



NEWSLETTER ANTRIEP

Vol. 18 No. 2, July - December 2012

Bi-annual

Vocational Education and Training : Policies, Programmes and Challenges

Current Issue focuses on ‘Vocational Education and Training: Policies, Programmes and Challenges’. The articles in this volume are drawn from the papers presented in ANTRIEP Regional Workshop held on 5-8 November, 2012 in New Delhi hosted by National University of Educational Planning and Administration. The articles cover Australia, Bangladesh, Bhutan, Sri Lanka, South Korea, China, Indonesia, India, Malaysia, Maldives, Nepal, the Philippines and Pakistan.

In this issue...

Vocational Education and Training in Australia: Facing the Challenges of Core Skills in Australia	3
Vocational Education and Training in Bangladesh	5
Modern Technical and Vocational Education and Training System in China: Shanghai as a Special Experience	6
System and Current Status of Vocational Education and Training in Korea	7
Vocational Educational and Training: Malaysian School Perspective	8
Vocational Education in Maldives	9
Technical and Vocational Education and Training in Nepal	10
Technical and Vocational Education in Pakistan	12
Vocational Education at Secondary Level in India	13
Vocational Education and Training In Bhutan: Policies and Programmes	14
Reforms in Secondary Education and Its Implication to Technical, Vocational Education and Training in Philippines	17
Vocational Education and Training System in Sri Lanka	18

The article from ACER, Australia describes existing vocational education and training system including different providers and different types of programmes highlighting current issues and challenges facing the vocational education and training in Australia. One of the challenges has been participation of variety of providers and lack of ability to maintain national standards. Another issue is quality of the outcomes from vocational education and training. The article also discusses various initiatives and programmes around core skills, collaborations between government and industry.

The paper on Bangladesh discusses National policies and role of NGOs with regards to vocational education and training. Both public and private sector are active in imparting vocational and technical courses. The article highlights several issues and challenges related to quality, relevance and gender discrimination.

The article from China explains the importance of vocational education and training to match with fast growing economy. Developing vocational education and training in rural areas has been placed on top agenda with involvement of industries and enterprise in vocational education training.

In South Korea vocational Education is mainly provided by special purpose schools and specialized high schools. General high schools also include some job related curriculum. At higher education level Junior colleges, industrial colleges, company colleges and cyber colleges provide vocational education and training. Academic credit bank system has been adopted.

The paper on vocational education and training in India presents about sources, structure, size and type of vocational education and training. Vocational education is mainly implemented at secondary level in general

education and vocational training through industrial training institutions.

Government of Maldives in collaboration with Asian Development Bank has initiated Employment Skills Training Project by restructuring and reforming existing vocational education scheme creating awareness and demand for vocational training.

The article from Nepal presents genesis of vocational training and changes in last two decades. Private involvement in vocational education and training remained limited while the state and households have major responsibility.

The paper from the Philippines discusses reforms in school education structure which deals about opportunities for academic, technical and vocational education. The article from Sri Lanka presents the status

and management of vocational education. The paper presents details about the National Vocational Qualification Framework.

In Bhutan, the government has accorded importance to vocational education and training in tenth plan in order to tackle unemployment problem and to meet required skilled manpower. However, social acceptance of vocational educational and training is an issue. The vocational educational and training is linked with employment opportunities.

We would like to express our sincere thanks and gratitude to all the contributors of the present issue of the newsletter. Besides, we also would like to thank all the readers, individual professionals and institutions for their continued support and overwhelming response.

Editor

Regional Workshop on “Vocational Education: Policies, Programmes and Innovations (November 5-8, 2012)

The National University of Educational Planning in collaboration with ANTRIEP and UNESCO Office, New Delhi organized a Regional workshop on “Vocational Education: Policies, Programmes and Innovations from November 5-8, 2012.

The education systems worldwide have witnessed significant changes in line with the fast changing developments in technology and economic liberalization and consequential changes in the world of work and production. In this context, several new issues and challenges have emerged placing Vocational Education and Skill Development (VE&SD) at the centre stage of education reform process. While this is not altogether a new area in the education sector in any country, policies, programmes and delivery mechanisms related to VE&SD have received increased importance in many Asian countries.

Keeping these developments in view, the National University of Educational Planning and Administration (NUEPA), in collaboration with Asian Network of Training and Research Institutions in Educational Planning (ANTRIEP) and UNESCO Office, New Delhi, organized a Regional Workshop on Vocational Education: Policies, Programmes and Innovations from November 5-8, 2012.

The main objectives of the Workshop included:

- Reviewing policies and programmes in the area of Vocational Education and Skill Development;
- Identifying critical areas requiring empirical research with respect to Vocational Education and Skill Development; and
- Preparing a draft research proposal for studying Vocational Education and Skill Development in a comparative frame work.

The Workshop was specially designed for participants from ANTRIEP member institutions while some participants from Cambodia, Bhutan and Maldives were also invited from Asia region and hosted by NUEPA, New Delhi.

Vocational Education and Training in Australia: Facing the Challenges of Core Skills in Australia

The vocational education and training (VET) sector is the sector in Australia responsible for education and training for work. Australia is considered to have a well established national system of endorsed and accredited training and curriculum – through Training Packages. There is a National qualifications framework which applies across the different tertiary sectors (higher education and VET) through the Australian Qualifications Framework, and qualifications are transportable across boundaries (states/sectors). There is industry input and co-ordination to training and Training Packages through national (and state) Industry Skills Councils. The Training Package qualifications undergo regular reviews and revisions, and there are nationally set and agreed standards for training organisations through the VET Quality Framework.

There are a variety of providers – called Registered Training Organisations (RTOs). These can be public, enterprise and private, ranging from almost 60 very large public TAFE (Technical and Further Education) institutes that deliver approximately half of all accredited training to small public community organisations and approximately 3000 private RTOs.

Current issues and challenges

However, there are a number of current issues and challenges facing the VET sector in Australia. One is that due to the extent and variety of providers – public, enterprise and private – there is a lack of ability to implement the national standards and to monitor the quality of providers and of the training delivered. There is no measure of the inputs and outputs of private training that is not publicly funded. In relation to funding, there have been some significant recent moves to make VET provision a market driven, level playing field with contestable funding with learners having an “entitlement” to study – and with differing criteria across States. This has created much discussion and debate. Not unrelated to this is the rapid growth in private RTOs, e.g., in Victoria they have doubled in the last 4 years.

Another current challenge that is being debated and discussed relates to the quality of the outcomes from VET – this has been raised as an issue from industry and

from the public VET sector (and sometimes the media). Related to this is the issue of quality of assessment practices in a historically competency based system with the rather blunt approach of “yes, you are competent; no, you are not”. There are other concerns too, about the low completion rates from VET training, and about the capacity and expertise of the VET workforce. It is an ageing workforce, and there is debate about what the minimum qualification standard should be for teaching and training in the VET sector, and whether the current requirement is set too low.

Core skills in the 21st Century

One example of a new, co-ordinated and comprehensive program of delivery and support in the Australian VET system that has resulted from research and from a range of collaborations between government, industry and education providers and organisations is the development of a number of initiatives and programs based around **core skills**. Core skills, also called Foundation Skills, includes adult language, literacy and numeracy (LLN) skills and employability skills.

In recent years, both Government and Industry have argued for and acknowledged that adult Language, literacy and numeracy (LLN) skills are important and need to be addressed and supported on a national basis. LLN skills have been recognised as essential underpinning skills that enable people to be productive in their work, to continue to learn and develop, and to participate fully in society. This need was recognised in the follow up to the release of the results of the international Adult Literacy and Life-skills survey (ALLS) (ABS, 2007) where the results showed that between 46% (more than 7 million adult Australians) and 70% of adults in Australia had poor or very poor skills across one or more of the five skill domains of prose literacy, document literacy, numeracy, problem-solving and health literacy. ALLS found that approximately 40% of **employed** Australians had poor or very poor (Level 1 or 2) English language, literacy and numeracy (LLN) skills.

In a 2011 report (Industry Skills Councils, 2011), the 11 National Industry Skills Councils (ISCs) proposed that

in order to move forward in regard to improving core skills, Australia needed:

- Better identification of the LLN skills of learners before training, and targeted funding to address identified LLN skill gaps
- The inclusion of clear advice on LLN skill requirements in Training Packages and/or their companion volumes
- The implementation of a strategy to develop greater national awareness of LLN issues, including the de-stigmatisation of LLN skill development
- An increased capacity in the VET system, and all practitioners, to support the LLN skill development needs of learners and workers
- Better-targeted solutions for building the LLN skills of workers/learners.

In the last two years, the following initiatives have been developed and introduced which contribute to meeting these needs:

- The release of a National Foundation Skills Strategy for Adults by the Federal Government
- The development and release of new frameworks for Core skills: one for language, literacy and numeracy – the Australian Core Skills Framework (ACSF) and one for employability skills – the Core Skills for Work
- The development and release of new LLN qualifications for VET trainers by the relevant national ISC: a Vocational Graduate Certificate in

Adult Language, Literacy and Numeracy Practice, and Vocational Graduate Diploma of Adult Language, Literacy and Numeracy Leadership

- The development and release of a new Foundation Skills Training Package (FSTP) as part of a national, systemic approach to developing and supporting foundation skills.

The new literacy and numeracy framework – the Australian Core Skills for Adults (ACSF) describes six levels of performance in the five core skills of learning, reading, writing, oral communication, and numeracy. The ACSF is now being used in updating and reviewing Training Packages to document what the underpinning LLN skills are. The new Core Skills for Work describes five levels of performance across 3 clusters: Navigate the world of work, Interact with others and Get the work done.

References

Australian Bureau of Statistics, 2007. *Adult Literacy and Life Skills Survey: Summary results, Australia* (cat. no.4228.0), Australian Bureau of Statistics, Canberra

Industry Skills Councils (Australia) 2011. No more excuses: an industry response to the language, literacy and numeracy challenge, Industry Skills Councils, Australia

Dave Tout
ACER, Melbourne, Australia
Email:- david.tout@acer.edu.au

For Editorial correspondence please contact:

Prof. K. Sujatha

Editor

ANTRIEP Newsletter

National University of Educational Planning and Administration (NUEPA)

17-B, Sri Aurobindo Marg, New Delhi - 110 016, India

Tel: (+91 11) 26967784, 26962120

Fax: (+91 11) 26853041, 26865180

E-mail: ksujatha@nuepa.org

sujakalimili@yahoo.com

Vocational Education and Training in Bangladesh

Having over 60% population in the age group of 15-64 years, Bangladesh is aspiring to be a middle-income country by 2021. A demographic dividend is to be utilized through better management of human resources - equip them with appropriate knowledge and relevant skills. Therefore, importance of the vocational education system (VET) is highly placed in the government policies and plans including in recent 'National Skill Development Policy 2011'. Both private and public sectors are active in the VET sector around 292 government and 3965 non-government institutions are offering different vocational and technical courses, various reforming initiatives are underway; however, increasing enrolment in this stream at the post-primary level from the current 3% to 20% is still a far reaching goal. Recent studies show that the VET is suffering from many shortcomings in management, delivery, quality, relevance. On one hand, it is unable to comply with shifting market demands, and, on the other, most of the vocational graduates remained unemployed after substantial time of their graduation. Thus, VET system in the country has remained relatively an unpopular educational option - about half of the seats in the vocational institutions of the country stay vacant. Moreover, gender disparity is prevailing in the sector; only 13% of the students in public technical and vocational training institutes are females. Further research should explore the reasons behind the lack of relevance and quality and, low participation of the females in system.

In order to overcome this situation and make education effective and facilitate the process of bringing about change in the quality of life, it is essential to transform the young population into skilled human resources.

The National Education Policy (NEP 2010) of Bangladesh acknowledges the importance of skilled workforce as an essential resource for national development.

The NEP, therefore, emphasises the need and importance of vocational and technical education as:

- To increase competent manpower in diverse sectors including Information and Communication Technology at a fast pace, keeping in mind the national and international demands;
- To build up skilled manpower in a fast pace with a view to create opportunities of economic

development and to increase dignity of labour; and

- To create wide-ranging employment opportunities through export of skilled manpower and to enhance foreign currency earnings.

On the other hand, the Non-formal Education (NFE) Policy also has emphasized on the necessity of technical and vocational education as an essential tool for human development. The policy also recommends that the Literacy and Post-literacy courses should be extended and linked to vocational training courses designed by the concerned agencies.

Another option prevalent in the country is that NGOs can implement TVET programmes by using Donors Support directly. BRAC, UCEP, DAM, Caritas, FIVDB etc. have their own model to provide skill training to the target groups. In most cases, these are professionally handled by their experts, not certified by any of the Government institution. However, private sectors recognize these competencies; and that it is easier to get a job after completion of skill development training designed by NGOs like BRAC, UCEP, DAM, CMES and some others.

The National Skills Development Policy (NSDP) (2011) is a major outcome of the TVET reform project funded by the Government of Bangladesh, the European Commission and the ILO. The Ministry of Education is the line Ministry responsible for the project. The policy is aimed to guide skills, development strategies and facilitate improved coordination of all elements of skills training and the parties involved. The Skills Development Policy will contribute to the implementation of other national economic, employment and social policies so that Bangladesh can achieve its goal of attaining middle income status in 2021.

It is a major initiative to improve the coordination and delivery of skills in Bangladesh for the betterment of the nation as a whole. This policy also extends and builds on other major government policies such as the Education Policy of 2009, the Non-Formal Education Policy of 2006, the Youth Policy of 2003, the National Training Policy of 2008 and the NSDC Action Plan of 2008. The skills development policy includes a full range

of formal and non-formal vocational, technical and skills-based education and training for employment and/or self-employment. In keeping with international trends, skills development thus includes:

- a. Pre-employment and livelihood skills training, including TVET, apprenticeships and school based TVET;
- b. Education and training for employed workers, including workplace training; and
- c. Employment oriented and job-related short courses not currently affiliated with BTEB servicing both domestic and international markets.

Skills Development stands at the intersection of different policy domains including education and training, non-formal education, labour, employment and industry development. This policy integrates elements of education and training within these policy domains under the concept of skills development.

The National Skills Development Policy for Bangladesh clearly states that “given the current low participation rates of women in skills development, special efforts are necessary to correct this gender imbalance, particularly in the formal training system.” The National Skills Development Council (NSDC) Secretariat, in collaboration with the ILO TVET Reform Project, has taken initiative to formulate a specific gender strategy

to promote gender equality within TVET and boost up the rate and quality of female participation.

The income generation and non-formal vocational training component of NFBE is being addressed in one way or the other by 18 ministries in Bangladesh. Of late, major initiative is underway by the World Bank, ADB, SDC and European Union to bring market-oriented reforms in vocational training, of which, income generation and non-formal vocational training is a component running parallel to the mainstream formal vocational training system.

Although the government of Bangladesh has rightly recognized Technical and Vocational Education as the need of the time, and have undertaken some major steps to implement the SDP, there is a serious need for coordination among government, private sector and NGOs so that the skilled human resources emerging out of the various interventions may feed into the employment market. There is a definite need for studies to look into the requirements of the global market and the quality training offered and ample opportunities for the government, private sector and NGOs to come together and make vocational education a tool for changing lives.

Tasneem Athar *M. Mahbubul Kabir*
CAMPE, Bangladesh *BRAC, Bangladesh*
Email: -tasneem@campebd.org *mahbub.k@brac.net*

Modern Technical and Vocational Education and Training System in China: Shanghai as a Special Experience

In the context of immense scientific, technological and socio-economic development, either in progress or envisaged, which characterizes the 21st century, particularly globalization and the revolution in information and communication technology, technical and vocational education and training (TVET) has been placed high on government agenda in China. Since the reform and open-up policy adopted over 30 years ago, the reform and development of China's TVET have experienced historical breakthroughs. At present, China

steps into a critical stage in the process of building a harmonious and well-off society in all aspects and transforming its economic development modes. Facing the new opportunities and challenges both at home and abroad, China is in need of rapid development of its TVET more than ever before. In July 2010, China held its first National Education Conference since the beginning of the new century and promulgated the “The Guideline of National Medium and Long-Term Educational Reform and Development (2010 – 2020)”. According to the

Guideline, TVET has been placed in a more prominent position as the strategic priority not only for education sector but also for social and economic area; and has become a well-defined national strategy for the next decade. China's TVET system is at a critical point for its focus in shifting from scale expansion to quality and equity improvement. The most pressing task now is to build a modern TVET system respond to market demand and featured in flexibility, diversity and coherence as a part of the system of a lifelong learning. This attempt aims to provide a glimpse on the policies, innovations as well as key tasks of reform in building China's modern TVET system, and, in that innovation and research will be conducted with the following major objectives/ aspects:

- To motivate industries and enterprises to involve TVET and institutionalize school-enterprise cooperation mechanism, to enhance in turn the school-running mechanism characterized by the leadership of government, guidance of industries and participation of enterprises;
- To vigorously develop TVET in rural areas, this is placed on our top agenda, entailing efforts to cultivate professionals and talents for the development of agriculture and rural areas, as also adopt more favourable policies and measures to

better serve agriculture, rural areas and farmers in specific and practical ways;

- To make our TVET system more attractive by strengthening the policy guarantee, improving education quality and equity, expanding new areas for development and getting favourable environment, to see that TVET system improves and attracts more people to get involved; and
- To make TVET systems serve towards all-round development of individuals. TVET should reflect the lifelong learning concept, and timely adjust its content and form based upon the changes of the labour market. Education quality should be elevated through innovation, so as to meet the demand of skill upgradation, job changes and career development, to expand the scope and coverage of TVET, and to enrich formal and informal learning models.

Minxuan Zhang

Guo Suhua

S N U, China

Email:- mxzhang@shnu.edu.com

Ding Xiaojiong

SAES, China

Email:- dingxiaojiong@hotmail.com

System and Current Status of Vocational Education and Training in South Korea

Vocational Education (VE) in Korea begins at the high school level. VE is mainly performed by special-purpose high schools and specialized high schools. General high schools also run job-related curriculums but its importance is very limited compared to regular curricula.

Specialized high schools are divided into job-oriented ones whose purpose is to cultivate talents in specific fields from student pools with similar talent, aptitude and abilities, and alternative ones providing experience-oriented curriculum.

Vocational high schools in Korea are the main source of specialized technicians and, as of 2010, there were 504 of

them. Curriculum of vocational high schools spans 6 semesters in 3 years as in general high schools, and divided into general curriculum and job-specific curriculum. At least 50% of the job-specific curriculum has to be assigned to practical training, and all vocational high schools are running field practice programmes in cooperation with private companies.

Vocational Education (VE) at higher-education level is provided by junior colleges, industrial colleges, in-company colleges, cyber colleges, etc. The source of lifelong education and VE and T are different as the Ministry of Education, Science and Technology is incharge of the

former while the Ministry of Employment and Labor is in charge of the latter. However, recently with advent of the concept of lifelong Vocational Education (VE) and Training (T), boundary between the two is beginning to disappear. As a result, providers and programmes of VE and T are becoming highly diverse and it can be said that various Vocational Education (VE) and Training (T) institutions and programmes provided in these two fields all belong to informal types of Vocational Education (VE) and Training (T).

Since the launch of local autonomy system in Korea, each local government has been providing various VE and T by

linking with central government projects. Evaluation, certification and management of performance of lifelong Vocational Education (VE) and Training (T) are prescribed in various laws but currently qualifications; academic credit bank system; and self-education degree system are actually being administered. Qualifications, academic credit bank system and self-education degree system are related to lifelong VE and T as major evaluation and certification systems.

Young-Ran Hong
KEDI, South Korea
Email:- hyr@kedi.re.kr

Vocational Education and Training: Malaysian School Perspective

Countries in the Asian region have placed varying emphases on general and vocational education, depending upon various historical, social, economic and political considerations. While general secondary education is somewhat a common option, there is a diverse pattern of provision of vocational and technical education and training (VE and T) in many countries. In Malaysia, the government is making an effort to make vocational and technical education and training more appealing to students and employers, thus making it a more viable education option. Various government initiatives have been carried out in the quest to attract more students to pursue technical education or vocational training which in turn will benefit both current and future VE and T students. However, the Vocational Education and Training (VT and T) curriculum provided at the school level does not always prepare the students and provide appropriate skills to meet the needs of the current job market.

There is a high demand for skilled workers in the industrial sector which will further boost the growth of the economy, especially in Malaysia which is embarking upon new phase of development towards realizing its aspiration of becoming a developed and high income nation by the year 2020. In preparing quality human

capital for the country, the physical and mental abilities of the students have to be considered in designing and developing the competency-based curriculum for VE and T which is much emphasized in the selection of knowledge and skills, appropriate to individual needs and abilities. In other words, VE and T should not be over-emphasized in terms of academic and intellectual ability. Instead, it must also foster positive attitudes which will help in mastering the technical and vocational skills. Similar to most developed countries, the emphasis of academic compared to vocational is about 70:30 whilst in some countries like Germany the ratio of vocational is even higher.

In Malaysia, the perception towards VE and T is decreased and hampered by the perception that it mainly caters to the less academically-qualified and does not represent careers of choice. As a result, many parents are reluctant to encourage their children to embark into VE and T. Transformation of VE and T in line with Malaysian Education Transformation should be able to bring back the glory during late 70's and early 80's; and indeed the government has strong policies promoting VE and T to grow further. Hence, VE and T should not only focus on knowledge and hard skills but should also emphasize on the development of communication

and soft skills in order to build more self-esteem and entrepreneurship skills to increase the employability of our students. The low level of communication skills and low motivation can affect the graduate's ability and thus pose difficulties to get jobs. Although, many educationists and interested parties agree that VE and T systems often kill learners' creativity than nurture it, at the same time, they argue that normal schooling is obsessed with the teaching and assessment of only certain ways of thinking, communicating, doing and behaving.

It is often argued that the Malaysian school curriculum tends to neglect imagination, intuition, emotions and the quality of mind vital for creativity and innovation necessary for the nation's economic and social survival. In the draft of Malaysia Education Blueprint 2013 – 2025, the government believes that education can be the major contributor to the development of social and economic capital. It inspires creativity and fosters innovations which provide Malaysian youth with the necessary skills to be able to compete in the modern labour market and serve as a key driver of economic growth.

As the Government puts in place measures under the New Economic Model, Economic Transformation Plan and Government Transformation Plan to place Malaysia firmly on the path to development, there is a need to

ensure that the education system continues to progress in tandem. Another important aspect of VE and T which need to grow further is industrial training, which is essential for the development of practical and professional skills required by the students before they enter the world of work. Industrial training can be introduced in several levels of VE and T in order for the students to keep a pace of where technology is headed in the industries as well as to prepare the students to become more competent and confident in their chosen profession. Systematic and effective industrial training can expose the real life and situations in industrial organizations and their related environments which help accelerate the learning process. It is hoped that VE and T policies that have been implemented, programmes that have been designed and innovations that are going to be achieved in Malaysian schools will enhance opportunities for the students to further study, broaden the range of career, provide a range of job skills and improve communication skills needed by the industries. Subsequently, the dream of the Malaysian people for the country to grow further economically and socially towards becoming a developed nation will become a reality.

Mohd Zanal Bin Dirin
IAB, Malaysia
Email:- zanal@iab.edu.my

Vocational Education in Maldives

Education is essential for economic and social development of a country. Having a well-trained, motivated and adaptable workforce is key to the national development. Hence, an effective employment and skills development strategies are vital.

Maldives is geographically a unique country with a total of about 300,000 people dispersed over 196 scattered islands where travelling is relatively expensive and job opportunities limited within the islands. In such settings, implementation of an effective training programme linked with employment is a real challenge.

The education process is usually seen as a continuing school based experience starting with children of 5 or 6 years of age and completing at 21 to 25, with University degrees at various levels. The objective of each level is to meet the entry requirements of the next level up. Standards of education are set by the system itself. Such a system does not necessarily meet the needs of either employer for a skilled workforce or for the majority of young people for decent jobs. It is estimated that there are about 10,000 school leavers from Grades/Years 10 and 12 combined by 2012. Already we have 20,000 unemployed youth. Vocational Education and Training

introduced during the 1970s had no major reform until restructure took place in 2004.

The Government of Maldives, concerned with rising youth unemployment, particularly in regions outside Malé, led to the initiation of Employment Skills Training Project (ESTP) delivered in collaboration with Asian Development Bank (ADB) to increase the number of Maldivian, men and women, actively participating in the labour force and employment. With the referred project, skills training area was re-formed and re-structured that led to the establishment of current TVET system in the Maldives.

One major concern of the Government is to ensure a TVET system that is relevant and accessible while addressing issues of quality. As a result Furthermore, the system got enhanced with the establishment of TVET Authority in 2011 to support and promote TVET system in the Maldives. The project is designed specifically for youth, aged 16 to 34, and adults previously unable to continue their education and training. The project aims to train about 5,000 youth within a year, at least 40% of whom will be females. The goal of the project is to increase the number of Maldivian men and women with entry-level occupational

qualifications and skills for employment or for self-sustaining livelihood initiatives.

Using the revised Maldives National Qualification Framework (MNQF), curriculum is developed with competencies and National Standards are developed; and the skills required to qualify MNQF Levels are embedded into the training / courses. Thus, graduates of this programme are not only receiving sector accepted training, but also qualify as skilled workers who possess a National Certificate.

The current skills training programme has made youth and other stakeholders more aware of the system and demand for TVET programmes are increasing. However, there are limited TVET institutions in the existing educational framework of the Maldives, hence, no systematic way to train these unemployed youth for employability skills and to meet the national demand. Therefore, a consistent and effective TVET management system is required to achieve the goal.

Aminath Asra
TVETA and MQA, Maldives
Email:- aminathasra@hotmail.com

Technical and Vocational Education and Training in Nepal

In Nepal, the systematic effort for the development of education started only after the advent of democracy in the country in 1951. Since then, several committees and commissions have been formed for suggesting the reforms in education.

TVET was started in Nepal after the establishment of an Ayurvedic school to train Ayurvedic physicians in 1929. Since then, the government has been involved in conducting several kinds of technical and vocational education programmes. As a result of the government intervention, different institutions have been established and technical knowledge and skills have been provided. In the past, efforts were made to attach

vocational education to general education from grade 6 to 10 with the purpose to impart vocational knowledge and transfer technical skills to the students of grade 6 to 10. The New Education System Plan (NESP) was introduced in 1971 that provisioned vocational education in every secondary school throughout the country. This plan could not produce skilled human resources at desired level. Hence the concept of trade school for imparting employable skills with promoting rural development was introduced and the first technical school, Karnali Technical School, was established. Since then, TVET has been delivering through trade schools. CTEVT has been entrusted responsibility for the

management, implementation and coordination of TVET in the country.

At present, the major policy thrust of TVET is the expansion of training opportunities, inclusion of and access of training to all citizens who need training, integration of various training modes and training providers into one system, linking training contents and outcomes of the training with market demands, and sustainable funding for TVET. TVET policy is part of education reform endeavour of the country, and the policy intends to alleviate poverty.

The education structure in Nepal is an academic-oriented formal education. The structure shows the formal education structure from the primary to tertiary level. This structure normally does not accept technical/vocational students in mainstream education. TVET has been running as a separate stream and conducted under CTEVT system, private institutes and Annex schools. Normally, these institutes offer long-term courses. But, short-term training is also provided. In addition, TVET has also been conducted by non-CTEVT system. Recent reform made by SSRP re-structured the school education and integrated TVET in general education stream. The reform makes it possible that one can go from vocational to general or from general to vocational stream. However, TVET is also provided through non-formal and informal mode that needs to be certified through skill testing. For the purpose, National Skill Testing Board (NSTB) organized under CTEVT develops occupational skill standards, arranges skill test and certifies the skill.

Even though, efforts are being made to deliver quality TVET programmes through improving and standardizing curricula, maintaining, updating and upgrading TVET institution's facilities, workshops and building by regular monitoring, enhancing competence of technical instructors, arranging on the job training (OJT), counseling service and entrepreneurship skills for self employment, the employment rate is declining, and the national TEVT system is perceived as ineffective and inefficient with weaker links to labor market demands.

Several attempts have been made to expand the access of women, Dalits, disadvantaged and marginalized

groups to TVET in Nepal. Scholarship, stipends, special provisions were made for them to attract them to TVET.

TVET policy stresses the needs of the vocational pathways, but approved and widely accepted National Technical and Vocational Qualifications do not exist in Nepal. If students wish to progress from a TVET course to a general academic course, they have to take an entrance examination.

Involvement of private sectors in areas like curriculum design, internship offered to students, assessment and certification, apprenticeship training, developing labour market information system, etc. is limited. Insufficient attention is given to developing a reliable labour market information system, a standard training needs assessment system, linkages with business and industries, and employment services.

The major contributors for TVET in Nepal are the state and the households. As employment is attached with the vocational training; the state resumes major responsibility for the TVET in Nepal. However, resources allocated to TVET are found to be inadequate.

Based on the experiences of TVET implementation in the country, it is suggested that a national TEVT policy framework that ensures TEVT quality assurance, enhances linkages among skill development, education and the world of vocational pathways through the qualification ladder, career guidance and post-training support services, and increased access and equity needs to be developed. Moreover, enterprise-based training needs to be enhanced along with quality improvement attempts. A participatory financing system of TEVT needs to be institutionalized by mobilizing the resources of public, private and other sectors. Mobilization of CLCs is essential for addressing the objectives of life-skills learning.

Hari Prasad Upadhyaya

CERID, Nepal

Email:- jnan.upadhyaya@gmail.com

Technical And Vocational Education in Pakistan

Pakistan is blessed with a surfeit of human resource potential with no scarcity of opportunities, but, like other countries, the issues there remain the same. The formal Technical and Vocational Education (TVE) system is not a major supplier of skills to the country's labour market. While, theoretically, it caters to the market needs, in practice, it meets a very small part of the demand. Hence, the base of technical and vocational skills provided to the economy in Pakistan is narrow.

On the demand side, jobs in the public sector continued to be a priority. Most of these jobs did not require specialized skills and even a general matriculation certificate, with no technical or vocational content, was deemed satisfactory to fill the junior level administrative and service jobs. The academic degrees of Bachelor of Arts and Master of Arts were sufficient to fill the requirements for higher level jobs. This tradition has largely been maintained since the country's Independence, even though the economic structure of Pakistan has changed significantly. The demand-pull effects have had limited effect on educational provision.

On the supply side, the certificate and diploma programmes do not seem to offer a progress ladder into higher level skills. They do not provide entry claims into the tertiary sector with credit recognition in both the academic and applied streams. In addition to this blocked forward linkage, the backward linkage, with apprentice training in the traditional sector, is missing. There is no provision by which the traditional apprenticeship experience in the non-formal sector can be assessed and certified for entry into the formal sector of vocational education. The current TVE certificate stream is too narrow in its scope and does not cover the large variety of skills' training that takes place in the traditional sector. Two way cross-over between the academic and the applied / professional streams is lacking in the system. The absence of a well-articulated qualifications system is a major structural shortcoming.

The Technical and vocational education in the country has been reorganized through the establishment of provincial and federal technical and vocational authorities. The Government of Pakistan established the National Vocational and Technical Training Commission (NAVTTTC) in 2006 with the mandate of facilitating, regulating and providing a policy direction for technical and vocational education and training for meeting the national and international demand for skilled manpower. In order to provide a framework against which to deliver its mandate, NAVTTTC has developed 'Skilling Pakistan: the National Skills Strategy, 2008-2013'. The Strategy has been prepared in accordance with best practices in stakeholder identification and consultation. The Policy proposes a framework for creating a high- quality skills' development system that ensures inclusion and employability, is responsive to the changing demands of the local and global economy and helps promote and sustain socio-economic development. Efforts are being made in coordination/cooperation with all stakeholders to include Technical and Vocational Education as subjects in the curricula at the Secondary Level. Inputs of all stakeholders like Industrial/Agricultural/Service sectors and the Business community etc. will be institutionalized to ensure their inclusion in all current and future reforms of TVE to enable the sector meet market needs. Skills' Standards and Curriculum should be developed and standardized at the National Level.

Mr. Tahir Taj
AEPAM, Islamabad, Pakistan
Email:- tahrtaj2001@yahoo.com

Vocational Education at Secondary Level in India

India has a very small vocational education and training system, with a capacity for training about 3.1 million persons a year as against 12.8 million people joining the workforce annually (National Policy on Skill Development, 2009).

Vocational Education in India refers specifically to vocational courses offered in schools in Grades 11 and 12 of general educational institutions under the Centrally Sponsored Scheme of Vocationalization of Secondary Education. The successive Commissions and Committees on Education in India had emphasized that education at the lower and higher secondary stages should be given a vocational bias to link it with employment. The Vocational Education programme was started, with slow progress, in 1976-77 under the programme of Vocationalisation of Higher Secondary Education in general educational institutions of a few States. Based on the National Policy on Education (1986), the Centrally Sponsored Scheme (CSS) on Vocationalization of Higher Secondary Education is being implemented from 1988. Thus, Vocational Education falls under the administrative purview of the Union Ministry of Human Resource Development (MHRD). The 11th Five-Year Plan (2007-2012) has recommended expanding vocational education in 20000 higher secondary schools, covering two million students. However, the targets are elusive as currently about 9870 higher secondary schools are implementing Vocational Education, covering about one million students of Grades 11 and 12 (Annual Report, MHRD 2010-2011)[®]

Students are selected to the vocational stream on the basis of performance in the Grade 10 public examinations. In all the States, students are screened for vocational education on the basis of the marks obtained by them in the public examinations. The general preference for general and higher education by parents and students makes one believe that students joining vocational education are those who perform poorly in Grade 10

examination and this, sometimes, corresponds with low socio-economic status of students.

The extent of access to vocational education and its coverage varies in the rural and urban areas, with only nine percent higher secondary schools in rural areas imparting vocational education, covering a little over five percent of students at this level, as against 16% of the schools and seven percent of students in urban areas. The extent of girls opting for VE is lower than boys both in the rural and urban areas. Taking into account the numbers of students at the higher secondary level, the extent of coverage under vocational education is very insignificant in rural and urban areas. The higher secondary schools are managed by different agencies viz government, Local Body, Private -Aided, Private-Unaided. Largely, the schools that impart VE fall under government and privately managed but funded by government category. The proportion of Private-Unaided schools providing VE constitutes a very small segment. This, clearly, testifies to both inadequate facilities and under-utilization of vocational education (Sujatha.K, 2012).

The extent of access to vocational education and its coverage varies in the rural and urban areas, with only nine percent higher secondary schools in rural areas imparting vocational education, covering a little over five percent of students at this level, as against 16% of the schools and seven percent of students in urban areas. The extent of girls opting for VE is lower than boys both in the rural and urban areas. Taking into account the numbers of students at the higher secondary level, the extent of coverage under vocational education is very insignificant in rural and urban areas. The higher secondary schools are managed by different agencies viz government, Local Body, Private -Aided, Private-Unaided. Largely, the schools that impart VE fall under government and privately managed but funded by government category. The proportion of Private-

[®] VEP at HS level is not covered under school education statistics brought out annually by MHRD. For analysis in this part 7th All Education Survey data (2005) is used.

Unaided schools providing VE constitutes a very small segment. This, clearly, testifies to both inadequate facilities and under-utilization of vocational education (Sujatha.K, 2012).

As there is very small segment of vocational education at the higher education level, chances are highly limited for vertical mobility of vocational education. In some of the States, vocational students are required to take additional courses like English and general education in order to retain the possibility of joining general higher education. In these States, an overwhelming number of vocational students prefer taking additional courses despite considerable extra work. And in these States, vocational education could draw substantial enrollment.

The objectives of vocationalisation of secondary education seem to be misplaced. Even after two decades of introducing the Centrally Sponsored Scheme of Vocational Education, the proportion of students going in for vocational education remains at a much lower level. Compared to many countries, vocational education in India at the secondary level is very small, both in terms of facilities and student numbers.

References

GOI, Ministry of Education (1985) National Working Group on Vocational Education, New Delhi.

Ministry of Human Resource Development (2011-11) Annual Report, Government of India, New Delhi

Planning Commission (2008), Eleventh Five Year Plan (2007-12), Government of India, New Delhi

GOI MHRD, National Policy on Education (NPE) 1986, New Delhi

GOI, MHRD, Revised National Policy on Education 1992, New Delhi

Sujatha.K. Vocational Education and Training in India: Policies and Programmes, ed by Vinayagum Chinapah and Li Wang, Strategies to Achieve Balanced Inclusive Educational Development, Stockholm University 2012, Stockholm

*K. Sujatha
NUEPA, New Delhi, India
Email:- sujakalimili@yahoo.com*

Vocational Education And Training In Bhutan: Policies and Programmes

National Education Policy

Since the introduction of planned development in the early 1960s, the education system in Bhutan has grown from a mere 400 students in 11 schools to over 182,462 students in over 666 schools around the country. While the initial goal of education was primarily to address the human resource development needs of the country, the goals of education have now expanded to cover the provision of basic education needs and the achievement of Gross National Happiness mainly through improved quality education that prepares youth for life.

Policies and Programmes for Vocational Education and Training (VE&T)

The Royal Government, in the 10th Plan, set the target to reduce the unemployment rate to 2.5 percent. Among

others, the Technical and Vocational Education and Training (TVET) reform process has been very instrumental in facilitating and promoting gainful employment in the country. Recent annual report details major initiatives undertaken by the Ministry in the TVET sector towards building skilled workforce, facilitating gainful employment and strengthening labour administration in the country.

Vocational Education and Training (VE&T)

The process and procedures of admission in to VE&T is based purely on merit rather than aptitude of the students. For the technician level, the minimum requirement is Class 10 pass, and, for the Diploma courses, Class 12 pass. As per the availability of the seats in the training institutions, the securing of cut-off marks in the qualifying examination is necessary for

admission. Very little emphasis is placed on the aptitude of the students to take up vocational training. In many cases, the students take up vocational training courses as the last option. In the present scenario, only limited number of youth comes forward to join vocational courses. This is due to the fact that people prefer white collar jobs to blue collar ones. This has mainly to do with the common attitude of the society, in general, and youth, in particular, towards technical jobs. This may also be linked with the motivation factor too as the blue collar jobs are not better paid.

Formal and informal VE&T

Formal VE&T programmes are carried out by the Department of Human Resources (DHR). DHR is entrusted with the responsibilities of all TVET aspects in the country. It is responsible for providing certificate-level technical and vocational education in various occupational skills, and supporting the capacity-building of private training providers.

Expansion program

In line with the 10th Plan program, expansion has been carried out in all the existing Technical Training Institutes (TTIs) and Zorig Chusum Institutes (ZCIs) to enhance the enrolment capacity to 90% by 2013. The expansion includes construction of additional classroom / workshop, hostels and procurement of tools and equipments. This program helped increase the enrolment in TTIs by nine percent in 2011-2012 compared to the previous year.

Establishment of new technical institutes

To meet the aspirations for providing broader access to vocational training, the construction of the new Technical Institute at Dekiling under Sarpang dzongkhag is underway.

Informal VE&T programmes

Village skills development program

The Village Skills Development Programme was initiated in 1996 with the aim of sustaining development and quality of life in rural Bhutan, with an emphasis on reaching unschooled, women and school drop-outs. This

program mainly targets those in the rural areas to raise their living standards by imparting functional skills to help open avenues for income generation. It provides basic construction skills as a means of earning their livelihood during the off-farming season. The training programmes are oriented towards the actual skill requirements of the rural community.

Special skills development program

This program seeks to extend the provision of TVET to special target groups such as monks, nuns and armed forces to provide relevant vocational skills so as to help promote and sustain traditional arts and crafts, and, thereby, create income and employment generation opportunities. Till date, it has trained 1451 monks, nuns and armed force personnel.

Skills' training in hydro-power projects

As a part of accelerating Bhutan's socio-economic development, initiatives are taken to provide skills and training related to the hydro- power construction project, in collaboration with power generation companies. A total of 238 youths have completed training of whom 132 are employed.

The Apprenticeship Training Programme (ATP)

The ATP for youth over 17 years of age was first introduced in the country by the then National Technical Training Authority in 2000. ATP is a program, wherein fresh job- seekers are attached to enterprises/ industries to gain skills and experience. ATP includes both job-related instructions and on-the-job training in vocational skills' development. The ATP is delivered through attachment and structured training programmes. Attachment is based on the employment opportunities at the end of the programme. The recruiting company is required to guarantee 100% employability on completion of the training. Under the structured training programme, instruction on trade technology and trade -related science covers at least 20-30% of the entire training period, while the remaining 70 - 80% of the training period needs to be allocated for practical learning through attachment with relevant companies/enterprises/ agencies.

Curriculum and National Qualification Framework

The department of Occupational Standards (DOS) was created in June 2003 as the Bhutan Vocational Qualifications Authority (BVQA) at the time of the creation of the Ministry of Labour and Human Resources. It was renamed as the Department of Occupational Standards (DOS) in January 2006. The mission of the department is to develop high-quality skilled workforce to drive and sustain economic growth through setting of occupational skills standards and regulating the quality of Technical and Vocational Education & Training in the kingdom.

Assessment and certification Program

Guidelines for competency-based assessment and certification system have been developed and published. The Guidelines for Recognition of Prior Learning (RPL) is being developed and piloted.

Registration of training providers program

All the TVET Training providers in the country are mandatorily to be registered with the Department, in accordance with the Regulation for Registration of Training Providers 2010. In line with the regulation, a total of 71 training providers from government, private, corporation, NGOs and association are registered. Monitoring of registered training providers are also undertaken to ensure that they comply with the regulation and deliver quality training.

Accreditation of training courses program

The courses offered in Technical Training Institutions (TTI) are required to be accredited to gain official recognition and award National Certificate Level 1-3. Six courses offered in the TTIs have been accredited.

Linkage with Industry and Employment Market

The vocational training institutions work very closely with the industries and other agencies. As a result of harmonized efforts, the unemployment rate has decreased from 3.1 percent (10,500) in 2011 to 2.1 percent (6904) in 2012. Among others, the Technical and Vocational Education and Training (TVET) reform

process has been very instrumental in facilitating and promoting gainful employment.

Issues and challenges

The challenges, today, for effective implementation of the strategies and activities include:

(a) appointment of the required number of officers; (b) training for all, both initial and on-going; (c) production of technical desk manuals on human resource planning and skill development; (d) formal and informal linkages to both government and private training providers; (e) collection of information on in-house skill development activities conducted by enterprises, and (f) procedures for tendering and bidding arrangements for skill development training contracts.

Innovations adopted

Traditionally, Bhutan has used testing to determine in Technical, Vocational Education and Training (TVET) as to whether or not a person should receive a qualification. Competence Based Assessment (CBA) was adopted. The reason why Bhutan has chosen to use the term assessment is to signify that there may be a number of ways in which a person is able to demonstrate his or her competence.

Bahadur Tamang
Ministry of Education, Bhutan
Email:- bhadurt@gmail.com

Reforms in Secondary Education and Its Implication to Technical, Vocational Education and Training in Philippines

The Philippines is the only country in Southeast Asia and one of the only three countries in the world with a ten-year basic education programme prior to entry to the university.

In last June 2012, the Philippine Government through its Department of Education (DepEd) embarked on a key education reform by adding two more years to the existing four-year high school programme. This radical shift effectively extends basic education from ten years to 12 years in the country.

The main intention of the K to 12 basic education curriculum, particularly at the high school level is to prepare students with lifeskills that they can learn while in school. The revised curriculum will enable students to acquire Certificates of Competency (COC) and National Certification (NC) issued by the Technical Education and Skills Development Authority (TESDA). These NCs signify that K to 12 graduates have acquired middle level skills and will have better opportunities for gainful employment. The additional years also ensures that K to 12 graduates are better prepared for college.

As envisioned, K to 12 Education Programme offers career pathways or optional courses that students select from a number of choices. It offers opportunities for specialization in academic, technical-vocational, and entrepreneurship. At Grades 7 and 8, students will study exploratory subjects by taking four Technology and Livelihood education courses for each grade. At Grade 9 and 10, TLE specializations are offered, then at Grades 11 and 12, career pathways or specializations are offered. Career pathways lead to eligibility for Certificate of competency (COC), which TESDA issues to individuals who satisfactorily demonstrate competence on a particular or cluster of units of competency. The COC leads to certification beginning with NC-1 which indicates the performance of a routine and predictable tasks, requiring little judgment and supervision, and NC-2, the performance of a prescribed range of functions.

Early on, there was a need to look into the implications of the K to 12 Reform and the existing Philippine Technical Vocational Education and Training (TVET) system. Off-hand, the following issues are seen as potential areas for action research and policy inquiry:

1. Question regarding articulation between the Junior and Senior High School with TVET system.
2. What existing local models on high school TVET articulation are successful and can serve as learning framework for education managers?
3. What does a competency-based, labour market driven and assessment based qualification look like for learners who have completed Junior and Senior High Schools?
4. What is the implication of the K to 12 reforms to the national system for the development, recognition and award of qualifications based on standards of knowledge, skills and values acquired?
5. Not only is the basic education changing, TVET system itself is changing too in many ways (decentralized, lifelong learning strategies, nationwide curricula development, students needs prioritized) to meet the needs of changing economies (free-market, global competition, etc). These changes require greater flexibility and rapid organizational response on the part of the DepEd and TESDA. Are they organizationally ready for this?
6. What technical and financial investments are necessary to build the capacity of technical vocational high school teachers and administrators? The same goes with developing the TVE equipment and workshops of schools.
7. What alternative learning response can be generated given resource limitation?

Sharon Joy Berlin Chao
SEAMEO- INNOTECH, Philippines
Email:- sharon@seamo-innotech.org

Vocational Education and Training System in Sri Lanka

As evident in the surviving monastic and royal monuments as well as the extended irrigation network, ancient Sri Lanka claimed a skill base of a very high level, supposedly sustained through family based apprenticeship system.

The beginning of an institutional form of skills training may be traced back to the mid 18th century, when industrial schools were set up by the missionary societies in order to provide craft and agricultural training for children from poor families. However, industrial schools soon became unsustainable and withered away for want of funds and government and societal support. Institutional forms of skills training re-emerged in the form of technical schools under government sponsorship, with the establishment of the first technical school in November 1893, in Maradana, Colombo. The two decades after independence saw the first phase of expansion of institutionalized training in the hands of the government, seen as a response to the skills requirements of various government agencies created for industrial, agricultural and social infrastructure developmental purposes.

Vocational education and training in Sri Lanka is managed by the Tertiary and Vocational Education Commission of the Ministry of Vocational and Technical Training. Training includes course based curriculum at vocational technical training centres and apprenticeship at private or public organizations. Higher education in vocational fields could be achieved through several universities. The National Vocational Qualifications Systems in Sri Lanka (NVQSL) provides a structured seven levels of qualifications from Level 1 to Level 7. Vocational education and training is carried out for degree level at the Open University, Sri Lanka and the University of Vocational Technology as well as at diploma level at 37 technical colleges, Sri Lanka Institute of Advanced Technical Education and the Sri Lanka School of Agriculture.

Apart from these, the Ministry of Education has launched a non-formal vocational education programme

which allows school drop-outs and adults who did not complete their school education to earn a living through self-employment. Most of these courses are held at community centres and they cover a wide range of fields such as dressmaking, beauty culture, hair-dressing, stitching, carpentry, plumbing, painting and so on.

Over the past 30 years, institutions engaged in technical education and vocational training have grown in number and complexity. Private-owned training institutions have also expanded, mainly in response to the growing demand for private computer education. Furthermore, Non-Government Organizations, including church- and temple-based ones, as well as those funded by international NGOs, have increased their involvement in institutional training, reflecting humanitarian concerns for the socio-economic upliftment of the disadvantaged groups.

Though institutional training in the public, private and NGO sectors has had a fast expansion, industry based skill acquisition is still dominant and majority of people still acquire skills through working in industry, as well as through the informal apprenticeship. TVEC has found in its studies that 84% of working people have not followed formal training and hence, are not certified.

Industry based training is apprenticeship. Apprenticeship is recognized in Sri Lanka Labour Market or Industry, and Employee Provident Fund Act of 1958 has outlined the provident fund right of the apprentices. However, when an apprentice acquires skill through working in the industry without a curriculum, it is called informal apprenticeship. The Government has taken action to formalize the informal apprenticeship by establishing the National Apprenticeship Board in 1971 which was later restructured as the National Apprenticeship and Industrial Training Authority (NAITA). Total annual training of public Institutional training system is about 60,000 and a large majority still acquires the skill through working in the industry.

Legal and Institutional Framework of the TVET System in Sri Lanka

The following Acts are the main components of the legal framework of the Technical and Vocational Education and Training (TVET) System in Sri Lanka:

- Part I of the Tertiary and Vocational Education (TVE) Act No. 20 of 1990, establishing the Tertiary and Vocational Education Commission, with a mandate to set general policy, planning and coordination, as well as to set standards and regulate the TEVT sector; this Act was revised in 1999 with the provision of additional powers to the Commission for funding and research.
- Part II of TVE Act No. 20 of 1990, which converted the National Apprentice Board (NAB) to the National Apprentice and Industrial Training Authority (NAITA), undertaking the apprenticeship programme and trade tests.
- Vocation Training Authority of Sri Lanka Act No 12 of 1995 which established the Vocation Training Authority with a special focus on training youth in rural areas.
- The Sri Lanka Institute of Advanced Technical Education (SLIATE) Act No. 29 of 1995, to provide training towards higher National Diploma and Diploma Level Qualifications.
- The Institute of Technology, University of Moratuwa, Ordinance No. 3 of 2000, established

under an amendment to the University Act No. 16 of 1978, primarily conducting the National Diploma in Technology course, which was previously conducted by the Faculty of Engineering of the University of Moratuwa.

In addition to the institutions established under above Acts, the Department of Technical Education and Training, which has a network of Technical Colleges in all major cities, plays a dominant role in Technical and Vocational Education and Training. In all these leading public sector TVET institutions except SLIATE and ITUM, the primary function is training function under the Ministry of Vocational and Technical Training. In addition, many Ministries and provincial councils through the Departments and Corporations under their purview, undertake training as an associate function. In addition, there are also a large number of private and NGO sector training institutions.

National Vocational Qualification Framework (NVQ) in Sri Lanka

In 2005, the Ministry of Vocational and Technical Training (MVTT) introduced the National Vocational Qualifications (NVQ) framework which was an important milestone for the education, economic and social development of Sri Lanka.

*Nihal Tissa Kumara Lokuliyana
NIE, Colombo, Sri Lanka
Email:- lokuliyana@hotmail.com*

For further details on ANTRIEP activities contact

International Institute for Educational
Planning (IIEP)
7-9 Rue Eugene - Delacroix
75116 PARIS, France
Fax: + (33) 1 40728366
email: a.de.grauwe@iiep.unesco.org

National University of Educational Planning
and Administration (NUEPA),
17-B, Sri Aurobindo Marg
NEW DELHI-110 016, India
Fax: + (91 11) 26853041, 26865180
E-mail: ksujatha@nuepa.org

ANTRIEP Member Institutions

1. Academy of Educational Planning and Management (AEPAM), Ministry of Education, Taleemi Chowk, G-8/1, P.O. Box 1566, ISLAMABAD, Pakistan (<http://aepam.edu.pk>)
2. Australian Council for Educational Research (ACER), 19 Prospect Hill Road, Private Bag – 55, Camberwell, Melbourne, VICTORIA-3124, Australia (www.acer.edu.au)
3. Balitbang Dikbud Centre for Policy Research (Puslit Penelitian), Office for Educational and Culture Research and Development (Balitbang Dikb) Ministry of Education and Culture, Jalan Jenderal Sudirman, Senayan, JAKARTA – 12041, Indonesia.
4. Bangladesh Rural Advancement Committee (BRAC) 75, Mohakhali Commercial Area, DHAKA – 1212, Bangladesh (www.brac.net)
5. Campaign for Popular Education (CAMPE), 5/14, Humayun Road, Mohammadpur, DHAKA – 1207, Bangladesh (www.campebd.org)
6. Centre for Multi-Disciplinary Development Research (CMDR), D.B. Rodda Road, Jubilee Circle, DHARWARD - 380 001, Karnataka (INDIA) (www.cmdr.co.in)
7. Centre for Education Leadership Development, (CELD), National Institute of Education (NIE), Meepe Junction, Padukka, Sri Lanka (www.nie.lk)
8. Institut Aminuddin Baki (National Institute of Educational Management), Ministry of Education, Sri Layang 69000, Genting Highland, PAHANG, Malaysia
9. International Institute for Educational Planning (IIEP), 7-9 rue Eugene-Delacroix, 75116 PARIS, France (www.iiep.unesco.org)
10. Korean Educational Development Institute (KEDI), 92-6 Umyeon-Dong, Seocho-Gu, SEOUL 137-791 KOREA, (www.kedi.re.kr)
11. National Academy for Educational Management (NAEM), Dhanmodi, DHAKA – 1205, Bangladesh (www.naem.gov.bd)
12. National Centre for Educational Development (NCED), Sanothimi, BHAKTAPUR 2050, Nepal (www.nced.gov.np)
13. National Council of Educational Research and Training (NCERT), Sri Aurobindo Marg, New Delhi - 110 016 (INDIA) (www.ncert.nic.in)
14. National University of Educational Planning and Administration (NUEPA), 17-B, Sri Aurobindo Marg, New Delhi –110016, India (www.nuepa.org)
15. Research Centre for Educational Innovation and Development, Tribhuvan University, P.O. Box 2161, Balkhu, Kathmandu, Nepal, (www.cerid.org)
16. Shanghai Institute of Human Resource Development (SIHRD), 21 North Cha Ling North Road SHANGHAI - 200 032, China
17. South-East Asian Ministers of Education Organisation Regional Centre for Educational Innovation and Technology, SEAMEO INNOTECH P.O. Box 207, Commonwealth Avenue, U.P. Diliman, Quezon City 1101, Philippines (www.seameo-innotech.org)
18. State Institute of Educational Management & Training (SIEMAT), 25 P.C. Banerjee Road, Allenganj ALLAHABAD, Uttar Pradesh, India
19. The Aga Khan Education Service, Pakistan (AKES,P) House No.3 & 4, F-17/B, Block VII KDA Scheme 5, Clifton, Karachi-75600, Pakistan (www.akdn.org/akes)
20. The Aga Khan University-Institute for Educational Development, (AKU-IED), 1-5/B-VII, F. B. Area Karimabad, P.O. Box No.13688, Karachi-75950, Pakistan (<http://www.aku.edu>)

Edited by K. Sujatha on behalf of the Focal Point, ANTRIEP and published by the Registrar, National University of Educational Planning and Administration, 17-B, Sri Aurobindo Marg, New Delhi - 110 016 and processed/printed by the Publication Unit, NUEPA at M/s Anil Offset & Packaging Pvt. Ltd., Jawahar Nagar, Delhi-110007, India