

PART II

DETAILED DISCUSSION

CHAPTER 1

ACCEPTANCE OF TRAINEES

Section 1. General Situation of Trainees Acceptances in Fiscal 1968

1. Situation of Execution

Japan has expanded the scale of the program for accepting trainees on Government basis year by year, with the total number of trainees accepted exceeding 10,000 persons. Moreover, this year's epoch-making activities included the acceptance of 3 trainees for meteorology from Mongolia in a program of the United Nations, for the first time since the start of the technical cooperation program in 1954. The number of trainees accepted as on March 31, 1969 totaled 10,898.

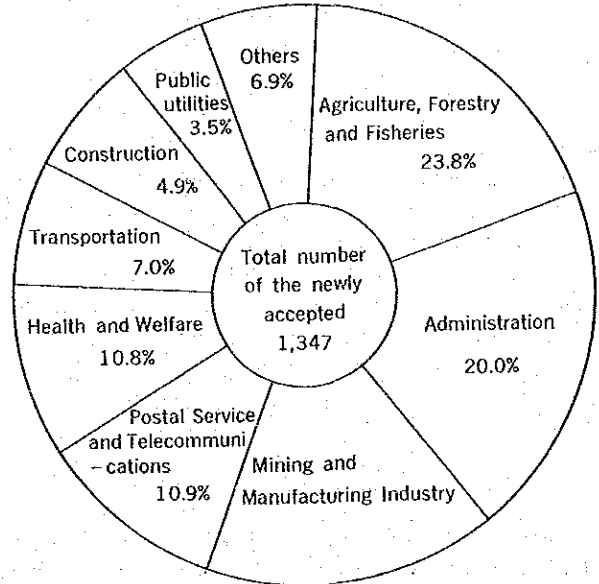
On the other hand, the expenditures incurred for accepting trainees in fiscal 1968 amounted to ¥784,662,000, an increase of 11% or ¥80,000,000 over the previous year. The number of trainees accepted during the same fiscal year was 1,510, with the newly accepted accounting for 1,347 and the continuous trainees from the previous year being 163, or an increase of 335 persons over the previous year.

Of said 1,510 persons, the 681 trainees joined the group training courses and 872 joined the individual training courses.

The breakdown by country is as follows: in regard to Asian countries, Korea accounts for 182 persons, Thailand for 171 persons, China for 159 persons, Indonesia for 91 persons, Malaysia for 89 persons, Philippines for 88 persons, Ceylon for 79 persons, India for 72 persons, Pakistan for 45 persons, and Burma and Singapore for 21 persons each; while for the Near and Middle East and Africa, Iran accounts for 37 persons, the United Arab Republic for 30 persons, Turkey for 27 persons, Nigeria for 19 persons, Afghanistan for 16 persons, Ethiopia for 11 persons and Ghana for 11 persons. As for the Central and South America, Brazil accounts for 30 persons heading the list, Mexico for 17 persons, Venezuela for 11 persons, Colombia for 8 persons and Argentina for 7 persons. In addition, one person each from Czechoslovakia, Hungary and Yugoslavia were sent to Japan to receive training on an atomic energy program.

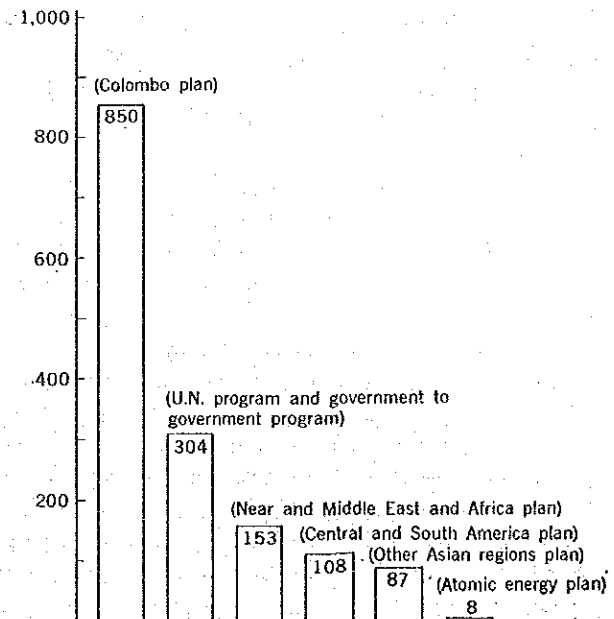
In classifying the number of trainees by types of training, agriculture, forestry and fishery account for 321 persons (23.0%), administration for 269 persons (21.2%), mining and manufacturing for 164 persons (11.7%), postal service and telecommunication for 148 persons (10.6%), public welfare for 146 persons (10.6%), transportation for 94 (6.7%), construction for 66 persons (4.7%) and public utilities for 45 persons

Fig. 1. Trainees acceptances status by field



(3.3%). (Refer to Fig. 1) The breakdown of the total number of trainees by programs shows that the Colombo Plan accounts for 850 persons, the Near-Middle East and Africa Plan for 153 persons, the Central and South America Plan for 108 persons, other regional plans for 87 persons, the Atomic Energy Plan for 8 persons and requests by the governments of developing countries and the United Nations for 304 persons (Refer to Fig. 2).

Fig. 2. Trainees acceptances status by plan



2. Group Training Course

The number of group training courses provided in fiscal 1968 was 72, with the total number of trainees who joined group training courses amounting to 681 men as described above, marking an increase in the number of courses by 15 and an increase in the number of trainees by 115 over the previous year. Subjects and outline of the group training courses for fiscal 1968 are as shown in Table 1 (Refer to page 28 onward).

3. Individual Training Course

The total number of the trainees accepted for individual training courses for fiscal 1968 was 829 (excluding those accepted on the reparations basis). Of these the number of trainees accepted under the Colombo Plan, the Near and Middle East and Africa Plan, the Central and South America Plan, other Asian Regions Plan and Atomic Energy Plan, for whom the whole expenditures were to be borne by Japan, accounted for 525 persons. Table 2 shows the main organizations which have received these trainees (Refer to p. 40).

4. Japanese Language Course

Japanese language courses are given the trainees for the convenience of their daily life and also for use as an auxiliary language to carry out technical training effectively and smoothly.

In fiscal 1968 a total of 20 Japanese language courses were provided at Tokyo, Osaka, Nagoya, Uchiyama and Misaki centres in which about 300 trainees participated. The period for the course is 2~3 months. There are two types of courses, evening course aimed for daily conversation and intensive course designed for technical training, in which lessons for technical terms are also given.

5. Matters Relating to Trainees Residence in Japan

(1) Subsistence and other allowances

As an allowance for preparation upon arrival in Japan, a sum of ¥10,000 to ¥30,000 is supplied according to the period of a trainee's stay in Japan. In addition, an allowance for subsistence is supplied in the range of ¥2,100 to ¥4,500 per day according to the lodging and food charges at the accommodation facilities. The standard amount of the subsistence allowance is ¥2,400 per day, an increase of ¥200 over the fiscal 1967. Furthermore, for high-level technicians, a sum of ¥5,000 to ¥7,200 per day is supplied to meet their subsistence. In addition, a sum of ¥1,200 per day is supplied as a traveling allowance when travel is required for training purposes. Moreover, an allowance for books needed for training is supplied according to the period of training as follows: ¥2,000 to a person whose period of stay is less than 6 months and ¥4,000 to a person whose period of stay is more than 6 months.

(2) Accommodation facilities

It has become increasingly difficult recently to secure hotels and other accommodation facilities where lodging charges are inexpensive while being well-equipped. In order to mitigate such situation, the Tokyo International Centre was expanded and remodelled. As a result, the number of beds increased by 100 to a total of 291, and such facilities as a gym, a hair-dressing room and a Japanese style room were provided. Furthermore, the Ibaragi International Agricultural Training Centre (having the capacity for 54 persons) was equipped with central heating facilities. Furthermore, the Fukushima Livestock Breeding Farm and the Kyushu Agricultural Experiment Station both owned by the Ministry of Agriculture and Forestry built lodging facilities designed to accommodate trainees (8 and 10 beds respectively).

(3) Health and Welfare

Health and welfare consideration is indispensable to protect the trainees from illness and accidents and also to enable them to lead comfortable and significant lives during their stay in Japan. The Tokyo International Centre, the Osaka International Training Centre, the Nagoya International Training Centre, the Misaki International Fisheries Training Centre and the Ibaragi International Agricultural Training Centre carried out various recreation activities including bus trips, visits to Japanese homes and social gatherings as well as medical activities including preventive injections. The number of disease contractions for 1968 was 1,750 with influenza heading the list, followed by troubles with digestive organs. Other diseases include eczema, skin diseases, toothache, neuralgia, vitaminosis, pharyngitis, rhinitis, urinary diseases, eye diseases, external wounds, otitis externa, blood pressure troubles, kidney troubles and respiratory diseases.

6. Matters Relating to Returned Trainees

The number of returned trainees was 10,808 as on March 31, 1969. In order to help these returned trainees exhibit the result of the technical training which they received in Japan and also to cooperate with them for the economic development of their respective countries while promoting friendly relationship between the returned trainees and Japan, aftercare activities as described below were carried out in fiscal 1968.

(1) Survey of the actual situation of returned trainees

A survey was conducted based on questionnaire system on the actual situation of the trainees who returned home in 1966 and 1967. Moreover, OTCA sent staff members to countries in Asia including Korea, The Republic of China, Philippines, Indonesia and Malaysia and to countries in Central and South America including Mexico, Peru, Brazil and Argentina to investigate the actual status of the returned trainees.

(2) Follow-up

English quarterly "KENSHU-IN," booklets such as

"FARMING JAPAN" and "LOOK JAPAN" and other technical literatures were dispatched to returned trainees. Quantities of equipment and materials including an earthquake observation equipment (Recipient: Philippine Volcano Committee), an electric plating equipment (Recipient: Iranian Industrial Teacher's Training College), a casting machine (Philippine College of Auto and Trade) and a machine for timbering (Recipient: Philippine Eastern University) were provided as after-care services.

(3) Alumni Associations

In addition to the alumni associations formed by the returned trainees in the Philippines, Malaysia and Thailand, the returned trainees in India and Argentina newly formed alumni associations in fiscal 1968. Moreover, there are strong indications that similar associations will be set up in Singapore, Indonesia, Ceylon, Iran and the UAR, as the promoters met to discuss the matter. In Pakistan, there is a movement for forming a large-scale alumni association consisting of not only the ex-trainees and experts who returned from Japan but also those who returned from other countries. With technical exchange with Japan as the principal axis, the activities of such alumni associations include setting up Japanese language classes, holding social gatherings and introducing Japanese culture and industries. Taking advantage of the aforementioned on-the-spot survey of the returned trainees, the OTCA exchanged information with the leaders of such alumni associations and presented the associations with texts on Japanese languages, and technical and cultural books to encourage their activities and to contribute to the development of the associations.

Section 2. Problems and Future Prospect of Trainees Acceptance Project

Now that 15 years have passed since the project was started, the problems of the project have become clarified through the individual problems which have occurred from time to time, the evaluation of the effect of training, the survey of the actual situation of returned trainees and the discussions at technical cooperation seminars. Some of the problems have been settled and others are yet to be solved. And there are some which have newly occurred. By dint of our constant efforts, these problems are moving towards solution slowly but steadily. When each of the current problems is examined, the issues in the execution of training and the issue of treatment of trainees must be pointed out first. Moreover, the field of follow-up after the trainees have returned home shows some problem. What can be said of the trainees acceptance project as a whole is that despite the increase in the number of trainees accepted into Japan, we can hardly meet the ever-increasing requests from various countries. Moreover, there are

many occasions when we are forced to postpone our constant efforts to improve quality in order to increase quantity. Thus, some problems are unavoidable.

1. Plan for the Project

(1) Problems of Quantity

- 1) Cases in which we could not accept the requests for group training

Group training was provided in 72 fields with each course having the average capacity for about 10 persons. In fiscal 1968, there were 48 courses in which the applications exceeded the number limit, for a total of 143 persons. We had to inform them of our inability to give them the courses which they applied for, due to various reasons.

- 2) Rejection of applications for individual courses and pending cases

The number of applications for individual courses received during the fiscal 1968 was 1,396, from which 829 applicants were accepted. We had to inform the remaining 439 applicants of our inability to accept them as trainees for individual courses and they were carried over to the following fiscal year as pending cases.

- 3) Increase over previous year

Although the acceptance of trainees in 1967 showed a decrease of 3.7% compared to the preceding year, the acceptance of 1968 showed an increase of 28% over the previous year.

However, the rate of increase in the economic cooperation as a whole far exceeds the rate of increase in the acceptance of trainees. In view of the fact that the project of accepting trainees is an accumulation of precisely arranged training for each trainee, that it takes a long time to develop facilities for accepting trainees and that the number of staff personnel to take care of the trainees is apt to be insufficient, it is next to impossible to effect a remarkable increase at once. We must admit, however, that Japan is not living up to the expectations, both domestic and foreign, in point of quantity.

2. Training

- (1) Linking of the training plan with the needs of the participating countries

In case of individual training, training which matches the request can be provided, since it is possible to decide training facilities after concretely examining the content of the request prior to sending a reply of acceptance. On the other hand, in case of group training, a principle is adopted by which Japan decides the contents of the training in advance and makes offers to prospective participating countries. As a result, we have received some reports from the trainees who participated in group training courses that the contents of the training had not served their purposes. Thus, in certain cases, it seemed that the training plan had not been

properly linked with the need of the participating countries.

(2) Differences of technical backgrounds among the participants in group training courses

In case of a group training, we make an offer with the qualifications for participation clarified. But, we can generally point out that such qualifications cannot be strictly maintained. Moreover, since each country has its own educational system and qualification standards, differences of technical backgrounds exist among the participants in one and the same training course. As a result, lecturers and instructors for practical training find difficulties. On the part of the trainees, too, there were many cases in which the effects of training had to be restricted.

(3) Effects arising from restrictions on training expenses

As regards the texts needed for lectures, there is almost no English text available. So, we have to order for a draft, have it translated into English and then order the printing and book-binding to make it into a text book. Since, however, the fund appropriated for this expenditure is very small, in many cases, we could prepare text books containing only the outlines of lectures and could not distribute to the participants the statistical data, tables and descriptions of examples constituting valuable data along with the text books.

Although English is designated as the language to be used in the training, it was necessary to give data in French or Spanish to the participants from countries where French or Spanish is used; yet we could not do this either.

In the field of practical training, too, it is desirable to have sufficient raw materials and materials, but they were not adequate enough for both group training and individual training. For example, we could only have the materials needed for the demonstration of a machine operation, since the expenditures for the materials would have been several times the amount appropriated to the practical training, repeated practices were to be provided sufficiently. Moreover, in seminars we could not arrange for simultaneous interpreters nor stenotypists; thereby we were not able to take full advantage of the fundamental functions of a seminar including the presentation of opinions, discussions, preparation of reports and minutes. Thus, in many cases, the effects of seminars could not be fully realized.

(4) Difficulty in conquering language barrier

It is an undeniable fact that the language problem constitutes a great barrier in giving training in Japan. So, we have done our best to secure English speaking instructors and to engage temporary interpreters as extensively as possible. At the same time, we reinforced the teaching of Japanese language to conquer the barrier, but despite our efforts, it still remains a serious problem hindering the effects of training. Thanks to the understanding and cooperation on the part of the

trainees, now very little of them complain about it directly. However, our training coordinators, whose number is limited, are assigned to group training, and temporary interpreters, who are mostly university students, are provided for trainees accepted for individual courses. As a result proper interpretation for technical terms was not possible. As regards group training, actual practice in special fields were provided to small groups of trainees in the latter part of each course and the curriculum are compiled so as to match the technical background of each trainee. However, there were many cases in which the period for such practice had to be cut down to 1 or 2 weeks due to the shortage of the training coordinators in spite of the fact that a period of 2 to 3 months was considered necessary for the practice to be effective. The conveniences of the training facilities may have been a part of the reason, but the main reason was the language barrier.

3. Trainees

(1) Subsistence allowance, etc.

The existing standard amount of subsistence allowance for a trainee is ¥2,400 per day, but the hotel accommodation and meal charges are so expensive that this amount cannot be said to be sufficient for taking care of a high-ranking official of the central government of each country. So, it is desirable that the amount of the subsistence allowance for such individuals be increased.

A sum of ¥10,000 to ¥30,000 is supplied to each trainee as preparation allowance according to the period of his stay in Japan. In case of trainees visiting Japan in winter, additional expenses will be needed for clothing, so that a special consideration should be extended to such trainees.

(2) Accommodation facilities

During their stay in Japan, trainees are to stay at accommodation facilities designated by the OTCA. These facilities include the Tokyo International Centre with 291 beds, the Osaka International Training Centre with 70 beds, the Nagoya International Training Centre with 45 beds, the Ibaraki International Agricultural Training Centre with 54 beds and the Misaki International Fisheries Training Centre with 30 beds, totaling 490 beds which are not enough to accommodate the trainees exceeding 1,500 persons annually. Under the circumstances, expansion and remodelling of said centres as well as construction of new centres are, of course, necessary and at the same time, proper accommodation facilities including private hotels and apartment houses which can accommodate them at reasonable charges must be developed.

(3) Health and Welfare

Health and welfare considerations, including medical treatment given the trainees, has a great significance in protecting them from illness and also in enabling them

to lead a comfortable life. So, medical and recreation activities should be greatly expanded. Various measures to protect trainees from traffic accidents and a system of compensation in case they should have accidents are urgent problems and are now in the process of study.

4. Returned Trainees

(1) Survey of actual situation and on-the-spot technical guidance

Whether the training that a trainee received in Japan is really effective or not depends on how he is using the result of his study after he has returned home. It is important to grasp the actual situation of the activities of the returned trainees, in order to improve training in the future. Moreover, for the effective execution of our training, not only the improvements of training in Japan but also the arrangements of conditions to help returned trainees fully demonstrate the result of their training in their respective countries should have value. Therefore, the kind of follow-up that is provided after they have returned home will be an important issue in the future.

In carrying out a survey of the actual situation of returned trainees, an arrangement of data on them, a questionnaire system survey and an on-the-spot technical guidance should be concurrently carried out. Especially, the opportunity of providing on-the-spot technical guidance, to the returned trainees should be taken by the instructors.

(2) Follow-up

There are various methods of extending follow-up services to returned trainees, but according to the opinions of ex-trainees and the governments of recipient countries, the supply of technical literatures and equipment and materials to returned trainees are effective. Now that the number of returned trainees is over 10,000, it is necessary to appropriate a considerable sum for follow-up services or to set up a system of supplying technical literatures regularly to each of the returned trainees.

(3) Advanced training

According to the result of the survey conducted on returned trainees, many of them desire to visit Japan once again to receive advanced training in their special fields. And this is necessary for effective implementation of the project. At present, retraining is given an ex-trainee only when a request is made from the government concerned. It is necessary to consider a system by which the government of the recipient country and Japan agree on a program to allow ex-trainees whose retraining would be necessary and effective to return for advanced training.

(4) Alumni Associations

There are active movements to form alumni associations among ex-trainees in order to make their training

in Japan meaningful and to promote the friendly relations between Japan and returned trainees and among returned trainees. In view of the fact that an organization is needed to receive our follow-up services, the formation of such associations will be useful. However, since a considerable amount of money is needed to form and to manage an alumni association, the membership fees collected from the promoters and the members of the association will not be enough to cover such expenditures. Under the circumstances, there are opinions favoring extension of financial assistance. In order to facilitate formation of alumni associations and also to help develop the associations which are already formed, financial assistance should be considered, and also it is desirable that the activities of the alumni associations be strengthened by supplying them with technical movie films and text books on Japanese language, etc.

5. Solution of the Problems and Future Prospect

Most of the problems described above may be solved both in quantity and quality through the establishment of a system to measure the effects of training along with budgetary measures, improvement in implementation of training and organization and reinforcement of training functions. Viewing the future of Japan's project for accepting trainees, it is possible that new problems which are unforeseeable will occur before the existing problems are settled. Thus, a thorny path lies ahead. However, we believe we will be able to obtain excellent results through the understanding and cooperation of the government and people, thus meeting the expectations of the developing countries.

We take up below the present problems mainly and close this section with a description of the solutions and future prospects.

(1) Quantitative expansion of the acceptance of trainees

The requests to Japan from the developing countries for acceptance of trainees are ever-increasing, while the budget and the facilities including the OTCA's to meet such requests are not enough. In this sense, the securing of budget and the arrangement of required facilities to receive trainees to meet the requests of developing countries are important tasks. The budgets for fiscal 1968 and 1969 show steady increases and further increases are expected in future. Especially, the number of requests to accept high-ranking administrator is increasing recently. Meeting such requests will not only contribute to the development of the recipient countries but also will prove useful for the development of economic and technical cooperation between Japan and such countries. Therefore, it is necessary for us to examine the applications for accepting high-ranking administrator with a positive attitude.

(2) Systematic implementation of acceptance of trainees

Under the existing system of acceptance of trainees,

the background of the request from each country and the relationship between a request for acceptance of trainees and an economic and social development plan or a talent cultivating plan of a developing country is not clear. Taking every opportunity, we have been asking each government to improve on this point. Furthermore, it is necessary to clarify this point in the course of contacts with the developing countries concerned and to carry out the project of accepting trainees systematically.

(3) Regional consideration in acceptance of trainees

Since trainees are accepted based on the requests from about 60 developing countries in the world, allocation frameworks by region and by country are set up as the standards for acceptance. In setting up said allocation frameworks, however, no emphasis by region nor by country is placed, e.g. no preponderant acceptance for certain countries are provided, so it seems that the best effects of the program are not fully obtained.

The same can be said with the absence of emphasis by field. As a result, the requirements in a certain field cannot be wholly satisfied and no effect can be obtained. Especially in the case of group training, we invite participation by as many developing countries as possible, strongly emphasizing international training while transferring Japan's experiences and knowledge to the trainees. This group training system has, therefore, a side effect of promoting understanding and friendship among the participants. On the other hand, there exist great differences in the level of knowledge and techniques among the participants due to differences among regions, differences among countries and differences between advanced and developing countries. These not only give rise to difficulties in working out and executing training programs but to dissatisfaction among the participants. As a solution to this problem, it is desirable that a group training system be set up, centered on countries having a common regional background or in accordance with the development stages of the countries.

This system has been adopted in some cases recently and we have found that management of training is easier and more effective. In the future, therefore, expansion and reinforcement of this training system should be examined in relation to quantitative expansion of training.

(4) Expansion of individual training

We have so far been receiving almost an equal number of trainees for group training courses and individual training courses and we are making efforts to insure that the ratio of the individual training does not decrease despite the gradual increase in the total number of trainees. It cannot be helped, however, that more emphasis is placed on the group training from the viewpoint of efficiency. This problem should be solved by jointly setting up individual and special field

programs in group training and by training as a group the individual trainees for one and the same subject, while giving due consideration to the necessity and usefulness of individual training.

(5) Improvement of contents of group training

1) In group training, the principle is that Japan makes an offer to developing countries, so that the requirements of each country can be adapted to the situation of Japan, with the result that sometimes the potential requirements of each country are ignored. In this sense, it is necessary for us to set up group training, after fully taking into consideration the requirements of each country, so we can meet their requirements as much as possible.

2) In making an offer for group training, it is necessary to clarify the objectives of the group training so that each country will fully understand the objectives of the group training and will be able to select the best applicants for the purpose.

3) Furthermore, the qualifications and the curriculum for group training should be clarified. Success or failure of the curriculum will influence the results of the group training. It is, therefore, important to fully examine the curriculum in advance so that the objectives of the group training concerned can be perfectly attained. Especially, in preparing curriculum, it is desirable to engage a person having expert knowledge and experiences on the technical contents of the group training as the course leader; thereby, aiming at perfection in the compilation of curriculum. The OTCA carries out compilation of curriculum in cooperation with various institutions. Each of these institutions has a number of engineers having profound knowledge of the field concerned but since they are charged with domestic researches or training projects as their primary responsibility, and moreover, since they are not always versed in the situations abroad especially of developing countries, it is important to have an expert course leader in the field of the technical cooperation project.

4) It is needless to say that when group training courses are established and information thereon are sent to the countries well in advance, the selection of applicants by such countries, the preparations for the visit to Japan by the participants and their arrivals in Japan by the designated date are carried out smoothly. So far, such information have been sent to each country 6 months before the commencement of training. In the future, it is necessary, however, to send the outlines of the provisional group training courses to each country and to make greater efforts to send formal information much earlier than before.

5) It is natural that the duration of group training varies according to the course; however, the training durations are generally short due to the limitations in Japan's receiving setup. In order to meet also the calls for specialization and higher-level of training, it is de-

sirable that the receiving setup be reinforced and that the training durations considered necessary and sufficient for attaining the training objectives be provided.

(6) Expansion and improvement of training facilities

The existing training facilities are widely spread among various government, local government bodies and private organizations, with government facilities being in overwhelming number. This situation is only natural as Japan's governmental technical cooperation, but it appears that training at the government facilities has reached the point of saturation. However, in order to drastically expand the project for accepting trainees, it is important to develop facilities owned by local government bodies and private organizations along with redevelopment of government facilities. Especially, as a result of the liberalization of international trade and technical renovation, private enterprises have come to turn their eyes on all the world and their intention to positively participate in the technical cooperation is increasing to fulfil part of Japan's responsibility as advanced nation. Under the circumstances, it is also necessary to request the cooperation of private enterprises in respect to training. At the same time, budgetary measures should also be considered so that the actual expenses incurred by the cooperation for training by private enterprises may be fully compensated. On the other hand, the number of trainees at universities are limited to about 20 persons annually due to language restrictions and fund limitations. However, training at universities is largely effective in research and training, and moreover, there are strong requests for it from many countries. It is now high time to increase the trainees for Master's and Doctor's courses while keeping close contacts with the institutes concerned, including university authorities, and systematically to make adjustments with scholarship projects and offer to each country the opportunities for such trainees.

OTCA should seek other training organizations, or make a plan for the expansion of such OTCA's facilities as Ibaraki and Misaki Centres and further consider the establishment of a third centre such as a small size industry centre.

(7) Increase in expenditure on training

The various types of training provided require a large amount of money for each type of training. Due to existing budgetary restrictions, we find difficulties in maintaining temporary high-level supervisors, paying remunerations to instructors, preparing text books in trainees' native languages especially in French and Spanish, buying sufficient quantities of raw materials, component materials and fittings needed for practices and paying traveling allowances to persons accompanying the trainees on trips for training purposes in Japan. Furthermore, a large sum of money and much labor are needed for managing a seminar although the duration is short. The amount appropriated as incidental

expenses for training is far from being enough to cover such expenses. We have so far been managing to provide seminars through elastic management of the budget, but in the future, it is absolutely necessary to have a budgetary appropriation for this item separately from the framework of incidental expenses to training.

(8) Reinforcement of training coordination

Under the present situation in which training is provided in English or trainees' native languages, accurately transferring knowledge and techniques is a prerequisite; wherein lies the importance of the training coordination including interpretation service. Since it is difficult to secure training supervisors in accordance with the number of training courses. Therefore, assignment of training coordinator is made with emphasis placed on group training. In regard to individual training, temporary coordinators are engaged whenever necessity arises, but currently when Japan is short of available talents, we can hardly obtain well-qualified persons. It has become a matter of urgent necessity to secure the necessary number of training coordinators and to improve their qualities by drastically reviewing the training coordination so as to meet the trend for advancement of training to higher levels and for the increase in the number of trainees. In the future, the problem of improving training coordination must be seriously considered.

(9) Reinforcement of training in Japanese

The reasons why training in Japan cannot be given in Japanese are that Japanese is not an international language and that the diffusion rate of Japanese is extremely low. Recently, however, with the improvement of Japan's position in the family of nations and the subsequent increase in the understanding of and the interest in Japan by each country, the diffusion rate of Japanese language is increasing. The fact that opinions favoring training in Japanese were expressed even at the seminar of officials in charge of technical cooperation may show that implementation of training in Japanese has become realistic. At the present stage, it is however difficult to carry out training in Japanese right away, but reinforcement of training in Japanese should be considered, in connection with the aforementioned problem of the training coordination. Therefore, for the immediate future, a long-term group training centering on practices and individual training given in Japanese, should be considered and moreover, Japanese lessons should be given intensively for two or three months, coupled with education of the Japanese language in each country. In this connection, it should be noted that some governments are ready to give Japanese lessons to a trainee before his departure. In the future, the giving Japanese lessons to a trainee prior to his departure for Japan should also be considered.

(10) Establishment of an effective evaluation system

Evaluation of the effects of training is based on the

Table 1. Table of Group Training Courses

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country | Participants |
|---|---|--|---|---|--|
| Agricultural Machinery Utilization for Rice Cultivation | To those technicians who will be engaged in improving and popularizing agricultural implements this course provides lectures, experiments and practices as regards mechanism, theory, function, operation, assembly, disassembly, repair, testing and evaluation, of motors, machines and power transmitting mechanism of agricultural machinery for rice cultivation, so that the trainees can give technical guidance in the utilization and management of agricultural implements after returning to their homelands. (Observation tours 15%, lectures 20%, Practices 39%, selfstudy and others 26%) | April 1968 through February 28, 1969 | Ibaragi International Agricultural Training Centre | Afghanistan 1 Indonesia 1 Iran 1 Tanzania 1 Malaysia 2 Total: 11 | India 1 Ceylon 1 Thailand 1 Bhutan 1 Nigeria 1 |
| Rice Cultivation and its Extension Work | This course is designed to provide trainees with knowledges and skills with which they can improve, guide or promote techniques of rice cultivation and method of its extension in their countries. For the purpose, this course offers lectures, experiments and practices to trainees, on the cultivation of Japanese rice plants, to make them fully understand techniques of rice cultivation according to the stages of growth and a basic method of diagnosing rice growth. | -do- | -do- | India 1 Thailand 1 Malaysia 2 Total: 7 | Indonesia 1 Bhutan 1 Laos 1 |
| Land Improvement for Rice Cultivation | This course is designed to provide training on irrigation and drainage to middle-class technicians who are engaged in small-scale irrigation and drainage and land improvement works as field leaders in the developing countries by making them acquire such techniques as can be put to practical use, through practices, experiments and field observation which will be supported by theoretical understanding through lectures, it aims at cultivating technicians who can supply sufficient water to rice plants systematically and according to plans. (Observation tour 10%, lectures 22%, practices 41%, selfstudy 17%) | May 10, 1968 through February 28, 1969 | -do- | Indonesia 1 Burma 1 Thailand 1 Iran 1 Iraq 1 Total: 10 | Ceylon 2 Nigeria 1 Malaysia 1 Pakistan 1 |
| Agricultural Machinery Repair and Maintenance | In order to give systematic training in Japanese rice cultivation of agricultural implements in developing countries, this course provides trainees with factory training, lectures, survey tour, etc. to give them knowledge of practical techniques for discovering and repairing malfunctions of various types of agricultural implements. Thus, this course is aimed at contributing to the augmentation of skills to agricultural implements mechanics who are few in number in developing countries. (Observation and practices 80% orientation and lectures 20%) | June 14, 1968 through December 28, 1969 | Osaka International Training Centre | Ceylon 1 Philippines 3 Pakistan 1 Total: 10 | Malaysia 4 Thailand 1 |
| Prevention and Treatment of Crime and Delinquency | By inviting participation of reformation and rehabilitation officers from the Southeast Asian countries, this course introduces to the participants the situation in Japan in respect of treatment, reformation and rehabilitation of offenders as well as prevention of crimes and at the same time the situation of the countries of the participants and provides discussions on the problems in these fields. Moreover, in addition to the OTCA trainees, about the same number of Japanese trainees participate in this course with the training from similar to that of a seminar in which mainly discussions are held along with lectures. (Lectures and discussions 70%, field works 20%, others 10%) | September 14, 1968 through December 13, 1968 | United Nations Asia and Far East Institute for the Prevention of Crime and Treatment of Offenders | India 1 Korea 1 Pakistan 1 Singapore 1 China 1 Total: 9 | Indonesia 1 Nepal 1 Philippines 1 Thailand 1 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
|----------------------------|--|--|---|---|
| Women for Crime Prevention | Taking up preponderantly the role of women in prevention of crimes and delinquency and treatment of offenders in Japan and in the participating countries, this course aims at contributing to the development and improvement of the administration in this field through lectures and discussions and promoting exchange of information in this field among the trainees' countries, with the training form being similar to that of a seminar as in the case of the course for Prevention and Treatment of Crimes and Delinquency. Women are made the object of participation in this course. And, as regards the contents of training, emphasis is placed on reformation and rehabilitation centering around juvenile delinquency. (Lectures and discussions 70%, field works 20% and others 10%) | February 26, 1969 through March 25, 1969 | United Nations Asia and Far East Institute for the Prevention of Crime and Treatment of Offenders | Ceylon 1 Indonesia 1 Philippines 1 Nepal 2 Vietnam 1 India 1 Korea 1 Thailand 1 Pakistan 1 Total: 10 |
| Livestock Hygiene Research | This course is aimed at cultivating experts in new techniques of diagnosis by introducing to them the present situation of veterinary experiment and research in Japan. Training is carried out by means of lectures and survey tours covering general stock-raising administration and through lectures and experiments on prophylactic, diagnosis and treatment in livestock pathology. Of the training duration of 6 months, the first 3 months are devoted to lectures, experiments and observation tours concerning veterinary virology, method of tissue-culture, parasitology, veterinary bacteriology, breeding, dietetics and epidemics in order to provide the trainees with the techniques of diagnosing, preventing and treating the diseases for livestock. The remaining 3 months are reserved for individual training on certain special subjects, according to the requests from trainees. The program is composed of lectures (40%), practices (40%) and observation tours (20%). | May 10, 1969 through November 9, 1968 | National Institute of Animal Health, Ministry of Agriculture and Forestry | Indonesia 1 Ceylon 1 Laos 1 Thailand 1 Brazil 1 Mexico 1 U.A.R. 1 Total: 7 |
| Forest Products Research | This course aims at improving the ability of the trainees and conducting to the researches and development of techniques on forest products in the participating countries by providing the trainees with training on specific subjects of forest products research, in order to contribute to forest development in the developing countries. The training is performed through studies on sawing, lumber processing, lumber seasoning and fiberboards. (Practices 60%, observation tours 30% and lectures 10%) | May 15, 1968 through November 14, 1968 | Government Forestry Experiment Station, Forest Agency | Malaysia 1 Thailand 1 Philippines 1 Korea 1 Total: 4 |
| Forestry Research | In order to contribute to forest development and improvement of forestry techniques in the developing countries, this course is so designed that the trainees can receive training on specific subjects in each seminar while making the most of their knowledge and techniques in their own special fields. The subjects of training cover the whole field of forestry including forest investigation, plant breeding, soil investigation, protection and fire prevention. Since individual training system is adopted, observation tours and field training will be provided according to the need of each trainee. On an average, the training is composed of practices and field training (60%), observation tour (30%) and lectures (10%). | May 15, 1968 through November 14, 1968 | --do-- | Afghanistan 1 Malaysia 1 Brazil 1 Indonesia 1 Philippines 1 U.A.R. 1 Total: 6 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
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| Poultry Farming | To persons who could become middle-class technical leaders on diffusion of poultry farming in developing countries, this course is designed to provide poultry farming techniques and the techniques for diffusion of poultry farming through mainly practices in order to contribute to the development of poultry farming in each country. The training program consists of lectures on poultry farming technique including hatching, feeding, poultry farms, hygiene and practices on feeding and hatching and observation tours to poultry farming facilities in Japan. | July 1, 1968 through November 30, 1968 | Okazaki National Livestock Breeding Station, Ministry of Agriculture and Forestry | Philippines 1 Malaysia 2 Singapore 1 Thailand 1 Afghanistan 1 Brazil 1 Laos 1 Total: 8 |
| Agricultural Cooperatives | To contribute to cultivating leaders in development of agricultural cooperative unions, this course provides extensive training regarding agricultural cooperative unions in Japan. Specific individual training is also given according to wishes of trainees. The training program consists of lectures and the ensuing field practices which will be provided at the ratio of 50% each. | August 25, 1968 through December 24, 1968 | Institute for the Development of Agricultural Cooperation in Asia | Afghanistan 1 Indonesia 1 India 2 Iran 1 Ceylon 2 Malaysia 3 Philippines 3 Thailand 3 Guatemala 1 Ghana 1 Nigeria 2 Uganda 1 Total: 21 |
| Fresh-water Fish Culture & Propagation Research | This course is designed to provide the trainees with theories and practices on production management of rivers and lakes and multiplication of fish in ponds through lectures, practices and observation tours, in order to enhance the trainees' ability on fresh water fishery and to contribute to improvement of fishery techniques and promotion of experiments and researches in developing countries. (Lectures 70%, practices 15%, tours 15%) | May 1, 1968 through November 30, 1968 | Fresh-Water Fisheries Research Laboratory, Fisheries Agency | Ceylon 1 Indonesia 1 Nepal 1 Thailand 2 Kenya 1 Nigeria 2 Total: 8 |
| Rice Cultivation Research | This course gives systematic training in Japanese rice cultivation techniques including studies on physiology, cultivation, damage by blight and noxious insects, soil, fertilizers, etc., so as to give trainees knowledge of rice cultivation theory and practice and eventually to cooperate with developing countries in improvement of techniques and in promotion of researches and development of rice cultivation. Lectures, practices, discussions and survey tours are properly arranged according to the stage of growth of rice. | May 7, 1968 through November 18, 1968 | Central Agricultural Experiment Station, Ministry of Agriculture and Forestry | India 2 Indonesia 1 Malaysia 1 Philippines 1 Thailand 2 Brazil 1 Mexico 1 Total: 9 |
| Coastal Fisheries | With the aim of contributing to the coastal fisheries in the trainees' countries, this course is designed to provide the trainees with knowledge and techniques useful for improvement, guidance and diffusion in respect of coastal fishery in each country through lectures (41%), practices (34%), observation tours (16%) and auxiliary researches (9%) which are properly arranged so as to be correlated to one another, centering around fishing methods with fishing gear, fishery administration, management in general and multiplication and cultivation in respect of coastal fisheries in Japan. | May 1, 1968 through March 31, 1969 | Masaki International Fishery Training Center | Ceylon 1 Costa Rica 1 Ecuador 1 India 1 Indonesia 3 Iran 1 Iraq 1 Kenya 1 Malaysia 2 Mexico 2 Nigeria 2 Philippines 2 Sudan 1 Thailand 2 Turkey 1 Total: 22 |
| Marine Fisheries Research (Including Fishing Gear and Methods) | This course provides training of specific themes in fishery (fishing resources, ocean chemistry, preservation, ocean fish multiplication and fishing methods with fishing gear) selected by trainees, who will receive individual training in their respective study rooms. By providing training consisting of experiments and researches (68%), lectures (17%) and observation tours (15%) which are properly arranged, this course aims at contributing to improvement of fishery techniques and promotion of experiments and researches in developing countries. | (1) June 1, 1968 through November 30, 1968 (2) September 15, 1968 through March 14, 1969 | Tokai Regional Fisheries Laboratory, Fisheries Agency | Philippines 2 Thailand 1 Colombia 1 Indonesia 1 (Fishing methods with fishing gear) Chile 1 Total: 6 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country | Participants |
|---------------------------------|--|--|---|--|--------------|
| Local Government Administration | <p>(1) To provide trainees with the opportunities to directly obtain knowledge and information on Japan's local government administration through lectures (80%) and observation tours (20%).</p> <p>(2) To provide description on the role that Japan's local administration played and is still playing in the socio-economic development in Japan as well as the methods.</p> <p>(3) To open seminars on comparative studies on administrations of the participating countries, in order to provide the participants with the opportunities for exchanging ideas and information for promotion of mutual understanding among the participating countries and for regional cooperation in the field of local administration.</p> | January 20, 1969 through April 19, 1969 | Autonomy College, Ministry of Home Affairs | Iran 1 Ceylon 1 Philippines 1 Malaysia 2 Korea 2 Viet-Nam 1 Thailand 2 Pakistan 1 Total: 11 | |
| Teratology | In view of the significance of studying the causes of congenital monstrosity which is one of the most important themes in the modern medicine and taking preventive measures against such causes, this course is designed to provide researches of experimental medicine to congenitally deformed children. The course consists of meetings (30%), lectures (30%), observation tours (20%) and others (20%). | April 1, 1968 through April 20, 1968 (20 days) | Anatomy Class-room, Pharmaceutical Department, Kyoto University | Indonesia 1 Malaysia 1 Thailand 1 Turkey 1 Iran 1 Philippines 1 China 1 Total: 7 | |
| Television Broadcasting | This course is designed to provide trainees with knowledge on TV broadcasting control techniques and description on the present situation of TV broadcasting activities and at the same time an outline of broadcasting equipment in Japan. The course consists of lectures (40%), observation tours (20%), tours (5%), discussions (5%) and others (30%). | April 8, 1968 through June 18, 1968 (about 3 months) | Radio Regulatory Bureau, Ministry of Postal Services | Indonesia 1 China 2 Thailand 2 Total: 5 | |
| Computer | This course is designed to provide trainees with the basic knowledge needed to become programmers in connection with utilization of computers which will play an important role in modernization of developing countries and thereby make them accustomed to utilization of computers and also to provide them with the knowledge and techniques needed for installation and management of computer centers. The course consists of basic programming (26%), topics on application (8%), practices (8%), observation (15%), tours (8%) and others (15%). | April 10, 1968 through June 9, 1968 (2 months) | Data Processing Society | Burma 3 Indonesia 1 Singapore 1 Philippines 2 Korea 1 Ceylon 1 Malaysia 1 Pakistan 1 Thailand 1 Total: 12 | |
| Dentistry | Aiming at cultivating leaders in the field of dentistry at synthetic hospitals or universities in developing countries, this course is designed to provide trainees with the up-to-date techniques and knowledge on dentistry in Japan and thereby to serve for stabilization of people's livelihood in the developing countries. Training is given mainly through individual guidance with the course consisting of lectures on basic medicine (20%), practices on basic clinical pathology (30%), special clinical practices (45%) and observation (5%). | April 10, 1968 through April 9, 1969 (1 year) | Osaka Dental College | Indonesia 1 Korea 1 China 1 Nepal 1 Philippines 1 Total: 5 | |
| Telephone Lines | This course is designed to provide trainees with knowledge and techniques on theories, designing, installation and maintenance in respect of the up-to-date outdoor telephone equipment. The training consists of lectures (30%), practices (20%), observation (15%), tours (to Kansai and Kanto areas) (10%) and others (25%). | April 15, 1968 through July 14, 1968 (3 months) | Nippon Telegraph & Telephone Public Cooperation | Malaysia 1 Iraq 1 Costa Rica 1 Brazil 1 Philippines 1 Turkey 1 Honduras 1 Mexico 1 Total: 8 | |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
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| Seminar for Senior Staffs in Postal Administration | This seminar is designed to provide discussions on various problems in executing postal services in the participating countries and thereby to contribute to the development of postal business in future. It consists of lectures (40%), discussions (20%), observation (10%) tours (Kansai) (10%) and others (20%). | June 11, 1968 through June 30, 1968 | Postal Bureau, Ministry of Postal Services | Afghanistan 1 Ethiopia 1 Iran 1 Sudan 1 Iraq 1 Libia 1 Turkey 1 U.A.R. 1 Kenya 1 Kuwait 1 Saudi Arabia 1 Total: 12 |
| Short-Wave Radio Engineering | This course aims at contributing to the advancement of short-wave radio engineering in developing countries, by introducing the short-wave radio engineering of Japan. The training consists of lectures (15%), practices (15%), observation (20%), tours (Kansai) (10%) and others (30%) regarding engineering of transmission and reception of international short-wave radio and operation and maintenance of transmitting and receiving equipment and antenna apparatus. | June 15, 1968 through October 14, 1968 (4 months) | Kokusai Denshin Denwa Co., Ltd. | Malaysia 2 Iran 1 Thailand 1 Indonesia 1 Philippines 1 Kenya 1 Tanzania 1 Sudan 1 Brazil 1 Total: 10 |
| Telecommunication Management (Seminar) | This seminar is designed to provide introduction of the present situation of Japanese telecommunication to the senior administrators engaged in telecommunication services in developing countries, to provide discussions of various problems presented on management of telecommunication services in each country and thereby to contribute to the development of telecommunication services in those countries. The seminar mainly consists of lectures and discussions on management of telecommunication services in Japan, cultivation of engineers, new techniques on international communication, telegraph and telephone services, new techniques on telecommunication, management of satellite communication and broadcasting services, the present situation and future of telecommunication industry. Lectures (30%), discussions (30%), observation (5%), tours (Kanto and Kansai) (20%). | November 3, 1968 through November 22, 1968 (20 days) | Administrative Director's Office of Telecommunications, Ministry of Postal Services | Afghanistan 1 Burma 1 Cambodia 1 Indonesia 2 Philippines 1 Thailand 1 Pakistan 1 Total: 8 |
| Satellite Communication | This course mainly aims at providing trainees with the basic knowledge on satellite communication by training them in the operation and maintenance techniques in detail. It consists of lectures (30%), practices (20%), observation (25%) and others (25%). | January 22, 1969 through March 25, 1969 (2 months) | Kokusai Denshin Denwa Co., Ltd. | Iran 1 Malaysia 1 China 1 Pakistan 1 Thailand 1 Sudan 1 Mexico 2 Total: 8 |
| Seminar on Economic Planning | This seminar aims at contributing to preparation of economic plans in the participating countries by introducing to the trainees the techniques for economic planning in Japan. It consists of lectures (30%), practices (20%), tours (25%) and others (25%). | April 10, 1968 through June 9, 1968 (2 months) | Economic Planning Agency, Economic Research Institute | Malaysia 1 China 1 Thailand 1 Syria 1 Iraq 1 Iran 1 Somalia 1 Nigeria 1 Colombia 1 Equador 1 Peru 1 Paraguay 1 Total: 12 |
| Tuberculosis Control | There is seen a falling tendency of the rate of death due to tuberculosis in Japan recently, while tuberculosis is raging in all its fury in the Southeast Asia, with high rates of incidence and death. This course is designed to introduce the technology employed in countermeasures against tuberculosis which enabled Japan to control it and also effective measures for controlling tuberculosis in the participating countries, with emphasis placed on prevention and clinical field. | May 10, 1968 through October 31, 1968 | Japan Anti-Tuberculosis Association Tuberculosis Research Institute | India 1 Indonesia 1 Malaysia 1 Laos 1 Philippines 1 Thailand 1 Total: 6 In addition to above, the following are accepted as WHO |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
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| | The training is given through lectures, practices and observation tours on (1) anatomy of lungs, (2) pathology of tuberculosis, (3) X-ray diagnosis, (4) science of epidemics and (5) tuberculosis control programs. It consists of lectures (40%), practices (20%), observation (20%), tours (Tohoku, Kansai) (10%), and others (10%). | July 18, 1968 through October 9, 1968 (about 3 months) | Central Training Institute, Japan Broadcasting Corporation | trainees: Korea 2 Philippines 1 China 1 (4 month from May 10, 1968 through September 9, 1968) |
| Educational Television Program | This course is designed to introduce Japanese educational television broadcasting and thereby to contribute to the improvement of educational television programs in the trainees' countries. Training is given mainly through lectures and practices on preparation of educational television programs, uses of camera, lighting apparatus and other equipment, studio installation, and way of utilization of educational television programs. The course consists of lectures (30%), practices (15%), observation (10%), tours (Kanto, Kansai) (15%) and others (30%). | July 18, 1968 through October 9, 1968 (about 3 months) | Central Training Institute, Japan Broadcasting Corporation | Indonesia 1 Philippines 1 Thailand 1 Ghana 1 Sudan 1 Bolivia 1 Mexico 1 Total: 8 |
| Surgical Treatment of Pulmonary Tuberculosis | This course is designed to introduce the theory of tuberculosis in general and theory of surgical treatments of pulmonary tuberculosis patients in Japan, to conduct practical training on surgical operations being practiced in Japan, and thereby to contribute to the advancement of surgical treatment of pulmonary tuberculosis in developing countries. The course consists of lectures (20%), practices (30%), observation (10%), tours (Kansai, Tohoku) (20%) and others (20%). | November 8, 1968 through April 7, 1969 (5 months) | Japan Anti-Tuberculosis Association, Tuberculosis Research Institute | Afghanistan 1 Philippines 1 Indonesia 1 Thailand 1 Total: 4 |
| Cancer Control | This course aims at contributing to the improvement of cancer control in developing countries by introducing methods of diagnosis and treatment including radiotherapy and pharmacotherapy and research activities on cancers of various kinds in Japan. The training consists of lectures (20%), practices (30%), observation (30%), tours (Kansai and Hokuriku) (10%) and others (10%). | November 7, 1968 through May 6, 1969 (6 months) | The National Cancer Center | Afghanistan 1 Thailand 1 Philippines 1 Peru 1 Total: 4 |
| International Telegraph & Telephone Services | This course aims at introducing knowledge and techniques pertaining to management and administration of international communication networks provided with international telegraph and telephone, telex and circuits for special purposes through lectures (30%), practices (15%), observation (15%), tours (20%) and others (20%). | February 1, 1969 through April 27, 1969 (about 11 weeks) | Kokusai Denshin Denwa Co., Ltd. | Malaysia 1 Thailand 1 Kwait 1 Saudi Arabia 1 Mexico 1 Afganistan 1 Total: 10 |
| Water Supply Facilities | This course is designed to provide introduction of Japanese water service administration centering around the standards for water-works with the aim of contributing to the development of water supply service and improvement of water service techniques in the participating countries. The training comprises lectures on Japanese water service administration and detailed exposition (from water source to prevention of leakage), observation of relevant facilities, practices and observation tours. Lectures 30%, practices 10%, observation 15%, tours (Kansai and Tohoku) (15%), and others 30%. | February 1, 1969 through April 27, 1969 (3 months) | Environment Sanitation Bureau, Ministry of Health & Welfare | Afghanistan 1 Laos 1 Thailand 1 Ethiopia 1 Ceylon 1 Malaysia 1 Pakistan 1 Iraq 1 Total: 8 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
|---------------------------------|--|---|--|---|
| Family Planning (Seminar) | Southeast Asian countries are suffering from the problem of rapidly increasing population. As one of the solutions to such problem, this seminar is designed to introduce and discuss various counter-measures which are practiced in Japan and which will be effective in these countries and thereby to contribute to solution of the population problem. The seminar consists of lectures on the social environment and movement of population in Japan, lectures on the role of medical personnel engaged in population problem and lectures on contraception and religion. Lectures 25%, discussions 20%, observation 15%, tours (Kansai) 15% and others 25%. | March 1, 1968 through March 21, 1968 (3 weeks) | Family Planning Federation of Japan | Indonesia 1 Malaysia 1 Nepal 1 Pakistan 1 Philippines 1 Thailand 1 Viet-Nam 1 Turkey 1 Total: 8 |
| Telephone Exchange | This course is designed to provide trainees with extensive knowledge on the up-to-date telephone exchange equipment centering around crossbar exchange system. It consists of lectures (40%), practices (20%), observation (15%) and others (25%). | February 25, 1969 through May 14, 1969 (3 months) | Nippon Telegraph & Telephone Public Corporation | Ceylon 2 Iran 1 Pakistan 1 Thailand 1 Uganda 1 Bolivia 1 Honduras 1 Total: 8 |
| Carrier Telephone Engineering | This course is designed to provide extensive knowledge on the up-to-date carrier telephone engineering. It consists of lectures (35%), practices (15%), observation (25%), tours (Kanto, Kansai) (15%) and others (10%). | September 20, 1968 through December 19, 1968 (3 months) | Nippon Telegraph & Telephone Public Corporation | Iran 1 Thailand 1 Ethiopia 1 Kuwait 1 Bolivia 1 Brazil 2 Colombia 1 Mexico 1 Total: 9 |
| Telex Communication Engineering | This course is designed to introduce the telex communication techniques in Japan in order to contribute to the advancement of telecommunication technology in developing countries. Training is given through lectures on telecommunication system, paramecron, transistor and ARQ facilities and practices on circuit monitoring, frequency exchange, repairs of parts in trouble, operation, and maintenance of ARQ facilities, etc. It consists of lectures (30%), practices (15%), observation (20%), tours (Kanto, Kansai) (20%) and others (15%). | August 4, 1968 through November 30, 1968 (4 months) | Kokusai Denshin Denwa Co., Ltd. (KDD) | Burma 1 Indonesia 1 Iran 1 Malaysia 1 Ethiopia 1 Nigeria 1 Sudan 1 Turkey 1 U.A.R. 1 Argentina 1 Peru 1 Brazil 1 Total: 12 |
| Automobile Service Engineering | This course is designed to cultivate automobile maintenance workers who are lacking in developing countries and to contribute to the technical advancement of automobile maintenance in those countries. | June 14, 1968 through December 23, 1968 (7 months) | Toyota Motor Sales Co., Ltd. Chubu-Nippon Automobile Service Engineering School, Nissan Motor Co., Ltd. Sales Training School | Laos 1 Thailand 2 Burma 1 Pakistan 1 Indonesia 2 Malaysia 3 Singapore 1 Afganistan 1 Iran 1 Sudan 1 Kenya 1 Nigeria 1 Total: 16 |
| Mintage | This course is designed to provide trainees with the basic knowledge on minting of coins, analysis of minting metal materials and smelting through observation, lectures and practices and the techniques on special fields including melting and rolling, through lectures and practices. | January 10, 1969 through June 9, 1969 (5 months) | Mint Bureau | Korea 1 Philippines 1 Thailand 1 Indonesia 1 India 1 Pakistan 1 Total: 6 |
| Regional Development | This course is designed to provide synthetic training on regional development with the Chubu Area as a model case, in accordance with the resolution of the United Nations on regional development investigation and training and introduce to the trainees on the methods and knowledge on development of economic societies. | January 10, 1969 through April 9, 1969 (3 months) | Central Districts Development & Adjustment Headquarters | Malaysia 1 Thailand 1 Singapore 1 Indonesia 1 Viet-Nam 1 Ceylon 1 India 1 Iran 1 Brazil 1 Total: 9 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
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| Vocational Training Instructor (Seminar) | This seminar is designed to introduce the way of thinking, the system and the concrete method of training vocational instructors in Japan and also make comparative discussions on the present situation of training vocational instructors and problems thereof in Japan and thereby to contribute to the advancement of cultivation of vocational instructor in developing countries. | April 8, 1968 through May 27, 1968 | Institute of Vocational Training, Vocational Training Bureau, Ministry of Labor | Iran 1 Turkey 1 Philippines 1 Korea 1 Pakistan 1 U.A.R. 1 Thailand 1 Ceylon 1 Indonesia 1 Malaysia 1 Total: 11 |
| Vocational Training (Seminar) | This course is designed to introduce the present situation of vocational training in Japan especially intra-enterprise training (apprentice system) through lectures, observation and tours and to discuss problems on vocational training in Japan especially the methods of intra-enterprise training. | September 1, 1968 through November 7, 1968 | Institute of Vocational Training | Ceylon 1 Ethiopia 1 Indonesia 1 Iran 1 Korea 1 Malaysia 1 Pakistan 1 Thailand 1 Sudan 1 Uganda 1 Philippines 1 U.A.R. 1 Total: 13 |
| Highways (Seminar) | This seminar is designed to provide training on survey, planning, construction, maintenance and management which are necessary for construction of highways in the countries concerned with the Asian Highways based on the request of the ECAFE and thereby contribute to the development and extension of Asian highways. The content of the seminar mainly comprises lectures, discussions and observation of Japanese highway. | November 1, 1968 through November 30, 1968 (1 months) | Road Bureau, Ministry of Construction, Japan Road Corporation | Thailand 1 Singapore 1 Nepal 1 Afganistan 1 Indonesia 1 Iran 1 Malaysia 1 Viet-Nam 1 India 1 Laos 1 Pakistan 1 Total: 11 |
| Railways Signal and Communication Engineering | In the railway signal systems of developing countries, there have been observed such bottlenecks in the way of modernization of railways with low efficient mechanical signaling devices and tablet blocking devices for section blocking still used by all the lines except some of the trunk lines. With a view to promoting the automation of railway signals, they are switching mechanical signals over to automatic electric signals and from tablet blocking devices to tokenless blocking devices. Considering said situation, the course is intended to conduct training on railway signal engineering with emphasis placed on maintenance, inspection and repair of signaling devices in an effort to elevate the technical level of railway signal engineering in those countries. | August 1, 1968 through November 30, 1968 (4 months) | Japanese National Railways, Japan Signal Industry Association | Thailand 1 India 1 Indonesia 1 Brazil 2 Argentina 1 Mexico 1 Total: 7 |
| Railway Rolling Stock Engineering | For the purpose of rationalizing the management of railway service, the developing countries have lately purchased a number of diesel rolling stocks from advanced countries, but the technical level of maintenance and operation in railways is comparatively low. With improvement of said situation fully taken into consideration, the course is organized to train trainees sent from those countries in the excellent techniques of Japan through lectures, practice and observation tours. | June 1, 1968 through September 30, 1968 (4 months) | Japanese National Railways, Japan Railway Rolling Stock Export Association | Malaysia 2 Thailand 1 Sudan 1 Kenya 1 Bolivia 1 Uruguay 1 Total: 7 |
| Maintenance and Improvement Engineering Ways | This course is designed to introduce to developing countries the techniques required in construction and maintenance of railways. Training comprises explanation of the outlook of Japanese railways, and lectures on maintenance and construction of railway tracks and practices and observation of survey for construction of railways. | March 17, 1968 through June 16, 1968 (3 months) | Japanese National Railways | India 3 Korea 1 China 1 Thailand 1 Philippines 1 Malaysia 1 Mexico 1 Total: 9 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country | Participants |
|---------------------------------------|---|---|--|--|--|
| Bridge Engineering | This course mainly provides introduction of civil engineering for bridge construction in Japan. The content of training comprises lectures on structural dynamics of bridges and substructures as well as lectures on, and field observation of the typical construction methods including the methods for constructing reinforced concrete bridges and iron bridges and etc. | June 1, 1968 through September 30, 1968 (3 months) | Ministry of Construction Japan Highway Public Corporation | India 1 Laos 1 Thailand 1 Brazil 1 Total: 7 | Iran 1 Philippines 1 Turkey 1 |
| Surveying and Mapping | This course mainly aims at providing techniques on map printing. After lectures on surveying in general are given, lectures, observation and practices in respect of map compiling, photograph reading, scribbling, drafting and map printing are provided. | May 10, 1968 through November 9, 1968 (6 months) | Geographical Survey Institute, Ministry of Construction | Ceylon 2 Iran 1 Indonesia 1 Nepal 1 Thailand 3 Pakistan 2 Iraq 2 Turkey 2 China 1 Total: 26 | Laos 2 Philippines 3 Malaysia 1 Viet-Nam 1 Burma 1 India 1 U.A.R. 1 Nigeria 1 |
| Seismology and Earthquake Engineering | Provided under cooperation of the United Nations, training is given in two courses, seismology and earthquake engineering, with the contents comprising lectures on earthquakes in general and earthquake proof structures and bridges and so on and observation of and practices at seismological research institutes, observatories and construction sites of earthquake-proof structures, aiming at contributing to prevention of disasters from earthquakes in developing countries suffering frequent earthquakes and thereby serving for the welfare of peoples in such countries. With effect from this fiscal year, a 5-month senior course was set up. | September 1, 1968 through August 31, 1969 (12 months) | International Seismological Engineering Department, Architectural Research Institute, Ministry of Construction | Philippines 3 Afghanistan 2 Turkey 1 Mexico 1 Venezuela 1 Bolivia 1 Ghana 1 Total: 18 (incl. UN) | Indonesia 1 Fiji 1 Argentina 1 Peru 1 Chile 2 Colombia 1 Yugoslavia 1 |
| Port & Harbor Engineering | This course is designed to provide trainees with the techniques on ports and harbors in Japan and thereby to contribute to advancement and improvement of port and harbor techniques in the participating countries. The training comprises planning, designing and construction techniques in respect of ports and harbors as well as observation of principal ports and harbors in Japan. | May 5, 1968 through September 4, 1968 (4 months) | Ports and Harbors Technical Research Institute, Ports & Harbors Bureau, Ministry of Transportation | Brazil 1 India 1 Philippines 1 Korea 1 U.A.R. 1 Total: 10 | Ceylon 1 Indonesia 1 China 1 Singapore 1 Venezuela 1 |
| Offshore Prospecting | This course is intended to train technical experts assigned for prospecting and developing the abundant mineral resources remaining unexploited on the coastal areas and continental shelves in Asia. The training comprises lectures, practices, experiments and observation tours. Especially, the 10-day maritime training on board a prospecting ship fully demonstrated the features of this course. | May 10, 1968 through December 20, 1968 | Geological Survey of Japan, Ministry of International Trade and Industry | Indonesia 1 Malaysia 1 Thailand 1 China 2 Total: 9 | Korea 1 Philippines 1 Burma 2 |
| Electronics | This is designed to contribute to the development of electronics engineering and its industries in the developing countries concerned through theoretical and practical training in the field of electronics. The training comprises lectures with experiments and practices included (80%) and observation tours (20%). | May 15, 1968 through November 30, 1968 | Osaka Electro-Communication University | Iran 1 Indonesia 1 India 1 Total: 5 | Philippines 1 Thailand 1 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
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| Foundry | This course is intended to the technical advancement of foundries in the developing countries and also to promote mutual cooperation between the trainees' countries and Japan in this field. The trainees acquired the up-to-date techniques through lectures (60%), practices (40%) and tours. | April 10, 1968 through October 16, 1968 | The Nagoya Industrial Technological Laboratory, Ministry of International Trade and Industry. | Thailand 1 Malaysia 1 Philippines 1 Nigeria 1 Total: 8 |
| Plating | This course is designed to provide trainees with the up-to-date electric plating techniques. The training divided into 3 fields, (1) plating of copper, nickel, chrome, zinc, cadmium and precious metals (2) management and control of plating plants and (3) testing of plated products consists of lectures (30%), practices and experiments (30%), training tours to Shikoku District including observation of copper smelting works (20%) and Japanese lesson (20%). | April 15, 1968 through October 16, 1968 | The Nagoya Industrial Technological Laboratory, Ministry of International Trade and Industry. | Thailand 1 Malaysia 1 Philippines 1 Nigeria 1 Total: 8 |
| Textile Engineering | This course is intended to provide knowledge and skills related to textile engineering for those who are engaged to be technical leaders in this field in developing countries. | December 1, 1968 through June 20, 1969 | Industrial Research Institute, Nagoya | Thailand 1 Ghana 1 Indonesia 2 Brazil 1 Pakistan 5 Total: 14 |
| National Government Administration | This course aims at improving the quality as administrators in special fields of administration for those who hold highly responsible posts at present or those who are eligible to be senior public officers in the field of government administration in developing countries in the Southeast Asia. Training comprises lectures, reporting, comparative studies on the administration of the trainees' countries, case-study on administration, discussions, researches, observation tours, etc. Lectures and discussions 80%, trading tours to Kansai and Chugoku districts and observation 20%. | January 10, 1969 through April 19, 1969 | Institute of Public Administration, National Personnel Authority | Indonesia 1 Ceylon 1 Philippines 1 Thailand 1 Pakistan 2 Total: 11 |
| Smaller Enterprise Development (Seminar) | In an effort to cope with the problems of smaller enterprises that are being posed in developing countries, this seminar aims at contributing toward the solution of present problems of smaller enterprise management in those countries by giving training on methods and techniques employed in the management of Japanese smaller enterprises through lectures discussions and observation tours. | May 5, 1968 through July 16, 1968 | The Nagoya Chamber of Commerce and Industry | Paraguay 1 Malaysia 2 Ceylon 1 Thailand 1 Total: 8 |
| Trade Promotion | In order to promote international trade of the participating countries, this course provides high-level persons in charge of trade business both in government and private enterprises with training on general theory covering the world trade structure, legislation, development and importation, economic cooperation and finance, market researches, packaging and designing for products and on the present situation in Japan, through lectures and discussions. Furthermore, in addition to the bilateral government-base trainees, trainees recommended by the UNCTAD-GATT are accepted in this course. | June 1, 1968 through July 15, 1968 | The World Trade Center | Peru 1 Colombia 1 Cambodia 1 Thailand 1 Malaysia 1 India 1 Total: 11 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country | Participants |
|-----------------------------------|---|---|--|--|---|
| Groundwater Resources Development | Divided into two. Geological course with emphasis placed on the theories for survey and development of underground water and Drilling course with importance attached to operation of drilling machines and practical matters, this training course provides training on effective utilization of underground water resources. Lectures 50%, practices 30% and tours (Niigata and Kansai) | June 1, 1968 through November 30, 1968 | Geological Survey Station, Ministry of International Trade and Industry Japan Well-Drilling Association | Afghanistan 1 Ceylon 1 Iran 1 Pakistan 1 Ethiopia 1 Total: 9 | Burma 1 Indonesia 1 Laos 1 Thailand 1 |
| Glass Engineering | Aiming at qualitative improvement in the glass manufacturing techniques of the trainees, this course provides training on quality analyses and experiments centering around practices on small scale production and thereby introduces Japanese techniques. Lectures 40%, practices 60% and tours (Kyushu) | April 10, 1968 through October 9, 1968 | The Nagoya Industrial Technological Laboratory, Ministry of International Trade and Industry | Indonesia 1 Korea 1 Philippines 1 Total: 6 | Iran 1 Malaysia 1 Thailand 1 |
| Ceramic Engineering | This course aims at providing training in the way of thinking to technical problems which may arise in manufacturing ceramics in developing countries and practical solutions to such problems. In addition to lectures and basic practices, special laboratory works are provided. Lectures 30%, practices 70%, tours (Hokuriku, Chugoku and Kyushu Districts) | June 1, 1968 through March 31, 1969 | The Nagoya Industrial Technological Laboratory, Ministry of International Trade and Industry | Indonesia 1 Philippines 1 U.A.R. 1 Total: 5 | Laos 1 Nigeria 1 |
| Industrial Standardization | While providing theoretical lectures on the methodology for establishment of industrial standards and quality control which constitute the basis necessary for industrialization of a nation, this course provides such training that can provide not only the practical knowledge but also the material which induce the trainees to think about the problems of their own countries, through introduction of the history and the present situation of this field in Japan. Lecture 80%, practices 20%, tours (Kansai) | April 10, 1968 through July 9, 1968 | Ministry of International Trade and Industry Japan Standards Association | Burma 1 India 1 Korea 1 Philippines 1 Turkey 1 U.A.R. 1 Argentina 1 Mexico 1 Total: 15 | Ceylon 1 Indonesia 1 Pakistan 1 Thailand 2 U.A.R. 1 Brazil 1 Peru 1 |
| Iron and Steel | This course is divided into Steel Manufacturing Course and Rolling Course. After receiving lectures on basic theories, trainees are sent in the works and are given training on the up-to-date techniques on said fields respectively through field observation of the production. Lectures 20%, practices 80% and tours (Nagoya district) | May 10, 1968 through September 30, 1968 | Ministry of International Trade and Industry Japan Iron & Steel Federation | Indonesia 1 Philippines 1 U.A.R. 2 Total: 8 | Pakistan 1 Turkey 1 Brazil 2 |
| Offset Printing | In order to introduce the up-to-date offset printing technique in Japan, a thorough practice covering the processes from photographing to plate making and printing is provided in addition to lectures on basic theories. Lectures 40%, practices 60%, tours (Chugoku and Kyushu). | November 1, 1968 through March 31, 1969 | Japan Typology Society The Kimki Phototype Process Association | Burma 1 Iran 1 Nepal 1 Philippines 1 U.A.R. 1 Total: 9 | Indonesia 1 Malaysia 1 Pakistan 1 Thailand 1 |
| Hydro-Electric Power Engineering | This course is designed to introduce the present situation of the hydro-electric power generation in Japan and thereby to contribute to further development of electric power industry in the trainees' countries. The content of the training mainly comprises case studies of the process from planning of development to its completion in respect of several development projects with training on system administration and transmission, transformation and distribution of power added thereto. Lectures 70%, observation and distribution of power added thereto (places). | May 6, 1968 through August 15, 1968 | Electric Power Development Co., Ltd. The Chubu Electric Power Co., Ltd. | Brazil 5 Guatemala 1 Total: 10 | Colombia 2 Peru 2 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
|--------------------------------------|---|---|--|---|
| Thermal-Electric Power Engineering | This course is designed to introduce the present situation of the thermal-electric power generation in Japan and thereby to contribute to further development of electric power industry in the trainees' countries. Training is given on various problems regarding the process from planning of construction to its development, with several different power station taken up as examples. And training on pumping-up power generation and transmission, transformation and distribution of power was also added to this course. | May 6, 1968 through August 15, 1968 | The Tokyo Electric Power Co., Ltd. The Kansai Electric Power Co., Inc. | Indonesia 1 Thailand 2 Malaysia 1 U.A.R. 1 Total: 5 |
| Smaller Enterprise Management | This course is designed to introduce management and control with emphasis placed on the process of development and on policies and methods as well as the present situation of smaller enterprises in Japan through lectures, discussions, practices and observation and thereby to contribute to the development of the smaller enterprises in the trainees countries. Lectures 50%, practices 25%, observation 25% and tours (Chugoku, Shikoku and other places). | April 15, 1968 through July 14, 1968 | The Osaka International Training Centre The Osaka Chamber of Commerce & Industry | Ceylon 1 Malaysia 1 Pakistan 1 U.A.R. 1 Ghana 1 Peru 1 China 1 Total: 9 |
| Statistics | This course is designed to introduce the actual situation of application of Sampling Method in Japan and thereby to contribute to further development of statistical techniques in the trainees' countries and also to promote cooperation between Japan and such countries in the field of statistics. Lectures 60%, discussions 10%, observation 30% and tours (Kansai) | April 15, 1968 through June 14, 1968 | Administrative Management Agency | Afganistan 1 Ceylon 1 Indonesia 1 Iran 1 Pakistan 1 Philippines 1 Thailand 1 China 1 U.A.R. 1 Turkey 1 Total: 10 |
| Shipbuilding and Maintenance | This course is designed to contribute to the advancement of building and maintenance of ships in participating countries and thereby to promote technical cooperation in matters of shipbuilding between these countries and Japan. Training comprises lectures on ship designing, related laws, regulations and lectures on theories at the dockyard, practices and observations at the dockyard and plants manufacturing marine equipment. | October 1, 1968 through March 31, 1969 | Mitsubishi Heavy Industries, Ltd. Kobe Shipbuilding & Engineering Co., Ltd. Japan Shipbuilding Technology Centre | Burma 1 Indonesia 1 Philippines 2 Thailand 1 U.A.R. 1 India 1 Korea 1 Thailand 1 Total: 8 |
| Ports and Harbors (Seminar) | This seminar is designed to introduce the present state of management and administration of ports and harbors in this country and to contribute to the advancement of technics in the harbor administration of the developing countries. Training comprises lectures on management, operation and construction of ports and harbors, development of seaside industrial zones, and observation tours to major harbors in this country. | January 21, 1969 through March 12, 1969 | Port & Harbor Bureau, Ministry of Transportation | Venezuela 1 Syria 1 Thailand 2 Indonesia 2 Burma 1 U.A.R. 1 Mexico 1 Costa Rica 1 Columbia 1 Argentina 1 Iran 1 Peru 1 Philippines 1 Malaysia 1 Ceylon 1 Turkey 1 U.A.R. 1 Columbia 1 Iran 1 Total: 18 |
| Narcotic Smuggling Control (Seminar) | This seminar is intended to introduce the investigation technics in this country, to discuss effective control measures, to exchange information and materials concerned and to establish closer cooperative relations among the countries concerned in order to eradicate narcotic offences and smuggling thereof from Asian countries and thereby to contribute to the economic development and the improvement of welfare in these countries. | September 22, 1968 through October 18, 1968 (27 days) | Safety Division, Criminal Investigation Bureau, National Police Agency | Singapore 1 Philippines 1 Indonesia 1 Lacs 1 India 1 Vietnam 1 Thailand 2 Korea 2 Malaysia 2 Burma 2 Total: 14 |

| Name of Course | Object of Course and Contents of Training | Duration | Main Institution and Facility | Number of Participants by Country |
|----------------------------------|--|--|---------------------------------------|---|
| Training of High Skilled Workers | This training is intended to provide those expected to be vocational instructors in the field of metal industry of the developing countries with skills and knowledge, especially of mechanical processing, to make them adaptable to the technical innovation. Training comprises practice in the fundamental operation of machine tools and then applied technics, and lectures on theories required for the attainment of these technics. | April 7, 1968 through March 31, 1969 (12 months) | Kita-Osaka Vocational Training Centre | Philippines 1 Iran 1 Indonesia 1 Korea 1 Laos 1 Singapore 1 China 1 Thailand 2 Total: 9 |

Table 2. Table of Principal Training Institutions and Facilities in Individual Training Courses

| (1) Public Institutions | (2) Educational Institutions | (3) Private Institutions |
|---|---|--|
| National Personnel Authority | The Broadcasting Corporation of Japan | Kubota Iron & Machinery Works, Ltd. |
| Patent Agency | Japan Telegraph & Telephone | Ishikawajima-Harima Heavy Industries Co., Ltd. |
| Science & Technology Agency | Government Preventive Hygiene Research Institute | Kokusai Denshin Denwa Co., Ltd. |
| Japan Atomic Power Research Laboratory | The Institute of Public Health | Nippon Reizo K.K. |
| Radiotherapeutics Synthetic Research Laboratory | The National Cancer Center | Mitsubishi Electric Industrial Co., Ltd. |
| Tax Administration Agency | The Japanese National Railways | Nippon Electric Co., Ltd. |
| The Industrial Technological Experiment Station | Institute of Vocational Training | Tokyo Electric Power, Inc. |
| The Nagoya Industrial Technological Laboratory | Geological Survey Station, Ministry of International Trade & Industry | Chubu Electric Power, Inc. |
| Agricultural Administration Bureau, Ministry of Agriculture | Tokushima University | Kansai Electric Power, Inc. |
| National Institute of Animal Health | Kanagawa University | Dengen Kaibatsu K.K. |
| Government Forestry Experiment Station | Nagasaki University | Hitachi Shipbuilding & Engineering Co., Ltd. |
| Regional Construction Bureau, Ministry of Construction | Telecommunication College | Mitsui Shipbuilding & Engineering Co., Ltd. |
| Civil Engineering Research Institute | | Kawasaki Dockyard Co., Ltd. |
| Geographical Survey Institute, Ministry of Construction | | Fuji Iron & Steel Co., Ltd. |
| Japan Highway Public Corporation | | Yawata Iron & Steel Co., Ltd. |

examination of the interim and final reports submitted by the present trainees to the OTCA, the training and training administration reports prepared by the training officers and training coordinators and the evaluation meetings held whenever necessary. But, there is a danger that the result of such evaluations may end in unobjective evaluations by the persons concerned. It is important to evaluate the effects of training objectively

and numerically and to work out a policy for improvement. This is a theme for our future examination. At present, we are carrying out an objective and numerical evaluation, on a trial basis, of the coastal fisheries course at the Misaki International Fisheries Training Centre. Depending on the result of the said evaluation, we may be able to establish a workable system.

CHAPTER 2

DISPATCH OF EXPERTS ABROAD

Section 1. Outline of Experts Abroad

The program of dispatching experts is being carried on mainly by sending experts on the basis of a bilateral agreements with the developing countries in Southeast Asia, the Near and Middle East, Africa and Latin America. Since 1954 a total of 1,506 experts has been sent out under those programs. From 1963 on, with the dispatch of the Asian Highway experts to ECAFE as a start, experts have also been sent out to international organizations, such as ECAFE, ECA, EAC, UNCTAD, GATT and DAC. These experts are being posted to administrative agencies, research institutes, educational institutions and vocational training centres of the receiving countries as well as international organizations and are engaged in technical co-operation services covering activities such as planning, research and study, guidance, extension work and counseling. The technical fields also cover extensive fields such as telecommunication, mining and manufacturing, civil engineering and construction, transport and light industries as well as agriculture, forestry and fisheries.

What is worth special mention in the work of dispatching experts for fiscal 1969 was the fact that there has been an increase in the dispatch of senior experts on the high-level policy level such as drawing up plans or giving advice in connection with the execution of the economic, industrial development plan of a government organization in the country to which they have been assigned. These were in addition to the dispatch of experts to international organizations including the Asian Development Bank, and were unlike the experts in the past who have been mainly engaged in giving guidance in technical know-how.

1. Actual Conditions of Work Execution

The budget allocated for dispatching experts abroad for fiscal 1968 was in the amount of ¥915,551,000, or a 22.1 per cent increase over ¥749,619,000 for fiscal 1967. The total number of experts dispatched under

the Colombo Plan and the like was 436, of which 219 were those newly sent and 217 were those whose stays were continued. Assistance was extended in the sending of 15 experts invited or contract basis by the governments of the receiving countries. Salaries were supplemented by OTCA in the case of two experts who were held over.

A total of 21 experts was sent out to international organizations: 6 were assigned to the Asian Development Bank and 15 to the Southeast Asian Fisheries Development Centre. The following table shows the breakdown by plan:

Dispatch of Experts Abroad by Plan

| Name of Plan | Continued | | | New | | |
|---------------------------------|--------------------|-------------------|-----------------|--------------------|-------------------|-----------------|
| | Short term persons | Long term persons | Family Families | Short term persons | Long term persons | Family Families |
| Colombo Plan | 24 | 115 | 68 | 59 | 46 | 33 |
| Middle & Near East, Africa Plan | 10 | 17 | 9 | 17 | 21 | 12 |
| Latin America Plan | 19 | 22 | 18 | 26 | 11 | 6 |
| Other Asia Plan etc. | 7 | 3 | 2 | 37 | 2 | 1 |
| Sub-total | 60 | 157 | 97 | 139 | 80 | 52 |
| International organizations | 0 | 0 | 0 | 12 | 9 | 7 |
| Government invitation | 0 | 2 | 0 | 0 | 0 | 0 |
| | 60 | 159 | 97 | 151 | 89 | 59 |
| Total | 219 | | | 240 | | |
| | 459 | | | | | |

The Colombo Plan area (244 persons) accounts for 56 per cent of the total of experts dispatched (436), followed by the Central and South America Plan (78 persons), the Middle and Near East and Africa Plan (65 persons) and the plan for the rest of Asia, etc. (49 persons).

The results of dispatch of experts in fiscal 1968 by country and field are given in the table at the end of

this section.

In the fields of experts, agriculture and fisheries ranked first (124 persons) as in fiscal 1967, followed by public utilities, i.e. electricity, gas and water supply (70 persons), posts and telecommunication (53 persons), light industries (45 persons) and transport and construction (32 persons). Others, such as, business management, technical education, economic planning, etc. account for 33 persons.

2. Number of Experts Requested

The following table shows the number of experts requested by developing countries:

| | |
|----------------------------|-------------|
| Agriculture & Fisheries | 142 persons |
| Industry & Trade | 104 |
| Posts & Telecommunications | 34 |
| Transport | 37 |
| Construction | 48 |
| Others | 48 |
| Total | 413 |

The requests for these experts showed a 23.6 per cent increase over fiscal 1967, rising from 326 to 413 persons. However, 35 requests for 45 experts had to be cancelled as in fiscal 1967, for several reasons, such as the difficulty of selecting proper experts, the political considerations and the inadequate conditions for receiving experts on the part of the receiving countries:

| | |
|----------------------------------|------------|
| Agriculture & Fisheries | 24 persons |
| Construction & Civil Engineering | 15 |
| Telecommunications | 1 |
| Light Industries | 3 |
| Transport | 1 |
| Other | 1 |

Of the cancelled plans, some requests were impossible to achieve as in the case where Ceylon desired an expert who could establish maritime commercial law, both public and private, in only a six-month period.

Also, there was request from Costa Rica for 10 experts in farm raising and stock raising, including rice cultivation. We did not meet this request because the contents of the request were not clear and we did not have adequate knowledge about farming and stock raising conditions in Costa Rica. This made it difficult for us to select experts suitable for the current conditions, so the request was not met.

For the above reasons, the sending of experts were called off in as many as 18 cases, since suitable persons were difficult to locate. This shows that further efforts should be made to secure experts for the future.

3. Follow-up to Dispatched Experts

The bulletin, "Experts" No. 5, was issued with a view to ensuring closer communication between OTCA and experts sent abroad (including the staff members of overseas centers and medical experts). Also, discussion meetings were held at the Tokyo International Centre

on March 19 and at the Osaka International Training Centre. Discussion groups were formed by regions and by fields of the returned experts. In fiscal 1968 the system of Livelihood Guarantee for the Returned Experts was introduced and was started in October of the same year. Under this system the returned experts (including the staff members of overseas technical cooperation centers and medical experts) are to be granted an allowance guaranteeing their livelihood so that they may secure their living for a certain period of time after returning home and are re-employed.

The recipients of the livelihood guarantee allowances in fiscal 1968 numbered 20. On the other hand, as another step in securing experts, a new system was started in March 1969. Under this system, experts who have returned home after achieving excellent results and who are most likely to be sent again are to be pooled as special non-regular members in OTCA. In fiscal 1968 two experts were nominated as special non-regular members.

Meanwhile, to provide better treatment to experts, the system of compensation for accidents was improved and medical supplies were provided in fiscal 1968.

Section 2. Instances of Experts Dispatched

1. Examples of Assignment of Experts by Countries

(1) Expert on Economic Planning Dispatched to Indonesia

The Government of Indonesia, which is mapping out a drastic five-year plan for reconstruction of the national economy, has already obtained the cooperation of the United States, West Germany, Australia and IBRD. It has also requested the Japanese Government to send a senior expert on economic planning. In compliance with the request, our government dispatched Mr. Saburo Okita, Director of the Japan Economic Research Center, to the National Planning Agency of Indonesia; thereby, extending its cooperation in their effort of national economic rehabilitation.

The latest situation in the Indonesian economy showed a tolerable stability in its inflationary trend, registering a rise in price of about 50 per cent in fiscal 1968. The prospect for the demand-supply situation for food was improved, and therefore, the possibility of a strained demand and supply relationship (particularly in rice) as witnessed in 1967 was obviated. Export trade, mainly in petroleum, progressed favorably and the balance of international payments was improved thanks to aid from abroad. In view of this economic situation, Mr. Okita recommended the adoption of the following measures as the main points in the Five-year Plan for Economic Reconstruction:

- 1) For the increased food production program, the adoption of the plant breeding policy to prevent the yield from being affected adversely by the

weather and the use of better fertilizers;

- 2) For fostering manpower, the strengthening of vocational education and training;
- 3) The main emphasis in the improvement of the infrastructure should be on the repairing of roads and harbors and on what contributes greatly to production and exportation;
- 4) Export industries should center on labor-intensive ones; and
- 5) Due consideration should be given, in promoting a new industry, to the point that such industries should be selected for being able not only to substitute for imports but also for being able to function as export industries.

The Indonesian Government, highly evaluating this recommendation, asked for the second visit of Mr. Okita to Indonesia. Complying with this request, we had him visit Indonesia twice, in January and August, 1969 to recommend adjustments in the 5-year plan.

Also, as this is a most important field of cooperation, the Japanese Government sent out Mr. Koichi Baba, a member of the Japan Economic Research Center, as economic advisor to the National Planning Agency in April this year, when the 5-year plan began, to follow up Mr. Okita's earlier work.

(2) Expert on Business Management of Small-scale Enterprises Dispatched to the Republic of China

The Small Business Division, Council for International Economic Cooperation and Development, Executive Yuan, of the Government of the Republic of China, was set up in January 1968 and has since been proceeding with the fostering, rationalization and modernization of small-scale enterprises. Small-scale enterprises have a very high share in the economy of Taiwan as in the case of Japan. The lags in modern business administration, that is, production plan, price research, industrial equipment program, market research and supply of raw materials, are considered as important factors, checking the development of small-scale enterprises. In view of this situation and the outstanding development of Japanese small-scale enterprises, the Chinese Government requested the dispatch of experts on business administration for small-scale enterprises.

In response to the request, our government sent Dr. Koichi Hosono, Professor of Kokushikan University, for one month from September 14 to October 14, 1968. He investigated the actual conditions of small-scale enterprises in Taiwan, examined the general aspect of business administration, identified the problems of small-scale enterprises in Taiwan and defined their trends. His achievement was highly evaluated.

On a repeat request this year, we sent Dr. Koichi Hosono and Mr. Akira Kobayashi, from February 24 and from March 11 to April 10, respectively. This time, a large-scale survey was conducted taking Karenken as a model area and all plants of small-scale enter-

prises were examined from the viewpoint of business administration. They advised that remedial measures be adopted as soon as possible in view, especially, of the lag in the financial field and they achieved abundant results.

(3) Expert on Personnel Administration Dispatched to Tanzania

This expert was to be assigned to the Central Personnel Agency, President's Office, of the Tanzanian Government and his main duties were to study the assignment of the talented people, the fixed number of personnel, the personnel changes and training, the items which were most closely connected with the improvement of administrative efficiency in the field of personnel administration; and to recommend and give guidance for improvement. This was an important post in that the personnel affairs of the national public personnel who were vital elements of the economic and social development of Tanzania were left solely to its guidance. The Japanese Government sent Mr. Kū Tashiro of the National Personnel Authority as the desired expert. By this time, he has already dealt with an recommended (1) appropriate assignment of administrative officials (2) improvement on affairs pertaining to research and distribution, (3) improvement of personnel administration on land registration and (4) appropriate assignment of people relative to cooperative associations; and these recommendations are each being implemented.

The problems now under study are (1) appropriate assignment of auxiliary, technical and labor staff members, (2) and reorganization of the personnel administration machinery. The expert is now an active member of the committee on transfer in 1970 of the Comprehensive Development Centre assisted by the three Scandinavian countries and of the committee on business rationalization of the leaders of cooperative associations.

(4) Expert on Proliferation and Culture of Marine Products Dispatched to Brazil

The request for dispatch of the expert was made by the Oceanographic Laboratory attached to Pernambuco University in Brazil. The request stated that vivalve shellfish, which breeds mainly in the coastal lake districts of the State of Alagoas and which constitutes the source of living for petty fishermen and also the major source of foods for the people in the neighborhood, recently showed a decrease by an unknown cause, with the result that the diet life as well as economic life of the local inhabitants were seriously affected and that proper guidance in the technique of increasing and cultivating fishes and shellfishes, including the said shellfish, as well as the investigation of the cause was solicited. Accordingly, the OTCA sent out Mr. Shodai Matsushima of the Fresh Water Area Fisheries Research Institute as an expert on fishery products proliferation and culture for a term of one year and six months begin-

ning in November 1968. The expert has been assigned to the Oceanographic Research Institute and, while giving lectures and conducting laboratory work, has taken part in conducting surveys on the fresh and salt water areas in the north-eastern part of Brazil, the fresh water basin in Itamaraca Island, the hydrographic environment and living organism in the reservoir of Salinho, and in particular on the effects of rainy and dry seasons of Brazil on fish farming. In addition, he has engaged in the new construction of fish farms and the breeding of and raising of grass carp. The Institute, whose director participated in the group fisheries training seminar held in 1962, is closely linked with Japan on this project. Furthermore, in conjunction with SUDENE, with which Japan is cooperating by dispatching experts on agronomy and plant pathology, Japan's technical cooperation in the North East Brazil development project, including the present case, is considered to be truly significant from the viewpoint of strengthening the links of Japan with SUDENE and the Oceanographic Research Institute of Pernambuco University and from the viewpoint of improving the techniques of many Japanese settlers in Brazil.

2. Experts Dispatched to International Organizations

(1) Experts Dispatched to ECAFE

A total of 13 experts was newly sent to ECAFE in fiscal 1968; Mr. Susumu Maeda, an expert on harbor survey; to the steel division of the Asia Industrialization Development Conference, four experts on steel including Mr. Shintaro Tabata; to the Forestry Mission, Mr. Mutsumi Iwashita; to the Farm Machinery Mission, Mr. Keisaku Kobayashi; to the Asia Highway Bus Routes Project, five experts including Mr. Tomoyoshi Shirahata.

(A) Expert on Harbor Survey

Mr. Susumu Maeda, technical official of the Transport Ministry was assigned on this project, which was launched on the proposal made by the ECAFE secretariat at the 12th Inland Transport and Communication Committee held in 1964. Japan decided to cooperate in the project, since she had strongly demanded the improvement of harbor facilities in the ECAFE countries, mainly in connection with the rationalization of the problem of freight rates. In March 1968, Mr. Maeda returned home after finishing his term of one year and six months, and he participated in the harbor seminar held in Singapore from October 7 to 16, 1968. It may be added that Japan, Britain, the Netherlands and ILO cooperated in the project.

(B) Experts on Steel, Forestry and Farm Machinery Dispatched to Asian Industries Development Council (AIDC)

On the recommendation of the 37th session of the United Nations Economic and Social Council, ECAFE held the first session of AIDC in December 1965, with

the purpose of clarifying the problem of industrialization in countries within the region and other problems arising in connection therewith.

A resolution for holding regular sessions of AIDC every three years thereafter was adopted, and the AIDC was set up as the executive organ. In 1968, the third session of the Council took place in Bangkok. In cooperation with the industrialization program within the region of AIDC, the following experts were dispatched to the steel department:

- Mr. Shintaro Tabata
Executive Director, Japan Iron & Steel Association
- Mr. Okio Fujimoto
Kawasaki Steel Corporation
- Mr. Shuichi Takahisa
Yawata Iron & Steel Co., Ltd.
- Mr. Shuzo Morimoto
Fuji Iron & Steel Co., Ltd.

In addition to this cooperation with the steel department, Mr. Mutsumi Iwashita, Forestry Experiment Station of the Agriculture and Forestry Ministry, was sent to the Forestry Mission to conduct a survey of forestal resources within the region; and Mr. Keisaku Kobayashi of the Iseki Agricultural Machinery was assigned to the Agricultural Machinery Mission to conduct a survey on the utilization of farm machinery within the region and on the possible future demand thereof. Particularly, Mr. Kobayashi was highly evaluated for his meritorious service and is being requested as an expert on agricultural machinery. On the other hand, a project of operating high-speed international buses over a distance of 3,000 km along the A-1 route between Vientiane and Singapore is under study mainly by the International Construction Association. First of all, a five-man survey team headed by Mr. Yukei Shirahata, advisor to the Association, was sent to conduct a survey of the route, and their survey report was submitted to the ECAFE and the relevant quarters in Laos, Thailand, Malaysia and Singapore.

(2) Expert on Educational Assistance Dispatched to OECD and DAC

The Japanese Government, whose basic policy is to develop the interest of DAC in Asia and which had proposed the holding of a DAC conference on educational aid, decided to cooperate with DAC by sending an expert on the problem of educational aid to the DAC secretariat. Mr. Ikuo Arai of the Educational Research Institute, Ministry of Education, was dispatched to DAC secretariat for three months. On his way to Paris, he stopped over in the Philippines, Singapore, Thailand and India, where he studied the local education conditions and collected relevant data and information. The salient items of his duties in the DAC secretariat were to study and to do research on important problems relating to the development of education in Southeast Asia; that is, the planning of educa-

tion in relation to the socio-economic development of Southeast Asia, particularly employment and labor, and the reduction of illiteracy in rural districts. After returning home in May 1969, he submitted a report to DAC; and he is expected to participate in the conference which will reportedly take place in Tokyo. DAC secretariat has already completed research on the problem of educational aid to Africa in the past, and has reached the stage of extending such aid gradually, but holds that a beginning has just been made by its research on the problem of educational aid to Asia with the participation of Mr. Arai. The progress of its activity along this line is being watched with great expectations.

(3) Experts Dispatched to ADB

The international situation mainly in Southeast Asia in recent years has been proceeding along the line of regional economic co-operation with the inauguration of the Ministerial Conference for the Economic Development of Southeast Asia as a momentum. Particularly the Asian Development Bank may be said to be the most important, tangible outcome. The service of sending experts as rendered by OTCA for ADB provides men of talent. Also by bearing their air passenger fares, daily allowances and hotel bills at the time of dispatch of a survey team or a consultant, the OTCA cooperate in the services of ADB in areas such as (1) acceleration of development investment within the region, (2) development financing and (3) provision of technical assistance.

In fiscal 1968, OTCA sent six experts including Mr. Saburo Okita, Executive Director of the Japan Economic Research Center, to the Transport Survey Project within the region, Vientiane Plain Agricultural Development Project and Korean Agriculture and Fishery Development Project, while another service was rendered by providing one expert to the Republic of China Tuna Fishing Boats Project.

(A) Transport Survey Project within the Region

This project has been pushed with ADB as the focal point; a the projected survey provides the basis for joint development of transportation networks of Southeast Asian countries and is expected to facilitate generally the intra-regional economic development. The geographical coverage of the survey extends to Brunei, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam, and the Japanese Economic Research Center is in charge of the consultant service under a contract signed with ADB. OTCA, in the past, decided to cooperate positively in this project and sent out Mr. Saburo Okita, Executive Director of the Japan Economic Research Center, Mr. Hiroshi Matsumoto of the Japan Highway Public Corporation, Mr. Nagatoshi Suzuki of Institute of Developing Economies, and Mr. Tohachiro Konno, Professor of Hirosaki University, respectively, to conduct a survey on the transportation

conditions within the region, to attend the working Committee and to participate in the work at ADB.

(B) Vientiane Plains Agricultural Development Project

The Asian Development Bank decided to dispatch an Agricultural Programming Mission to Laos as part of the agricultural aid to Laos and sent Mr. Kazuma Nojima, Deputy Chief of the Konosu Agricultural Experiment Station, Agriculture and Forestry Ministry, as Crop Agronomist to the Mission.

This project is intended to develop the Vientiane Plains. ADB decided to extend technical assistance to it and in this connection requested NEDECO, a technical consultant company of the Netherlands, to conduct the survey. Mr. Nojima carried out a survey on crop agronomy in Laos in connection with the irrigation project in order to cooperate in the survey of NEDECO. After finishing the survey, he proceeded to NEDECO headquarters in the Netherlands to prepare a report. He completed and submitted his survey report to NEDECO before he returned home.

(C) Korean Fisheries Development Project

Mr. Shin-ichi Watari, professor of Nihon University (Agricultural and Veterinary Faculty), was assigned as a member of the technical assistance mission which was dispatched by the Asian Development Bank to the Korean Farm and Fishing Villages Development Corporation from February 1 to April 14. He gave guidance and advice to the corporation and the Korean Cold Storage Company whose capital is wholly invested by the Corporation to develop the field of cold chain system. ADB is reported to have decided on making a long-term loan of \$7 million to this project which intends to distribute frozen marine products of Korea through a network of refrigeration warehouses to be constructed in fishing centers and in Seoul, the capital of Korea.

(4) Southeast Asian Fisheries Development Centre

As a follow-up to the Ministerial Conference for Economic Development of Southeast Asia, an agreement for this Centre was signed in December 1967 and January 1968. The following experts were assigned, at the end of March for a term of three years, to the training department of this Centre in Thailand and to its research department in Singapore. This marked the initial step in the implementation of the agreement made at the Inaugural Meeting of the Council of the Southeast Asian Fisheries Development Centre held in Bangkok from March 18 to 21, 1969:

To the Training Department in Thailand:

Mr. Tomekichi Yamazaki
Chief of the Research Section for Fishing
Methods for Fishes and Shellfishes
Mr. Yasumasa Nishioka
Lecturer on Fishing
Mr. Kazuhiko Kitagawa
Lecturer on Navigation

Mr. Takashi Yamamoto
Lecturer on Machinery and Engines
Mr. Akira Wada
Lecturer on Communication

Mr. Takashi Ino, Deputy Chief of the Training Department, and Mr. Masatsune Nomura, member of the Department, had been assigned in the previous fiscal year.

To the Research Department in Singapore:

Mr. Kentaro Hamashima
Deputy Chief on the Research Department
Mr. Toshi Mito
Chief of the Resources Research Section

- (5) Experts on Science and Agricultural Education Dispatched under the Overseas Cooperation in Science and Agriculture Education
OTCA gives guidance, by demonstration, on the con-

tents and the method of guidance in science courses to teachers in charge of science education, physics and chemistry at the junior high level, as part of the technical cooperation for educational service in developing countries. For that purpose OTCA carried on the overseas cooperation service in science education, entrusted to it by the Ministry of Education as in the previous fiscal year. In the current fiscal year, it was decided to conduct agricultural education, in addition to science education. The results of the program for the current fiscal year are as follows:

In addition to the dispatch of experts, a total of 15 million yen or an average of 3 million yen worth of equipment, consisting of scientific teaching materials, audio-visual equipment, tools, glass ware, medicine and lockers, have been supplied in science education, while 6 million yen worth of farm machines have been supplied to experts in agricultural education.

Results of Dispatch of Experts on Science and Agricultural Education in Fiscal 1968

| Country where sent | Name of expert | Period of dispatch | Assigned to | Position at time of assignment | Last educational career |
|--|--------------------|-----------------------------------|--|--|---|
| Science education Republic of China | Shigeharu Funamoto | Dec. 21, 1968— June 20, 1969 | National Taiwan Teachers College | Assistant Professor at Kagoshima University | Graduated from Chemical Course of Hiroshima Literature Science University |
| Singapore | Kei Ino | Feb. 8, 1969— Aug. 7, 1969 | Science Teaching | Professor at Musashi University | Graduated from Engineering Department of Tokyo University |
| Thailand | Yoshimasa Sato | Dec. 12, 1968— June 11, 1968 | Samsen School | Assistant Professor at Tokyo Gakugei University | Graduated from Physical Department of Tokyo Literature Science University |
| Uganda | Takeo Yasuda | March 25, 1969— Sept. 24, 1969 | National Teachers College | Teacher at Junior High School attached to Tokyo Education University | Graduated from Science Department of Tokyo Education University |
| Agricultural education Iran | | March 31, 1969— Sept. 30, 1969 | Institute of Technology & Agricultural High School | Lecturer at Tokyo Agricultural & Engineering University | Graduated from Agricultural Department, Tokyo Agricultural & Engineering University |

Note: Agricultural education was newly started as of fiscal 1968. The expense for equipment was 6 million yen.

Section 3. Problems in the Service of Dispatching Experts and its Future Outlook

Since the inauguration of the service of dispatching experts in 1954, the number of experts dispatched under the bilateral scheme of the Colombo Plan, cooperation in science education and in international organizations has been increasing year by year, and as of March 31, 1969, the total number of experts reached 506.

The dispatch of these experts has had an extremely good effect on the economic and social development of the receiving countries and its development and expansion are being greatly anticipated. However, when we look back on this work during the past 15 years, we

cannot say positively that this work leaves nothing to be desired from the standpoint of qualitative improvement since greater emphasis had been attached to quantitative increase. Consequently, priority has been given specifically to qualitative improvement in various areas for the next two or three years, but many problems are still to be solved. We shall here present some recent improvements and touch on future problems.

1. Securing of Excellent Experts

It is being proverbially said that "technical cooperation is the right man." Whether or not we can secure excellent experts may be said to be the most important factor affecting the work of dispatching experts. It can

be recalled that last year's report by the chairman of DAC stressed this point and attached utmost importance, as a strategy of development assistance, to the provision of the ablest men from the advanced countries for technical cooperation, together with the relaxation of conditions for extension of aid. In this connection, of special note is the fact that the difficulty of securing experts is becoming increasingly acute as the dispatch of experts increase in quantity due to the recent expansion of the work and the boom in the business situation at home, causing a shortage in the number of technicians. To cope with these circumstances, there is urgent necessity to push forward more vigorously the improvement of various systems concerning the dispatch of experts which has already been partially effected; and thereby, to recruit experts positively. The sources of experts are extremely diversified: the national public service personnel, and members of local public entities, governmental organizations, non-official bodies, private enterprises and independent entrepreneurs. Apart from the relationship with the ministries and agencies, hardly any constant cooperation is being maintained with these sources of experts, but, in many cases, experts are recruited by requesting the respective bodies to select them each time a request for experts is received from the individual countries.

Consequently, in order to send out excellent experts in response to requests from individual countries, it is important, first of all, to maintain close contact with the relevant organizations which can provide these experts, to give them a better understanding of technical cooperation and, thereby, to be fully equipped with a set-up which can always secure cooperation. In this respect, it may be noted that in advanced countries like America and Britain, it is so arranged that the required experts can always be recruited by an agreement of business cooperation with government offices and universities of which such experts are members. For that purpose, it will be essential to solve the problem of position for the expert to be sent out from these bodies; consequently, the improvement of the relevant system should be a prerequisite. We shall deal with these systems below.

(1) Strengthening the System by Dispatching Experts Who Retain Their Present Posts—The Current State of Ministries and Future Strengthening

As for the problem of position for experts, it is most desirable that they should be dispatched, retaining their present posts. In the case of the national public service personnel representing nearly half the number of experts, most of them are sent out while retaining their present posts. However, the policy on the retention of experts in their present posts is not always fixed, varying with the ministries or agencies and sometimes they are suspended from office. Particularly, in cases when experts are sent for long terms, there are the problem of personnel policies within different ministries and

agencies and also that of recruiting successors to fill the vacancies. Therefore, the Ministry of Agriculture and Forestry and the Ministry of Construction have set up the system on overseas cooperation officer for experts to be sent and are thus managing their personnel problems, while other ministries have no such system. During this period, when the dispatch of members of the national public service personnel as experts is anticipated, the expansion of this overseas cooperation officer is desirable.

Although it may depend on the establishment of the Total Personnel Strength Law, it is considered more convenient and efficient to concentrate this system in the Prime Minister's Office or the National Personnel Authority than in the respective ministries or agencies, in view of the current situation under which the number of experts from ministries and agencies is not fixed.

(2) The System of Compensating the Pay to the Organization Dispatching Experts for Local Public Entities, Governmental Organizations and Private Organizations

As to the dispatch of experts from various organization, including local public entities and governmental organizations as sources of experts adapted to the needs of developing countries, the problem of how to deal with them in status and treatment is also a serious obstacle. In other words, these organizations have no express regulation requiring them to cooperate in the work of technical cooperation conducted by the state, and in many cases, we rely on the voluntary co-operation of such organizations for the dispatch of experts. Consequently, in regard to the status and treatment of experts during their dispatch, they are mostly suspended from office or in some cases they have to retire from office temporarily. Such experts cannot be content if they are treated unfavorably after they return home and if their annuities at the time of retirement is less than comparable incumbents. It is therefore necessary to remedy the problems of status and treatment. As one such measure, it is most desirable to make it possible for the expert to proceed to the overseas post while retaining his present position. Yet, in this case, his organization will have to pay the expert's salary etc. while he is serving overseas, and the disbursement of this personnel expense will be an item of the expenditure not connected with the proper work of his organization. Thus, a system will be required under which the OTCA compensates for the salary that his organization must pay him. Needless to say, the implementation of this system will presuppose the favorable measures to be taken by the organization sending out the expert in regard to his treatment in personnel and other matters. However, OTCA, for its part, intends to secure the required appropriation, as the first step.

(3) Temporary Staff System

Even after the aforesaid system of compensating for

the salary paid to the expert by his organization is settled and it becomes possible for him to retain his post, there is still the problem of filling the vacancy left by him. Especially in the case of the expert who is expected to be assigned to an overseas post for a long period of time, it may be impossible for him to retain his present post for a long period. In order to facilitate the assignment of the expert who cannot retain his present post, it is necessary to adopt the temporary staff system, as a remedial measure, by which the members of these organizations are dispatched after they are transferred to OTCA. Under this system, such officials are granted the basic pay, family allowance, special allowance and retirement allowance by OTCA during the term of transfer as temporary staff, while their retirement pay and annuity are computed for the total period, including the period, both prior and subsequent to the transfer. Also, their promotion and raise in salary are effected in the same way as in the service of their organization. Thus, they are in a much more advantageous position in status than if they were suspended from office or place on temporary retirement. Therefore, it will be easier for their organization to dispatch them as experts. Toward that end, it is necessary to adopt measures such as the revision of local regulations. It is desirable that relevant organizations support such a system positively.

(4) Adoption of Public Recruitment System and Strengthening of Registration of Experts

In parallel to the method of requesting the above-mentioned ministries and agencies as well as relevant organizations to select appropriate experts, OTCA has been operating the experts' registration system for applicants since fiscal 1967, and the number of persons who have registered as such have reached more than 600. From this, over 60 persons are being sent out as experts annually, but it can hardly be said that full advantage is being taken of the current system. It is therefore necessary to publicize this registration system extensively and also to operate and intensify the examination system and other methods on an organized scale. It may also be necessary, according to the content of request or type of business, to consider the system under which such persons are recruited publicly from the general public, and this system is useful in making the general public aware of the significance and substance of the work done by experts.

(5) Expansion of Experts Pooling System

A method which may be considered a step to secure excellent experts is the utilization of experts who have returned home after achieving brilliant results at the place of their assignments. The effectiveness of this method is expected not only to cover the difficulty of securing experts but to take advantage of the rich experiences that the expert gained at the place of his assignment. For that purpose, the experts' pooling sys-

tem was introduced in fiscal 1968. Under this system, the expert who is expected to be sent again is granted the pay of a special non-regular member pending the time of his reassignment and the expert has the chance to brush up on his technique during the period. However, under the system currently in force, the pooling period is short and whatever excellent ability the returned expert may have, he cannot enjoy the benefit of this system, unless a definite request is made and unless he is sure to be dispatched shortly. In view of these deficiencies, it is essential to replenish the system by lengthening the pooling period, and also by according a better treatment, so that it makes possible the fuller use of the returned experts.

2. Dispatch of Senior Experts

(1) Necessity of Dispatching Senior Experts

Requests for dispatch of experts from developing countries in the past several years have been undergoing qualitative changes along with quantitative increases. One of the most important changes may be the increase in the number of requests, in addition to those for dispatch of experts on research, survey guidance and extension work, for senior advisors who are required to prepare the policy for economic or technical development, to give advice on it and to assume charge of its implementation. This may be taken to indicate the fact that the achievement of Japan's technical cooperation over the past 15 years has won recognition in many of the developing countries, and this may also bespeak the improvement of her position among nations.

(2) Difficulty of Dispatching Senior Experts for a Long Period and the Payment of Remuneration

It is difficult to secure men of advanced knowledge, technique and experience under the current pay standard for experts. Moreover, the current pay standard for experts sent for a short period stipulates only the payment of personnel expenses, and undeniably is inadequate for dispatch of this type of experts. Incidentally, as compared with the overseas allowance by some of the developed countries, the average maximum amount in Japan is US\$799 as compared with US\$2,500 for the United States, US\$1,896 for Canada and US\$2,167 for the United Nations. While it may not be proper to form hasty judgment merely in terms of the amount of pay, it may at least be admitted that considerably more favorable treatment is being accorded to experts in such countries than in Japan. In this connection, the Canadian Development Bank pays this type of expert remuneration for special technique in addition to personnel expense, passage money, travel expense. The amount of this remuneration varies according to the occupational career, educational background, knowledge and experience of the expert, and it ranges from US\$700 to a maximum of US\$2,100 per month and

averages US\$1,300 per month (as to these figures, the amount of remuneration by OTCA to experts is referred to). In view also of the comparison with third countries and the Asian Development Bank, it is by all means necessary to pay this type of expert better remuneration when they are assigned to overseas posts.

3. Full Understanding and Follow-up Investigation of Experts Dispatched

Under the work of dispatching experts, as many as 1,506 persons have been sent out overseas since its inauguration. It would be necessary to inquire fully into its effective operation as well as its quantitative increase. In fiscal 1967, the operation of assessing the effectiveness of the technical cooperation service as a whole, including the work of dispatch of experts, was conducted. As a result, a report was that Japanese experts were generally achieving favorable results. It has to be remarked, however, that such results were mostly due to the steady, personal efforts, made day by day, by experts.

On the other hand, however, the work of dispatching experts should be effected by the government, or, further, OTCA uniting its efforts with experts. For that purpose, OTCA, which is the implementing body, must fully inquire into and grasp, first of all, the background of the request, the relationship of the dispatch of the expert to the economic development plan of the receiving country, the connection with aid by a third country as well as the content and scale of the request, the particular points desired by the government of the receiving country, the objective of the request, the actual conditions of the place of assignment and the receiving set-up. So far, much has been left to be desired in this respect, and the work of dispatch of experts has had to be effected before these factors were thoroughly studied and understood.

On the other hand, it is also essential to the experts, for the more effective operation of technical cooperation service to grasp precisely, on the spot, the conditions of activity and the problems in the adjustment of business with the receiving country and the reception set-up of the country where they are going. We need to inquire into the movement of the experts during their assignment overseas, to give advice to them and to investigate the place of their assignment. So we can give counsel to the experts when they request information about their daily life. In this respect, strong demands are being made by the individual experts and Japanese diplomatic and consular offices concerned.

When we are to render effective technical cooperation service without relying on the personal efforts of experts, it is of imperative necessity for the OTCA to bolster efforts on the spot. In view of the particular problem of administrating experts, it is strongly desired that investigations be made into the actual conditions of such experts.

4. Fuller Language Training and Preparatory Education for Assignment

It is necessary to conduct, on a fuller and systematic basis, language training and preparatory education for assignment. As is evident in the light of the results of the effectiveness assessment work, technical cooperation seminars etc., the weakest point of Japanese experts is linguistic ability. In order to make up for this deficiency, the current language training system will be strengthened. More specifically, it is essential to increase the teaching staff, assign well-qualified men, give further consideration to teaching materials and enforce the system of checking the results of language training on an organized scale.

As to the orientation in relation to the local conditions before the experts proceeds to his post, it is done as far as possible, but it can hardly be said that lecturers and teaching material are adequate. It is therefore desired that systematic measures, such as the compilation of and the preparation of teaching material for the preparatory education before assignment and the system of pooling the lecturing staff, be adopted.

5. Consolidation of the Structure of the Local Activity of Experts Being Assigned

In order to enable the task of the experts dispatched to be performed more smoothly and more effectively, it has been arranged for the accident compensation system to be introduced, the expense for local activity to be paid and medical supplies to be provided to the expert as from the current fiscal year. As regards the following problem, thorough consideration has to be given in the future as before.

(1) System of Granting Home Leave for Experts

At present, after two years experts are allowed to return home temporarily at public expense for business contact, brushing up technique and health control when their service term is not less than 3 years. It is necessary to consider the extension of this system to their family and it is also proper to consider their return home to attend meetings of their professional societies.

CHAPTER 3

EQUIPMENT SUPPLY PROJECT

Section 1. Outline of Equipment Supply Project

The equipment supply project for fiscal 1968, aiming for the efficient execution thereof by combining the services of experts with the equipment, included a supply of 20 items (including the earthquake measurement instruments to the Philippines), valued at 223,740,000 yen which were carefully selected out of the 45 items wanted by 20 countries in Southeast Asia, Near and Middle East and Latin America. These were furnished to 15 countries.

Supplied as follow-up measures to aid the dispatched experts were the following:

- 1) Light electrical materials to Singapore Institute of Technology.
- 2) Concrete work materials to the Cambodian Ministry of Agriculture.
- 3) Bamboo processing materials to the Training Centre of Home Industry in Tanzania.
- 4) Measurement instruments to Yabe Institute of Nigeria.
- 5) Agricultural machinery to the Ministry of Agriculture and Irrigation, Afganistan.
- 6) Water-supply materials to the Waterworks Bureau, Pnom-Penh, Cambodia.
- 7) Electro-spectro photometers to North Brazilian Agricultural Experiment Station.
- 8) Irrigation pumps and agricultural machinery to the Central Agricultural Pilot Farm, Ceylon.
- 9) Agriculture propagation materials to Bhutan.
- 10) Fishing nets, machines and tools to the Fishery Training Centre, Ceylon.
- 11) Research materials to Siliam Oil Refining Laboratory, Burma.
- 12) A teleprinter for 2 different languages to the Postal and Telecommunication Agency, Cambodia.

The following were supplied as follow-up measures to aid the returned trainees.

- 1) An earthquake measurement instrument to the Volcano Committee, the Philippines.
- 2) An electroplating equipment to the Industrial Teachers' College, Iran.
- 3) A wood-working machine to Eastern Philippine University, and a casting equipment to Philippine Technological University.

The following were supplied as follow-up measures to aid the Japan Overseas Cooperation Volunteers.

- 1) Vocational training materials to the Training Centre, Ministry of Youths' Culture and Sports, Malaysia.

- 2) Agricultural machinery to the Ministry of Agriculture, Kenya.

In addition to the above-listed items, audio-visual aids to Mining School, Congo and simultaneous interpretation equipment to Korea, to give aid to the holding of the 19th Meeting of Consultative Committee of the Colombo Plan.

Section 2. Examples of Equipment Supply

1. Experimental Instruments for Semi-conductors Supplied to Singapore

The Government of Singapore has adopted, as its most important policy, the policy of promoting industrialization, and, for this purpose, has enacted various laws and regulations. In 1958, the Government established the Singapore Institute of Technology for general technical education and instruction in science, technology, engineering and vocational education such as architecture and business account and requested Japan for a supply of the above-mentioned materials to improve and to intensify its functions. To meet this request, since 1961, Japan has accepted 16 trainees in the fields of broadcasting and TV and has dispatched 9 experts. She was rewarded with good results in this technical cooperation. Especially with respect to the said Institute, 3 experts have already been dispatched there, and at present, one expert on electronic engineering is currently active there. His achievements has been so highly evaluated that he was appointed as a director of the Institute in March 1968; and his period of stay was extended. The equipment requested for this period were experimental materials of semi-conductors which were to be used for re-training the students in the faculty of electrical engineering and the professors there, under the guidance of this expert.

2. Bamboo Processing Materials Supplied to Tanzania

Upon request from Tanzania, OTCA dispatched one expert on bamboo resources utilization, for a period of 6 months in December 1965. As a result of the investigation, he proved that the resources therein were suitable for industrialization and, at the same time, cooperated in establishing a bamboo processing section at the Cottage Industries Training Center which constitutes a part of the industrialization of the country. In 1966, bamboo processing materials, about 3,000,000 yen in value, were supplied and one trainee was accepted.

In June 1967, one expert on bamboo processing was dispatched and is now under service. This scheme of technical assistance, combining the supply of equipments along with services of experts in the field of bamboo processing has attained success, contributing greatly to the progress of small and medium industries therein. President Nierere and the Minister for Commerce and Industry have visited the Center and have paid tribute of praise to the cooperation from Japan.

3. Waterworks Maintenance Materials Supplied to Cambodia

The water service in Cambodia began in 1968. The capacity of water supply was 5,000 m³/day at the start, but has increased to 147,500 m³/day through the supply of services, materials and others under the economic and technical agreements between Japan and Cambodia. As a result of such improvements, 70 per cent of the population in Pnom-Penh, or more than 400 thousand inhabitants, enjoy the water supply. However, because of worn-out equipment, there often occur cracks in water pipes and leakages of water. Once such accident occurs, it takes much time for repairs due to lack of maneuverability, and the water supply is inevitably stopped. To cope with the situation, the Cambodian Government requested Japan for a supply of such items as service cars, water-quality test instruments and pipe cutters.

Experts on waterworks have been consecutively dispatched to the country since 1966, while the chief engineer of the Municipal Waterworks Bureau, Pnom-Penh, and one trainee were accepted for a period of 6 months in 1967 to receive training in waterworks maintenance and control.

4. Spectrophotometers Supplied to Brazil

The North Brazilian Agricultural Experiment Station, the Ministry of Agriculture, Brazil, is engaged in investigation and research of tropical agriculture in the northeastern part of Brazil and in the development of the Amazon River Area. Lacking instruments such as a spectrophotometer, the Station could not make delicate analysis of plants, soil and fertilizer and found it impossible to make a soil map which is a basic material for effective development in agriculture. Under such circumstances, the said request for supply was filled. The technical cooperation on agriculture with Brazil started when the Director of the above-mentioned station visited Japan in 1962 and recognized the high level-agricultural technology in Japan.

Since then, cooperation has been rendered continuously to the said Station by accepting trainees and by dispatching experts in the field of plantation and agricultural soil. An expert on agricultural soil is presently in service there. This cooperation will result in providing aid in farming to not less than ten thousand

Japanese emigrants. On this respect, this cooperation is significant.

5. Fishing Nets, Machines and Tools Supplied to Ceylon

In 1961, Japan established the Fisheries Training Centre for the purpose of developing the fishing industry in Ceylon, in accordance with the Agreement between the two Governments; and 8 experts on fishery and engineering were dispatched as the Centre personnel. After the termination of the said agreement in 1964, 3 more experts were sent in accordance with the Colombo Plan. They were in service there until 1967. The Centre was turned over to the Ceylonese Government in 1967. Recently they found it difficult to continue the training mainly because of the severe wear and tear and shortage of fishing nets, implements, machines and tools, supplied by Japan at the time of Centre opening. Accordingly, they requested for a supply of the materials concerned.

The graduate trainees of the Centre have reached 249 by June 1968, whereas the total of applicants were 3,500 a year against the quota of 40 in the field of fishery and engineering; and it was impossible to satisfy all the requests. The Ceylonese Government places so much emphasis on the training of the beginner engineers that they formulated a plan to increase trainees from 40 to 100 and to expand the buildings and site with an appropriation for 1969, providing the Center with an elementary technical school equipped with facilities for training and research.

6. Earthquake Measurement Instruments Supplied to the Philippines

There are 15 volcanoes over the territory of the Philippines. Their activities are quite threatening and Mt. Taar and Mt. Mayon on Luzon Island are quite famous for the fumes they spew into the air. The tragedy caused by the eruption of Mt. Taar, is still quite new in our memory. The Philippine Government has long requested Japan for a supply of earthquake measurement instruments in consideration of her past experience. This resulted in a supply by Japan of the above mentioned instruments after another request was made by the Philippine Government following the earthquake which struck Manila City. The above instruments are to be operated and maintained by 21 trainees in the earthquake-prone areas of the Philippines. These men have received training at the Earthquake Research Institute of Tokyo University and another organization in Japan. This kind of supply is a good example of follow-up activities with returned trainees.

7. Vocational Training Materials Supplied to Malaysia

The Training Centre of the Malaysian National Youth Pioneers Corps, established in 1966, belongs to the Ministry of the Youths' Culture and Sports as a

training organization for young leaders who will become the cadre of Malaysian economic development and provides 2 months' basic technical training to the elite youth from various States in the country. After the completion of basic training, they receive training as leaders and technical training in the fields of electricity (TV and radio), agriculture (rice crop and horticulture), automobile repairing, furniture production and others. However, the shortage in training materials have been excessive and has caused inefficiency in the training at the Centre. 5 members of the Japan Overseas Cooperation Volunteers are giving technical training in the fields of TV, automobile repairing, agriculture, bamboo processing and physical training, at this Centre and have won high appraisal in Malaysia. The supplied materials were quite meaningful as a follow-up to the service provided by members of the JYOV and have greatly contributed to the training of Malaysian engineers.

8. Simultaneous Interpretation Equipment Supplied to Korea

Simultaneous interpretation equipment was requested by the Korean Government for the 19th Meeting of the Colombo Plan Consultative Committee, stating that it was indispensable for the holding of the Conference in Seoul in 1968.

The assisting countries under the Colombo Plan such as the UK, the USA, Australia and Canada willingly cooperate with the request of the Korean Government: Australia sent 20 automobiles, while the UK and Canada sent interpreters and typists. Japan agreed to supply interpretation equipment.

As for Japan, she had performed such technical cooperation as receiving 702 trainees, dispatching 37 experts for investigation, development and establishment of an industrial training centre. The supply of the simultaneous interpretation equipment played a vital role in making the Conference a success. This served to increase the effect of Japan's cooperation with Korea and also showed the high standard of Japanese techniques in the field of electronics.

Section 3. Problems on Supply of Equipment Furnished and Its Future Prospects

The supply of equipment is intended to furnish necessary materials and to provide technical cooperation in cases where the developing countries can not fully develop, convey, propagate, educate or train the specific techniques and knowledge because they lack or cannot afford the necessary materials to put into practical use the knowledge they have acquired for implementing development.

Among the most effective measures in the said supply of equipment is the policy of combining the supply

of equipment with the services of experts, indicating that there are shortages of engineers who can fully utilize the materials in the developing countries. This way of combining the experts with materials is, in our opinion, the most effective way of performing technical cooperation at present.

1. Supply of Equipment in Combination with Experts

In supplying equipment, we have chosen the programs putting emphasis on the combination of "experts with equipment" as a most effective means of executing supply.

To state it more concretely, in the case of dispatched experts and the Japan Overseas Cooperation Volunteers, the materials are supplied in order that technical training and propagation, survey and instruction can be done effectively, and that the counterparts to these experts can be trained to raise their technical level. As for returned trainees, the materials are supplied when deemed necessary in order that these trainees can develop further the techniques they have acquired and also to further the promotion of activities of the organizations to which these trainees belong. The supply falling under this category has shown steady increases recently.

In spite of the fact that the supply of materials combining "experts with equipment" is effective from the viewpoint of our side, there remains the question of how our supply is meeting the needs of the recipients and whether we are really supplying that they need most. Furthermore, we must also take notice of the various stages of development among developing countries. For instance, India has already been able to afford substantial sources for supplying technical personnel; while in such advanced developing country as the Republic of China, there is an emerging group of technical personnel who are able to handle, maintain and manage the equipment supplied. These countries are apt to request Japan only for the supply of equipment they cannot produce. To meet these varying factors, there should be various alternatives in the manner of supplying equipment; i.e. we should not take as an absolute condition that these countries should have returned trainees or should receive experts from Japan in order to get a supply of equipment. It may well be that the supply of equipment only will be welcomed by the receiving countries.

We already have four years' experience in the supply of equipment since April, 1964, with a record of 81 cases of supply to the countries in Southeast Asia, Near and Middle East, Africa and Latin America, totalling 281,539,000 yen. Although a good achievement has been made, we cannot neglect the difficulties lying therein.

The following are the problems, solutions and future prospects of this project, based on the results of work done last February to examine the effects of equipments supplied.