three months – 390 hours to one year) on various employment oriented or market oriented trades catering to youths from disadvantaged background including ex combatants / out of cantonment youths / conflict affected and so on. Such programs have pre condition to link training with employment at least by 80% within 3-6 months of training completion.

These programs specially cater to disadvantaged / marginalized group and women. They are also focusing on women's participation in male dominated trades and have encouraging incentive to attract them – placing quota of women participants in trainings. Up to the enrolment and in house training, these female trainees who are bold enough to join male dominated trades such as welding, motorcycle mechanic, plumbing, and auto mechanic may face no difficulties as peers and instructors are always supportive and resourceful. Their real challenges often start when they have to go to OJT (on the job training – an integral part of the training where trainees are required to work for certain duration in real work setting such as workshops, garage, factory etc. The harsh reality of social outlook towards females who are rarely seen in motorcycle or auto workshop do make them feel discouraged to pursue the training further and often opt to either drop out of training or are irregular during OJT. It takes a great amount of determination to carry on training despite offensive remarks at the OJT places. Ironically, the sponsored programs have sole focus in securing employment for the trainees after training completion rather than addressing psychosocial situation of the target group. Also, capacity building of training institutions, support for processes that facilitate well being of trainees in terms of their preparedness for world of work have not yet found a strong value by sponsors. However, in statistics, the number of female participants in male dominated trades may look good but their plights in real work places remain unheard and unaddressed.

Career counseling and psychosocial approach / counseling as a new and an evolving strategy that could give a substantial impact in enhancing performance of TVET are not being tested and supported considerably. Of late, some of the donors such as SEP[3] (skill for employment project) are emphasizing on training centers to have placement, counseling and marketing unit (PCMU)[4] through which services like career counseling and psychosocial counseling[5] are provided to trainees. But in practice, such practices still need due recognition and lot of people has to be trained in this area. In recent time, thousands of disadvantaged youth may be getting opportunity to participate in vocational training programs that also links them with employment but the psychosocial situation of the target group is largely unknown and unaddressed.

Now coming to the crux of the matter – how does really counseling services enhances performance of TVET. The viable strategy could be amalgamation of services that addresses psychosocial situation of trainees along with career counseling - psychosocial counseling for addressing well being of a trainees in his / her given environment and career counseling for helping trainees to be in tune of one's true vocation. Along with the right skill it is equally important that trainees also have right perspective towards work.

Often vocational training providers are reluctant to undertake counseling services, which they believe is not part of their core business. Inevitably, however, institutions are facing with the difficulties that participants bring along with them and if the training institutions do not

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[3] SEP (The Skills for Employment Project) is supported by the Government of Nepal and Asian Development Bank which aims to promote poverty reduction by increasing the engagement in wage, and self employment as well as foreign employment through market-oriented short term (MOST) skills training particularly for women, dalits and other disadvantaged groups. Ministry of Education is the executing agency and Council for Technical Education and Vocational Training is the implementing agency of the project.

[4] PCMU is unit established in vocational training institute which collects and disseminates information on employment and available skilled graduates to trainees and employers and promotes linkage between training and employment throughout the training cycle (pre – during and post training stages). (TfE, 2006,p3)

[5] Psychosocial Counseling is a process or approach where trained psychosocial counselor supports to analyze different emotional and social problems of a client and his /her emotional experience. This process supports the client to understand one's problem and look for its possible solution. (Mahat, 2009, p 2)

acknowledge such psychosocial problems, often the institutions themselves will be left trying to cope alone. However, with appropriate training and supervision institutions can be empowered to support their trainees better. This will increase the participants' chances of success and will thus benefit the program.

Income generating measures work better if skills training are combined with psychosocial counseling[6].

Thousands of young people join various kinds of TVET programs – of long term, short term or of formal kind or informal kind (the exact data of young people attending TVET programs is very scattered and do not have consolidated official records) but most of the training institutions do not have counseling services. Apart from very limited donor supported programs where career counseling and psychosocial counseling are hardly being tested; it is still not seen as an effective approach which definitely contributes to enhance performance of TVET. Such services will be better provided by PCMU (placement, counseling, marketing unit) of training centers but under the TVET sector apart from couple of training institutions, almost none of them – big, small, formal or informal have PCMU in their structure and are capable of providing such services.

Viable way out

To initiate such services for the quality of TVET, the ideal option could be - A system backed structure in all kinds of vocational training providers – to compulsorily have PCMU unit giving counseling service (both career counseling and psychosocial counseling – for wellbeing of trainees in relation to their environment and to follow correct choice of vocation according to individual's need and aptitude) to trainees. Not only PCMU but it would be better, if system also supports for capacity building of training institutions on these aspects for better performance of TVET.

There are many benefits of such services and counseling may be provided to -

i.   Encourage trainees through establishing a relationship of mutual respect, where the counselor can be both supportive, yet challenging, in promoting the trainees' development of the skills needed to achieve an employment outcome.

ii. Facilitate informed choice throughout the entire rehabilitation process by providing information about the scope and limits of vocational rehabilitation services, and by helping the trainee obtain specific information on programs, resources and services that can assist him/her in the selection and achievement of vocational goals and an employment outcome. When there are limits on the provision or availability of vocational rehabilitation services, the counselor can assist the consumer   in exploring alternatives.

iii. Gain a comprehensive and individualized understanding of the trainee's abilities, capabilities, interests, strengths, resources, priorities and concerns in order to identify factors that will be critical to vocational achievement.

iv. Facilitate the trainee's understanding of his/her strengths on which to capitalize in achieving vocational goals and plan with the trainee to find ways to work around any impediments, such as functional limitations related to health, personal, economic (e.g. Benefits, work disincentives/incentives) and social issues.)

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[6] Dr. David Becker & Barbara Weyermann, (2006), Gender, Conflict Transformation & The Psychosocial Approach, Toolkit, SDC

v.   Assist the trainee in selecting a vocational goal and developing a plan of services toward that goal.

vi.   Involve "significant others" (with the trainee's consent) such as family members, relatives and friends in the community who can: be assets to counseling; support the desired outcomes; and, at times, provide valuable resources.

vii.   Provide follow-along services that are not intrusive but continue to support the achievement of long-term outcomes.

viii. Enhance self-reliance by teaching the trainees how to get information and tap into supportive workplace and community networks, promoting independence beyond the outcome of such services is always an empowered and skilled human resource who knows one's choice of vocation and its importance as a means of livelihood.

The combination of career counseling and psychosocial counseling through placement, counseling and marketing unit (PCMU) of vocational training providers will definitely bring an effective outcome – a confident trainee with right skill and attitude for work and collective contribution of such young skilled human resource will eventually not only contributes to enhance the overall performance of TVET but ultimately fulfills the need of the country of skilled human resources in occupational trades. And when TVET sector produces thousands of skilled human resources that are saleable in the market – individual progresses and do does the country.

Conclusion

Counseling services is crucial in helping trainees to be prepared for training of one's vocation and utilize it afterwards for one's career development and economic benefit. Although the reference in the article is given from vocational training background – it could be applied for long term technical training as well where the target group is young people.

Career and psychosocial counseling has become buzz word in vocational training sector but its application is yet to be seen on a larger scale apart from few sporadic testing of such approach. Donor agencies funding significantly can pilot this approach in vocational training programs and document the impact. Results are sure to be positive and later government could take it up and make it mandatory for vocational training programs.

Vocational learning is not just a matter of contributing skills to the economy, nor of providing opportunities to young people who find difficulty with academic subjects – though it can do both of these things. Soundly-based vocational training is an absolutely key feature in the country's educational structure and it is capable of attracting large numbers of young people to participate in, and attain at, advanced level of skill. Young people do not learn only from classrooms. Their surroundings and the times in which they live have as much influence on them. Thus, if we could make TVET programs more meaningful in terms of skills, knowledge, addressing their psychosocial situation, aptitude for chosen trade, lots of young people will find a path for themselves which will guide them towards the direction they are supposed to follow. Career and psychosocial counseling as an approach is instrumental in giving the new meaning to TVET programs.

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Relevant Vocational Training for the Persons with Disabilities in Nepal

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Abstract

Vocational training has been observed one of the important strategies for reducing poverty. It is very popular in developing and underdeveloped countries basically to enhance the economic status of marginalized and disadvantaged community. Among the disadvantaged communities, Persons with Disabilities (PWDs) are known as most marginalized, covered around 10% part of total world's population and 20% of the total number of poorest people. Nearly 82% of the total number of PWDs are living in below poverty and the unemployment rate of PWDs is double than the general unemployment rate

PWDs are often denied in work and economic activities due to a kind of negative preconceive notion about their capacity and productivity. The unfriendly systems, policy and physical infrastructures are other key barriers for their access in such opportunities. This exclusion has been adding a big loss in the total GDP of the world (between US$ 1.37 and US$ 1.94 trillion.) annually. This paper highlights some important issues regarding the vocational training for PWDs including popular models being practiced in the world, some conventional vocational training in Nepal and some new possible areas.

Background

United Nation has estimated around 10% of the total population of this globe has some forms of disabilities although the definition and classification of disability vary according to the country context. 80% part of the total population of the persons with disabilities (PWDs) is in developing and underdeveloped countries and majority of them (82%) are forced to live in below poverty line. This justifies the close relationship between poverty and disabilities. Poverty is both causes and consequences of disability. Poverty is a cause of disability since the poor often lack resources to prevent malnutrition, and do not have proper access to adequate health services which may lead them to disability. Poverty is a consequence of disability since PWDs often lack access to education, health services and income-generating activities; they are often denied their human, social and economic rights which ultimately throw them to vicious cycle of poverty.

The exclusion of PWDs from economic activities has given big loss not only in their personal life but also to the state and society. According to World Bank (Metts) the total annual value of total Global GDP loss in relation to disability lies between UD$ 1.37 and US$1.94 trillion and particularly the developing countries have been bearing the major part of this losses. A study carried out by ILO has concluded, disabling environmental conditions and deliberately exclusion of PWDs from labor market as the key responsible reasons for this low participation in economic activities and this big loss. Based on the latest review of implementation status of millennium development goals UN has declared that any goals cannot be achieved without including disability issues and particularly the goal of poverty reduction is most essential to revise from disability perspective.

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[1] Author is the Coordinator of Information and Advocacy, Resource Centre for Rehabilitation and Development (RCRD), Nepal and he is himself a person with physical disability contributing in disability rights movement.

National and international legislations

Many legislative instruments have been made and promulgated in national and international level regarding the economic empowerment of PWds. The following is a short view in some important provisions;

a) <u>UN convention on the rights of persons with disabilities, (Article 27):</u> "States Parties recognize the right of persons with disabilities to work, on an equal basis with others; this includes the right to the opportunity to gain a living by work freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities. States Parties shall safeguard and promote the realization of the right to work, including for those who acquire a disability during the course of employment, by taking appropriate steps, including through legislation,"

b) <u>Article 27(d):</u> " Enable persons with disabilities to have effective access to general technical and vocational guidance programs, placement services and vocational and continuing training;"

c) <u>ILO convention 159</u>: The ILO Vocational Rehabilitation and Employment (Disabled Persons) Convention No. 159 requires member States, in accordance with national conditions, practice and possibilities, to formulate, implement and periodically review a national policy on vocational rehabilitation and employment of disabled persons.

d) <u>ILO code of practice</u>*:* The ILO Code of Practice on Managing Disability in the Workplace (ILO 2002) was brought up to provide guidance to employers on practical means of implementing the types of measures to be taken while making the work place disability friendly according to the provisions contained in international instruments.

e) <u>Disabled protection and Welfare Act-</u> 2039: Point 8 of this act has provisioned about the job, self employment and related training for PWDs. This point has stated the provision of vocational trainings, micro credit for small business, access to PWDs in mainstream training system, access of PWDs in corporate sectors' employment and rural employment etc.

f) <u>National policy and Plan of Action on Disability 2063:</u> Training and Employment is 5th priority area of national policy and plan of action on disability. This policy has ensured 5% quota reservation for PWDs in the mainstream vocational training institutions. The 5th strategy of this priority area has emphasized on the capacity building of existing mainstream vocational training Center and developing disability friendly environment in the training centers.

Vocational Trainings for PWDs

Vocational training is the preparation for jobs that call for extensive practical experience and training. Disability-suitable and market oriented vocational training, job related training, job placement or self employment opportunity and reasonable accommodation in work place is very much successful package in the world which has really supported to enhance the economic life of PWDs' in many places. Providing vocational training to PWDs is a bit different and complicated than other people since their functional limitations and essential supports needed vary according to disability category and level of severity. So the suitability of training, management of essential environment and appropriate training delivery method or approach are the key factors to be considered while providing vocational or job related training to PWDs. The model and approaches of vocational training also vary as per the country, culture, need and

resource; however there are some very commonly practiced approaches or model of trainings as described below.

Mainstream model

Government, Private sectors or NGO run vocational training center provide training for any interested or needy people. These training centers provide quality training and certify trainees as able to work in the relevant job or business. For mainstreaming disability, the physical infrastructures, rules and regulations, systems, curriculum and evaluation processes of such training centers are made disability friendly. The resource persons (trainers) are also fully oriented about disability issues and capacity of PWDs. Since being inclusive in nature this model is very demanding and effective. Most of the PWDs want to be trained through such types of model.

Community Based Model

Community Based Rehabilitation (CBR) program is experienced the best strategy for the overall development, rehabilitation and empowerment of PWDs in the world. Economic empowerment is one of the key components of CBR which support to enhance the economic participation of PWDs by mobilizing the local resource and community's cooperation in their own community. Under this approach PWDs are given different types of vocational training based on the need of local market and they are supported technically and financially to start the self employment or get relevant job in the local labor market. In CBR model the needy people are also facilitated to include in the locally run mainstream vocational training center.

Apprenticeship model

This is a way to gain skill in a particular subject by working with experienced and skilled persons in his/her workshop or workplace. Learning with experienced crafts and trades people is a very longstanding and widespread means of developing skills. This model is very good to engage in informal economy and even it is cost effective. Sometime such types of trainings are very much useful for people with disabilities who face many barriers in accessing formal sectors and centre based training.

Peer Training

Peer training is a process where successful business people teach their skills to others. In this model the trainers and trainees are from same background, living condition or same disability category in the case of PWDs. In peer training the relationship between trainers and trainees is very close like friendship. They both have a very good spirit of teaching and learning. The trainee also feels a kind of deep ownership in the training. In Cambodia such model is very effective to enhance the economic status of PWDs.

Group training model

This is a model where a person learns skills within the group of people having same training needs. This model is known effective for saving time and resources. We can find many groups having same interest and involved in same job. The very good example of such model is saving credit group. One case study of Cambodia is replicable in our context. Some PWDs having same training needs formed a group and started to learn Khmer music (which is old but popular music in Cambodia). After a time interval they were able to perform the music and started their performance for tourist and wedding. They earn US$ 700 per month.

Sheltered Model

This is a traditional model where PWDs are kept in specially designed structures and provided different types of vocational training. The trained human resources are given work

in the same shelter and paid for their work. The produced goods are also marketed by the shelter. This type of model is highly expensive and cannot cover the wider population of PWDs. This model is not so popular in developing and underdeveloped countries.

Relevant vocational trainings for PWDs

PWDs are not homogenous group. Like general people, their identities, personal situations and needs are determined by gender, age, personality, location, education, ethnicity, color, class, family, religion and sexual orientation. Disability is simply a component of human diversity, and itself is diverse in nature. Sensory disabilities, physical disabilities, intellectual disabilities are the main category of disability and each includes other different sub-categories. A part from the very common needs and requirements as human being they have very special needs and requirements due to their disability which vary according to the types of disability and level of severity. Similarly the training needs may be different and should be shaped according to the types of disability and by their own decisions. So the active and intensive participation of PWDs is essential while assessing the training needs of PWDs. However there are lots of trainings that PWDs are given from formal and informal sectors. We cannot say how far these trainings have brought positive impact in the economic life of PWDs since there is not any detail study about this. But many of them are found effective in general observation.

In Nepal Ministry of Women Children and Social Welfare has been providing vocational trainings to PWDs with residential facilities since 2058. But the coverage of this training by geography, number and disability categories is very small. Since the government has no comprehensive national program to provide vocational training for PWDs they depend on the trainings provided by non-government sectors which do not cover the wider population. So there needs a national initiation to develop a national curricula of vocational training for PWDs by organizing and including all the replicable practices and exploring new training areas with the intensive participation of PWDs. Some common training programs that PWDs are given in Nepal are:

S.N.	Name of Training	Types of PWDs involved
1	Chalk making, candle making, sewing, cutting, waiter/waitress,	Physical, Deaf, speech, intellectual
2	Bamboo craft, handicraft, goods packaging, music, white can making,	Physical, Deaf, speech, blind, intellectual, multiple
3	Painting,	multiple, deaf, physical
4	House keeping, vegetable farming, livestock , bee keeping, flower farming	physical, deaf, speech,
5	Radio, TV, watch, cycle and motorcycle repair and maintenance	Physical, Deaf, speech, multiple
6	Wood craft	physical, deaf, speech, multiple
7	Liquid Soap making	Blind

Some other possible areas of trainings are:

S.N.	Name of Training	Types of PWDs can be involved
1	Computer software operation skill (Basically office package), computer maintenance (Hardware and Software),	physical, blind, deaf, speech
2	Mobile repair and maintenance	physical, deaf,
3	Secretarial service and reception handling	Blind, physical
4	Graphic designing, cyber operation, computer networking	physical, deaf, speech
5	Offset Printing, Thanka Painting	Physical, Deaf, Speech

But this list has been prepared only on the basis of general observation and experiences. So there may be lots of other areas of training needs which needs to be explored through participatory need assessment.

Factors to be considered while providing vocational training to PWDs

The following factors are very essential to keep in mind while deciding about the vocational training for PWDs:

a) <u>What the PWDs say is important:</u> The needs should come from the PWDs themselves. The institution, trainers group or expert cannot impose any training to them. It comes from an intensive discussion among expert of vocational training, PWDs, organizations of PWDs, parents of PWDs, disability resource centers, and training providing expert.

b) <u>Appropriate model and Methods:</u> Appropriate training model should be chosen but this depends on the interest and condition of PWDs, availability of resource and nature of training etc. The training methodology should also be disability friendly. For example access of sign language, more visual presentation and practical way is essential to train deaf persons.

c) <u>Reasonable Accommodation:</u> In the case vocational training, simply this is a modification of physical infrastructures of training centre, curriculum, methodology according to the need of WPDs and fulfillment of additional support and requirements that support to ensure their full and equal access in the training course. According to the UNCRPD "Reasonable accommodation means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms"

d) <u>Friendly examination System:</u> Sometime the examination system doesn't consider the need and limitation of PWD, so that their skills and capacity are undervalued. So that special evaluation and examination system should be adopted according to the need of PWDs. Particularly different evaluation or examination system may be essential in the case of persons with visual, hearing and intellectual disability.

Conclusion

Nothing is very special and much complicated for the vocational rehabilitation of persons with disabilities. Only the positive attitudes, study based information and some additional efforts are needed. Generally people explain PWDs from what they cannot do. Now this explanation need to be changed and we should start from what they can do. We should not forget the environmental barriers while describing disability because disabling environmental factors and knowingly and unknowingly exclusion from labor market are the key elements to keep PWDs far away from economic opportunities.

So, the primary focus of government, NGOs and corporate sectors should go on removing such types of barriers. Research based and flexible training modality is another important aspect to be considered according to the disability category and its severity.

Finally, there is nothing to be undervalued in the capacity and productivity of PWDs. Accessing PWDs in employment sectors and labor market with reasonable accommodation is not a burden or extra expenditure for employers and government. It is an investment which certainly provides good returns to the investors and ultimately contributes in the common goal of poverty reduction. But not employing PWDs is of course a big economic and social loss that really hinders for achieving goal.

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Access of Women in Technical Education and Vocational Training in Nepal

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Abstract

Women's contribution to socio economic development is equal to men but their participation in technical education and vocational training is not encouraging. In spite of many programs and approaches to bring women in technical education and vocational training, their participation is very low. This paper highlights the status of women in TEVT and five major causes which hindering the access of women in TEVT are: lower education levels, involvement in household work, male dominance, lack of access to information and financing. Participation of women is high in rural areas than urban in public technical schools because programs are women friendly in rural areas. Similarly, there are high women participation in urban areas in private technical schools because most of them are running health program and only in urban areas not in rural. Participation of women in vocational training is higher compare to technical education. Women access in technical education and vocational training become difficult because about half of the women are uneducated and they have not got equal opportunity as men for education, most of the time they should involve in household works, training programs are male dominance, difficult to get information about programs and lack of finance. The conventional wisdom towards women will not work to enhance access of women in technical education and vocational training programs. There are measures to overcome these problems such as women focused education programs in all levels, awareness program, design and development of women friendly programs, use of appropriate medias and approaches to disseminate information about programs, and different financing mechanism should be applied to encourage women participation.

Background

Women and men make equal contributions to Nepalese economic and social development, but women are not getting equal opportunities in education and other sectors. There are 50.1 percent females and 49.9 percent males in Nepal (CBS, 2001). However, the involvement of women in the public sector service and other development sectors is negligible. However, their involvement in household work and agriculture is remarkable. There have been different women empowerment programs, but the status of women in Nepal is still not encouraging. In spite of several years of concerted efforts and different approaches of technical education and vocational training (TEVT) programs, women could not benefit because their access to TEVT programs was almost impossible. A research article (Subedi, 2005) claimed that women and other disadvantaged groups have had little opportunity in TEVT. Similarly, women's participation in TEVT programs was only 21 percent compared to 79 percent of males (Lamichhane, 2006). This paper highlights the status of women in TEVT and five major causes which hindering the access of women in TEVT are: lower education levels, involvement in household work, male dominance, lack of access to information and financing.

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Status of Women in TEVT

The status of women in TEVT is not encouraging. The following tables show the status. Table 1 shows the gender distribution of technical education (TE)[2] graduates by location of technical training providers (TTPs). The public institutes are established both in rural and urban areas and private institutes are in urban areas only. There were 57 percent male and 43 percent female graduates in rural public schools. In urban schools, percentage of female was higher in private schools than in public schools. The percentage of female graduates was higher in rural areas than in urban areas. There were 22 percent female in private and 12 percent in public schools.

Table 1

Gender Distribution of TE Graduates by Location of TTPs

Gender/ Area	Public			Private		
	Total	Male	Female	Total	Male	Female
Rural	1107	631 (57)	476 (43)			
Urban	844	740 (88)	104 (12)	901	702 (78)	199 (22)
Total	1951	1371 (70)	580 (30)	901	702 (78)	199 (22)

Figures in parenthesis represent row percentage.

Source: Lamichhane, R.H. (2006). *The participation of poor and disadvantaged group in TEVT in Nepal. An unpublished doctoral thesis.* Kathmandu University, Nepal.

According to the study (Lamichhane, 2006), public rural schools had run more women friendly trades e.g., health, agriculture, construction, than urban schools, where mostly mechanical, electrical, and construction trades were operated. Therefore, the participation of the females was higher in rural TTPs. Similarly, the respondents said that the percentage of the SLC failure females was high in rural areas. They went to TEVT as an alternative education stream.

Similarly, private schools mostly operated health, agriculture and construction trades where female participation was high. Urban public technical schools have organized urban trades, e.g. mechanical, electrical, auto-mechanic, sanitation etc, where female participation was low. Therefore, there were more females in private than in public school in urban areas.

Table 2 shows gender distribution of vocational training (VT) graduates by location of TTPs. Female participation in vocational training in public school was high as in rural areas than in urban areas. There were 85 percent male and 15 percent female vocational training graduates in rural areas. In urban areas, there were 91 percent males and 9 percent females in both public and private technical schools. The female participation in Skills Development Training Centers (SDTCs) was more than in other schools. There were 54 percent male and 46 percent female graduates.

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[2] Technical Education is considered Technical SLC and Diploma level.

Table 2

Gender Distribution of VT Graduates by Location of TTPs

Gender/ Area	Public			Private			SDTCs		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Rural	531	450 (85)	81 (15)	-	-	-	-	-	-
Urban	392	356 (91)	36 (9)	542	491 (91)	51 (9)	2514	1360 (54)	1154 (46)
Total	923	806 (87)	117 (13)	542	491 (91)	51 (9)	2514	1360 (54)	1154 (46)

Figures in parenthesis represent row percentage.

Source: Lamichhane, R.H. (2006). *The participation of poor and disadvantaged group in TEVT in Nepal. An unpublished doctoral thesis.* Kathmandu University, Nepal.

According to study (Lamichhane, 2006), public and private schools conducted similar kind of vocational trainings and technical education. Therefore, justification of female participation in urban and rural areas was similar to technical education as mentioned above. Female participation in SDTCs was greater than in other schools because SDTCs run more women friendly trades e.g., beauty parlour, sewing and knitting etc., and provided free tuition with training allowance. Similarly, SDTCs have standard operational calendar for vocational training programs, which was lacking in private and public technical schools. People were aware of the training information of SDTCs and more females participated than in other schools. Private schools run vocational training programs only if they got support from donors.

Table 3 presents the status of female graduates in different trades by nature of training providers. Health, agriculture, electrical and electronics trades had higher percentage of female graduates in technical education in both public and private institutes. In public institute, there were 50 percent, 25 percent and 17 percent of the total female graduates in technical education in health, agriculture and electrical and electronics respectively. There were no female graduates in mechanical trades. Similarly, there was high percentage of females in agriculture trade in vocational training in both private and public institutes that was 50 percent and 90.5 percent respectively. In SDTCs, more females (93%) were in beauty parlour and stitching training than in other profession. There was no female participation in construction and mechanical trades.

Table 3

Female Graduates in TEVT by Trades and TTPs

Trades	Public TS		Private TS		SDTCs	
	TE	VT	TE	VT	TE	VT
Construction	48 (8)	22 (19)	31 (16)	1(0.5)	-	-
Agriculture	143 (25)	59 (50)	8 (4)	46 (90.5)	-	-
Mechanical	-	-	-	-	-	-
Electrical and Electronics	96 (17)	36 (31)	-	4 (8)	-	77 (7)
Other (Health, Beauty Parlour and sewing)	293 (50)	-	160 (80)	-	-	1077 (93)
Total	580	117	199	51	-	1154

Figures in parenthesis represent column percentage.

Source: Lamichhane, R.H. (2006). *The participation of poor and disadvantaged group in TEVT in Nepal. An unpublished doctoral thesis.* Kathmandu University, Nepal.

According to the study (Lamichhane, 2006), females participated in easier and softer skills than in hard and risky ones. Therefore, their participation was higher in health, beauty parlour, sewing and agriculture related training than mechanical and construction. This finding was consistent with the findings of Nepal Human Development Report (2004, p. 52) and Sharma and Dhungel (2002). The research reports emphases that women were confined to socially accepted and culturally prescribed occupations, and they had to perform household work, reproductive functions and unpaid agricultural activities in addition.

Causes of Hindering the Access to TEVT Programs

The lower education level of women is one of the major causes hindering their access to TEVT programs. The average literacy rate is about 56 percent in Nepal. Out of that, female literacy is just 43 percent. As far as literacy is concerned, about 69 percent of the economically active population of Nepal is illiterate (CBS, 2001). Most of the TEVT programs require at least primary level education and above. The training achievements do not only rely on the candidate's interest, because the skill-training programs are targeted to persons with academic degrees (School Leaving Certificate level education). The people with low qualifications or illiteracy therefore do not meet basic requirement for training entry. Technical and vocational training needs basic levels of literacy and numeracy, and often an understanding of scientific concepts, without which training inputs will be compromised. Educated trainees often benefited more from training programs than their less educated friends. Therefore, basic education should be a pre-requisite to obtain entry into technical training programs (DFID, 1993). According to the journal (African Economic Outlook, 2010), "Gender inequalities in technical education and vocational training (TEVT) reflect the lower enrollment rates of women in secondary education generally. Countries where women account for fewer than 15 per cent of TEVT enrollment include Eritrea, Ethiopia, Malawi, Namibia, Niger and Uganda. For this group of countries, the share of TEVT enrollment in overall secondary enrolment is less than 5 per cent, and the

proportion of girls is low not only in technical and vocational education but throughout the entire education system."

The second important cause hindering the access of women in TEVT program is their high involvement in daily household work. In Nepal, especially in rural area, women have to perform daily household work in addition to farm work and child care, such as preparation for cooking, carrying water and fuel, cooking, cleaning and washing clothes. Being a daughter in the family, a young girl also has to perform such activities. In urban areas, women have to do those activities in addition to their jobs. The TEVT Journal (Sharma, 2005) states that women were forced to spend most of their working hours in carrying water and fuel. This made their days longer. One of the key factors that limited access was the time spent by rural poor in development activities to meet their everyday needs (ILO, 1998). Therefore, despite their willingness to participate in TEVT and other education programs, women are being hindered by day to day household activities.

The third important cause hindering the access of women in TEVT program is male dominance. In our society, most of the people feel that TEVT programs are for men and not for women. This stereotype thinking has been supported by the nature of programs such as carpentry, plumbing and sanitation, welding, furniture maker, scaffolding, shuttering carpentry, steel fixture, mechanical, auto mechanic, electrical, and commercial cooking. There are only a few trades which are women-friendly such as health, care giver, housekeeping and some agriculture related programs. Because of the programs' nature women hesitate to participate. One of the major findings of the study regarding the reasons for low female participation in technical education were heavy physical work demand and the physical structure of the female (Sharma, 2000). Similarly, other international studies have also recognized this problem. According to (Zuga, 1999), "Even though women today have an increased opportunity to enroll in technology education programs, the vast majority still chose not to. Women perceive technology education as a male domain in which they do not belong and feel even more so after having taken a technology education course. The question of whether technology educators can address this lack of participation without first understanding the differences between men's and women's choice of studies is investigated using feminist analysis." (p.1)

The fourth important cause hindering the access of women in TEVT programs is lack of access to information. Information related to TEVT programs published mostly in national newspapers and radios, which cannot reach to women easily and not friendly to illiterate women. There is lack of alternative sources of information to provide in rural areas especially for women. Most of the information reaches only in major cities and districts' headquarters.

The fifth important cause hindering the access of women in TEVT programs is financing. On one hand, TEVT programs are costly so, ordinary and poor people cannot finance easily. On other hand, due to the traditional concept towards women, parents do not like to invest much in daughter's education. Similarly, there are not any financing institutions that provide loan to the TEVT students. If there is provision, they can provide against collateral only. Some TEVT programs have been running without tuition fees especially for women and disadvantaged groups. However, poor women cannot participate due to the living cost and transportation.

Conclusion

Despite several efforts and focused programs, access of women in TEVT is still negligible compare to the size of women population. There are some good signs in women friendly vocational trainings and health and agriculture related technical education. The access of women in TEVT could be remarkable, but hindering factors are so strong to bring them in the

programs. Their encouraging access in TEVT is not possible without taking some positive discriminations and meaningful measures. There are several measures to imply for women's access in TEVT programs. First of all, there should be women focused programs to increase their access in all kinds of education. Second, there should be awareness programs to provide information and importance of education to females. Third, TEVT programs should be designed and developed considering the demand and needs of the women, which can overcome the male - dominated of TEVT. Fourth, TEVT programs should be affordable and flexible in time, which can enhance the access of women. Finally, TEVT program should be implemented in mobile basis or institutions should be opened in all parts of the country. They should not be focused only in capital and major cities.

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Increasing access of Technical Education and Vocational Training (TEVT) Programs and Relevancy to the job Market

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Abstract

This article presents the existing situation of Technical Education and Vocational Training (TEVT) Programs in Nepal and gives an analytical view in terms of access and relevancy of the programs. The analysis shows that in spite of quantitative expansion of the TEVT programs under CTEVT, most of the private TEVT providers (TTPs) have concentrated their programs in urban areas of Kathmandu and terai region so there is a question of equitable access of the programs. This article also analyzes the fact that in the name of quantitative expansion of the program, there is a mismatch between training & education provided by the TEVT providers and needs of the job market. Thus, in order to reduce gap between the market needs and training & education provided by TTPs, existing curricula need to be revised according to the changing needs of the job markets establishing regular linkage.

Background

Nepal after the restoration of democracy in 1950 realized the need of technical education and vocational training and has been implementing different types of vocational and technical education programs through government (community) schools, technical schools/ training centers and different universities of Nepal. However, except the success of trade schools system and technical universities other vocational training programs implemented in secondary schools either multipurpose vocational schools or vocational schools after the implementation of new education system plan were found ineffective as a result, they became failure. One of the main causes behind such failure was because those programs were implemented with the pressure and interest of donor not as the need of local people. As basic education was implemented from the impression of India, multipurpose schools were run because of American impression and new education system plan was implemented because of the impression of Japanese and other western countries (Sharma T, 2003). Likewise 'The multipurpose education was dropped after the withdrawal of American support in the early 1970's (Belbase, 1997), proves that vocational education programs in Nepal were launched being influence from donors and Government of Nepal just tried to please them without considering the need of local people and environment.

When school level vocational education programs became failure, it was realized from the educationists that there is a need of separate technical schools in Nepal, which will have sole responsibility of conducting technical and vocational education. As a result, Karnali Technical School in Jumla was established in 1980, as the first technical school in the history of Nepal with the responsibility of producing middle level technical manpower in agriculture, construction and health sectors. Later on, some other technical schools were also established gradually. When it was realized that due to theory based academic education of formal education system, millions of students were found dropped out from school level and college level without getting any skills for their living (who neither could start any income generating activities nor could get job in the market due to lack of skills), a separate wing under ministry of education to control and expand the technical and vocational education was realized. Thus, in order to incorporate

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the increasing needs of producing skillful human resource for the economic development of the country and reducing the poverty of the country people, Council for Technical Education and Vocational Training (CTEVT) was established in 1989 assigning the roles of skill development and coordinate & assure the quality of developed workforce (Sharma S, 2001). The CTEVT in particular has the mandate of producing basic and middle level skilled manpower for which it conducts various short-term, long-term mobile and different apprenticeship training in different parts of the country. Recently, it has also got the mandate of producing higher level technical and skillful human resource required to the country from Government of Nepal and Research and Information Division has done a preliminary research to find out whether internal strengths of the CTEVT constituted schools is sufficient to run bachelor level programs or not . The finding was positive with some recommendations.

Accessibility of TEVT Programs in the Country

After the establishment of CTEVT through trade school system, TEVT programs in Nepal have got tremendous success making the programs accessible in each parts of the country which was limited to few trade schools before two decades most of the people in the country were unaware of the programs. When Government of Nepal adopted liberal policy in education allowing private investment in this sector after the democratic movement of 1990s, it provided ample opportunities to the private sector to invest even in TEVT programs. As a result, TEVT programs are now expanded from eastern part to western part of Nepal and thousands of TEVT graduates are able to generate income using the skills and knowledge they gained through TEVT programs.   Presently, there are 25 constituted schools/ training centers of CTEVT, 329 private institutions (it includes 275 technical education providing institutions and 54 short term vocational training providing institutions) affiliated to CTEVT and 30 community schools offering TSLC level programs named as annex programs. Many constituted and affiliated schools have been running short term vocational training to 3 years' diploma level programs, whereas other such schools are running either vocational skills of short duration and or TSLC level programs. The following table shows the coverage of the schools by ecological zones; mountain, hill, terai and Kathmandu valley.

Table 1: Geographical Distribution of Existing TEVT Institutions by types and programs of the schools

Geographical Region/ Programs	Constituted			Affiliated			Annex		
	TSLC	Dip	Total	TSLC	Dip	Total	TSLC	Dip	Total
Mountain	3	1	4	3	1	4	2	0	2
Hill	5	4	9	30	16	46	12	0	12
Terai	4	9	13	73	86	159	16	0	16
Kathmandu valley	1	1	2	24	63	87	0	0	0
Total	**13**	**15**	**28**	**130**	**166**	**296**	**30**	**0**	**30**

Source: CTEVT Brochure, 2010.

As mentioned above the number of constituted institutions (including Training institute for Technical instruction and 3 other institutions running only short term training) is 25 but five of such technical schools have run the programs of both TSLC and Diploma level programs so such institutions are counted in both the categories, as a result total number of institutes has reached to 28. In the same way, the case of affiliated schools is also the same because total number of affiliated schools is 275 but due to the double counting of the schools running both diploma and TSLC level programs, total number of institutions has reached to 296. Above table depicts that most of the TEVT programs are concentrated on privileged area of Nepal like Kathmandu valley and Terai regions, whereas very few of institutions are providing services to the people of mountain region. It reveals that only 2 of the institutions (one each from constituted and affiliated schools) have been running diploma level programs in mountain region. The table also presents the fact that there is equitable distribution of constituted schools in terai, hill and mountain regions and less focus has been given to Kathmandu valley by CTEVT because there is huge investment of private sector running 24 TSLC level programs and 63 diploma level programs in the valley. It shows that private investment in TEVT sector mostly falls on well facilitated or resourceful area like capital city and terai giving less focus on hill and mountain regions. Distribution of annex programs is also not found equitable in the sense that no school has been run in the community schools of Kathmandu valley, whereas most of poor people who need TEVT programs to uplift their living standard study in community schools of Kathmandu valley and can't afford the cost of private affiliated schools. However, except in capital city, distribution of annex programs seems to be equitable in other places.

Chart 1: Distribution of TEVT programs by geographical regions
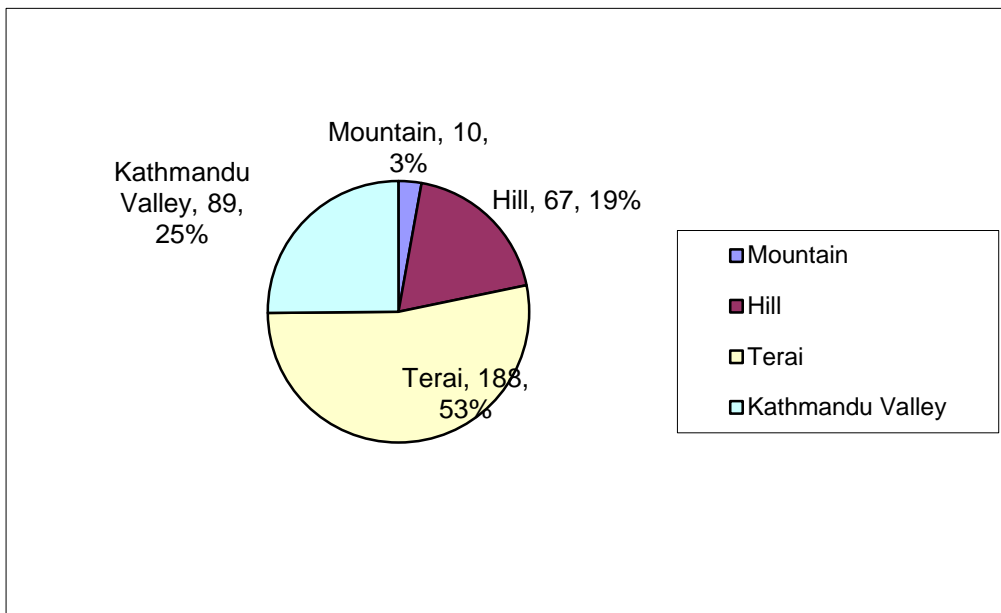
The above chart depicts that the large number of TEVT providing institutions (78%) lies in terai region and Kathmandu valley which are well resourceful areas of Nepal. On the other hand, only 22% of TEVT providing institutions lie in geographically backward regions like mountain and hill, where most of disadvantaged and poor people live. On the top of that only 3% of total intuitions are providing TEVT services for the people of mountain region. Thus, providing equitable access of TEVT programs is one of the challenges to CTEVT.

Efforts Made by CTEVT in Providing Equitable Access

Technical education and vocational training is one of the means of making people self reliant and economically independent. Considering this fact, CTEVT has set the vision of making all people employed providing the access of TEVT-programs. However, on the one hand TEVT program is very expensive and cost bearing and on the other hand most of Nepali people are very poor and can't afford the cost of TEVT programs. As this is a bitter fact in Nepal that many children are dropped out from the community schools because of poverty though school education is free. In such situation, how can such people afford the cost of TEVT programs? Thus, making TEVT programs accessible to all is a challenge to CTEVT. CTEVT (2005) stated:

> *One of the main reasons for children of the underprivileged not being able*
> *to stay in school is economic condition. Therefore unless some special*
> *measures are undertaken, affordability will remain a major problem for the*
> *vast number of out of school youth to go through the TEVT programs*

In order to address the need of people, CTEVT has different types of scholarship schemes for providing equitable access to the poor, disadvantaged and talented persons in TEVT programs. Such scholarships are classified scholarship for geographically disadvantaged groups, special scholarship for socially disadvantaged and poor people and scholarship for talented and genuine persons. This effort of CTEVT has somehow helped to the needy people in making TEVT programs accessible. Besides, Government of Nepal through CTEVT from this year (2010) has brought an inclusive scheme for poor Muslim and Dalit girls of 8 districts of terai region, from which more than 750 people will have access of TEVT programs.

Despite the efforts made by the Government /CTEVT in making TEVT programs accessible to all, large portion of population is still deprived of TEVT programs because TEVT programs are very costly but government investment in this sector is very nominal (less than 1% of total education budget). The budget allocated for CTEVT is very negligible in comparison to nature of the program so this is one of the main obstacles in making TEVT programs equitable and accessible to all.

In order to increase the equitable access to the deprived and disadvantaged communities, Skills for Employment Project was established in 2005 with aim of providing free Market Oriented Short Term Training to 80,000 people with the financial loan of Asian Development Bank. It has focused its programs to the remote villages of Nepal and has been serving to the targeted people. However, question has been raised regarding proper needs assessment and selection of training providers for the effective implementation of the project.

Relevancy of the TEVT Programs to the Job Markets

There were only 48 institutions offering diploma level programs by the end of 2003 (Karki, 2005) but now number of institutions running diploma level programs has reached to 181 (CTEVT Brochure, 2010). This shows that within seven years period, there is 377% increment in diploma level programs but what's about the quality and relevancy of the programs? The main attraction of TEVT programs is because of employability of programs for which market based education and training need to be delivered. Regarding the main responsibility of TEVT providers Sharma,T. (2005) mentions

> *Technical schools always and invariably have to serve at least two purposes:*
> *1. employment and earning needs of the individual student, and 2. employers'*
> *need to improve performance and productivity of the firm for competitive*
> *advantage through the supply of appropriately trained workforce. Thus, the*

> *primary relation in TEVT of whichever type, with whichever content, at whichever occupational skills level is always the one in between trainee and employer or employment market*

But, if we see the TEVT programs of technical institutes in Nepal , they have been conducting the same types of training programs for a long period of time following the same outdated curricula, while need of the job market is ever changing in nature. Some time even if the training or education is of quality with fulfillment of minimum set standard, graduates still become unemployed if the acquired training is not as the need of job market. Thus Proper match between demand of job markets and skills possessed by the graduates of institutions is essential for maintaining the high rate of employment. However, if we see the existing situation of Nepal, the gap between demand and supply or the job of the market and training of the training providers is in increasing trend. As a result the employment rate of TEVT graduates is decreasing. This is the reason why the set standard of employment rate of CTEVT graduates, which was supposed to be 100% for beginning years of establishment of CTEVT, has gradually been reduced. Graduates' follow up studies made by Research Division of CTEVT show the decreasing rate of employment. The most demanding trade among various trades of technical schools is considered as health, which had more than 80% of employment rate before now average rate of employment in health trade is reduced to 62%, though followup study conducted last year (2009) showed employment rate of nursing graduates having 94%., other programs of health trade are not so encouraging. The employment rates of other trades are very frustrating having 45.6% in agriculture and 54.2% in Diploma in computer Engineering etc.This is all because of mismatch between the training program and need of job market. Thus, Poudyal (2001) mentions 'the irony of the situation is that many unemployed youths look for the job opportunities every year but the employers keep expressing their frustrations about the acute shortage of skilled nationals they could employ'. It shows that the skills and knowledge possessed by TEVT graduates don't match with the changing demand of job markets. CTEVT (2005) also mentions

> *The linkage between TEVT and industry generally were not found effective. Similarly, there it was observed that there is poor linkage between TEVT program curricula and need of industry. This has caused less interest among potential employers to employ the TEVT graduates*

*R*ealizing this bitter fact in mind, CTEVT has taken a policy of establishing a Placement and Counseling Unit in each of the technical schools and establish regular linkage with the job market. Some units are already established in some of the constituted schools with the support of Skills for Employment Project. Moreover, initiation has also been taken in establishing labor market information system and training management information system, which needs to be strengthened.

Conclusion

When Government of Nepal got lesson from previous failure of vocational education implemented in secondary schools of Nepal, as the programs were imposed due to donor's interest, need of technical and vocational training program as a separate wing for the effective implementation of technical education and vocational training programs for uplifting the economic status of the country and people was realized. As a result, Karnali Technical School was established in1980 as the first trade school in Nepal. Later on, some other trade schools like Jiri Technical School, Lahan Technical School, Mechanical Training Center (presently known as Balaju School of Engineering & Technology) were also established. After getting

success of trade schools system in generating employment for the graduates through skilled human resource, expansion and systematic management of the TEVT programs was felt necessary which paved the way for the establishment of CTEVT in 1989 as an autonomous organization. CTEVT was mandated for producing basic and middle level technical skilled human resource required to the country. In order to fulfill its objectives, presently 25 constituted technical schools/training centers, 329 affiliated schools and 30 annex schools are in operation. However, despites the increasing number of TEVT providers, equitable access of TEVT programs to the people of all geographical regions and deprived and disadvantaged community hasn't been established. Moreover, due to the supply based training policy of the training providers, there is an increasing gap between the skills possessed by TEVT graduates and needs of the job market. Thus, in order to increase the rate of employment and control the quality of the TEVT, it is necessary to conduct need-based training, should establish strong labor market information system and match the need of training providers, job seekers or trainees and employers or job providers so that need of all groups will be addressed.

Some Suggestive Measures for Improving Relevancy

After analyzing the above finding of Technical Education and Vocational Training (TEVT) programs of CTEVT, the following recommendations are made as suggestive measures:

1. Though the number of TEVT providing institutions has been increased tremendously, most of the private institutes are concentrated on most resourceful places like Kathmandu valley and terai region so CTEVT should encourage TEVT providers to run the programs in the remote and mountain region for increasing the equitable access of the all people.

2. In order to increase the access of poor and deprived people of remote villages in TEVT programs, special programs needs to be launched, for which existing CTEVT budget allocated by the government should be increased by at least two hundred percent.

3. In order to match the employers' need of hiring competitive human resource and training providers' need of producing saleable human resource all the curricula need to be revised as per the need of the job markets. A labor market survey conducted by Research and Information Division in 2006 also pointed out the need of changing existing curricula in order to produce multi skilled human resource required to the national industries.

4. Labor Market Information System and Training Management Information System initiated by Skills for Employment Project needs to be made effective and accessible to all the stakeholders.

5. Placement and Counseling service should be made compulsory in each of the TEVT providing organizations with a separate unit and the unit should be encouraged for the frequent survey of the market need and establish regular linkage with the employment markets.

6. Entrepreneurship skills need to be developed on the students of different trades during training so that they will be encouraged for self employment rather than roaming around in search of job.

7. There should be compulsory provision of skill testing for all types of human resource who apply for foreign employment so that they will be paid well by the employers in foreign markets.

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Inequality in Education: the Effect of Social Stratification

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Abstract

People are unequal in their access to wealth, power, and prestige. This unequal distribution of the society's resources creates a system of stratification which is an unavoidable feature of every society. Nepalese education system is heavily influenced by its present stratification system. There is a persistent inequality in access, aspirations and attainment of education among different groups of people as they are placed in different strata of society because of their sex, class, caste, socio-economic status and geographical region (rural-urban differences). People representing higher strata of the society are major beneficiaries of education system whereas people from lower strata of society are far away from this benefit. As these educational inequalities are deeply rooted in the Nepalese society, any remedy provided may not work as panacea however specific actions for gradual changes must be implied.

Introduction

The stratification system of society is an unavoidable feature of the present social system. It is closely connected with other aspects of the society such as family, religion, economics, politics and education (Tumin, 1985). The education system, as an inseparable component of any society, serves in establishing interrelationship with all these sub-systems.   Nepalese education system is heavily influenced by its present stratification system. There is a persistent inequality in access, aspirations and attainment of education among different groups of people because of their sex, class, caste, socio-economic status and geographical region (rural-urban differences). Thus, this paper is an attempt to analyzing the relationship between education and stratification system at the present context of Nepal. Furthermore, this paper is about the critical examination of one's position in the stratification system in terms of social background such as caste, class, gender, power etc. which determines his/her educational aspirations and achievement and thereby status in the society.

Social stratification: some ideological impulses

People are unequal in their access to wealth, power, and prestige. In all societies, people receive different shares of what is valued and limited. This unequal distribution of the society's resources creates a system of stratification. People are grouped based on how much of the society's respect or value they receive, and these groups or strata are arranged in a rank order or hierarchy. Those at the top receive the most of what there is to get and those at the bottom the least (Tumin, 1985).

According to Marx's explanation, social inequality can be understood in terms of socio-economic formation of the society. Marx considers economics -- the means of production is the foundation or base of the society. He identified that the social classes are stratified based on their connection to the means of production and thus the ruling class, bourgeoisie, and working class, proletariats, maintain their social positions by maintaining their relationship with the means of production. For Marx, the way such production is organized shapes all other things in the society (Wikipedia, 2007).

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On the other hand, Max Weber points out that social stratification is not purely based on economic inequalities but is equally shaped by status and power differentials. In Weber's view, every society is divided into groupings and strata with distinctive life-styles and views of the world, just as it is divided into distinctive classes (Wikipedia, 2007). In theorizing stratification, Talcott Parsons, one of the leading interpreters of Max Weber, believes the essence of social stratification in any society is the relative term which is the moral evaluation enjoyed by different social units. (Tumin, 2003).

Bourdieu rejects Weber's view that class can be treated as analytically and empirically separable from status. Bourdieu argues that class and status are not to be understood as qualitatively rather status is to be regarded as the symbolic aspect or dimension of the class structure. According to him, cultural capital of each group is embodied in schools, and this leads to social reproduction. This legitimate cultural capital allows students who possess it to gain educational capital in the form of qualifications. Those students of less privileged classes are therefore disadvantaged. To gain qualifications they must acquire legitimate cultural capital, by exchanging their own cultural capital (Savage &, Bennet 2005; Parajuli, 2003; Sadvonik, 2001).

Social stratification and inequality in education

As various dimensions of inequality such as class, caste, sex, status and rural-urban differences place people in the different strata of society, it affects their aspirations, access and achievement towards the education.

Class is one aspect of social stratification which stresses that people in high social class carries real social advantages, such as better occupations, living conditions as well as greater leisure, prestige and power. In effect, such association means greater returns for lesser effort. Society offers due respect to its elites in terms of comfort, honour and self-respect. Individuals in higher social strata prefer and predominantly consume 'high' or 'elite' culture, and individuals in lower social strata prefer and predominantly consume 'popular' or 'mass' culture (Tumin, 2003). Such preferences may impact on the degree of access to education. School as a system is the main process of inequality for educational outcomes. People who are on top strata has a choice and prefer to go to recognized, renowned, urban school where as, people in the lower strata have to remain on whatever available to them (ibid.).

Caste and socio-economic status of people is another reason for inequality in educational attainment. Numerous studies conducted in developing countries in the past indicate marked disparities in enrollment and attainment associated with socioeconomic status (Hannum and Buchmann, 2001). Hannum & Buchmann (2001) quote the study on analysis of the "wealth gap" in education conducted in 35 countries in Africa, the Middle East, South Asia and East Asia. All countries (except Kazakhstan) displayed a difference between rich and poor children's attainment; the largest wealth gaps emerged in the countries of South Asia.

Nepalese society also believes in caste system and socio-economic status of people. People from higher caste and sound economic condition tend to have higher levels of education, occupational status, and income than people from lower caste and poor economic condition. Nepal Human Development Report 2004, Sijapati (2007) in her paper 'Perils of higher education in Nepal' wrote that the major beneficiaries of higher education in Nepal particularly came from the upper social strata and from an urban background.

Educational achievement is so powerful in shaping one's life chances ultimately to secure positions in the society (Tumin, 1985). In line with this, Mr. Bista in his book "Fatalism and Development" (1991) argues that members of the higher castes such as Brahmins, Chettris and

others exercise control over both land and the political system in Nepal. In describing the correspondence between caste, social status and education, he has further elaborated the perception of education as certificate orientated and a symbol of status. Brahmin, Chettries and other so called elites simply want to obtain especially high school and college degrees for the purpose of acquiring higher status in the society. It shows that the upper caste families (Brahmins especially) continue to be at the top of the hierarchy. It means 'caste values' virtually influence each and every aspect of social life including an access to education.

The role and status of men and women in any society is defined by the cultural ideology, norms, beliefs and values, which the society has developed over a period of time. Discriminatory values and norms against girls and women are deeply rooted in Nepali culture and society. Social and cultural beliefs, practices and attitudes often do not favor girls in their quest of education to the same extent as boys. A tradition of early marriage, social norms and values undermine the importance of educating girls on an equal footing with boys. Moreover, preferential treatment of the male child, perceived unsure benefits of educating girls, the traditional view of girls as someone else's property etc. work together to limit girls' enrollment and school attendance. 'Why to invest in daughter that will soon be given to others?' is the common attitude to be found in most communities. Parents are largely unaware of the benefits of girls' education. It is often difficult for people to see a connection between women's education and economic development, better health, child development, family welfare and overall social progress (ADB, 1999). Such gender-based inequality and discrimination in education are a reality rather than an accident. They are a part of the deep-rooted socio-cultural norms and practices of a patriarchal society.

Nepal has marked gender disparities in literacy rates: 52% of males are literate as compared to 24% of females. These gender disparities persist across all classifications (development region, ecological belt and urban/rural residence). They are evidently seen in the Mid-West and Far-West Development Regions, the mountain belt, and in rural areas, especially rural Terai. The gender gap in literacy rates is the smallest in Kathmandu (CBS, 2005).

There are many studies conducted in gender disparity in education in Nepal. These studies have basically shown gender disparity in terms of participation, learning conditions and funding. Dr. Bista (2004) had conducted a review of such studies for UNESCO Bangkok in 2004. According to his review report, previous study conducted on barriers to girls education revealed many barriers that prevent girls and women receiving formal education. Such barriers are listed as follows: social and cultural barriers, economic barriers, psychological barrier, institutional barriers, barriers caused by poor teaching-learning conditions in schools, barriers caused by family circumstances, geographic barrier, mental and physical barriers and barriers caused by armed conflict. Similarly, his review had further examined the studies conducted on different forms of gender disparity in education. He found out that the studies had identified many reasons for disparity in education such as: disparity in participation; disparity in learning conditions; disparity in funding; under-representation of women in decision-making and leadership positions; the gender neutrality of educational policies, acts and programs; discrimination against girls through educational materials and examinations and the lack of gender mainstreaming skills and commitment (Bista, 2004).

Another dimension of inequality in education is the place where people live. People have different levels of access and opportunity according to their residence. The study conducted by Roscino and Crauly (2001) in United States showed that students who are living in the rural area of United States, exhibit lower level of educational achievements and higher likelihood of dropping out of school than students living in non-rural areas. In this study, the achievement was measured in terms of science, math, reading performance etc. This is not a surprise in Nepal. Children studying in rural part of Nepal have worse condition than this. We can just

simply refer to each year's SLC result and an overall score of pass out SLC students from the rural area. It is obvious that the students have access and opportunity to read and write more advanced materials in urban areas in comparison to rural areas. According to the data in CBS/ National Planning Commission (2005), literacy rates are substantially higher in urban areas (64 percent) than in rural areas (36 percent). They further elaborate the existence of regional disparities also, with the highest literacy rates found in the Western Development Region (44 percent), and the lowest rates in the Mid-West and Far-Western Development Regions (around 31 percent). As per the stratification by ecological belt, it revealed that the hills have the highest overall literacy rate (45 percent). There are many children who have never attended school and there is a marked difference in rural-urban percentage. The study revealed that 60 percent of the rural population has never attended school, where as, the corresponding urban number is only 32 percent (CBS, 2005).

Another relationship that needs to be examined is between the inequalities in income distribution and access to education. Checchi (2003) says that the distribution of educational attainments in one generation depends among others, on the same distribution for the previous generation. With the help of a path diagram, Tumin (1985) also elaborates about how son's education is influenced by father's occupation and education. Similarly, the study conducted by Wu (2005) in Hong Kong, showed the mutual relationship between the fathers' income and educational attainment of children. This study was conducted for the period of 1991 to 2001 which revealed that the rising inequality in education among the youth aged 20-29 is partly due to the income inequality of father between the period of 1991 and 2001. No specific studies of similar nature are found in Nepal. But looking at other dimensions, it is obvious that education of children in terms of access, aspiration and attainment is heavily influenced by their parents' income in Nepal.

Conclusion

Nepal constitutes diversity in the social structure. People, in one way or the other, are placed in different strata of society because of various dimensions of social inequality such as caste, class, sex, socio-economic status, rural-urban residence and family background etc. Above discussion on social stratification and its consequences on education has highlighted to some extent on the crucial relationship between such dimensions and opportunity, aspiration and attainment of education.

People who are from upper caste, upper class, higher socio-economic status and urban background have major opportunities for obtaining more valued and higher level of education. For the lower castes, especially in the rural areas, such opportunities are beyond their dream. They rarely think of educational achievement for their specific style of life. In the same way, it also applies to female education. If they are from rural areas and with lower castes they are even pushed back from educational access and attainment.

In short, the educational inequalities are deeply rooted in the basic institutions of Nepalese society. However, this is not only the case of Nepal but also of many other developing countries. Thus, any suggestion provided as a remedy may not work as a panacea as these inequalities are borne from the society itself. However, there is a need for addressing such issues wisely to attain gradual changes.

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