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UNESCO Regional Center Project(2008):
2008 KRIVET TVET and HRD Training Program for Experts

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FOREWORD

In this rapidly changing age, human resources development has emerged as one of the top priorities for sustainable economic growth. The changes in society is generating an ever-increasing demand for human resources capable of utilizing and innovating new technologies.

Technical and vocational education and training for providing knowledge and skills enable people to expand their competency, raise productivity, increase their personal income and thus elevate the quality of their daily lives. TVET has now become major national policy concerns in countries throughout the globe. Many countries, especially developing countries are in urgent need for establishment of structural changes in their HRD and TVET systems.

Korea Research Institute for Vocational Education and Training (KRIVET) was established in 1997 with contributions for the Korean government. Since then, KRIVET has carried out educational research and development works in all areas of TVET playing a central role in finding creative solutions to Korea's HRD and TVET.

KRIVET was assigned as UNESCO Regional Center in 2000 and has been organizing its annual 'KRIVET TVET and HRD Training Program for Experts' since 2002. I sincerely hope this training program will contribute to providing theoretical and practical assistance to developing countries in establishing HRD and TVET system.

권 대 봉

Prof. Dr. Dae-Bong Kwon
President, KRIVET

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Executive Summary

Since 2002, the Korea Research Institute for Vocational Education and Training has been conducting the annual TVET and HRD Training Program for Experts as part of its UNESCO Regional Center of Excellence in TVET Project. Through close cooperation with international organizations such as UNESCO, OECD and ILO, Korea Research Institute for Vocational Education and Training(KRIVET) has made continuous efforts for international exchange of knowledge and expertise in TVET and HRD.

In 2000, KRIVET was designated to serve as an Asia-Pacific region UNESCO Regional Center of Excellence in TVET. To fulfill this role, KRIVET is always endeavoring to develop new and effective initiatives to foster the development of TVET in the region.

The annual UNESCO Regional Center of Excellence in TVET Training Program is one initiative that was launched in 2002 by KRIVET. This year, 11 experts from 11 countries were selected to take part in the 6th annual training program for experts that was held from September 1 to September 5.

The 5-day training program consisted of 6 lectures, which gave the participants a general introduction to TVET and HRD in Korea. The lectures were delivered by the research fellows at KRIVET.

At the end of each day, participants evaluated the program by filling out written questionnaires. Based on the results of the evaluation, we have prepared improvement plans for future training programs.

Chapter 1
Background

Section 1 Program Background

□ To act as an UNESCO Regional Center for Excellence in TVET, KRIVET needs to carry out international projects in the field of HRD and TVET and establish the foundation for international cooperation projects.

□ By inviting HRD and TVET experts from the Asia-Pacific region and providing them with opportunities to learn more about Korea's advanced systems and KRIVET's roles and functions. KRIVET needs to develop and maintain a network of contacts that can be utilized in future regional center projects.

□ KRIVET has been conducting the annual HRD and TVET Training Program for Experts since 2002 as part of its UNESCO Regional Center of Excellence in TVET project. The 2008 training program was the 7th annual training program for experts.

Section 2 Program Objectives

□ The objectives of the training program are:

○ To provide participants with information on Korea's experience of developing TVET and HRD at various stages of the nation's economic growth along with guide for application.

○ To provide an opportunity to exchange valuable ideas, knowledge and experience among participants to stimulate innovative thinking in regards to TVET and HRD.

○ To establish network among participants and program organizers for lasting international partnership to collaborate in the future.

Chapter 2

Program Outline

Section 1 Program Introduction

Title: 2008 KRIVET TVET and HRD Training Program for Experts

Date: September 1 ~ 5, 2008

Venue: KRIVET

Section 2 Program Preparation

□ Planning of program contents

○ Selected lecture topics and site visitations upon analysis of questionnaire results.

□ Applicant selection process

○ Sent out program booklets with application forms to UNESCO member countries via e-mail, and fax.

○ Eligibility of applicants: Experts in the Asia-Pacific region with at least 7 years of experience who is capable of applying or utilizing the outcomes of the training program for the development of TVET and/or HRD in his/her country.

○ Required application documents: application form, resume, recommendation letter, coverletter, copy of passport.

○ Received 22 applications from 14 countries between July 1 ~ August 14.

○ 11 participants representing 11 countries were selected as final participants.

Chapter 3

Program Contents

Section 1 Composition of the Program

□ The 5 day-long training program was held from September 1 (Mon) to September 5 (Fri).

- ○ Six Lectures
- ○ Three Site Visits
- ○ Country Reports by Participants
- ○ Project Proposals by Participants
- ○ Cultural Activities

□ Program Timetable

Day ONE - May 28(Mon)

Time	Program
09:30~09:40	Registration
09:40~10:00	Orientation
10:00~12:00	Lecture 1: Effective Management of Human Resources Development Process *by Dr. Suk-Min Chang (KRIVET)*
12:00~13:30	Lunch
13:30~15:30	Lecture 2: Vocational Training Policy in Korea *by Dr. Mee-Souk Kim (KRIVET)*
15:40~18:00	Lecture 3: Vocational Education Policy and Industry Academia Cooperation in Korea *by Dr. Ji-Sun Chung (KRIVET)*
18:00~	Welcoming Dinner

Day TWO - May 29(Tue)

Time	Program
10:00~12:00	Lecture 4: Economic Growth and Skills Development: Korea's Experience *by Dr. SooBong Uh (Korea University of Technology and Education)*
12:00~13:30	Lunch
13:30~18:00	Site Visit 1: Incheon HRD Institute Site Visit 2: SIVAT
18:00~	Back to hotel

Day THREE - May 30(Wed)

Time	Program
10:00~12:00	Lecture 5: E-learning System in Korea by Dr. Hea-Jung Chang (KRIVET)
12:00~13:30	Lunch
13:30~17:00	Site Visit 3:Samsung Electronics
17:00~	Back to hotel

Day FOUR - May 31(Thurs)

Time	Program
10:00~12:00	Lecture 6: Vocational Qualification System in Korea Dr. Jeong-Yoon Cho (KRIVET)
12:00~13:30	Lunch
13:30~17:30	Country Reports and Discussion Session I, II moderated by Dr. Ki-Sung Lee (Soongsil University)
17:30~	Back to hotel and preparation for action plans

Day FIVE - June 1(Fri)

Time	Program
10:00~11:30	Presentation of action plans by participants
11:30~12:00	Program evaluation and ceremony of completion
12:00~14:00	Farewell Lunch
14:00~	National , Insa-Dong

Section 2 Lectures

☐ **Lecture 1**: New Trainer's Guide: Effective Management of Human Resource Development Process / Dr. Suk-Min CHANG (KRIVET)

- How to prepare yourself as a trainer
- Preparation and implementation of effective training programs
  - · Conducting needs analysis
  - · Determining objectives and goals
  - · Selecting instructional methods and media
  - · Making lesson plan
  - · Conducting, evaluating, revising program

☐ **Lecture 2**: Vocational Training in Korea / Dr. Mee-Souk KIM (KRIVET)

- General introduction of vocational education and training in Korea
- Understanding education system and vocational training in Korea
- Employment trends and other challenges
- Future policy tasks

☐ **Lecture 3**: Vocational Education & Training and Industry- Academia Cooperation / Dr. Ji-Sun CHUNG (KRIVET)

- Economic development and vocational education & training in Korea

- Vocational education and training system in Korea
- Tasks of vocational education and training
- Industry-academia cooperation
- The effect of industry-academia cooperation
- Policy tasks

☐ **Lecture 4**: Economic Growth and Skills Development: Korea's Experiences / Dr. SooBong UH (KRIVET)

- Globalization and decent work
- Korea's experiences in skills development
- Environmental changes and innovations in skills development
- Korea's role in skills development in the Asia-Pacific region

☐ **Lecture 5**: e-Learning System in Korea / Dr. Hea-Jung CHANG (KRIVET)

- Overview of e-Learning in Korea
- e-Learning system in Korea
- e-Learning contents development
- e-Learning consulting

☐ **Lecture 6**: Introduction to Korean Vocational Qualification System / Dr. Jeong-Yoon CHO (KRIVET)

- Function and role of vocational qualification
- What is Korean national qualification system?
- Structure of Korean qualification system
- Economy, education and vocational qualification
- Korean economic development steps
- Change of national technical qualification framework
- Classification of national technical qualification
- Number of qualification items in technical groups of NTQS
- Certification criteria in NTQS according to grade
- Eligibility for national technical qualification
- Testing procedures of technical group
- Relation between qualification grade, job type and education institute

Section 3 Site Visits

□ Incheon Human Resource Development Institute The Korea Chamber of Commerce and Industry

○ Purpose of Visit: To learn about the institute's curriculum and its operation of vocational education and training

○ About the institute

- Established in 1996 by The Korea Chamber of Commerce and Industry for cultivation of creative technical workforce
- High employment rate in major-related fields
- Regular education and training course and in-service training course for the employees
- Main functions
  - · Installation and operation of vocational eduation & training facilities
  - · VET projects commissioned by government
  - · VET demand study and job analysis
  - · Job placement and post guidance for the graduates
- Long-term development plan
  - · Extension of education & training service focus on industry demands
  - · Establishment of education & training network focus on enterprise demands
  - · Extension of its public benefit role as public education & training institution

□ Seoul Institute for Vocational Training in Advanced Technology(SIVAT)

○ Purpose of Visit: To learn about vocational training in advanced technology

○ About the institute

- Co-established by the Ministry of Labor and ILO/APSDEP (Asian and Pacific Skill Development Programme of International Labour Organization) in 1989 to function as a training hub by cultivating core human resources in HRD field in Asia-Pacific region
- Establishment objectives
  - ·playing a role of a central institution in the field of human resources development in Asia-Pacific region
  - ·functioning as a unique national training institution for foreign participants
  - ·promoting Korea's experience in the field of vocational training and human resource development on international arena
  - ·cultivation, dispatching abroad and supporting Korean experts in the field of HRD

□ Samsung Electronics

○ Purpose of Visit: To learn about the importance of TVET by visiting a company that boasts world-class technology in electronics

○ About Samsung Electronics:

- Strives to contribute to the society by producing the best products and services with its outstanding human resource and technology

- Ranked number one in the world for many of its product lines, including semiconductors and television

Section 4 Country Reports

□ Bhutan

Status of TVET and HRD in Bhutan

Introduction

Bhutan 2020 - the country's vision for peace, prosperity and happiness in its preface states, "Youth and students of today will become adults in the period covered by this vision document." We hope that they will internalize the vision so that they can contribute to its realization. Their transition from students to workers will occur in this period, and career and employment plans should be made within the context of the economic expansion and social changes described in the vision document.

Our future is inexorably tied to issues of human resource development and employment. There is a paramount need to upgrade the skills of our people to fulfill our cherished goal of self-reliance. There is also a need at the same time to generate sufficient employment opportunities to ensure that all who seek work are engaged in productive and meaningful jobs. Failure in this regard will have serious consequences, not only through the negative impact on the economy, but also through the social dislocation that flows from unemployment.

In Bhutan, having achieved significant improvement in the country's

basic education system, each year we see an increasing number of youth graduating from schools who are either looking for jobs or some kind of vocational training. According to the forecast made by Ministry of Education, it has been projected that around 32,011 Class X school leavers and 30,802 class XII school leavers will be available for training and employment by the end of 10th FYP. These number shows that there is a need to increase training opportunities in the country for our youth to be gainfully employed. In addition, it has also been noticed that the country is facing a severe shortage of skilled manpower, therefore, Vocational Education and Training plays a major role in overcoming the mismatch between demand and supply of appropriately skilled human resources for the country.

Provision of TVET

Since the start of planned development in the 1960s, the Royal Government has consistently given high priority to the development of its human resources. However, Bhutan still faces and is constrained by the continuing shortage of skilled workers at all levels. On the other hand, increasingly large numbers of students are now graduating from the school system to a labour market that is no longer capable of providing traditionally attractive jobs to all of them.

The Ministry of Labour and Human Resources, the responsible body for the TVET sector in the country has been looking for ways and options to enlarge and improve the capacity and the quality of the vocational training system in the country. The ministry has a comprehensive responsibility for developing and envisaged transition process, particularly securing provision of relevant vocational education and training choices,

promoting expansion of suitable employment and entrepreneurial opportunities and facilitate labour market transactions for job seekers and employers.

The ministry is mandated to formulate and implement innovate and relevant human resource policies and to ensure high quality services for the benefit of workers and employers in public, private and corporate sectors. The functions of the ministry are implemented through four Departments:

- Department of Labour
- Department of Employment
- Department of Human Resources
- Department of Occupational Standards

Outlook of employers and stakeholders with regards to TVET program in Bhutan

TVET program in Bhutan has come a long way, with initial two vocational training institutes and now with 6 vocational institutes under direct administration of department of human resources including non-formal vocational training and apprenticeship training programs. Many more technical and vocational institutes were established under the other public agencies. The country has also growing private entrepreneurs delivering technical and vocational skills. There are NGOs conducting tailor-made courses for different target groups. Course conducted under the NGOs are more for self-employment and income-generation.

The TVET sector until recently have no defined polices and strategies. The training programs are conducted without proper curriculum, most

training is ad hoc and uncoordinated, no proper system in place to authorize, regulate, accredit the training system. As a result there is a mismatch between the demand and supply of skilled workers. Employers, especially those in the private sector are not satisfied with the quality and quantity of trainees graduating from the technical and vocational institutes and they are reluctant to employ trained Bhutanese skilled workers.

The situation has changed over the past few years, when the private sector has begun taking part in the TVET by delivering formal training and by participating in the apprenticeship-training program. There has been also policy guidelines from the government that employers should recruit national skilled workers instead of foreign skilled workers, only few cases whereby foreign workers are recruited, mainly because we do not have sufficient Bhutanese nationals trained in that particular field.

HRD Policies and Planning

Human Resources Development has always been accorded high priority by the Royal Government from the beginning of the development plans with the realization that human capital is crucial towards materializing socio-economic development goals.

The lack of managerial and technology skills continue to be a major causes for the slow development of the private sector. To address this constraint, a specific human resources development plan for the private sector has been developed in the Ninth Plan. The total outlay for the human resources sector in the Ninth Five Year Plan is Nu. 3 million. Reflecting the high priority accorded to human resources development in the private sector, 50 percent of the total HRD outlay in the Ninth Plan,

has been earmarked for the private sector. To address the shortages of skilled and semi-skilled labour, the Department of Human Resources (DHR) implemented various vocational skills training in various places around the country and also in the region. Despite this effort and active initiative from the Government, the HRD in private and corporate sector still is weak and needs development.

10th Five Year Plan

Bhutan has just entered the 10th FYP period starting July 2008. The following are the objectives and targets to be achieved by the end of the 10th FYP, which have been developed within the mandate of DHR.

Objective 1: To Increase Access to Vocational Training

Emphasis will be given on increasing access to vocational training programmes in order to cater to training needs of large number of school leavers exiting from general education system particularly from Middle Secondary Levels. The capacities of the existing training institutes will be enhanced, new Vocational Training Institutes will be established, areas of training programmes will be diversified, and capacities of the alternate mode of training (particularly, Apprenticeship Training Programme & Special Skills Development Program) will be increased.

Community/Village Skills Development Programme will be expanded to cater to training needs of the people in the rural areas. The training programme will be linked with the income generating opportunities in the rural areas, so that rural-urban migration is mitigated. However, these calls for aligning of interventions by other line ministries like Ministry of Agriculture and Ministry of Trade and Industry towards the common objective.

Objective 2: To Enhance Quality of Vocational Training

Quality of training is highly dependent on the quality of instructors & relevant tools and training equipments. Keeping in view of this, emphasis will be given on equipping training institutes with adequate number of qualified staff through recruitment of new instructors and providing them with appropriate training. Also, the procurement of relevant tools and equipments that are required to enhance the quality of training delivery is to be given equal emphasis.

It will be ensured that the curricula for training programmes delivered at the institutes are fully in line with national skills standards so that relevance of the training courses to the market demand is enhanced.

Objective 3: To Promote Private Sector Growth through Human Resource Development

A national human resource development policy is to be formulated and strategies developed. The private sector is foreseen to be the major employer of all human resources in the country. As such, an umbrella policy that streamlines all HRD activities is required to develop relevant skilled human resources responsive to changing labour market trends.

□ Cambodia

Background of TVET

- Before 2003, the management of TVET is under Ministry of Education Youth and Sport (department level)
- In the 3rd mandate of the Royal Government of Cambodia, Ministry of Labor and Vocational Training was created take

responsibility of and make TVET play more important role of country economic development.

Finance of TVET

- TVET programs run in training institutions/centers are supported by:
  - Government fund (for administrative expense, building, tools and machinery and in the form of special projects: PAP, NTF,…)
  - Training fees (paid by students)
  - Training fees (supported by employers, NGOs,…)
- NPIC finance is the example of financing TVET programs financing. It's composed of:
  - Annual Government budget for school building maintenance, tools, equipment purchase,…
  - Tuition fees from regular students, special programs, external supports, for expenditure on staffs and lecturers salaries and other projects.

NPIC Background

- The National Polytechnic Institute of Cambodia (NPIC) was the fruit of a summit conference between Samdech Hun Sen, Prime Minister of the Royal Government of Cambodia and H. E. K Lim, Dae-Jung, President of the Republic of Korea, which was held oh April 9, 2001, in Seoul on the agenda of *Promotion of Economic Cooperation between the Two Countries*.
- It was established by the 27,665,000 USD of EDCF loan of the Republic of Korea and 6,985,000 USD of the Royal Government of Cambodia.

NPIC Overview

- Vision
  - ·to be a national center for high-tech transfer
  - ·to be an advanced training center in the field of science, technical and services
  - ·to be an industrial cooperation hub with international corporation such as Korea and other countries
- Land size: 10Ha
- Number of building: 13
  - ·including Main administration building, Cookery & tour, Restaurant & VIP room, Multi-purpose hall, Auditorium, Dormitory, Practice building

NPIC Management

- NPIC is a public TVET institution under the management of MoLVT
- The management of NPIC consitsts of 7 offices and 6 faculties that carry out all activities of NPIC
- Four offices: Administrative, Accounting, Planning and Cooperation and State Property office escute general administrative tasks of NPIC
- Three offices manage and coordinate education and training activities in NPIC
  - ·Academic Office: responsible for the regular program
  - ·Special Training Office: coordinate the special program. Currently the office takes charge of the Pre-Departure program for EPS, Korean Language program, One Year Culinary and Restaurant Management program and some

other special program for NPIC students

- Educational Quality Control Office

- Faculties: Civil Engineering, Electricity, Electronics, Mechanics (General Mechanics, CAD/CAM, Automobile), Computer Science, Tourism and Restaurant

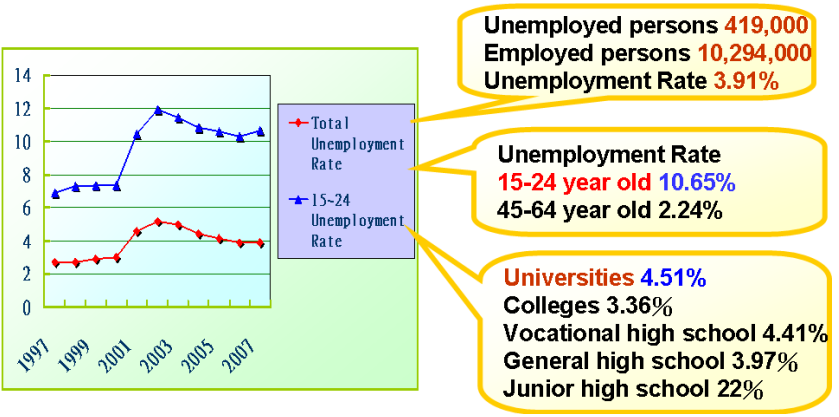
NPIC Programs

TVET programs in NPIC is coordinated by Academic Office and Special Training Office and developed by faculties members. Two kinds of pregrams offered by NPIC:

- Regular programs:
  - Bachelor (4 years)
  - Special Training offices (2 years)
- Special programs specially designed to response to the requirement of NPIC, and other clients.
  - Duration: range from 1 day to one year certificate program
  - Curriculum: flexible and responsive to the needs of clients
  - Targets: those who require immediate job-oriented skills

□ Chinese Taipei

2007 Unemployment Status



Manpower Supply and Demand Forecast

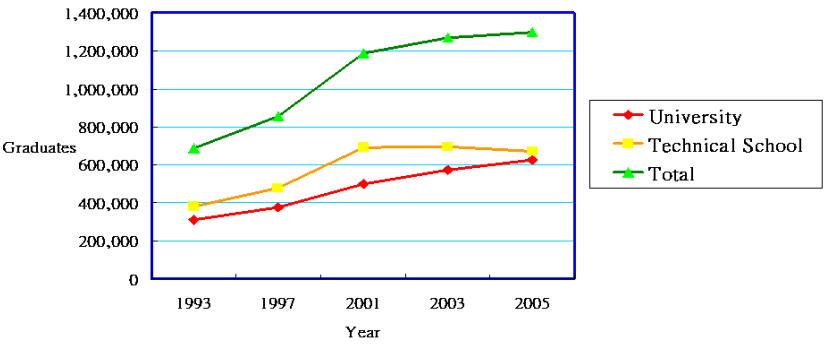
Technical levels	2005-2008 Average			2009-2105 Average			2005-2105 Average		
	S	D	S-D	S	D	S-D	S	D	S-D
Total	332	689	-357	324	700	-376	327	698	-371
Senior Professional Manager	15	65	**-50**	23	64	**-41**	20	65	**-45**
Intermediate Human	273	262	11	261	261	0	266	262	4
Based Workers	44	362	**-318**	40	375	**-335**	41	371	**-330**

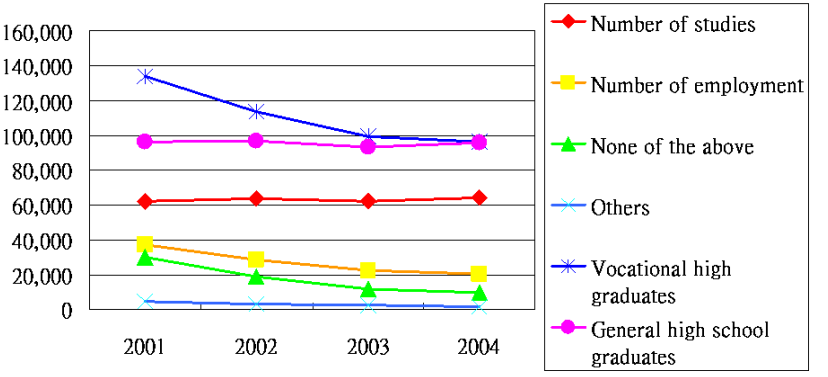
S: Supply D: Demand

In the future, supply and demand in labor market will be unbalanced continuously, especially in the levels of Senior Professional manager and Based Workers.

Status of Vocational Education

The number of tertiary school graduates grew to 607,373 people in 12 years





Industrial Manpower Package: Issues Faced

- Imbalance of supply and demand in labor market
- Educational mechanisms out of synch with industry's needs
- Cooperation between industry and academia still needs to be strengthened
- Lack of flexibility in competing for international talent

Industrial Manpower Package: Planning Concept and Targets

Integrating manpower supply and demand data, and making timely adjustments to manpower resources strategy.
⇩ ⇩ ⇩ ⇩
Unemployment of university graduates to be close to the general average unemployment rate in 2009.

Deregulating personnel system, to add value to the synergies of industrial-academic (research institute) cooperation.
⇩ ⇩ ⇩ ⇩
Deregulating personnel systems, to promote the flow and utilization of manpower resources among industry, academics and the research sector.

Industrial Manpower Package: Key Plans

1. Establishing integrative mechanisms for supply and demand surveys
2. Developing job skills training for key industries
3. Expanding industry-related academic courses
4. Launching an industrial manpower rooting program
5. Pepping up the flexibility of the higher education system
6. Reconstructing the technical and vocational education system
7. Actively heightening the internationalization of education
8. Adding value to joint innovation from industry-academia (research sector) cooperation
9. Competing to recruit international specialist talent

□ Jordan

Jordan officially the Hashemite Kingdom of Jordan is a country in Southwest Asia spanning the southern part of the Syrian Desert down to the Gulf of Aqaba. It shares borders with Syria to the north, Iraq to the north-east, Israel and the West Bank to the west, and Saudi Arabia to the east and south. It shares the coastlines of the Dead Sea and Gulf of Aqaba with Israel, the West Bank, Saudi Arabia and Egypt. Much of Jordan is covered by desert land, particularly the Arabian Desert, however the north-western area, with the sacred Jordan River is regarded as part of the Fertile Crescent.

The capital city, Amman, is in the north-west. Jordan has a rich history, its location in the central Middle Easthas long made it a prized possession. During its long history, Jordan has seen numerous civilizations, including ancient eastern civilizations the Sumerian, Akkadian, Babylonian, Assyrian, Mesopotamian and Persian empires. Jordanwas for a time part of Pharaonic Egypt and spawned the native Nabatean civilization who left rich archaeological remains at Petra. Cultures from the west also left their mark such as the Macedonian, Roman and Byzantine empires. Since the seventh century the area has been under Muslim and Arab cultures, with the exception of a brief period under British rule.

Jordan has given great attention to education in particular. Its educational system is of international standards and its secondary education program is accepted in world-class universities.

School education in Jordan could be categorized into two sections:

- Secondary education, which consists of two years of school study, for students who have completed the 10-year basic cycle. It comprises two major tracks:
  - Secondary education, which can either be academic or vocational. At the end of the two-year period, students sit for the general secondary examination (Tawjihi) in the appropriate branch and those who pass are awarded the Tawjihi (General Secondary Education Certificate). The academic stream qualifies students for university entrance, whereas the vocational or technical type qualifies for entrance to Community colleges or universities or the job market, provided they pass the two additional subjects.
  - Vocational secondary education, which provides intensive vocational training and apprenticeship, and leads to the award of a Certificate (not the Tawjihi). This type of education is provided by the Vocational Training Corporation, under the control of the Ministry of Labour / Technical and Vocational Education and Training Higher Council.

Foreign secondary education programs

After completing the 8 or 10 years of basic education, Jordanians are free to choose any foreign secondary education program instead of the Tawjihi examinations (8 for IGCSE, 10 for SAT and IB). Such programs are usually offered by private schools. These programs include:

- IGCSE
- SAT
- International Baccalaureate

Higher education Access to higher education is open to holders of the General Secondary Education Certificate who can then apply to private community colleges, public community colleges or universities (public and private), the admission to public universities is very competitive. The credit-hour system, which entitles students to select courses according to a study plan, is implemented at universities. At present, there are eight public universities plus two newly-licensed ones, and thirteen private universities plus four newly-licensed ones. All post-secondary education is the responsibility of the Ministry of Higher Education and Scientific Research. The Ministry includes the Higher Education Council and the Accreditation Council.

□ Laos

Background

1. Overview

Lao People's Democratic Republic covers an area of 236,800km^2 in the center of the Southeast Asian peninsula. It is a landlocked country bordering China and Myanmar in the north, Vietnam in the east, Thailand in the west and with Cambodia in the south. It extends over 1,700km in a north- south direction, with the widest part of the country from east to west reaching 500 km and the narrowest part, only 150km wide. Mountains and plateaus over approximately 80 % of the country.

Lao PDR is administratively organized into 17 provinces plus Vientiane Municipality. The provinces can be grouped into three regions: (i)the northern region comprising of 7 provinces such as Phongsaly, Luangnamtha, Oudomxay, Bokeo, Xayabury, Luang-prabang, and Huaphanh; (ii)7 provinces at the central region are Xiengkhuang,

Xaysom-boon, Vientiane Province, Vientiane Municipality, Bolikhamxay, Khammuane and Savanna-khet; and (iii)4 at the southern region Champasack, Saravane, Sekong, and Attapeu.

According to Statistical Yearbook 2002 of the National Statistical Center Lao PDR, the population is 5.52million and is expected to reach 6.7million in 2010. The population growth rate was 2.6% per year over the period 1985 to 1995. The average population density of 19.4person/km^2 is relatively low, especially for Asia.

The Lao PDR is a multi-ethnic Country. According to the latest information on this issue the number of ethnic group are 47, but the largest ethnic group is Lao-loum.

The first definitions used by the government classified the population by topography, with three categories: Lao Loum (Lowland Lao), Lao Thueng (Midland Lao or Upland Lao), and Lao Soung (Highland Lao).

The 1995 census categorizes the population into 47 ethnicities. In the 47 ethnic groups, there are 4 major ethno linguistic super stocks. These major super stocks are broken down into six main language families.

2. Economic Aspect

- Economic situation

The Lao PDR is a least developed country. The country still relies heavily on external aid. According to the 2003 UNDP Human Development Index, Lao PDR classified as having “medium human development”, ranking 135th out of 175 countries investigated. The provinces with the highest incidence of poverty in 1992/93 showed the greatest decline in poverty incidence, but the rate of improvement was slow compared with the mean GDP growth rate of 4.6 for the period.

Achieving the Governments target of “graduate” status from the ranks of the least developed countries by the year 2020 will require sustained

annual growth of about 9%, which is significantly higher than achieved annual of less than 6% in recent years.

Situation of Lao's Education

1. Supply of Labour Force

Lao PDR is undergoing major reforms to move forwards a free market economy under the New Economic Mechanism. Reforms are being introduced in public administration, financial sector, operation of state enterprises and various other economic sectors. It was considered necessary to initiate reforms in postsecondary education system. The establishment of Souphanouvong University Luang Prabang is continuing phase of postsecondary education system reform.

One of the serious development issues facing Lao PDR is the shortage of human resources educated at the university level to support and sustain its socioeconomic development under the New Economic Mechanism. This shortage of necessary skills and knowledge limits the absorptive capacity and hampers effective implementation of socioeconomic development efforts. However, the postsecondary education system cannot fully respond to the overriding need to produce more human resources, because of its limited capacity.

Most of the educational institutions located in Vientiane, so in the past, after graduation many students did not go back to their home provinces, because they found the jobs in Vientiane Municipality. In order to response the high demand of human resources for socio-economic development in Northern and Southern parts of the Country, especially human resources in potential sectors of economic development of the provinces such as agriculture, tourism, business management, and etc. The regional colleges must be established and produce itself skilled

workers.

The goal of the Lao PDR education system is: meet the educational needs of entire population: move toward universal literacy and increase the educational qualifications of those in all sectors of the economy including agriculture and the informal sector as well as in modern developing sectors.

2. Demand of Labour Force

The Lao PDR economy is predominantly agrarian. Agriculture and including forestry, represents about 50% of Lao PDR's GDP. Forestry contributes about 5% of but is the leading export sector, providing an average of 33% of total exports. A large share of the agricultural sector's exports (mainly coffee) goes to market outside the region. Lao supply of agricultural produce for agro-processing industries in the northern and northeastern provinces of Thailand has been increasing. The hydropower sector is still very small, representing under 2% of GDP. Over 70% of garment exports go to destinations in Europe.

Tourism is now the biggest contributor to national income. In 2007 the country earned US$233 million from the tourism sector. According to the National Tourism Authority, tourism has seen a continual rise in arrivals from all over the world, from 500,200 in 1998 to 1,6 millions in 2007. In 2008, the number rose to almost 2 million. Tourism in the Lao PDR has been developing continually and its role and status has grown in importance to the country's socio-economic development.

3. Human Resources Development

- Educational reform and economic change

The overall development goal of the Lao PDR in the first part of the

new millennium is to leave the group of least developed countries by 2020. This is to be done by reducing poverty, achieving sustainable management of resources and equitable distribution of the benefits of economic growth, and safeguarding social, cultural and political identity. Education is one of the four priority sectors included in the poverty alleviation strategy. Equitable and effective delivery of education services is a key objective.

In practical terms, decentralization in the education sector now means that the center retains policy authority, national curriculum and standards, supervision and control, post-secondary education, personnel management, and allocation of resources. Provincial education services (PES) are responsible for strategy development, medium (five-year) and long term (10-year) planning, and secondary general and vocational education. District education bureaus (DEB) are responsible for annual planning and budgeting, collection of statistics, pre-primary, primary and non-formal education. Villages are responsible for implementation.

- Human resources development policies

In 1996, a National Review Conference on HRD was held. The conference identified both progress and weaknesses in the sector. The major weaknesses causing obstacles identified in the conference were problems reaching remote rural areas and the heavy bureaucracy still in place. To counter these weaknesses, more attention needs to be paid to HRD, the planning must be better and more coordinated, training sessions should be continuous and coordinated, mobilization and management of funds needs to be more efficient and also equitable. Needed HRD efforts were identified as:

· Formation and training of civil servants;

- Quality of education;
- Building of labor force;
- Culture and information;
- Health; and
- Mass organizations: Youth, Women, Trade Union, National Front.

Lao society and education are embedded in movement towards a market economy and privatization. During the last decade, Lao People's Democratic Republic (Lao PDR) has made advances in several areas, including economic and educational growth. There have been many educational accomplishments in Lao PDR over the last 10 years initiated by the central government, international donors, local authorities and individual educational institutions. These include: system expansion in enrollments at primary, secondary and tertiary levels; clarification, by national decrees and policies, of roles, responsibilities and internal structure of Ministry of Education (MOE); and consolidation and rationalization of institutions and tertiary education. In support of major policy reforms of Lao PDR which focus on equity, economic growth and poverty alleviation, the educational highest priority should be development of effective tertiary education.

The Higher Education Reform is survey and establishment of regional colleges in Northern and Southern parts of country. That is reason of establishment the Universities in Champsack and Luangprabang provinces in academic year 2002 and 2003 respectively.

4. Education System in Lao PDR

The education system comprises general education, vocational/technical

education (including teacher training), and tertiary education. The education system of Lao PDR can be conceptualized as three interrelated systems: formal, non-formal, and informal education. These systems have differing but overlapping goals, organization, curriculum, and pedagogy.

□ Malaysia

Background

Department of Skills Development (before known as National Vocational Training Council) was established under the Ministry of Human Resources on 1st September 2006, for the purpose of promoting and coordinating skills training strategy and programmes in keeping with Malaysia's technological and economic development needs. DSD's main objectives are

- To establish a coordinated skills training system attuned to Malaysia'sdevelopmentgoalsandneeds;
- To promote the development of skills training; and
- To certify skills competence.

The policy changes were fundamentally geared towards improving the quality and productivity of the country's skilled workforce, thus enhancing the competitive position of the Malaysian economy at large. The changes also sought to co-ordinate more effectively the diverse skill training activities carried out by both the public and private sectors in the country, and to gear them towards meeting the actual needs of the Malaysian industry. The basic thrusts of the reforms were

- To reinforce the adoption of ***Competency-Based Education / Learning (CBE/L)*** principles in the skill training system in Malaysia;and

- To make the National Skill Certification System in Malaysia more flexible, accessible and user-friendly.

1. National Occupational Skills Standard Development

In the early 1990s, the Malaysian economy experienced rapid growth, driven largely by the manufacturing sector and this had resulted in the country experiencing severe skills shortage. In addressing the problem, the Malaysian government formed a high-powered Cabinet Committee on Training chaired by the Minister of Education, with the task "to assess the country's industrial manpower requirements and skill training as well as make relevant recommendations for policy reform". After extensive studies and consultations, the Cabinet Committee published its report in 1991, which, amongst others, concluded that the existing skills delivery system would not be able to cope with the skills demands of Malaysian industries. The Cabinet Committee put forward major policy recommendations, including "expanding the accreditation of skills" as a measure to strengthen linkages between training and technological change.

In response, the Department of Skills Development (National Vocational Training Council) decided at the Council Meeting on 9 December 1992 to introduce a new national skills qualification framework in Malaysia and to review the existing National Trade Standards from job-based' to 'occupational-based'. The new standards became known as **National Occupational Skills Standards (NOSS)**, which eventually replaced the National Trade Standards as the national benchmark for skills training and certification in the country.

DSD seeks to ensure that skills training programmes are benchmarked against actual workplace requirements, as required in the competency-based training approach, by developing **National Occupational**

Skill Standards(NOSS).

NOSS is defined as 'a specification of the competencies expected of a skilled worker who is gainfully employed in Malaysia for an occupational area and level'.

2. Competency-based Training Approach in Malaysia

- Overview

Since 1993, skills training in Malaysia has largely been based on the NOSS which, in turn, has adopted the competency-based training (CBT) as its underlying approach. The following sections will examine CBT as a training approach, and its theoretical underpinnings in the context of skills training in Malaysia at large, and skills training based on the NOSS in specific.

- Adopting the competency

In December 1992, the DSD made another landmark policy decision apart from introducing the accreditation system, that is, to adopt Competency-Based Training (CBT) in the Malaysian Skills Certification system in Malaysia. The decision aimed to enhance the effectiveness of the country's skilled workforce, and to gear skills training towards meeting the actual needs of the Malaysian industry. A new framework for developing NOSS in Malaysia has been developed in order to facilitate the shift towards the CBT approach, essentially to strengthen the link between the DSD and training providers with the relevant Malaysian industries.

By adopting the CBT approach, the DSD also attempted to shift the emphasis from an instructor-centred to a trainee-centred approach, involving the identification of competencies that are required in the world of work, and focusing on actual performances in assessing these

competencies. Towards this end, the DSD sought to develop a national skills training system that would contain the following main features:

- Competencies to be achieved in training for a particular job are identified by expert workers and practitioners, and clearly spelt out in the NOSS;
- Competencies are clustered around modules called 'duties' in NOSS, so that training, as well as assessment and certification can be more flexibly packaged and undertaken;
- Assessment of competencies emphasises actual performance that are based on specified criteria;
- Self-paced learning increasingly becomes the norm in training, in which trainees progress at their own best rates, rather than be dictated by the instructor or group; and
- Self-directed learning increasingly becomes a key feature of training, whereby trainees take greater responsibility for their learning, whilst instructors function as facilitators and resource persons.

Conclusion

The policy decision of the DSD in December 1992 to introduce the NOSS, replacing the National Trade Standards, as the new reference for skills training and qualification was not merely a change, say in curricular form or content. It also marked a significant shift in the conceptual and theoretical underpinnings of the skills training delivery system in Malaysia. By adopting the competency-based training approach, the DSD overhauled the NOSS development and skills qualification framework. This has been achieved, amongst others, by identifying competencies to be achieved in training for skilled jobs, and clearly specifying them in the NOSS; clustering competencies around modules called 'duties' in NOSS so that training, assessment and certification can be flexibly undertaken;

and assessing competencies which emphasizes actual performances thus gearing to the needs of the workplace. Over the years, the DSD has arguably succeeded in building skills training in to a major component in the country's national education and skills training system.

The competency-oriented training (and therefore NOSS-based training) has premised its theoretical foundation on the behavioral theories of learning. The behaviorists primarily view training and learning with resulting in behavioral changes for the domains of skills, knowledge and attitudes. Thus, the 'breaking-down' of an occupation or a task to be taught (as in the NOSS) provides the basis for skills training and development. Such an approach has been largely credited with successfully gearing training for actual job skills required in the workplace. However, behaviorism has been criticised, such as for being too 'reductionist' in nature and therefore inadequate to cope with current workplace demands on learning, as compared to other schools of thought, especially the constructivist point of view. However, it is not within the scope of this paper to enter into a full-fledged discourse on the competency-based approach and its theoretical underpinnings. Further researches and deeper insight are required in order to do justice to such a discussion, before any decision can be made as to whether the theoretical underpinnings of the NOSS-based training system in Malaysia is still relevant today.

□ Maldives

Maldives in Brief

- Location: South West of Sri Lanka, on the Equator
- Area: 115,300 sq. km
- Capital: Male' (2 sq. km)

- Climate: 28~32 Degree Celsius
- Geography: 1,190 coral islands, forming an archipelago of 26 major atolls. Stretches 820 kilometres north to south and 120 kilometres east to west. 202 are inhabited, 87 are exclusive resort islands.
- Population: 304,869
- Population in Male': 103,693
- Language: Dhivehi
- Literacy Rate: 98.94%
- Currency: Rufiyya and Laari
- Religion: 100% muslim (sunni)
- Economy: Tourism is the main industry, contributing close to 20% of GDP, Fishery and Trade follow close behind
- Life Expectancy: males 72 years, Females 73 years
- Infant Mortality Rate: 16 per 1,000 live births

Existing policies, strategies and programmes adopted for the promotion of skills development and vocational training

The world of Technical and Vocational Education and Training (TVET) is unique in the field of education in the Maldives. A lot of departments are working in conjunction to promote this unique but important arena of education. They include: Ministry of Higher Education and Training, Ministry of Education, Education Development Centre (EDC), Centre for Continuing Education (CCE) and PIU-TVET Team. Of the mentioned partners, the Ministry of Education, EDC and CCE works hand in hand to promote Skills Development and Vocational Education through integrating it in the formal school system to prepare the students for the different levels or grade up through university. On the other hand TVET prepares learners for employment and then helps them to continue their education part time.

The tradition of education is to fill the first 22 years of life with learning designed around growth and maturation. TVET is based on mature individuals mastering skills and the concepts behind those skills,

over a working lifetime to get a first job and then remain employable as technology and society change.

It is estimated that there will be about 10,000 school leavers from grades 10 and 12 combined by 2008. Already we have 20,000 unemployed youth. As there is no TVET institution in the existing educational framework of the Maldives, we have no way to train these unemployed youth for jobs.

The Government of Maldives, concerned with rising unemployment, particularly in regions outside Malè, launched Employment Skills Training Project (ESTP) in collaboration with Asian Development Bank (ADB) to increase the number of Maldivian, men and women, actively participating in the labour force and employed.

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 2,000 youth by March 2009, at least 40% of whom will be female. 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. A consistent and effective TVET management system needs to be developed to achieve this goal.

There is a lack of registered training providers to provide TVET training. A two track TVET system have been adopted by TVET to overcome this.

- Track 1: Institution Based Training (IBT)
- Track 2: Employer Based Training (EBT)

Efforts towards skills development and vocational training

1. Current situation of skills development and vocational training in the country

Decisions on education are mainly made for the youth by their families. Majority of youth are found to have O'level education. It can be seen

that experience and technical skills specific to the job are often lacking. Employers prefer those with good academic background and technical competency. Computer literacy is an additional requirement for most jobs.

Job opportunities are mostly in the tourism and construction industries. These are mostly skills based jobs.

In the area of tourism, skills such as chefs, receptionists, waiters, room attendants, guest relations officers are in demand.

In the area of transport skills such as boat captains, drivers, and mechanics are in demand.

In addition, skills such as performing artists, carpenters, and horticulturists are in demand and in the field of engineering, electrical and electronic engineering, civil engineering and related technicians are also in demand.

Most parents prefer blue collar jobs for their children rather than white collar jobs, which are considered low grade by them.

2. Mechanisms to address the problem of low skills and productivity in the country

Gaps in promoting skills development and vocational training

The major Challenge for the departments who are trying to develop skills and vocational training are the difficulties of providing access to all those interested in the programme compared to the demand, and seeking technical people to work in this field.

Similarly, from schools the students who participate in vocational education are either of limited curriculum (students who are offered less academic subjects due to various reasons of incapability to follow a normal curriculum) or students with behaviour problems.

Moreover the difficulty in transport creates a hardship to cater the demand for vocational education in the atolls, due to the geographical situation of Maldives.

Finally, lack of awareness among the parents about the importance of vocational education in the improvement of the national development of the country hinders in guiding the students to choose such skill based career paths.

Major areas of possible interventions

Many school graduates will follow college level programs to develop employment skills and national qualifications. But these same qualifications will also be available through the new Employer Based Training (EBT) system, designed in partnership with employers. A new system to give credit to training that meets employer's standards is based on the Maldives Accreditation Board (MAB).

However many young Maldivians leave school before completing grade 10 or grade 12. This means they may not have the informational background or understanding in science, math, English or employment skills required for entry into some skills training or progression through the National Qualifications Framework. Career advancement in any field requires a combination of skills, experience and a learning capacity often based on academic mastery of the tools needed for learning. Getting these basic academic tools is the basis of turning a first job into a career.

For the thousands of young Maldivians who have left school, there are few options in continuing either their education or beginning skills development beyond entry level. A mechanism is required so that these young people can become part of long term career development through the EBT model. Once into the NQF system, they can achieve the same credentials and same status as those that remained in the school system and can earn while they learn.

Both the Maldives College of Higher Education and the Ministry of Education through the Center for Continuing Education have experience in delivering foundation or bridging programs.

Under the new TVET system, foundation programs are being

experimented to build the TVET doorway. Two programs, Career Path Program (CPP) and Gulhun have been initiated.

Conclusion

Vocational education has become one of the most necessary programmes for the students of Maldives. In that it offers the chance for the students to study and proceed for higher education in many skill based subjects which are highly relevant for national development. In addition, the students find the subjects interesting and realize the many opportunities available in this field.

The students agree that inclusion of the vocational subjects into the main curriculum of the country as a result of the vocational programme will provide many chances for the development of potential for the students.

Many thanks are due to all those who have helped and are helping to make this programme a success.

□ Mongolia

Introduction

Mongolia has 1,564,000 sq.km territory and 2,6 milloin population, of which 1577,0 thousand is economically active population. According to National Statistical Office, poverty coverage index was 32.6 percent in 2006.

Gross Domestic Product per capita is 1000$ and national income is 600 US dollars, numbered at 161 in the world rank. 65.4 percent of industrial sector is accounted for mining while 20.3 percent is for processing and 14.2 percent is for electricity, heating production and water supply, respectively.

Government of Mongolia announced 2007 as a Year of Great Construction and Workplace Increase and set out objectives to create 80.0 thousand new workplaces in all sectors of economy.

In Mongolia, TVET sub-sector comprises of specialized upper secondary schools as well as post-secondary diploma programs housed in various types of technical and vocational education institutions.

Key Features of the TVET System

The shift to an open market economy which occurred in our country in late 80s and early 90s almost dissolved the vocationally trained workforce in state enterprises and industry sectors. This has had a negative impact on a number of vocations and professions. The number of students in the TVET sector has significantly declined from 60 percent to 30 percent of the student population. After this long period of decline TVET in Mongolia is in the threshold of revitalization.

There is no doubt that the training of the professional workforce is the Government's high priority. Although the number of students enrolled in TVET institutions gradually increase year by year (figure 2), there is still a great demand in national professional workforce. As of 2006-2007 academic years there were 54 TVET institutions with total 29.986.

Students hardly make 4 per cent of Mongolia's workforce. In contrast, according to the Mongolia HRD Report (2007), there are more than 140,000 students attending universities and this number is equal to nearly 15 per cent of the workforce. It is targeted that the number of students in TVET institutions will be increased up to 40.000.

The formal TVET system in Mongolia is based on a complex delivery system.

Current TVET System

- Current Vocational School graduates do not meet employers' skill needs and requirements in growth industries;
  - 29.5 % of graduates failed to show creativity,
  - 20 % lacked proper occupational skills,
  - 20.5 % failed in using modern equipment and tools,
  - 12.5 % were professionally inadequate,
  - 13.6 % lacked an interest in vocations they had chosen.
- Outdated training equipment, facilities, laboratories, workshop. (On average 30-40 years old equipments)
- Inadequate training and skills of teaching staff. (80 % of VETC teachers could not update their professional skill & knowledge)
- Underdeveloped private-public partnership (poor participation in funding for trainings, curriculum development, renewing of equipments)

TVET financing

TVET Institutions are financially dependent from the Government. The budget allocated to TVET sector is insufficient as only 7% of total buget is for education.

Resource Deficiency

- Equipment: 60 percent of VESs equipment are obsolete. There hasn't been done any modernization since 1987 (for 20 years)
- Qualified teachers: The faculty have had little or no opportunity for retraining since the socialist era. The breakdown of the system led some of the faculty to leave the education sector and

switch to business, and the older faculty were forced to retire. Lack of motivation and mechanisms for attraction for younger faculty with high competence and skills.

- Training facilities: Most TVET institutions' facilities are obsolete, do not meet modern T-L requirements or not designed for conduction of training activities.

Management

- Attitude and social value of TVET. Incomplete and complete high school graduates choose TVET institutions as a mean for getting into Universities. Because after the completion of TVET institutions they get Certificate for Vocational Education which is also regarded as the Certificate for Complete Secondary Education.
- Lack of linkage between the theoretical and practical training.
- Occupational standards and NQ Framework are not in place, and TVET accreditation and Certification is in its initial stage.
- Lack of interaction and collaboration between the two Ministries (MOE and MSWL).
- TVET Institution and Industry linkage is poor.

Planned Impact and Possible Risks

- Impact
  - To enhance the LM quantity and quality research and use the results in TVET planning and policies
  - Create Teacher training center and provide them with cutting edge technology, methodology and pedagogy, make substantial investment in the advancement of teaching/learning environment

- Promote of TVET, better the interaction and collaboration of the main players in TVET sector (cooperation of the Ministries, Institution-Industry linkage).
- Involve industry, funding organizations in financing the TVET institutions; provide opportunity for income generation and self-financing.

- Risks
  - Not objective results of the research
  - Conflict of interests between the Ministries and agencies
  - TVET institutions' tendency to overindulge in making profits.

Implementation

- Conduct comprehensive LM research involving all stakeholders
- Create integrated database between the Ministries and agencies
- Establish 2 hightech TT centers and 6 regional model TVET institutions
- Restructure and provide the equal representation of the public and private sectors in the National Council for TVET
- Establish legal framework to provide TVET autonomy
- Develop public-private partnership in vocational education training system
- Prepare skilled national teaching staff with applied knowledge of advanced technology
- Modernization of training standards, curriculum, and training supplies
- Policy reform to ensure sustainability

□ Philippines

Introduction

The Technical Education and Skills Development Authority (TESDA) was established through the enactment of Republic Act No. 7796 otherwise known as the "Technical Education and Skills Development Act of 1994", which was signed into law by President Fidel V. Ramos on August 25, 1994.

The merging of the National Manpower and Youth Council (NMYC) of the Department of Labor and Employment (DOLE), the Bureau of Technical and Vocational Education (BTVE) of the Department of Education, Culture and Sports (DECS), and the Apprenticeship Program of the Bureau of Local Employment (BLE) of the DOLE gave birth to TESDA.

TESDA aims to encourage the full participation of and mobilize the industry, labor, local government units and technical-vocational institutions in the skills development of the country's human resources.

On the whole, TESDA formulates manpower and skills plans, sets appropriate skills standards and tests, coordinates and monitors manpower policies and programs, and provides policy directions and guidelines for resource allocation for the TVET institutions in both the private and public sectors.

Standards Setting and TVET System Development

The TESDA has applied the accreditation system in the 41 Centers of Technical Excellence or CenTEx. The CenTExes are TESDA administered institutions that are being assisted to achieve the Platinum Award.

The Philippine TVET Quality Awards has 4 levels:

- Bronze Award (Commitment Level)
- Silver Award (Proficiency Level)
- Gold Award (Mastery Level)
- Platinum Award (Center for Program Excellence)

Ladderized Education

Ladderized Education simply means starting with Technical-Vocational courses that are creditable for a College Degree. You start with Tech-Voc modules, and thereafter will require much less College courses to earn a College Diploma.

- Implementation modes
  - Credit Transfer: the recognition and carrying forward of overlapping learning from TVET to higher education
  - Embedment: the process by which a student in a ladderized degree program can earn full TVET qualifications should the student choose to exit a college program and proceed to a TechVoc career

Philippine TVET Traininers Qualification Framework

The capabilities of the TVET institutions under TESDA are continually improved through better facilities, training materials development and faculty enhancement. Efforts on training the trainers, installation of top-of-the-line training equipment and development of training aids and materials are prioritized to the largest extent possible.

TVET managers and administrators are being trained and exposed to new trends, concepts, practices and systems of TVET governance. These thrusts shall relate with the over-all quality assurance process on program

registration, accreditation and compliance audit.

- TVET curricula is regularly reviewed and updated to strengthen foundation skills such as communication, quality and productivity, computer literacy, problem-solving and to introduce entrepreneurship/ technopreneurship.
- Multilingual proficiency is emphasized in the curriculum to enhance workers' chances in overseas labor markets and to facilitate their cultural interaction in host countries.
- The science, math and language content of TVET is enhanced to develop knowledge-based technicians who will help propel the country's global competitiveness.
- The promotion of non-traditional trades and jobs for both men and women is continuous to adapt to changing labor market demands.

Appropriate work values and ethics and gender-fair principles and practices are incorporated in TVET curricula. This will lead to the development of workers who are not only skilled but are also imbued with positive work values and specific competencies, respectively.

Competency-based TVET System

The competency-based TVET (CBTVET) system introduces new learning methodologies. It envisions an improved learning environment where teachers and trainers will be facilitators of learning and which varies from the traditional classroom set-up.

On the other hand, the students/trainees will be more independent, productive, dependable and knowledgeable, which are the hallmarks of desired workers in the workplace.

Added to this, new learning technologies, including the application of alternative and non-traditional approaches like distance learning shall be

utilized.

Implementation of the system shall however allow flexibility in delivery.

TESDA's Training Regulations implemented the paradigm shift in TVET from traditional batch skills training approach to competency based training delivery mode which is a self-paced, modularized individualized instruction methodology.

Also, the rigidity of the old teacher-centered structure is being replaced by flexible learner competency focused system in delivering skills training to TVET students.

Conclusion

The TVET environment continues to change at a dramatically increasing pace. To thrive in this turbulent environment, TESDA confronts the education and training needs for relentless innovation and forge the future workforce culture.

□ Uzbekistan

From the first steps of the independence and the creation of the market economy base, there was a huge necessity of reorganization of the education sphere, as the destiny of social and economic reforms is directly connected with the knowledge level and the professional competence of the national specialists who are capable to solve progressive and technological tasks.

Law "On education" and Law "On the National Programme of personnel training system", adopted in 1997, were the beginning of the reforms in the education system of Uzbekistan as a whole. A new system of 12 - year compulsory education, which includes 3 - year

secondary special professional education, was signified in the above mentioned laws.

New types of educational schools, namely, academic lyceums and professional colleges started to be created in the country. The purpose of the academic lyceums is to give a profound educational differential training on a selected specialty on the base of which graduates enter universities. The purpose of the professional colleges is to give the youth a specialty and several professions along with the necessary base of common educational knowledge, which gives right to enter universities.

According to the Decree of the Cabinet of Ministers, 176 academic lyceums for 118,420 places and 1,691 professional colleges for 1,014,504 places must be created through new constructions and reconstructions in 1998-2009.

119 academic lyceums for 76,316 places and 1,069 professional colleges for 775,478 places have been founded during 1998-2007. The total number is 851,794 places.

In 1998-2007, 493 academic lyceums and professional colleges were provided with training and laboratory equipment through the state budget (82 billion sums) and foreign investments (ADB, South Korea, Japan, Germany, Poland on the sum of 149 million US dollars).

According to the National Classifier of the training specialties and professions, the training of specialists is organized on 348 specialties and 840 professions. According to temporary demands of the national economy the training of specialists is conducted on 268 specialties that have a range of 712 professions.

Today, the standards of 23 educational disciplines, 268 field standards on training directions, more than 4,000 education programs on professional and special disciplines are introduced into the system of secondary special

and professional education.

According to employer's requirements, 268 new education plans are developed, ratified and introduced in the education processes, which are distinguished with their mobility and flexibility.

There are 70,678 teachers and masters in the academic lyceums and professional colleges. 63,610 (90%) of teachers are with higher education, 121 (0.2%) - doctors of sciences, 953 (1.5%) - candidates of sciences.

There are basic higher educational institutions, which are aimed at providing the training of pedagogical and engineering specialists for the system of secondary special and professional education.

The staff of professors and teachers of institutes, universities and engineering staff of other spheres of economy are attracted as teachers.

Graduates of higher educational institutions and teachers of 10-11 forms of secondary education are attracted for the pedagogical activity in the academic lyceums and professional colleges.

There was a profound reorganization of qualification improvement system on the base of adopted state requirements. The transition from planned and compulsory system to differentially-addressed system of the qualification of teachers' training has been introduced.

The new system ensures teachers' motivation for self-education and development of pedagogical degree.

In 1998-2007, in 40 courses of pre-preparation and promoting pedagogical qualifications of specialist's promoted their qualifications, 825,000 teachers and masters of industrial education.

In 2001-2007, over 1,211 teachers, leaders and masters of industrial education promoted their qualification and warned on probation in developed countries of the world (England, Germany, Japan, Denmark, Australia, the Republic of Korea).

In the base of 9 vocational colleges, including in the project of Japan Governments unpaid help, regional centers bring about their activity in promoting qualifications.

In 2001-2007 was created and published 1,060 denomination of text-books of the new generation in the 5.7 million circulation, in the amount of 13 billion 612.8 million.

Academic lyceums and vocational colleges are completely provided with literature of common educational subjects, and this display composes 59.6% in the republic.

The libraries of educational institutions have a wide range of modern and necessary literature. All information-resource centers have multimedia computer programs.

Specialists are involved in elaboration of electronic versions of the necessary literature. With the aim of modernization of educational process nowadays information-resource centers are provided with electronic versions of 210 text-books, academic lyceums and professional colleges are provided with new pedagogical and information technologies, computing systems, didactical materials educational multimedia programs and etc.

In 2001-2007 for different spheres of economy of the country were prepared 1,083,000 young specialists.

In the Vocational Colleges of modern technical base in qualification specialists allow preparing specialists who can make their contribution and knowledge in farming, in the sphere of micro-business and private business.

There are many chances for the students of academic lyceums and professional colleges who passed final exams successfully. They are allowed to work at the enterprises after finishing academic lyceums and professional colleges, where they spent their practice.

For excellent students there are scholarships to support them financially, and it helps the students to act and add their contribution in the development of the country.

In order to create opportunities for creation of own business enterprises, to provide employment among the graduates of vocational and professional institutions, a special course on "Bases of trading and business" is introduced.

Having fundamental theoretical knowledge and practice, graduates find their ways in independent life, and try to strengthen economic potential of Uzbekistan. Supporting of younger generation is the main purpose of the National Program of Personnel Training.

□ Vietnam

Overview

- Land: 330,900km^2
- Population: 84 mil., 1.2% growth rate
- GDP 2006: USD 60 billion
- GDP per capita: USD 729
- HDI: 0.709 (109 of 177)
- Economic growth 2008: 8.17%

Economic Graowth 1996 ~ 2006

- High and stable growth with an annual average of 7,33%
- GDP in year 2006 doubled as compared to that in 1996
- Impact of economic crisis of South East Asia region, 1998-2000
- From 2000 up to now, a continuous increase in GDP
- In the year 2006, GDP increased by 8,17% and income per capita was 729 USD

Rate of Growth in Sectors

- Service sector: 7.3%
- Agriculture, forest and fishery: 3.9%
- 1996~2006, the average rate of growth in the industry & construction sector: 10.3% annually
- Industry and service sectors require a large amount of skilled workforce and high demand for appropriate training

The Status of TVET & HRD in Vietnam

- TVET programs are authorized by two ministries: MOET and MOLISA
- Characteristics of National school system
- Quality of HRD: Difficulties and Challenges

Characteristics of National School System

the Education Law 2005 stipulate as follows:

- Regular Education and Continuing Education.
- Learning ranks and education levels of the national school system;
- Pre-primary school: nursery & kindergarten;
- High school: primary, middle and senior high school;
- Professional education: Professional high school & vocational training
- Higher education: associate degree, bachelor degree, master and PhD degrees
- In comparison with other countries national school of Vietnam has the following characteristics:
    - High school has no remarkable difference
    - Professional education implemented by vocational training and professional high school

- Higher Education has following traits
- College education awards associate degree, university education awards bachelor, master and PhD degrees
- Not having vocational or professional high school
- Professional high school curricula are very popular while a little country have that or updated that into college education level

Higher Education 2007

- 322 universities and colleges (47 private HEIs, account for 15%)
- 1.5 million students (4 year bachelor degree)
- 170 students /10,000 citizens
- 52,000 faculties (teaching staff), ratio of students to faculty (29 student/faculty)
  - 7,000 PhD. Holders as faculties (about 13.5% total teaching staff)
  - 463 professors, 2,467 associate professors
- Few research at universities (3% of universities revenues)
- Weak linkage with the industry
- Obsolete equipment for teaching and research, outdated curriculum and teaching method
- Low funding low spending on teaching and research

Problems: Low quality of graduates
(Do not meet the industry's skill requirements)

Quality of HRD: Difficulties and Challenges

- Population: 84,2 millions(2006);Young human resources (15-29 ages) is 47,5 % of workforce; 74% workforce are living in rural areas.

- In 2005 workforce reaches 43,5 Millions. Distribution of workforce is transited positively: rate of workforce in Agri-Forestry-Fishering area decreased (56,8%); in industry-construction increased (17,9%); services area quickly increased(25,3%), *but the system structure is still backward.*
- Level of technical-professional skills:
  - In 2005, 11,242 M. educated workers nearly 26.0% of workforce (including 6,700 M. having VT-15,57% workforce; 2,099 M students graduated professional high school-4,75% workforce and 2,443 M holders of associate degree up to PhD-5,71% workforce.
- Qualification ratio of educated workforce is very irrational and slowly improved: The rate of graduates from higher education/ Professional secondary education/vocational training are 1/2,25/7,1 (1979); 1/1,24/2,35 (2000) and 1/0,81/2,87 (2005).
- High level of learning ability, rate of graduates from middle high school and higher 52.4%, but professional skills is very low (26,0% workforce have training, 74,0% unskilled); The rate of graduates of college/university and higher level is 5,71% (in South Korea - nearly 20%).
- In general, quality of professional-technical human resource in Vietnam is low, its skills, knowledge are not enough to meeting the enterprises demands.

New Wave of Investment in High Tech

Trend 1: Investment for manufacturing and exportation of high-tech product in next 10~20 years (demand-side)

Biggest challenges:

- For investors
  - Difficulties in finding professionals and highly skilled workers while paying low labor costs (300-500 USD/month) compared to other countries
- For Vietnam
  - Risk of missing opportunities to attract foreign investors to manufacture and export high-tech products
  - Inappropriate skills and knowledge lead to miss opportunity for development

Visions and Targets for Developing of H.E and TVET to 2020

- Improving quality & scale of the workforce for increasing competitiveness of human resource and economy
- Meeting HRD's demands for social-economic development, improving nation's intellectual capacity

Specific Targets

- To complete the school networking -> rearranging career/profession structure and TVET networks in provincial territories to be suitable to the master plan
- To divide two streams of training programs: academic research and professional apply education
- To apply credit system more flexible, phased → national circulation
- To innovate content, delivery mode, improve professional skills
- Enlarge scale:
  - In 2010 → 200 studen/10,000 people; in 2020 -> 450/10.000
  - 70-80% of total enrollment following professional apply programs,
  - 40% enrollment of private college/university

Chapter 4

Program Results

Section 1 Program Evaluation by Participants

□ Lectures

○ Ten participants evaluated each lecture by each category on a scale of 1~5 (unsatisfactory, poor, fair, good, excellent).

<Table Ⅳ-1> Overall Evaluation of Lectures

Evaluation Category	Average
Lecture preparation (material, quality, etc.)	4.65
Quality of lecture content (relevancy, usefulness, etc.)	4.65
Delivery of content and pace of lecture	4.37
Easiness to comprehend materials	4.47
Level of trainee involvement (rapport, participation, Q&A sessions, etc.)	4.42
Material difficulty level	4.42
Total Average	4.49

○ <Table Ⅳ-1> is an evaluation of all lectures by category. As shown on <Table Ⅳ-1>, participants were most satisfied with the lecture preparation and the quality of lecture content. However, the delivery of content and pace of lecture needed improvement.

<Table Ⅳ-2> Evaluation of Lectures

Lecture Topic	Average
Effective Management of Human Resources Development Process	4.33
Vocational Training Policy in Korea	4.50
Vocational Education Policy and Industry Academia Cooperation in Korea	4.38
Economic Growth and Skills Development: Korea's Experience	4.70
e-Learning System in Korea	4.18
Vocational Qualification System in Korea	4.87
Total Average	4.49

○ <Table Ⅳ-2> is an evaluation of each lecture. As shown on <Table Ⅳ-2>, the total average of all lectures is 4.49. Participants were most satisfied with the lecture 'Vocational Qualification System in Korea' receiving score of 4.87. Some of the lectures's score were lower than average and needs to develop a method to help participant better understand the content.

□ Site Visits

○ Ten participants evaluated each visitation sites by each category on a scale of 1~5 (unsatisfactory, poor, fair, good, excellent).

<Table Ⅳ-3> Evaluation of Site Visits

Program	Average
Incheon HRD Institute	4.60
SIVAT	4.50
Samsung Electronics	4.70
Total Average	4.60

○ <Table Ⅳ-3> is an evaluation of site visits. As shown, program participants showed relatively high satisfaction for visit to Samsung Electronics. They participated with great enthusiasm.

Section 2 Improvement Plans

□ Customization of training program

○ For the trainees to achieve sufficient knowledge, time distribution among the lectures are very important. lectures must be divided into two parts or each lecture must be given more time.

○ To provide a more efficient training program, the agenda must meet the specific needs of trainees. This year's program was targeted toward providing theoretical and basic background knowledge on

Korea's VET and HRD system and in future programs it should be more focused on in-depth training in specific fields.

☐ Inviting qualified lecturers

○ Experts with ability to deliver context with fluent English must be providing lectures for the trainees to obtain proper information.
○ For efficient operation of the program, it is necessary to secure a larger pool of in-house and outside lecturers.

☐ Selecting visitation sites

○ It is necessary to select suitable organizations or enterprises to visit by conducting pre-program surveys on prospective participants.

☐ Linking the training program to actual results

○ A community in website for close international cooperative networks with participants' countries is required in order to link program results with actual projects to aid the development and implementation of VET and HRD systems in developing countries.

☐ Increase active participation of trainees

○ Participants must be given more time to discuss actual HRD/TVET examples.
○ There needs to allot more time for country report and project proposal presentations throughout the program.

SUMMARY

UNESCO Regional Center Project(2008): 2008 KRIVET TVET and HRD Training Program for Experts

Chang-Won Jang
Eun-Sang Cho
Janette Han
Kate Kim

In 2000, Korea Research Institute for Vocational Education and Training was designated to serve as an Asia-Pacific region UNESCO Regional Center of Excellence in TVET. Since 2002, KRIVET has been conducting the annual KRIVET TVET and HRD Training Program for Experts as part of its UNESCO Regional Center of Excellence in TVET project. This year, the training program was held in September 1~5 with participants from 11 countries.

The training program was composed of six lectures, three site visits, country reports, action plans by participants, and cultural activities.

At the end of the program, the participants presented action plans reflecting on what they learned from the program. KRIVET will continue to communicate with participants and assist participant countries in realizing their action plans through the provision of consulting services.

<Appendix>

<Appendix 1> List of Participants

Country	Name	Affiliation
Bhutan	Karma Lhazom	Department of Human Resources
Cambodia	Sonimith Sun	National Polytechnic Institute of Cambodia
Chinese Taipei	Jai-Yi Peng	Executive Yuan Council of Labor Affairs Bureau of Employment and Vocational Training Tayuan Training Center
Jordan	Mohammad Khair Irshaid	Vocational Training Corporation
Laos	Khamchan Sengchansouliya	Souphanouvong University
Malaysia	Abdullah Muhamad	Department of Skills Development
Maldives	Ahmed Zahir	Centre for Continuing Education
Mongolia	Tungalag Chimid	Vocational Education and Training Methodology Center at MECS
Phillipines	Theodora Josue Gayondato	Colombo Plan Staff College For Technician Education
Uzbekistan	Ulash Eshankulov	Centre of Secondary Special Vocational Education at the Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan
Vietnam	Tinh Mai Van	Ministry of Education and Training of Vietnam Higher Education Department

<Appendix 2> List of Lectures

Lecturer	Affiliation	E-mail
Dr. Suk-Min CHANG	KRIVET	smchang@krivet.re.kr
Dr. Mee-Souk KIM	KRIVET	mskim66@krivet.re.kr
Dr. Ji-Sun CHUNG	KRIVET	jschung@krivet.re.kr
Dr. SooBong UH	Korea University of Technology and Education	soobong@kut.ac.kr
Dr. Hea-Jung CHANG	KRIVET	hjchang@krivet.re.kr
Dr. Jeong-Yoon CHO	KRIVET	joycho@krivet.re.kr

<Appendix 3> Program Survey

2008 Training Program Questionnaire: Lecture Evaluation

※ Please circle the number corresponding to your assessment of each item as follows:

1	2	3	4	5
unsatisfactory	poor	fair	good	excellent

Lecture:
Lecturer:

a. lecture preparation (material, quality, etc.)

1	2	3	4	5

b. quality of lecture content (relevancy, usefulness, etc.)

1	2	3	4	5

c. delivery of content and pace of lecture

1	2	3	4	5

d. easiness to comprehend materials

1	2	3	4	5

e. level of trainee involvement (rapport, participation, Q&A session, etc.)

1	2	3	4	5

f. material difficulty level

1	2	3	4	5

g. overall evaluation of the session and any other comment

_____

_____

2008 Training Program Questionnaire: Site Visit Evaluation

※ Please circle the number corresponding to your assessment of each site visit as follows:

1	2	3	4	5
not helpful at all	somewhat helpful	neutral	helpful	very helpful

Site visit 1

IncheonHRDInstitute

1	2	3	4	5

Site visit 2

SIVAT

1	2	3	4	5

Site visit 3

SamsungElectronics

1	2	3	4	5

<Appendix 4> Certificate of Completion

CERTIFICATE OF COMPLETION

Awarded to

_____

Participant in

The UNESCO Regional Center Project 2008
KRIVET TVET & HRD Training Program for Experts

September 1 ~ 5, 2008

In acknowledgement of attendance and participation in the
The UNESCO Regional Center Project 2008
KRIVET TVET & HRD Training Program for Experts

Korea Research Institute for
Vocational Education and Training

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· 조은상
  - 한국직업능력개발원 부연구위원

· 한정임
  - 한국직업능력개발원 연구원

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  - 한국직업능력개발원 전문원

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