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Report on Jishu Kanri Mission to Argentina

I. Personal impression through the visit to Argentina

1. Officials of Rio Negro Province, Mendoza Province and Buenos Aires Province, researchers at laboratories, those in the Chamber of Commerce and Industry and managements of individual companies have much interest in QC.

2. Some of top managements who received lessons on TQC in Japan and entrepreneurs who attended seminars on TQC in Argentina have introduced TQC and are using it. Some are successful, but generally they are still groping in the dark. In order to make QC activities a part of management activities and promote it as the activities in the entire companies in future, it seems advisable and effective to have QC experts not only in individual companies but also beyond the limit of a company. In this sense, the project to promote education and training of TQC experts is believed to be significant.

3. In the course of discussion with those concerned of the places of my visits, many and varied requests and expectations were expressed such as establishment of laboratories, financial assistance for introduction of inspection facilities at the laboratories, technical guidance on quality, method of marketing research, mining of new ores, new method of fishing, refrigerating method for transportation of products and questions such as what must be considered when the Government of Rio Negro Province establishes the law on quality control. Personally I was very embarrassed, but I think those are of character which need consideration as projects outside the present project.

4. Should it be necessary to add fruit growers scattered in the mountain villages of Bariloche as a target of this project, it is considered imperative to organize them by first establishing a kind of cooperative. Not limited to this region, often producers of primary products such as agricultural products employ family members and a deliberate study is necessary for making it as a target of the project.

II. Some comments on the previous report

In order to ensure survival not only in the domestic market but also in international markets under the situation that the needs of users become more diversified and higher grades, needless to say, it is essential for an industry or company to improve its competitiveness. For that, qualitative improvement of products and services, without mentioning technological development, is indispensable and QC provides effective means.

In this sense I consider the matters proposed in the project are relevant, but as a member of the JK Mission to Argentina which finished fact finding this time, I would like to comment on some of the contents of the previous report.

1. Item 2. Target Beneficiaries, B. Concerned Parties and Target Beneficiaries

It is considered reasonable to limit the target sectors to Metalmechanic and Metallurgy, Food Industry, Leather and Footwear Industry for the time being as discussed in the reasons. Also it should be realistic that the project is expanded to other industries after QC got sure footing in those industries.

2. Item b. Environment or Energy Issues in D. Special Considerations

Isn't it acceptable to add cost reduction as an effect of promotion of QC in addition to energy saving?

3. Item E. Related Technical Assistance Activities

• CIATI is to be ENTEBA (Bariloche Technical Research Organization). Sectors to be included in ENTEBA shall be as follows;

- (1) Atomic Center of Bariloche (Technical development of atomic power)
- (2) Comhuc University (Laboratory and facilities for study of mining, foodstuff, fishery and agricultural technologies)
- (3) CIATI (Laboratory for inspection of fruit juice)
- (4) CADECYT (Bariloche Science & Technical Committee)
- (5) INVAP
- (6) ALTEC
- (7) Rio Negro Province Science & Technical Agency
- (8) Bariloche City Office
- (9) Private industries and companies in the Province

Remarks: This is because there is an agreement with CGI that in Rio Negro Province the guidance on TQC is to be conducted through ENTEBA.

Therefore it is clearly expressed that it is not limited to apple juice production alone.

4. Item G. Major Elements

(1) On Outputs

The plan should be reasonable that 30 QC personnel are to be trained in the first half of the first year. This is because, as stated in Item H. Project Strategy,

the number is appropriate for the 3 expert trainers from Japan to educate them effectively. In particular, if the education and training is to be given mainly on the job training, then it is preferable that one expert trainer handles 10 trainees or so.

(2) Activities

- Definition of national QC
trainers profile Counterpart
- Selection of 1st group of 30
national trainers, &
Selection of the enterprises Counterpart
- Design of training 2 weeks CTA, experts &
counterpart
- Collective training 1 month Experts
(Classroom training)
- On the job training)
(in plant training))
- On the job training of) 2 months CTA &
enterprises' staff,) experts
Creation of Quality Circles)
- Checking effectiveness of)
the training) 2 weeks CTA, expert &
- Evaluation of the training) counterpart
cycle

Remarks:

- ① Concerning "Definition of national QC trainers profile" & "Selection of 1st group of 30 national trainers", considering the experience of TQC training of the counterpart, CGI personnel, these

should be finished about 2 weeks or so before the QC education starts according to the judgement of the counterpart. So, the period of Activities is left blank.

- ② Concerning "On the job training of enterprises' staff" & "Creation of Quality Circles", it will be more effective that these are carried out concurrent with training of trainers by the experts.
- ③ Initially, 6 months were planned for the entire training period, but as stated in Note 1, recognizing widely the discretion of the counterpart, CGI (including those in UNIDO resident officers), the period of all activities is reduced to 4 months on the condition that the preparation is made so that 4 Japanese JK experts can start education and training of the trainers immediately after their arrival in Argentina. But in view of the period of study by the counterpart on "Definition of national QC trainers profile" and "Selection of 1st group of 30 national trainers", the period of all activities would be about 6 months.
- ④ This is an idea, but it is worth considering that in order to deepen the understanding on TQC by 30 national trainers, if possible, an opportunity is provided to hear a lecture of a top management of a Japanese company which is using TQC.

(3) The following are to be added as new paragraphs under "Activities."

Preparation of Learning Materials

to devote to quality promotion usually lack of learning and diffusion materials on quality and productivity for the rest of the company, its suppliers and clients.

Editing Centre of films on quality

The main objective is the filming, edition and distribution of material arising from the courses.

It will be highly profitable to count on own materials and filming equipment in order to:

- Film experiences obtained in plants to be used as learning material.
- Film courses and outstanding lessons to be distributed all over the country.
- Film particular events, such as meetings for the interchange of experiences or prizes awardings.
- Film interviews with entrepreneurs who convey their own experiences.

5. Item H. Project Strategy,

(1) "Direct Recipients"

To be revised as follows:

the project, through 4 QC Japanese experts (1 CTA coordinator and 3 expert trainers) and with the support of some of the entrepreneurs trained in Japan in the framework of APQM will:

- Design the training programme and adapt QC to Argentine specialty.

- These 30 trainers, after a classroom training, will be on-the-job trained directly in the enterprises. 15 two-men teams will be constituted by sector (5 in metalmechanic, 5 in food industry, 5 in leather and footwear industry). Each team will be affected to one enterprise for a 2-month project-supervised QC-staff training.

(2) Implementation Arrangements

To be revised as follows:

CGI will act as project counterpart and provide all facilities (infrastructures, secretariat, etc.) to Japanese experts and CTA, define the profile of the future national trainers, select the 1st group of 30 national trainers and enterprises.

A JK training committee will be constituted including 4 Japanese staff, the national project director (president to CGI), the national coordinator and 2 former APQM trainers.

This committee will discuss and design the training programme, check the effectiveness of the training, and evaluate the training cycle.

6. Item "One (1) Year-Version"

L. Tentative Skeleton Budget (in U.S. dollars)

External Inputs (Japan)

Personnel

- 4 JK International Experts 284,000
(including travel, etc.)

- Trainees (national JK trainers) -

- National project staff -

Training Activities,

National Travel, etc. 40,000

Equipment

(4 project vehicles, insurance) 60,000

Miscellaneous 20,000

Total 404,000

Remarks: (1) As the training period was reduced from 6 months to 4 months, the expenditures related to the 4 JK International Experts were also reduced.

(2) For the above reason, it is considered possible to reduce the expenditures for trainees in the column of National Inputs.

(3) Judging that the expenditures other than Personnel are strongly of nature of fixed cost, they are left as originally proposed.

7. Item "Three (3) Year-Version,"

L. Tentative Skeleton Budget (in U.S. dollars)

External Inputs (Japan)

Personnel

- 4 JK International Experts	928,680
(including travel, etc.)	
- Trainees (national JK trainers)	-
- National project staff	-

Training Activities,

National Travel, etc.	40,000
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Equipment

(4 project vehicles, insurance)	80,000
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Miscellaneous	<u>60,000</u>
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Total	1,108,680
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Remarks: (1) As stated in 6 above, the expenditures for the 4 JK International Experts were reduced as a result of the shorter training period.

8. A list of educational videos

As an example of Item 4 (3) Preparation of Learning Materials, a list of educational videos prepared by JUSE (Japan Union of Scientists and Engineers) is given below.

• QC Seven Statistical Tools (Vol.7)	\$1,533
• Introduction to TQC (Vol.2)	440
• New QC Seven Statistical Tools for the Management Staff (Vol.9)	2,400
• New QC Seven Statistical Tools for QC Circle (Vol.4)	880
• An Approach through TQC (Vol.3)	660

9. Others

When the education and training actually begins, it is considered necessary to employ three Japanese-Spanish interpreters. From my experiences, I can say the cost will be about \$100 per day per man.