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# **FINAL REPORT**

UNIDO Contract: 98/177/VK Project No.: US/RAS/98/004

Total Quality Management and Standardization in ASEAN Countries

TQM Seminar in Malaysia, March, 1998

UNIDO Tokyo Forum, October, 1998

Consolidated Material, November, 1998

Initial Survey on Standardization and TQM in Myanmar and Laos, November, 1998

February , 1999

Japanese Standards Association

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# 1. Background information

United Nations Industrial Development Organization (UNIDO) informed Japanese Standards Association (JSA) by its facsimile transmission dated September 11, 1998 that UNIDO selected JSA as "the subcontractor" for the execution of services for the UNIDO project No.US/RAS/98/004 (UNIDO Contract No.98/177/VK) at total all-inclusive cost US DLRS One Hundred and eighty Thousand (US\$180,000) payable in that currency.

# 2. Objective of the project

The project aims at assisting and strengthening the ASEAN countries and their institutions in the promotion and introduction of standardization and TQM at company level by the initial surveys on standardization and TQM in Myanmar and Laos, a seminar for 100 managers from companies in Malaysia and other ASEAN countries and representatives from national standards institutions in the ASEAN region, a workshop in Tokyo and preparing consolidated material of TQM based on the over—roll UNIDO—ASEAN programme.

#### 3. Subcontractor's duties

The services required for JSA (subcontractor) consist of the following four duties:

- (1) To conduct the initial survey on standardization and TQM in Myanmar and laos and to prepare the survey reports with the recommendations for future programmes for Standardization and TQM.
- (2) To organize a seminar in Malaysia on standardization and total quality management for 100 managers and prepare training materials and report.
- (3) To hold the workshop in Tokyo and prepare report.
- (4) To develop consolidated material on the introduction of TQM and finalize and distribute the material.

#### 4. Activities and achievements

4.1 TQM Seminar and The 5th Work Shop in Malaysia (Progress report II)

TQM Seminar in Malaysia was held at Auditorium SIRIM Berhad, Shah, Alam, Selongor, Malaysia March 10, 11, 1998 in cooperation with National Productivity Corporation (NPC), SIRIM Berhad, and Department of Standards of Malaysia (DSM). The Seminar was an open seminar entitled "Total Quality Management for Top and Middle Management-TQM for SMIs meeting Challenges of The 21st Century".

The Seminar was attended by 56 managers from Malaysian companies, 19 ASEAN representatives, 10 NPC and 10 SIRIM representatives. In total, 104 people participated the seminar including one UNIDO, Japanese speakers and delegates.

On the first day, March 10, 1998, Mr. Suuchi presented 2 papers\* "What is TQM?" and "Role of Top and Middle Management in Implementing TQM"

UNIDO representative presented "UNIDO Experience and Programme in Quality and Standardization".

Mr. Tsutsumi presented "Ensuring Continuous Improvement Through TQM Practices"

Case studies were also reported by two Malaysian model companies, Ingress Engineering Bhd. And Raya Plastic Sdn. Bhd.

On the second day, March 11, 1998, 4 papers were presented:

Case study "Journey toward Excellence-Takaso Rubber Product Experience"

By Ms. Lily Tee

Case study "Journey toward Excellence-Pawada Food Industry Experience"

By Mr. Wasli Ibrahim

" Development of SMI in Malaysia"

By Mr. Fozian Ismall, SMI Development Corporation of Malaysia

"TQM for SMI-Malaysian Senario"

By SIRIM Berhad

On the third day, March 12, 1998, The 5<sup>th</sup> Work Shop was held at the same place as an closed meeting inviting 19 ASEAN representatives, 7 national committees and 12 model companies, from 7 SEAN countries.

The model companies reported and their progress reports on TQM implementation at their companies and national committees reported their country reports summarizing the status of their TQM activities in their countries.

# 4.2 UNIDO Tokyo Forum (Progress report I, October, 1998)

UNIDO Tokyo Forum '98 was held on Tuesday, October 13 through Thursday, October 15, 1998 at Diamond Hotel, Tokyo, Japan with a main theme of "TQM Training in Model Companies".

UNIDO and MITI, Japan invited 19 participants, 7 from national committees and 12 from model companies, from 7 ASEAN countries.. The number of ASEAN participants were 18 in total.

"A guide to UNIDO Tokyo Forum '98 "was prepared to provide all information for the forum and mailed to ASEAN countries, the draft on July 4, 1998 and the final on August 12, 1998 to give them time enough to prepare the country reports and model company reports and their travel arrangements. Dr. Kenji Kurogane, TQM Counselor, Mr. Tamio Takato, Fuji Photo Optical Co., Ltd. and Mr. Eizo Asaka, Senior Technical Consultant of JSA were selected as speakers.

On the first day of the forum, October 13, 1998, after a welcome speech by Mr. Aakihiro Masuda, Director General, Standards Division, AIST, MITI and an opening speech by Mr. Anthony Bromley, Senior Industrial Development Officer, UNIDO, we had four presentations.

The first presentation was made by Dr. Kenji Kurogane on "TQM and Its Promotion"

He concluded his presentation with the remarks that it takes time to obtain tangible results of TQM activities. It is important to analyze and understand those problems which exist more or less in any company and to make good use of the information for later improvement activities.

Mr. Tamio Takato presented "TQM activities of Fuji Photo Optical Co., Ltd." Mr. Asaka reported "ASEAN-Japan TQM Project" which reviewd what have been implemented by year since 1995, the first year of the project and "Actual Status of TQM Technology Instruction "which summarized the progress of TQM introduction of each model company.

Mr. Bernardo Calzadilla-Sarmiento, Industrial Development Officer, Quality, Standardization and Metrology, UNIDO presented on "Sustainable Industrial Development" and discussed service framework, program in quality, standardization and metrology and system approach for continuous improvement.

The second day and the morning of the third day were spent for 7 National Committee's reports and 12 Model company's reports. The factory tour was arranged in the afternoon of the third day of the forum at Fuji Photo Optical Co., Ltd. located 40 km north of Tokyo.

Mr. Honda, President of Fuji Photo Optical Co., Ltd. presented "TQM a la carte "which summarized their TQM activities after they won Deming Award in 1996.

#### 4.3 Consolidated material

( Progress report III, December, 1998)

On October 15, 1998, a meeting was held at Diamond Hotel, Tokyo, Japan during UNIDO Tokyo Forum to discuss how to edit the consolidated material.

It was agreed that:

- -to compile selected existing texts used for seminars for Japan-ASEAN TQM Project since 1995 so as to summarize whole activities
- -The consolidated material will be distributed to the countries concerned.
- -The contents will be preface, selected texts of Japan-ASEAN TQM Project, case study reports of ASEAN model companies and Japanese examples

#### -Schedule

- -Collect all existing texts in JSA by the end of November, 1998
- -Make listing of the all existing texts and classify, make a set copy of the texts for selection and mail them to UNIDO by January 31, 1999
- -Classify the texts into four categories A: Conceptual texts, B: Teaching materials, C: Japanese example(s), D: Case study report of model companies and (E: Case study in general was added)
- -Select texts February through April, 1999.
- -Finalize editing work by August-October
- -Print, publish and distribute by the end of 1999

## Budget:

- -Collecting existing texts, making the listings and classification, making a set of copies of the texts and mailing them to UNIDO be covered by 1998 budget of US/RAS/98/004. Contract No. 98/177/VK
- -Selection, editing work, publishing and distribution be covered by 1999 budget

4.4 Initial survey on standardization and TQM in Myanmar and Laos (Progress report IV, December, 1998)

The national institutions of both countries are:

Myanmar Scientific and Technological Research Department (MSTRD)

Ministry of Science and Technology (MOST)

No. 6 Kaba Aye Pagoda Road, Yangon, Union of Myanmar

And

Department of Industrial Property, Standardization and Metrology (DIPSM)

Science, Technology and Environment Organization (STENO)

Prime Minister's Office

P.O. Box 2279, Nahaidiao Road, Vientiane,

Lao People's Democratic Republic

On July 24, 1998, The first letters were mailed to the above national institutions for standardization and TQM in both countries to confirm whether they would accept the survey mission.

By the end of August 1998, JSA received their replies that they would accept our survey mission in November 1998 as we proposed.

On September 3, 1998, JSA identified two experts for the surveys, Mr. Mitsuharu Shimada, TQM Consultant for the surveys of TQM and Mr. Katsuhiko Hirokami, Senior Researcher, JSA for the survey of standardization.

The survey has been conducted according to the following schedule:

Mon. November 9, 1998			TG641	1100	Lv.	Tokyo	Hotel	
				1530	Ar.	Bangkok	Sedona Hotel Yangon	
			TG305	1800	Lv.	Bangkok		
				1845	Ar.	Yangon		
Tue.	November	10	Day-I	Survey in Myanmar			Sedona Hotel Yangon	
Wed.	November	11	Day-2	Survey in Myanmar			Sedona Hotel Yangon	
Thu.	November	12	Day-3	Survey in Myanmar			Sedona Hotel Yangon	
Fri.	November	13	Day-4	Survey in Myanmar			Sedona Hotel Yangon	
Sat. November 14			TG304	1040	Lv.	Yangon		
					1220	Ar.	Bangkok	
			QV425	1720	Lv.	Bangkok		
					1840	Ar.	Vientiane	Lao Hotel Plaza
Sun	November	15					Lao Hotel Plaza	
Mon.	November	16	Day-I	Survey in Laos			Lao Hotel Plaza	
Tue.	November	17	Day-2	Survey in Laos			Lao Hotel Plaza	
Wed.	November	18	Day-3	Survey in Laos			Lao Hotel Plaza	
Thu.	November	19	Day-4	Survey in Laos			Lao Hotel Plaza	

Fri. November 20	TG691	1240	Lv.	Vientiane	Siam City Hotel
		1345	Ar.	Bangkok	
Sat. November 21	TG640	1120	Lv.	Bangkok	
		1900	Ar.	Tokyo	1

#### Survey Schedule

	Room #	AM: 0930-1200 (2.5 Hrs)	PM: 1400-1630 (2.5Hrs)		
Day-1	Α	Survey on Standardization	Survey on Standardization		
	В	Survey on TQM	Survey on TQM		
Day-2	Α	Survey on Standardization	Tour to national primary		
	В	Survey on TQM	organizations and facilities *		
Day-3		Visit company-A**	Visit company-B **		
Day-4	Α	Survey on Standardization	Survey on Standardization		
	В	Survey on TQM	Survey on TQM		

\$

\*which are responsible for standardization, quality control, metrology, product certification, accreditation, calibration and testing laboratories, etc.

- \*\*: Any two local manufacturing, non-joint venture, companies of your choice in metal working, electric appliance, machinery and automobile-related industries.
- # We need two rooms . A for standardization, B for TQM.
  Lunch time: 1200-1400. Visitors will return to their hotel for lunch.

#### 5. Remarks

# 5.1 TQM Seminar in Malaysia

The 2-day open seminar was organized to provide basic understanding of TQM the top and middle managers who are directly responsible for quality control on a day-to-day basis in their companies. The program has been developed according to JSA's long term experiences on TQM training for developing countries in cooperation with Japanese TQM consultants.

The speakers were not only Japanese TQM consultants but also those from local private companies and national institutions. Case study reports by local companies were also useful since the participants can feel very close to them as the companies are implementing TQM in the same environment in the same country.

The closed meeting for ASEAN delegates were also successful due to the excellent arrangement by Malaysian counterparts.

# 5.2 UNIDO Tokyo Forum

UNIDO Tokyo Forum '98, the second since 1995, the first one in July 1996, has been concluded successfully owing to the cooperation of UNIDO, MITI, speakers and

all participants.

1998 is the fourth year of the ASEAN-Japan 5 year TQM Project which will be concluded in 1999. While Asian countries are now being faced with economic difficulties, the positive introduction and implementation of TQM is much more important than the past years.

National committee in each ASEAN countries is expected to act as a TQM center and to develop their own programme to disseminate and spread TQM across the country after the project is concluded.

It takes a long time to understand and implement TQM effectively even in a company, it will take more time to spread it in a country. It is recommended that national committee develop a national TQM dissemination 5 year plan which includes national budget plan, human resource training and deployment plan, facilities and equipment supply plan, etc. and present the specific plan in the summary meeting which will be held some time in the later half of the 5<sup>th</sup> year.

### 5.3 Consolidated material

It was easy to collect all existing texts which have been prepared and used for Japan-ASEAN TQM Project since 1995. However, we failed to find good examples of TQM implementation of Japanese companies (Category: C).

# 5.4 Initial survey in Myanmar and Laos

Myanmar and Laos are agricultural countries with per capita GDP of around 400 USD and with agricultural population of over 70% of working population, compared to2-5% of such developed countries as the United States, UK, Canada and Japan.

It is in 1986-1998, only ten years ago that they introduced the market oriented economy instead of the centrally planned economy to expedite socio-economic development.

#### - Standardization

Systems involving standards, certification, accreditation, testing, calibration, and metrology are fundamental requirements for industrialization. Some of these basic systems are currently lacking in Myanmar and Laos. Others are present and implemented, but need to be elaborated or expanded, or lack legal background.

To promote standardization, factors such as degree and progress of industrialization, industrial structure, social systems, government policy for socioeconomic development, cultural and historic background differ from country to

country, and it is essential to implement actions that suit conditions prevailing in the country, commensurate with the degree of industrial development and based on a full understanding of these differences.

The introduction and promotion of these systems must take account of the particular realities of their industries and degrees and progress of industrialization. Both industrialization and standardization require a long time, a substantial budget and many skilled staffs. In both countries, standardization did not get underway until the early 1990s. To make efficient use of its limited financial and human resources, those countries must take the time to ascertain progress and future trends of its industrialization, avoiding wasteful investment.

It is recommended that both countries begin by preparing a long-term master plan and determine items, methods, process and timing for long-term implementation after clarifying basic policies concerning standardization by themselves who have the best understanding of the history and current state of affairs. However, since standardization is conducted primarily by the industries, the system must the one which can incorporate opinions from industrial, consumer, and academic circles when preparing long-term policies and implementing specific items.

# -TQM

Seminar of enlightening TQM should be held for popularization of TQM concept. The seminar, such as seminars held in other ASEAN countries in this few years, may be effective for least developed ASEAN countries, such as Myanmar and Laos.

Myanmar industry is not enough developed, most persons know a word of TQM but have no knowledge of its concept nor techniques.

Several trainers should be selected from advanced ASEAN countries. Myanmar can study much from Advanced ASEAN countries. All trainers are not necessary to be selected from Japanese, the local trainers from advanced ASEAN countries may be easily accepted, considering many parts are imported from neighboring ASEAN countries.

Myanmar trainers should be grown up. There are a few persons who can be trainers. When trainers will grow up in every country with cooperation of Japan and ASEAN countries supported UNIDO, mutual development should be realized in near future.

In Laos, support for exchange between neighboring countries should be enforced. Lao governmental officers should visit to advanced ASEAN countries grasping any opportunity, and trainers of advanced ASEAN countries would be liked to visit Laos.

Information center should be established, or, STENO's plan for establishment of information center should be supported.

TQM seminar should be open in Laos to popularization of TQM concept and techniques. The seminar is enough to consist of introduction of TQM concept and basic statistical techniques, not necessary of advanced high techniques.

Trainers of advanced ASEAN countries, especially Thai trainers, should be invited in above seminars. When Thai are involved in trainers besides Japanese trainers, lecture in common language can take place and make them easy understanding.