

Report on Implementation of PGTF Project INT/07/K03-00054900 “Training of Experts of Standardization and Metrology of Developing Countries”

The Committee of the Experts for the Perez-Guerrero Trust Fund approved the PGTF project “Training of Experts of Standardization and Metrology of Developing Countries”, which had been submitted by the State Commission of Quality Management of DPR Korea (SCQM). This report includes background, activities, results, a bill and annexes relating to the accomplishment of PGTF Project INT/07/K03-00083577.

1. Background

Globalization and international trade are leading enablers of economic growth and prosperity today. Standardization and metrology are important for removing barriers to trade and establishment of footholds in the global market. For trade facilitation alignment of global systems of measurement and quality standard, building of national institutional and HR capacities are key elements. Efficient and sustainable ways of achieving such capacity enhancements include South-South Cooperation, hence DPRK efforts to share its expertise and know-how for the benefit of global training system in general and DPRK and its South-South partners in particular. While there are active mutual cooperation and exchanges in the fields of standardization and metrology, many developing countries do not have any progress in standardization and metrology activities due to shortage of technology, funds and skilled human resource.

The need for closer south-south cooperation in this area was underscored at the 8th Coordinating Countries Meeting for Standardization, Metrology and Quality Control of Non-aligned Countries held in Pyongyang, DPRK in 1988.

The SCQM, a government body in charge of standardization, metrology and quality management, has rich experience in the development, implementation and dissemination of the national standards, the adoption of the national standards as the international standards, the development and research of the measurement standards and its transfer to industry, metrological testing and technical services, legal metrology and etc. It has implemented the three international cooperation agreements in this area.

Abiding by the principle of developing south-south cooperation on the basis of collective self-reliance, SCQM proposed and implemented the project of training of standardization and metrology experts for developing countries. This project has made a contribution to the training of standardization and metrology experts of Nepal, Laos and Cambodia.

2. Activities for Project Implementation

- The Government of DPR Korea organized an Action Group which consists of a project coordinator Mr. Han Sung Il, official of the Ministry of Foreign Affairs, a project manager Mr. Kim Kyong Ho, director of International Relations Department, SCQM, two

- advisors(collection and analysis of data) and three trainers for lectures and practices.
- The SCQM conducted collection and analysis of problems in standardization and metrology of the beneficiary countries and prepared training schedule, lecture texts and reference materials.
 - Training schedule included 1-hour Introduction of Standardization and Metrology of DPR Korea, 15-hour lecture, 5-hour laboratory practice and 5-hour questions and answers and panel discussions. All the training materials were printed in Korean and English and visualized on Powerpoint based presentations, which were distributed to all participants in electronic format. Deep attention was paid to exchange of experiences and information of actual situation in every participating country through the interviews with the concerned personnel and the visit to the measurement laboratories.
 - Trainers responsible for lectures and practices were Mr. Jin Kyong Man(Official, SCQM), Mr. Om Thae Song(Dept. Head of Central Institute of Metrology) and Mr. Kim Ryong ThaeK (Researcher of National Institute for Standardization)
 - The workshops took place at the Nepal Bureau of Standards and Metrology on February, 4 – 8, 2013, at the Laos Statistics Bureau on February, 11 – 14 and at the National Metrology Centre of Cambodia on February, 18 – 22 with total participation of 72 trainees(20 from Nepal, 24 from Laos and 28 from Cambodia).
 - Lectures were given on “Standardization in general”, “Method of Developing National Standard”, “Method of Developing Company and Branch Standard”, “Methodology guidelines on QMS and EMS”, “Standards Information System and its Management”, “Method of Adopting National Standard as International Standard”, “Legal Metrology System and Metrology Law”, “Measurement Units and Verification Hierarchy”, “Mass Measurement”, “Force Measurement”, “Hardness Measurement”, “Pressure and Flow measurement”, “Temperature Measurement”, “System of Collection and Dissemination of Information on Metrology”.
 - There were laboratory practices on the “Verification of Non-automatic Weighing Instruments(mechanical and electronic) according to OIML R 76” , “Verification of Load Cell according to OIML R 60”, “Verification of Weights according to OIML R 111”.
 - The trainers visited some laboratories in Nepal Bureau of Standards and Metrology, Department of Standards and Metrology of Laos and National Metrology Centre of Cambodia”.
 - At the closing ceremonies, all the trainees from Nepal and Cambodia received certificates of participation in the “Training of Experts of Standardization and Metrology of Developing Countries” on behalf of SCQM, Nepal Bureau of Standards and Metrology and National Metrology Centre of Cambodia”.

All the trainees expressed their deep appreciation for the practical assistance to them and made a suggestion that this kind of training be conducted again in near future through the Group of 77.

3. Results of Project Implementation

- 1) Affirmed the need and ways to improve the standardization and metrology activities in developing countries.
- 2) Provided the general basic technical data of standardization and metrology necessary for the beneficiary countries.
- 3) Provided the method for developing measurement standards and for establishing the calibration and verification systems in several branches.
- 4) Provided the method for developing and adopting national standards based on international standards in the beneficiary countries.
- 5) Established a system of information and exchange on a regular basis of research results and experiences gained in the beneficiary countries.
- 6) 72 experts from beneficiary countries were trained and they became able to manage standardization and metrology activities in their countries.

4. Conclusion

South-South cooperation based on collective self-reliance is the most rational way for developing countries to improve their standardization and metrology activities by themselves and to join developed countries and international level in these fields. The developing countries should cooperate each other, enlarge the number of their own experts and develop these activities in line with their specific conditions.

SCQM would like to extend its warm gratitude to Perez-Guerrero Trust Fund the Group of 77 Developing Countries, NCC for UNDP (DPRK Government), Governments of participating countries, UNDP Pyongyang CO and all the participants for their support and contribution to successful implementation of the project.

Annex 1

List of participants at the “Training of Experts of Standardization and Metrology of Developing Countries”

1. Nepal

Name	Sex	Occupation
Kamal Ojha	M	Regional Inspector, Nepal Bureau of Standards and Metrology (NBSM)
Prem Raj Kalouni	M	Regional Inspector, NBSM
Akhileshwar Prasad Verma	M	Regional Inspector, NBSM
Shambhu Kumar Jha	M	Regional Inspector, NBSM
Mohan Prasad Pandey	M	Regional Technician, NBSM
Ram Krishna Giri	M	Director, WTO Department, NBSM
P. K. Singh	M	Director, Certification Department, NBSM
S. K. Thakur	M	Director, Accreditation Department, NBSM
Indu Bikram Joshi	M	Director, Standardization Department, NBSM
Ganga Prasad Bhatta	M	Junior Technician, Regional Office, NBSM
Chanak Bahadur Chondhary	M	Junior Technician, Regional Office, NBSM
Bipin Puri	M	Junior Technician, Regional Office, NBSM
Birendra Upadhyaya	M	Junior Technician, Regional Office, NBSM
Niranjan Adhikary	M	Junior Technician, Regional Office, NBSM
Punya Bahadur Silwal	M	Junior Technician, Regional Office, NBSM
Hira Chand	M	Junior Technician, Regional Office, NBSM
Maila Manandhar	M	Junior Technician, Regional Office, NBSM
Tilak K. C.	M	Metrologist, NBSM
Maunta Manandhar	F	Metrologist, NBSM
Santosh Sharma	M	Metrologist, NBSM

2. Laos

Name	Sex	Occupation
Sisomboun	F	Director, International Cooperation Department, Ministry of Planning and Investment (MPI)
Thirakha Chanthalanouvong	F	Deputy Director, Social Statistic Department, Laos Statistics Bureau (LSB)
Phanthanome Dydalayong	F	Technical Staff, Ministry of Education and Sport
Souksavanh Xayavong	F	Technical Staff, Ministry of Education and Sport
Phanthong Bausavanh	M	Technical Staff, Ministry of Public Health
Daosadeth Kingkeo	M	Technical Staff, Ministry of Public Works
Bounthavy Bounmanyvanh	M	Technical Staff, Ministry of Labour & Social Welfare

Pouthavong Poummasack	M	Technical Staff, Ministry of Labour & Social Welfare
Khamliene Norlasing	M	Technical Staff, Ministry of Agriculture & Forestry
Somsanouk Khounthikoman	F	Technical Staff, Ministry of Agriculture & Forestry
Chanhsouk Thammavong	F	Director, Statistic Division, Ministry of Finance
Louna Oupalavong	F	Technical Staff, Ministry of Finance
Bounnam Chittanavong	M	Technical Staff, Ministry of Industry & Commerce
Souliya Khotsombut	M	Technical Staff, Ministry of Industry & Commerce
Soukan Sihophuck	M	Director, Statistic Division, Ministry of Information, Culture & Tourism
Thipkesone Sitthilathvong	F	Technical Staff, Ministry of Natural Resource & Environment
Leeyongyim Xayyasang	M	Technical Staff, Ministry of Foreign Affair
Manoxay Chulamany	M	Technical Staff, Ministry of Foreign Affair
Phamy Thongphuckdy	F	Technical Staff, Data Service Department, LSB
Somchai Vivankham	M	Technical Staff, Data Service Department, LSB
Ole Sonvilay	M	Technical Staff, Social Statistic Department, LSB
Leokham DOUNGPHACHAN	M	Technical Staff, Social Statistic Department, LSB
Phetsakhone	F	Technical Staff, Social Statistic Department, LSB
Vilaysouk	M	Technical Staff, Social Statistic Department, LSB

3. Cambodia

Name	Sex	Occupation
Kem Keomara	M	Chief, License Office, National Metrology Centre (NMC)
Khleang Amradarith	M	Chief, Metrology Law Enforcement Office, NMC
Yim Sovichea	M	Staff, Metrology Development Office, NMC
Preap Phalkun	M	Staff, Metrology Cooperation Office, NMC
Seng Kimheng	M	Staff, Administration & Human Rescues Office, NMC
Seng Kimsea	M	Staff, Dimension Metrology Office, NMC
Poun Sambo	M	Staff, Dimension Metrology Office, NMC
Van Channrat	M	Staff, Administration & Personnel Office, NMC
To Chansetavuth	M	Staff, Metrology Instrument Verification Office, NMC
Sok Bunsay	M	Staff, Chemical Metrology Office, NMC
Sros Raksmeay	M	Chief, Recapitulative Report & Publishing Office, NMC
Chea Vatana	M	Staff, Photometry Metrology Office, NMC
Sam Phearum	M	Staff, Metrology Law Enforcement Office, NMC
So Samrin	M	Staff, Policy and Administration Office, NMC
Som Monythida	F	Staff, Thermometry Metrology Office, NMC
Keng Leakhena	F	Staff, Administrative & Legal Metrology Office, NMC
Sarin Socheata	F	Staff, Metrology Instrument Verification Office, NMC
Phan Sidet	F	Staff, Metrology Development Office, NMC
Voun Samnang	F	Staff, Administrative & Legal Metrology Office, NMC

Tes Sodavin	F	Staff, Produced & Prepackaged Goods Verification Office, NMC
Vandy Sakandyka	F	Staff, Service Fee Management Office, NMC
Ek Namhong	M	Deputy Chief, Metrology Instrument Verification Office, NMC
Ing Sophearath	M	Staff, Metrology Instrument Verification Office, NMC
Vandy Sakndel	M	Staff, Metrology Instrument Verification Office, NMC
Lot Chharda	M	Staff, Metrology Law Enforcement Office, NMC
Noun Vando	M	Staff, Metrology Law Enforcement Office, NMC
Phe Engseak	M	Staff, Metrology Instrument Verification Office, NMC
Chhuon Sambathratanak	M	Staff, Metrology Law Enforcement Office, NMC

Annex 2

Titles of Lecture and Practice

1. Titles of Lectures

- Standardization in general
- Method of Developing National Standard
- Method of Developing Company and Branch Standard
- Methodology guidelines on QMS and EMS
- Standards Information System and its Management
- Method of Adopting National Standard as International Standard
- Legal Metrology System and Metrology Law
- Measurement Units and Verification Hierarchy
- Mass Measurement
- Force Measurement
- Hardness Measurement
- Pressure and Flow measurement
- Temperature Measurement
- System of Collection and Dissemination of Information on Metrology

2. Titles of Practice

- Verification of Non-automatic Weighing Instruments(mechanical and electronic) according to OIML R 76
- Verification of Load Cell according to OIML R 60
- Verification of Weights according to OIML R 111”.

Annex 3
Pictures

1. Nepal





2. Laos







3. Cambodia







