No. 74

航空管制セミナー

SEMINAR ON AIR TRAFFIC CONTROL

1. PURPOSE

The purpose of this seminar is to provide participants with an understanding of overall civil aviation activities in Japan, which include current organization, ATC, ATS-related matters, planning/ policy etc., thus giving them broader views to work out their own future plans and policies.

2. DURATION

From October 12, 1993 to November 26, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese systems.

The following is the subjects to be covered in the seminar, and it does not include any on-the-job training on ATC or training using simulator for ratings.

1) civil aviation and transportation
2) air traffic services at present and in future
3) air traffic control services

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) currently employed by their government or by public authorities
3) engaged in managerial activities of Air Traffic Control and have occupational experience of not less than three years in the field of air traffic control, or be engaged in administrative work in the field of Air Traffic Services together with previous occupational experience in air traffic services
4) under 45 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Civil Aviation Bureau, Ministry of Transport
3) Air Traffic Control Association, Japan

7. REMARKS

This seminar is not formulated to provide participants with ATC on-the-job training/training using simulator for ratings.

No. 75 都市交通セミナー

URBAN TRANSPORT SEMINAR

1. PURPOSE

The purpose of the seminar is to give knowledge of urban transport, especially mass transit system and opportunities to exchange views for the development of urban transport planning towards those who will follow in urban transport planning in future.

2. DURATION

From May 13, 1993 to July 3, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese systems and experience.

The main themes to be covered are:

1) urban transport policies and modern techniques in mass transit systems
2) problems of urban transport sector
3) framework of development study on better urban transport system in participating countries

5. QUALIFICATION OF APPLICANT

1) person with more than three years experience in the field of transport who will be engaged in urban transport planning in future
2) under 30 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Second International Cooperation Division, Transportation Policy Bureau, Ministry of Transport
3) Japan Transport Consultants Association (JTCA)

7. REMARKS

No. 76 総合都市交通施設計画

COMPREHENSIVE URBAN TRANSPORTATION PLANNING

1. PURPOSE

The purpose of the course is to provide participants with the knowledge of principle and the method of techniques on urban transportation planning in general through lectures, discussions and field studies such as planning principles of urban transportation, land use planning, transportation characteristics, systems of urban transportation survey, etc.

2. DURATION

From September 28, 1993 to December 1, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, discussions and observation trips.

1) urban transportation problems
2) planning principle of comprehensive urban transportation
3) methodology and planning techniques necessary for the draft of comprehensive urban transportation planning
4) methodology of evaluation necessary for the implementation of the project

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with occupational experience of more than three years
2) under 35 years of age
3) presently engaged in the fields of survey, planning, management and administration on urban transport

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) City Bureau, Ministry of Construction
3) Japan Association and other institutions of Steel Bridge Construction

7. REMARKS

Country Reports will be highly utilized both for the selection of participants and for the country report presentation.

SEISMOLOGY AND EARTHQUAKE ENGINEERING II

1. PURPOSE

The purpose of the course is to contribute the upgrading the knowledge and techniques of the participants in the field of seismology and earthquake engineering through lectures (including colloquiums, exercises, practical training, observation tours) and individual studies, so as to nurture researchers and engineers capable of playing an important role in these fields.

2. DURATION

From September 6, 1993 to July 30, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Participants will be divided into two groups: (1) Seismology and (2) Earthquake Engineering by their request on application. This course consists of common subjects for all participants, individual subjects for each of the group, and individual training at laboratory. The outline of the subjects on the training course are as follows.

1) Both Groups:
   General Seismology and Earthquake Engineering, Strong Ground Motion, Mathematics, Basic Programming of Computer, etc.
2) Seismology Group:
   Computer, Elasticity, Data Processing, Seismic Surface Waves, Interpretation of Seismograms, Seismicity and Plate Tectonics, Study Trip, Individual Study, etc.
3) Earthquake Engineering Group:
   Soil Mechanics and Dynamics, Structural Analysis and Dynamics, Earthquake Resistant Design of Building Structure, Study Trip, Individual Study, etc.

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with professional experience of more than five years
2) well versed in basic mathematics such as differentiation and integration
3) over 25 and under 35 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) International Institute of Seismology and Earthquake Engineering (IISEE),
   Building Research Institute, Ministry of Construction

7. REMARKS

1) Those participants who have passed the examination on more than five subjects and submitted their individual study report will be granted a Diploma of IISEE.

SEMINAR ON SEISMOLOGY AND EARTHQUAKE ENGINEERING

1. PURPOSE

The purpose of this seminar is to renew the knowledge and expertise of engineers and seismologist who have previously participated in "The Group Training Course in Seismology and Earthquake Engineering" in International Institute of Seismology and Earthquake Engineering, or an equivalent course, by introducing up-to-date and advanced knowledge on earthquake disaster prevention technology in Japan and other countries.

2. DURATION

(not conducted this year)

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on report presentation and discussion by participants.

The main themes are;

1) earthquake disaster prevention
2) restoration technology

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with professional experience in the field of earthquake engineering for more than ten years, and preferably be engaged in a job suitable to the aim of this seminar
2) over 35 and under 55 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) International Institute of Seismology and Earthquake Engineering (IISEE), Building Research Institute, Ministry of Construction

7. REMARKS

This course is conducted every other year in principle.
This year (in Japanese fiscal 1993) it will not be conducted; it is planned to be conducted in Japanese fiscal 1995.

No. 78 気象学 II

METEOROLOGY II

1. PURPOSE

The purpose of this course is to provide participants with general and practical fundamentals applicable to various areas of operational meteorological services, through lectures, exercises, study tours and technical visits thus motivating participants to improve the technical standards applicable to meteorological services. This is a revised version of the group training course in "Meteorology", after its completion in response to the continuous needs for this kind of training course.

2. DURATION

From August 19, 1993 to December 23, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course mainly consists of lectures with appropriate exercises and study visits.

The themes of lecture/exercises are;

1) theoretical basics and technologies for operational meteorological services
2) personal computers in meteorological services
3) meteorological satellite data
4) short, medium and long range forecasting methods including numerical weather prediction
5) selected topics from research activities at Japan Meteorological Agency

5. QUALIFICATION OF APPLICANT

1) presently engaged in meteorological observation of forecasting for their governments or government-related public organizations
2) university graduate or equivalent (WMO Classes I and II) with more than three years of occupational experience in the field of operational/practical meteorological services
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japan Meteorological Agency (JMA)
3) Meteorological Research Institute of JMA
4) Meteorological Satellite Centre of JMA
5) Meteorological College of JMA

7. REMARKS

No. 79 防災科学技術

SCIENCE AND TECHNOLOGY FOR DISASTER PREVENTION

1. PURPOSE

The course is designed to introduce beneficial knowledge of disaster prevention through case studies of Japanese experience and to upgrade administrative skills of personnel who are currently engaged in disaster prevention activities. As natural phenomena and disasters have many different aspects, this course is also aiming at exchange views of each participants.

2. DURATION

From September 6, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of comprehensive knowledge and technologies on disaster prevention including Japanese experience through lectures, practice and field trips.

The main themes are:

1) disaster caused by hydrologic, meteorological and oceanographical events
2) earthquake prediction and hazard mitigation
3) landslide prediction and volcanic eruption
4) basic theory of remote sensing technology on disaster prevention

5. QUALIFICATION OF APPLICANT

1) scientist or engineer in the field of science and technology for natural disaster prevention
2) have more than seven years experience in the field of research or technical application for natural disaster prevention
3) university graduate from the field of science, engineering and other relevant fields or the equivalent with a fundamental knowledge of science and technology
4) under 40 years or age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) National Research Institute for Earth Science and Disaster Prevention (NIED)

7. REMARKS

No. 80 火山学・火山砂防工学

VOLCANOLOGY AND VOLCANIC SABO ENGINEERING

1. PURPOSE

The purpose of the course is to introduce participants to basic and modern concepts of volcanology and mitigation of volcanic disasters through lectures, exercises and field studies. For this purpose, the first half of the course is allotted to the Common course and the second half is divided into two topics: volcanology and Volcanic Sabo Engineering (volcanic disaster prevention engineering).

2. DURATION

From March 22, 1994 to September 18, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of three parts;

1) common subjects for all participants
2) training for sub-groups
3) individual training at university/research institute/technical center

For the second part, participants will be divided into the following two groups.

1) Volcanology
   a. up-to-date physical and geological concept of volcanism
   b. theory of seismology, geodesy, geomagnetism, geothermy and geochemistry with the aid of exercises
   c. methods of volcano monitoring, data analysis and interpretation emphasizing eruption forecasting
2) Volcanic Sabo Engineering
   a. basic theories necessary for study and planning of erosion and sediment control engineering
   b. mechanism and structure of debrismud flows
   c. engineering technology and administrative countermeasures against volcanic disaster

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) not more than 35 years of age
3) presently engaged in the Volcanic Observation and/or the Disaster Prevention (Sabo works) and be scheduled to engage in the same after completion of the course

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Department of Erosion and Sediment Control, Ministry of Construction
3) Japan SABO Association

7. REMARKS

1) Country Reports will be highly utilized both for the selection of participants and for the country report presentation.
2) All the participants of this course are requested to bring Volcanological or Volcanic Sabo Engineering data necessary for the theme of studies during their individual programmes.

INFRASTRUCTURE

社 会 基 盤

No. 81 橋梁工学 II

BRIDGE ENGINEERING II

1. PURPOSE

The purpose of the course is to provide opportunities to learn the general techniques of bridge engineering used in Japan (including planning, design and construction of bridges) to the participants so that the participants would be able to improve the technology in bridge engineering and to contribute to the development of their countries.

2. DURATION

From August 12, 1993 to October 28, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, discussions and observation trips.

1) roads and bridges in Japan
2) design and construction of substructures
3) design and construction of concrete bridges
4) fundamental bridge design theory
5) design and construction of steel bridges
6) maintenance and repair of bridges

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with occupational experience of more than three years
2) presently engaged in bridge and highway construction
3) not more than 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Road Bureau, Ministry of Construction
3) Japan Association of Steel Bridge Construction

7. REMARKS

Country Reports will be highly utilized both for the selection of participants and for the country report presentation.

CONSTRUCTION ENGINEERING II (CIVIL WORKS)

1. PURPOSE

The aims of the course are to help the senior administrative engineers of governmental organizations to have broader views on construction engineering by introducing the latest techniques and information related to construction engineering, thus to contribute to the development of human resources in this field of developing countries.

2. DURATION

From August 5, 1993 to November 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures and observations.

The main themes are:

1) general information on public works in Japan and overseas construction
2) fundamental studies
   - geotechnical engineering, concrete, asphalt, steel and new materials, introduction of construction machinery, etc.
3) execution planning and management
   - work planning, process planning, introduction to contraction management, machinery control, safety control, counter measures for environmental protection, cast estimation, geotechnical analysis, etc.
4) construction techniques
   - earthwork, concrete work, shield work, paving work, improvement work, foundation work, tunnel construction, bridge construction (steel and concrete), road maintenance work, dam construction, Sabo work, etc.

5. QUALIFICATION OF APPLICANT

1) university / college graduate in civil engineering or equivalent
2) under 40 years of age
3) more than five years experience in planning, design, execution and project management at civil works

6. TRAINING INSTITUTIONS

1) Osaka International Training Centre (OITC), JICA
2) Ministry of Construction
3) Faculty at Engineering, Kyoto University

7. REMARKS

A compulsory intensive Japanese language course sill be conducted prior to the technical training for two weeks.

No. 83 建設施工管理者

CONSTRUCTION PROJECT MANAGER

1. PURPOSE

The purpose of this course is to help senior administrative engineers of public corporations, and private enterprises to master comprehensive techniques, practical knowledge and application techniques in project planning, construction management, and quality control with a view to upgrading the ability of leading construction managers in developing countries, thus contributing to the qualitative improvement of construction technology and civil works in their respective countries.

2. DURATION

From September 30, 1993 to December 15, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course will be conducted in the form of lectures, observations of construction sites, case studies, group work, discussions, and practical training, Emphasis will be put on case studies,

The main themes are:

1) management and system of construction project
2) construction planning
3) construction management
4) construction project management (group study)
   - Participants will be divided into two groups

5. QUALIFICATION OF APPLICANT

1) university graduate or those who have undergone higher education in the field of civil engineering or have equivalent educational qualifications
2) at least five years of experience as construction managers
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Osaka International Training Centre (OITC), JICA
2) Minister's Secretariat, Ministry of Construction
3) Planning Division, Kinki Regional Construction Bureau, Ministry of Construction
4) Japan Construction Training Center Foundation (JCTC)

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

No. 84 土質及び基礎工学

SOIL MECHANICS AND FOUNDATION ENGINEERING

1. PURPOSE

The purpose of this course is to introduce participants to new methods and knowledge concerning fundamental theory, applied technology, various structure designs, and evaluation methods in the field of soil mechanics and foundation engineering, which are essential for planning, implementation and management of public works and construction projects.

NOTE: This course is designed for researchers or senior officials engaged in soil mechanics and foundation engineering. It is not recommended for administrative staff who do not have a fundamental knowledge of soil mechanics and foundation engineering.

2. DURATION

From October 14, 1993 to December 10, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, discussions and observation trips.

1) geotechnical engineering in general
2) earth structures
3) laboratory soil testing
4) soil exploration
5) soil improvement
6) foundation of structures
7) evaluation of design

5. QUALIFICATION OF APPLICANT

1) researcher or senior official in charge of geotechnical construction, administration or geotechnical construction projects, and have more than eight years of practical experience in central or local government, or government related organization
2) under 45 years of age
3) university graduate or equivalent, and have knowledge of soil mechanics and foundation engineering

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) International Affairs Division, Economic Affairs Bureau, Ministry of Construction
3) Japanese Society of Soil Mechanics and Foundation Engineering (JSSMFE)

7. REMARKS

Country Reports will be highly utilized both for the selection of participants and for the country report presentation.

No. 85 国土開発セミナー

REGIONAL DEVELOPMENT PLANNING SEMINAR

1. PURPOSE

The purpose of the course is to provide the participants with the latest theoretical and practical knowledge of regional development planning through lectures, discussions and observation trips, thereby contributing to regional development in the participating countries.

2. DURATION

From October 5, 1993 to November 18, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese experience and discussions based on report presentation by participants. The seminar deals with planning, policy formulation and implementation of regional development.

The major subjects are;

a) outline of regional development planning
b) specific study for regional development planning
c) case studies
d) discussions based on country reports and study reports

5. QUALIFICATION OF APPLICANT

1) engaged in the planning or implementation of national or regional development projects and policies
2) university graduate or equivalent
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) National Land Agency

7. REMARKS

No. 86 防災行政管理者セミナー

SEMINAR ON ADMINISTRATION FOR DISASTER PREVENTION

1. PURPOSE

The purpose of the seminar is to:

1) provide the latest administrative knowledge of disaster prevention as a total system of prediction, evacuation, recovery and disaster reduction.
2) show the variety of the activities and organizations involved in disaster prevention administration, give a brief outline of the individual activities and demonstrate how these are organized in the Japanese disaster prevention administrative system.
3) exchange ideas and experiences concerning natural disaster prevention, and to discuss international cooperation for natural disaster reduction.

2. DURATION

From May 18, 1993 to June 13, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of basic theory and exchange of ideas and experiences. The main themes are;

1) policy formation, enforcement and implementation of disaster countermeasures in developing countries
2) international cooperation for natural disaster prevention and reduction

5. QUALIFICATION OF APPLICANT

1) presently engaged in government agencies responsible for disaster prevention
2) not more than 45 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Disaster Prevention Bureau, National Land Agency

7. REMARKS

No. 87

河川及びダム工学 II

RIVER AND DAM ENGINEERING II

1. PURPOSE

The course is designated to introduce recent technology and knowledge in the field of river and dam engineering to participants engaged in flood control or water resources development projects.

2. DURATION

From August 23, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11), (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Participants will be devided into two groups, namely River Group and Dam Group. This course consists of common subjects for all participants and individual subjects and training for each of the group. River Group will learn the techniques of river planning and design of river facilities, and Dam Group the techniques of planning, design, construction, operation and maintenance of dams.

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with basic knowledge in civil engineering
2) occupational experience of more than five years in the field of execution of flood control works or water resources developments projects
3) under 35 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) Ministry of Construction

7. REMARKS

1) A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

CITY PLANNING II

1. PURPOSE

The purpose of this course is to introduce city planners who are directly engaged in city planning to fundamental knowledge and technique of city planning experienced in Japan. These include information on the city planning systems, urban development works and the direction of future policy in Japan, which are useful for comparative studies.

The participants will also be suggested to find a way how to deal with the problems of their own towns and cities by exchanging their views and experiences on the occasion of presentation of the Country Report prepared by participants.

2. DURATION

From August 19, 1993 to October 21, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese systems and situations as follows:

1) city planning methods and urban development projects
2) planning and provision of urban transport
3) present housing situation
4) environmental aspects of urban development and urban transport
5) "Kukaku-Seiri" (Japanese method of urban land readjustment) applicable both to built-up and suburban areas
6) social, economic and institutional aspects of city planning

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with occupational experience of more than three years
2) presently engaged in city planning
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) City Bureau, Ministry of Construction

7. REMARKS

No. 89

都市整備

URBAN DEVELOPMENT

1. PURPOSE

The purpose of the course is to introduce the participants from developing countries through lectures and observations to land readjustment methods and projects carried out in Japan with specific objectives and their background; at the same time, provide the participants with opportunities to exchange views on urban development, so as to contribute to the acquisition of practical knowledge for their purposes.

2. DURATION

From May 18, 1993 to July 11, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered through lectures, discussions, practices and observation trips.

1) Japanese systems and methods of Kukaku-Seiri (Japanese method of urban land readjustment) applicable both to build-up and suburban areas
2) Japanese systems and methods of new town development
3) Japanese systems and methods of urban renewal
4) social background and problems which lead to the above-mentioned urban development activities
5) policies and methods of urban development in each participating country

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with occupational experience of more than three years
2) under 40 years of age
3) presently engaged in planning and/or implementation of urban development and redevelopment

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Land Readjustment Division, City Bureau, Ministry of Construction

7. REMARKS

Country Reports will be highly utilized both for the selection of participants and for the country report presentation.

HOUSING

1. PURPOSE

The purpose of the course is to provide the participants with examples and experiences from Japanese housing policies and administration in order for them to contribute to the betterment of human living conditions in their countries.

2. DURATION

From October 14, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course mainly consists of lectures, discussions, and observation, to cover the following themes.

1) outline of housing policies in Japan
2) general knowledge of housing administration, such as knowledge related to financial systems, new town development and urban renewal plans

5. QUALIFICATION OF APPLICANT

1) mid-career official in charge or expected to take charge of housing policy at the central or local government level or at a related governmental organization
2) university graduate or equivalent
3) between 30 and 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Housing Policy Division, Housing Bureau, Ministry of Construction
3) Building Center of Japan (BCJ)

7. REMARKS

No. 91 住宅・住環境改善セミナー

SEMINAR ON IMPROVEMENT OF HOUSING AND LIVING ENVIRONMENT

1. PURPOSE

The purpose of the course is to provide knowledge that will enable the participants to contribute to the planning and management of housing and living environment projects in their own countries through providing better understanding of the Japanese system for housing and living environment projects as well as actual problem-solving measures that can be utilized.

2. DURATION

From January 27, 1994 to February 27, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar is heavily discussion-oriented. Study report making and presentations by each participant is also a major part of the seminar.

The themes to be covered are;

1) problems and countermeasures in developing countries
2) ways to manage housing and living environment projects
3) necessary knowledge for policy formulation

5. QUALIFICATION OF APPLICANT

1) experienced official in charge of executing various developmental projects on housing and living environments at the central or local government level, or at a related governmental organization, and person of being expected to play a leading role in the said field
2) between 30 and 45 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Housing Policy Division, Housing bureau, Ministry of Construction
3) Building Center of Japan

7. REMARKS

BUILDING ENGINEERING

1. PURPOSE

The purposes of the course is to provide the participants with the latest information and knowledge concerning Japanese architectures and building technology so that the participants would be able to play a greater role for further progress and advancement of architectures and building technology in their respective countries.

2. DURATION

From April 6, 1993 to June 3, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures (regulation and standard, and building technology in Japan) and visits to related organizations.

Through these, the following themes are covered.

1) Japanese architectures and building technologies including the social and economic background
2) cross-cultural perspective of architectures and building technologies
3) appropriate mode of building technologies in each participating country

5. QUALIFICATION OF APPLICANT

1) official of the government or related governmental organization and expected to have leading position in building construction field
2) under 40 years of age
3) university graduate or equivalent with occupational experience of more than five years and with the general knowledge in the broad field of building engineering such as building administration, building designing and structural engineering

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Building Centre of Japan (BCJ)
3) Housing Bureau, Ministry of Construction

7. REMARKS

This course is conducted every other year in principle. This year (in Japanese fiscal 1993), it will be conducted.

No. 93 建設工事先進技術

ADVANCED TECHNOLOGY OF CONSTRUCTION

1. PURPOSE

The purpose of the course is to provide participants with the latest work methods, new materials and inspection methods so that the participants would be able to contribute to the improvement of construction work in their respective countries.

2. DURATION

From May 6, 1993 to June 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course will not cover the field of construction.

It covers the following major subjects:

1) outline of advanced construction technology
2) advanced work methods in civil engineering work
3) application of new material
4) advanced inspection method

5. QUALIFICATION OF APPLICANT

1) university graduate of civil engineering or related courses, or equivalent
2) have more than seven years of actual experience in construction works
3) not more than 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Minister's Secretariat, Ministry of Construction
3) Japan Construction Training Centre (JCTC)

7. REMARKS

This course is conducted every other year in principle. This year (in Japanese fiscal 1993), it will be conducted.

SURVEY AND MAPPING II

1. PURPOSE

This course is designed to contribute to upgrading the knowledge and skills of the participants in the field of surveying and mapping so as to train them capable of playing important roles in nationwide surveying and mapping projects, of conducting quality control and process control, and of applying advanced technologies in surveying and map making process.

2. DURATION

From August 16, 1993 to July 22, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of comprehensive knowledge and techniques in the whole process of surveying and map making including GPS, VLBI, GIS and remote sensing, etc. through lectures, practice and field trips.

It mainly covers;

1) survey planning
2) geodetic survey
3) cadastral survey
4) photogrammetry
5) map compliation
6) printing
7) geographical information systems

5. QUALIFICATION OF APPLICANT

1) surveyor presently in charge of surveying or mapping with more than three years of experience in this field
2) university graduate or equivalent
3) over 25 and under 35 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) Geographical Survey Institute (GSI)

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 95 水路測量（国際認定 B 級）

HYDROGRAPHIC SURVEY (INTERNATIONAL ACCREDITED CATEGORY B COURSE)

1. PURPOSE

The course is designed to upgrade knowledge of modern theory and technique of hydrographic survey for personnel engaged in the field of nautical charting and port and near shore surveys at the Category B level of the International Standards of Competence for Hydrographic Surveyors.

2. DURATION

From April 13, 1993 to November 14, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum of this course is strictly complying with the requirements under the International Standards of Competence of Hydrographic Surveyors, 6th edition, 1991.

The following are the major subjects to be covered in the course.

1) lectures

computing, physics, hydrography (control and practice), environmental aspects, legal aspects, nautical science, nautical charting surveys, port and harbour surveys

2) practice

data processing of harbour and coastal surveys, computer programming, control surveys, astronomy, cartography

3) field training on board survey vessels

harbour and coastal surveys, automatic hydrographic data acquisition system, navigation, seamanship, submarine geology

5. QUALIFICATION OF APPLICANT

1) technical college graduate or equivalent with at least two years occupational experience in hydrographic services
2) have obtained credits for two years' course of mathematics and physics at least on the level of technical college or equivalent educational institution
3) presently employed at the national hydrographic office or other pertaining organization responsible for carrying out hydrographic surveys of sea areas
4) not more than 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Hydrographic Department, Maritime Safety Agency

7. REMARKS

At the completion of this course, participants will take an examination for the certificate of Category B Hydrographic Surveyor accredited by FIG/IHO International Advisory board. The certificate will not be awarded to the participant who has failed to cover necessary subjects of the course or who has failed to pass the examination.

PHYSICAL OCEANOGRAPHIC SURVEY

1. PURPOSE

The purpose of the course is to provide participants with a basic modern theoretical knowledge of oceanography as well as practical knowledge and techniques through lectures, practices, field training and observation and study tours.

2. DURATION

(not conducted this year)

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the following major subjects will be covered.

1) lectures/practice
   - offshore physical oceanography
   - thermometrical and oceanographic instruments
   - chemistry of sea water
   - marine pollution research
   - wind waves
   - tide and tidal current
   - international oceanographic data exchange system
   - electronic computer programming
2) field training on board survey vessels
   - offshore oceanographic observation on "Shoyo" (1,900 tons)
   - tide and tidal current observation on "Kaiyo" (310 tons)

5. QUALIFICATION OF APPLICANT

1) presently employed at a national hydrographic office or other related organization, and currently engaged in physical oceanographic surveys and research, such as offshore and coastal oceanographic observations, tide and tidal current observations, or oceanographic data processing, analysis and management
2) have basic qualifications or some experience in hydrography, oceanography, or a relevant discipline, and be preferably college graduates or the equivalent with some occupational experience in oceanographic survey and research
3) no more than 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Hydrographic Department, Maritime Safety Agency

7. REMARKS

This course is conducted alternately with the group training course in "Nautical Chart" in every other year. This year the course in "Nautical Chart" will be conducted while the course in "Physical Oceanographic Survey" will be conducted in Japanese fiscal 1994.

No. 96 海図作製

NAUTICAL CHARTING

1. PURPOSE

The purpose of the course is to provide participants with:

1) modern theory of nautical charting based on the format established by the International Hydrographic Organization
2) knowledge and technique in drawing thematic charts to be used for preservation of marine environment and utilization of the ocean

In addition, the participants will be trained to become familiar with computer mapping technology, because the information science is developing day by day and so are the needs for the computers.

2. DURATION

From November 11, 1993 to March 25, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum of the course comprises lectures and practices in classroom, field training using a ship, and observation and study tours.

The following subjects will be covered in the course.

1) Lecture
   (i) nautical charting
   (ii) geodesy
   (iii) general aspect of navigation
   (iv) introduction to computers
   (v) mapping CAD
2) Practice
   (i) nautical charting
   (ii) mapping CAD
3) Field training
   - navigation
     (aboard survey vessel Shoyo 1,900 T/T)
   - investigation at port

5. QUALIFICATION OF APPLICANT

1) presently employed at the national hydrographic office or otehr organizations which are engaged in carrying out hydrographic survey for safe navigation of ships, nautical charting and oceanographic survey for utilization of the ocean
2) not more than 35 years of age
3) junior college/special school graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Hydrographic Department, Marine Safety Agency

7. REMARKS

The course is conducted alternately with the group training course in "Physical Oceanographic Survey" in very other year. This year (in Japanese fiscal 1993) this course will be conducted.

POSTAL SERVICE, TELECOMMUNICATION AND BROADCASTING

通信・放送

No. 97 電波監視

RADIO FREQUENCY MONITORING

1. PURPOSE

The purpose of this training course is to:

1) provide a fundamental knowledge of radio frequency monitoring.
2) provide up-to-date knowledge and techniques for the use and maintenance of monitoring equipment which is already in practical use in Japan.

2. DURATION

From August 10, 1993 to October 2, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of basic theory of radio monitoring and the system and techniques in Japan.

The main themes of the course are;

1) management processes for better quality of radio monitoring
2) application of latest techniques

5. QUALIFICATION OF APPLICANT

1) person with practical experience in the field of radio regulatory administration (ratio frequency monitoring, frequency management, etc.)
2) under 40 years of age
3) college graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) International Cooperation Division, Ministry of Posts and Telecommunications

7. REMARKS

No. 98 郵便幹部セミナーII

POSTAL EXECUTIVES' SEMINAR II

1. PURPOSE

The purpose of this seminar are to provide the participants with the knowledge of current situations of postal services in Japan, and with opportunities to examine and exchange views on the problems common among the participating countries through lectures, discussions and observations.

2. DURATION

From February 24, 1994 to March 12, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese situations and exchange of views.

The main themes are;

1) present situations and problems of views of postal services in participating countries
2) development and better utilization of postal infrastructures
3) improvement of quality of postal services in rapidly changing socio-economic conditions
4) measures to cope with evolving needs from customers

5. QUALIFICATION OF APPLICANT

1) director general or equivalent high-ranking official in charge of postal administration in governmental organizations

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Postal Bureau, Ministry of Posts and Telecommunications

7. REMARKS

No. 99 為替貯金国際幹部セミナー

EXECUTIVE SEMINAR ON POSTAL BANKING SERVICES

1. PURPOSE

The purposes of the seminar are:

1) to seek solutions to common problems in the participating postal administrations or national savings organizations, after providing know-how on the Japanese Postal Banking Services and Japanese financial environmental through a series of lectures and technical visits.
2) to promote further mutual understanding and closer cooperation among all the participating countries and Japan in the field of postal banking services through discussions and presentations.

2. DURATION

From September 26, 1993 to October 10, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar covers the following topics.

1. general introduction of Japanese postal banking
   1) role, present conditions and issues facing of postal banking services
   2) "outline of the postal banking services in Japan" (video show)
   3) history, organization and personnel of postal banking service
2. management of Japanese postal banking
   1) products
   2) sales promotion activities
   3) fund management
   4) computerization
   5) international business
      (remittance, foreign currency exchange and T/C)
3. introduction of Japanese financial system
   financial deregulation and fiscal investment and loan programme
4. discussion
   present status of and problem facing savings institutions of developing countries

5. QUALIFICATION OF APPLICANT

1) director or high-ranking official of savings organizations (Postal Savings Organization or, National/ Government Savings Bank) or Postal Money Order and Postal Giro Organization

6. TRAINING INSTITUTIONS

1) Institute for International Cooperation (IFIC), JICA
2) Ministry of Posts and Telecommunications

7. REMARKS

INTERNATIONAL TELECOMMUNICATION SERVICES (ADMINISTRATION AND COMMERCIAL) II

1. PURPOSE

This course is designed to renew and upgrade participants' knowledge and skill in administration and management of international telecommunication services through the study of both conventional and the latest telecommunication technologies and various services.

2. DURATION

From May 11, 1993 to July 16, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum mainly features lectures upon a) various management & public relations activities, b) telecommunication systems and technologies, c) miscellaneous services and operations. Observation trips to relevant facilities are integrated to augment the programme. Participants are required to make a presentation on their future perspectives at the end of the course.

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with occupational experience of more than five years in the field of international telecommunication services
2) presently engaged in traffic and commercial work of international telephone services
3) under 45 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Kokusai Denshin Denwa Co., Ltd. (KDD)
3) KDD Engineering and Consulting Inc. (KEC)

7. REMARKS

No. 101 国際電話通信技術

INTERNATIONAL TELEPHONE COMMUNICATION ENGINEERING

1. PURPOSE

The purpose of the course is to introduce participants to the Digital Switching System technology in construction work, operation & maintenance, operation administration and drawing up specification which is necessary for the construction of International Telephone Switching Network.

2. DURATION

From January 11, 1994 to March 12, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The emphasis is placed on the planning aspects of international telephone network; namely planning of switching system, numbering plan, signalling system, network planning & management. Lectures on operation and maintenance of international telephone switching system are featured to broaden participants' perspective. Observation trips to relevant facilities are organized to augment the lectures.

5. QUALIFICATION OF APPLICANT

1) university graduate in telecommunications and/or electrical engineering or equivalent
2) have basic knowledge of switching system technology, and currently engaged in or expected to be engaged in the field of establishment and maintenance of international telephone switching network
3) under 45 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Kokusai Denshin Denwa Co., Ltd. (KDD)
3) KDD Engineering and Consulting Inc. (KEC)

7. REMARKS

No. 102 国際データ通信技術

INTERNATIONAL DATA COMMUNICATION ENGINEERING

1. PURPOSE

The purpose of this course is to introduce to participants the fundamental and up-to-date technology of international data communications such as data transmission, switching systems, communications protocols, terminal equipment, etc., through lectures as well as practice sessions at the Kokusai Denshin Denwa Co. Ltd. (KDD).

2. DURATION

From January 11, 1994 to March 12, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Major portion of the curriculum is allocated for lectures upon a) introduction to data communication, b) various data communication technologies, c) KDD services and d) new communication services. Field practice and observation trips to relevant facilities are organized to supplement the lectures. Participants are required to take exams at the beginning and the end of the course.

5. QUALIFICATION OF APPLICANT

1) university graduate specializing in telecommunications and/or electrical engineering or equivalent
2) have basic knowledge of computer hardware, software and currently engaged in or expected to be engaged in the planning or the policy making of international data communications engineering
3) have experience of less than three years in the field of Data Communications
4) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Kokusai Denshin Denwa Co., Ltd. (KDD)
3) KDD engineering and Consulting Inc. (KEC)

7. REMARKS

No. 103 データ通信技術

DATA COMMUNICATION ENGINEERING

1. PURPOSE

The purpose of the course is to provide data communication engineers working for telecommunication administrations or public telecommunications operating agencies in developing countries with a fundamental and practical knowledge of data communications engineering.

Participants will obtain a basic mastery of data communication systems, especially with regard to the construction, maintenance and operation of these systems.

2. DURATION

From January 6, 1994 to February 20, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of concepts and basic theories on the following subjects;

1) network architecture
2) data communication systems
   - information network
   - data transmission
   - transmission control procedures
3) transmission control systems
4) digital data exchange systems
   - switching process
   - hardware and software of D51 system
   - outline of digital data switching systems presently in use in the world

5. QUALIFICATION OF APPLICANT

1) presently engaged in data communication services
2) university graduate or equivalent
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Central Training Institute (CTI), Nippon Telegraph and Telephone Corporation (NTT)

7. REMARKS

No. 104 無線通信技術

RADIO COMMUNICATION ENGINEERING

1. PURPOSE

The purpose of the course is to introduce to participants the basic and practical knowledge on radio communication engineering.

2. DURATION

From May 10, 1993 to August 8, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course will be conducted in the form of lecture, discussion, practical exercises and observation tour.

The main themes are:

1) digital transmission technology
2) microwave communication system
3) optical fiber line technology
4) administration techniques

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent in telecommunication or electrical engineering
2) working for telecommunication administrations or common career organizations except broadcasting stations
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Nagoya International Training Centre (NITC), JICA
2) Suzuka Training Institute, NTT

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 105 衛星通信技術 II

SATELLITE COMMUNICATION ENGINEERING II

1. PURPOSE

The purpose of the course is to familiarize operation and maintenance engineers of earth station with the basic knowledge and the latest technology necessary for the smooth operation of INTELSAT satellite communication systems, and technology such as operation, maintenance, etc. of earth station.

2. DURATION

From May 11, 1993 to July 23, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum mainly consists of lectures upon a) outline of microwave communication technology, b) INTELSAT system, c) various satellite communication systems, d) facilities of satellite earth station, and e) operation and maintenance of earth station. Field practice at an earth station and observation trips to relevant facilities are organized to supplement the lectures.

Participants are required to take exams at the beginning and the end of the course.

5. QUALIFICATION OF APPLICANT

1) university graduate in telecommunications and/or electrical engineering or equivalent
2) have fundamental knowledge of microwave engineering such as microwave propagation, microwave elements and microwave communication system
3) have experience of not less than one year in the field of INTELSAT satellite communication service
4) currently engaged in the field of satellite communication service
5) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Kokusai Denshin Denwa Co., Ltd. (KDD)
3) KDD engineering and Consulting Inc. (KEC)

7. REMARKS

SATELLITE COMMUNICATION ENGINEERING (PLANNING AND MANAGEMENT) II

1. PURPOSE

The purpose of the course is to provide engineers who are in charge of planning and management related to satellite earth stations with the basic knowledge and the latest technology of the INTELSAT satellite communication system and the basic concepts used in planning and management of satellite earth stations.

2. DURATION

From August 31, 1993 to October 29, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Lectures are provided on such subjects as a) INTELSAT system, b) satellite communication and radiowave transmission, c) INTELSAT communication system and related technology, d) facilities of satellite earth station, and e) various management schemes.

Field practice at an earth station and observation trips to relevant facilities are scheduled to enhance the curriculum. Participants are required to take exams at the beginning and the end of the course.

5. QUALIFICATION OF APPLICANT

1) university graduate in telecommunications or electric/electronics engineering, or have completed JICA Group Training course in the Satellite Communication Engineering (Regular or II) and have had experience of not less than three years in the field of INTELSAT satellite communication service since then
2) in charge of planning and management in the field of satellite communication service or so scheduled
3) under 45 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Kokusai Denshin Denwa Co., Ltd. (KDD)
3) KDD engineering and Consulting Inc. (KEC)

7. REMARKS

This course is designed as an advanced course for Satellite Communication Engineering II course.

No. 107 ディジタル通信網計画設計

DIGITAL TELECOMMUNICATION NETWORK PLANNING AND DESIGNING

1. PURPOSE

The purpose of the course is to provide engineers in the field of telecommunications with practical knowledge and techniques on the outline of systems, fundamental network design, and network planning.

2. DURATION

From October 21, 1993 to December 19, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nineteen (19) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum comprises three major components; namely a) fundamental telecommunication network design, b) outline of various systems, and c) telecommunication network planning.

Case-study method is employed to obtain more concrete understanding of network planning. Observation Trips to relevant factories and telecommunication facilities are planned to augment the training.

5. QUALIFICATION OF APPLICANT

1) university /college graduate in telecommunication or electrical engineering, or equivalent
2) under 45 years of age
3) working in telecommunication common carrier organizations

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Central Training Institute (CTI), Nippon Telegraph and Telephone Corporation (NTT)

7. REMARKS

No. 108 通信線路技術指導者育成

TELECOMMUNICATION OUTSIDE PLANT ENGINEERING TECHNIQUE

1. PURPOSE

The principal purposes of this training course are:

1) to provide engineers with knowledge of telecommunication line engineering to improve their leadership
2) to enable participants to learn line techniques, line operation, maintenance systems as well as solving their problems
3) to promote international understanding through group activities and joining local communities

2. DURATION

From August 16, 1993 to December 16, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course is conducted in the form of lectures, discussions and practice, emphasizing on the job training. Also visits to related factories and industries are arranged.

The training subjects covered in the course are

1) basic knowledge on outside equipment
2) construction
3) maintenance management
4) design engineering
5) construction and maintenance of communication equipment and devices
6) basic knowledge on inside plant
7) safety and quality control

5. QUALIFICATION OF APPLICANT

1) be telecommunication engineer or supervisor
2) be university graduate or equivalent
3) have more than three years' practical experience in outside plant systems of telephone
4) be 35 years of age or less

6. TRAINING INSTITUTIONS

1) Kyushu International Centre (KIC), JICA
2) Kitakyushu Branch, Nippon Telegraph and Telephone corporation (NTT)

7. REMARKS

1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 75 hours.

No. 109 電気通信経営管理セミナー

SEMINAR ON TELECOMMUNICATION MANAGEMENT

1. PURPOSE

The purpose of this seminar is to provide the participants with the knowledge of telecommunications companies' methodology of administration, management and privatization of NTT to cope with problems in the field of management. And another purpose is to introduce participants the latest technology for the future planning of respective countries.

2. DURATION

From October 5, 1993 to October 26, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar covers the following topics.

1) management
2) planning
3) fund raising
4) equipment and material supply
5) training
6) marketing
7) privatization
8) overseas engineering cooperation
9) research and development
10) TQC

5. QUALIFICATION OF APPLICANT

1) manager or equivalent ranking staff belonging to telecommunications-conducting-body (organization)

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Nippon Telegraph and Telephone Corporation (NTT)

7. REMARKS

No. 110 電気通信幹部セミナーII

TELECOMMUNICATION EXECUTIVES' SEMINAR II

1. PURPOSE

This Seminar is designed to:

(1) promote more cooperative relationships in the field of telecommunications,
(2) familialize the participants with the current situation in telecommunications administration and in the telecommunications business,
(3) invite the participants to discuss improvement and expansion of telecommunications networks, which are crucial topics in every country.

2. DURATION

From September 15, 1993 to October 2, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this seminar, the emphasis is put on introduction of Japanese system and discussion by participants.

The main themes are;

1) present status of telecommunications
2) telecommunication administration
   - significance, new development and reinforcement
3) reform of telecommunication legal structure
4) new services
5) human resources development

5. QUALIFICATION OF APPLICANT

director general or equivalent high-ranking official responsible for management or administration of public telecommunications in governmental or operational organizations

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Telecommunication's Policy Bureau, Ministry of Posts and Telecommunications

7. REMARKS

No. 111 ディジタル交換技術

DIGITAL SWITCHING ENGINEERING

1. PURPOSE

The purpose of the course is to introduce the configuration, maintenance and a series of procedures from traffic forecasting to plant design of the digital switching systems.

2. DURATION

From June 3, 1993 to August 7, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on practical exercise on D70 digital switching system.

The course mainly covers;

1) switching process, hardware and software configuration
2) procedures from traffic forecasting to plant-design
3) outline of ISDN
4) maintenance and traffic management

5. QUALIFICATION OF APPLICANT

1) university graduate specializing in telecommunications and/or electrical engineering or equivalent
2) under 40 years of age
3) working for common career organizations with at least five years of practical experience on their own switching systems

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Central Training Institute (CTI), Nippon Telegraph and Telephone Corporation (NTT)

7. REMARKS

No. 112 ディジタル伝送技術

DIGITAL TRANSMISSION SYSTEMS ENGINEERING

1. PURPOSE

The purpose of the course is to introduce the practical knowledge for the designing and administrative techniques on digital transmission system.

2. DURATION

From September 13, 1993 to December 19, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course will be conducted in the form of lectures, practical exercises, discussions and observation.

The main themes are:

1) digital transmission technology
2) optical fiber transmission technology
3) optical fiber line technology
4) microwave communication system
5) ISDN technology
6) administration techniques

5. QUALIFICATION OF APPLICANT

1) qualified in their repective fields
2) university / college graduate or equivalent in telecommunication or electrical engineering
3) working for telecommunication administrations or common carrier organization at least for five years
4) under 40 years of age

6. TRAINING INSTITUTIONS

1) Nagoya International Training Centre (NITC), JICA
2) Suzuka Training Institute, NTT

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 113 光線路技術

FIBER OPTIC OUTSIDE PLANT ENGINEERING

1. PURPOSE

The purpose of the course is to train participants to be able to operate and maintain the optical fiber transmission system which has been introduced or proposed in each country.

The course outlines the basic theory of the optical fiber cable, optical devices, etc., and planning, designing and construction of the system. The training includes sufficient practical training at the transmission field.

2. DURATION

From January 9, 1994 to March 19, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course will be conducted in the form of lectures, practical exercises, discussions and observation trip.

The main themes are:

1) optical fiber transmission technology
2) optical fiber line technology
3) digital transmission technology
4) outside plant technology
5) ISDN technology
6) administration techniques

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) sufficient practical experience on their own transmission system
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Nagoya International Training Centre (NITC), JICA
2) Suzuka Training Institute, NTT

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for eight weeks (36 hours).

INTERNATIONAL ISDN ENGINEERING

1. PURPOSE

The purpose of this course is to introduce the participants to fundamental knowledge about up-to-date International ISDN services and technologies such as digital transmission, digital switching, and user network interface, etc., through lectures and field trips.

2. DURATION

From August 31, 1993 to October 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of theories mainly on the following subjects;

1) outline
   (a) new technology trends (b) outline of ISDN (c) broad band ISDN
2) basic technology and services
   (a) ISDN services (b) network operation (c) OSI (d) user-network interface (e) signalling system No. 7 (f) XC-31 FMBS (g) digital satellite communication system for ISDN (h) optical fiber transmission system (i) switching system terminals (j) ISDN layer/specification (k) terminals
3) related equipment
   (a) digital transmission (b) digital switching

5. QUALIFICATION OF APPLICANT

1) engineer engaged in the field of International Telecommunication
2) person with a fundamental knowledge of digital communications (such as digital transmission principles of PCM, multiplexing, synchronization and digital switching)
3) between 26 and 42 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Kokusai Denshin Denwa Co., Ltd. (KDD)
3) KDD Engineering and Consulting Inc. (KEC)
4) KDD R & D Laboratories (Meguro)

7. REMARKS

INTEGRATED SERVICES DIGITAL NETWORK ENGINEERING

1. PURPOSE

The Purpose of the course is to provide engineers in the field of telecommunications with practical knowledge and techniques on the ISDN basic technology, user-network interface, and peripheral technology necessary for introduction of ISDN services.

2. DURATION

From January 6, 1994 to February 20, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (one participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is designed to get the participants understanding;

1) outline of ISDN, network configuration, ISDN numbering plan, etc.
2) layer 1, 2, 3, circuit switching, packet switching, etc.
3) ISDN terminal, standardization trend, B ISDN (ATM), etc.

The major subjects are;

a) outline of ISDN
b) user-network interface
c) ISDN network
d) ISDN service
e) ISDN terminal equipment
f) ISDN inplementation plan
g) practical study (UNI)

5. QUALIFICATION OF APPLICANT

1) university graduate majored in telecommunication or electrical engineering, or equivalent
2) under 40 years of age
3) working in telecommunication administration or common carrier organizations with at least three years of practical experience on their own switching systems

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Central Training Institute (CTI), Nippon Telegraph and Telephone Corporation (NTT)

7. REMARKS

No. 116 ルーラル通信技術

RURAL TELECOMMUNICATION ENGINEERING

1. PURPOSE

The purpose of the course is to introduce technological information on rural telecommunication systems to the participants so that they can acquire basic knowledge and skill concerning fundamental elements in making plans of actual networks in rural areas of their countries.

2. DURATION

From February 8, 1994 to March 19, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The first part of the curriculum includes lectures on rural telecommunication network designing method, and on various rural telecommunication systems. The second part is a drill practice, which is intended to simulate the rural telecommunication network designing augmented by the application of economic analysis.

5. QUALIFICATION OF APPLICANT

1) university graduate specialized in radiocommunications
2) in charge of network planning or so scheduled
3) under 45 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) New ITU Association of Japan, Inc. (NITU-AJ)

7. REMARKS

No. 117 電気通信 CAI 教材作成技術

CBT COURSEWARE DEVELOPMENT TECHNOLOGY FOR TELECOMMUNICATION

1. PURPOSE

The purpose of the course are to provide participants who are in charge of training at Telecommunications Training Centers with a fundamental knowledge of CBT courses and the ability to develop CBT courseware. Through this course, participants will be able to learn the basic concepts of learning theory and practice of course analysis, design, development and implementation/evaluation methods.

2. DURATION

From October 26, 1993 to November 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The major subjects in this course are;

1) basic concepts of CBT theory
2) CBT project management
3) CBT storyboarding
4) CBT courseware production
5) latest information about CBT course development

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) person with sufficient practical experience at their own telecommunications training center, and preferably familiar with personal computers
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japan Telecommunications Engineering and Consulting Service (JTEC)

7. REMARKS

No. 116 テレビジョン番組制作技術

TELEVISION PROGRAMME PRODUCTION ENGINEERING

1. PURPOSE

This course mainly covers programme production engineering, such as production in studio, outdoor and post production, etc. Participants can expect not only to get the latest information on TV engineering but also to improve their skills in programme production.

2. DURATION

From January 11, 1994 to March 6, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum is mainly dedicated to advance participants' theoretical knowledge of TV facilities through lectures and practice on a) video equipment, b) TV cameras and solid-state image devices, c) application of digital technique, d) VTR and VTR editing, e) special video effects and computer graphics, f) latest broadcast technique, g) direct satellite broadcasting. Several observation trips are organized to augment the lectures.

5. QUALIFICATION OF APPLICANT

1) engineer serving in a broadcasting organization with at least five years of practical experience in TV engineering, or those who have knowledge of TV engineering enough to undergo this training course

   It should be noted that this group training course is targeted for engineers. Programme directors are not appropriate to participate in this course.

2) university/college graduate or equivalent in electronic engineering

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) NHK Communications Training Institute

7. REMARKS

No. 119 テレビジョン番組制作

TELEVISION PROGRAMME PRODUCTION

1. PURPOSE

Producers and programme directors working for broadcasting stations in developing countries will be given opportunity to learn the general knowledge and technical skills of the programme production methods used in such as musical, cultural, dramatized and documentary production methods, and will receive suggestions for enriching their own TV programmes.

2. DURATION

From July 13, 1993 to September 26, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The curriculum consists of lectures on general concepts of Educational Television, and various production techniques, practical training in programme production, and observation of actual production sites and local NHK stations.

5. QUALIFICATION OF APPLICANT

1) serving in a broadcasting corporation directly and continuously as a producer or director with practical experience of two to seven years in the field of television programme production
2) under 35 years of age
3) university/college graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) NHK Communications Training Institute

7. REMARKS

No. 120 テレビジョン／放送技術

TELEVISION ENGINEERING

1. PURPOSE

The purpose of the course is to systematically introduce knowledge of television broadcasting technology to participants who are engaged in the field of television broadcasting in developing countries.

The training covers the technology of color television cameras, VTRs, studio equipment, transmission and reception.

2. DURATION

From July 13, 1993 to September 26, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Lectures cover such topics as a) color TV fundamentals and operation and maintenance of broadcasting equipment, b) programme production techniques, c) application of digital techniques, d) measurement and adjustment of broadcasting equipment and e) recent technical development. Lectures are supplemented by practice. Field training in small groups are organized to enhance the programme.

5. QUALIFICATION OF APPLICANT

1) engineer serving in a broadcasting organization with practical experience of three to five years in TV engineering
2) university/college graduate or equivalent in electronic engineering

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) NHK Communications Training Institute

7. REMARKS

No. 121 テレビジョン社会教育番組

TELEVISION SOCIAL EDUCATION PROGRAMME

1. PURPOSE

The purpose of this course is to introduce the production technologies and methods of NHK educational TV programmes to the producers and directors who are engaged in socially informative TV programme production. The training will focus on educational TV programme production.

The participants are expected to renew their appreciation of the importance of education by TV, and to acquire necessary programme production techniques such as planning ability, manner of presentation, etc.

In addition, the state-of-the-art technologies and the future prospects of the broadcasting field are also introduced.

2. DURATION

From January 11, 1994 to March 6, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese system and situation.

The course mainly covers;

1) trends in social education TV program
2) methods of TV program production
   - issuing cues
   - "complete program" production method
3) production techniques
   - video location shooting
   - editing
4) new technology

5. QUALIFICATION OF APPLICANT

1) serving and producing social education television programmes in a broadcasting corporation directly and continuously as a producer or director with practical experience of five to ten years
2) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) NHK Communication Training Institute
3) NHK Broadcasting Center

7. REMARKS

No. 122 テレビジョン放送管理 II

TELEVISION BROADCASTING MANAGEMENT II

1. PURPOSE

The purpose of this course is to contribute to the betterment of the television broadcasting management in the participating countries, by introducing Japanese experience in the development of the television broadcasting management, as well as the present television broadcasting activities and its equipment industries in Japan.

2. DURATION

From May 10, 1993 to June 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course aims to present Japanese experiences in this field for a case study, and covers;

1) administration
2) management
3) engineering
4) comprehensive study

5. QUALIFICATION OF APPLICANT

1) staff in charge of management with rank higher than division-chief engaged in administrative or planning department of a television broadcasting organization
2) university/college graduate or equivalent
3) between 30 and 40 years of age

6. TRAINING INSTITUTIONS

1) Hachioji International Training Centre (HITC), JICA
2) International Cooperation Division, Communication Policy Bureau, Ministry of Posts and Telecommunications

7. REMARKS

No. 123 放送幹部セミナーII

BROADCASTING EXECUTIVES' SEMINAR II

1. PURPOSE

The purposes of this Seminar are to introduce Japanese experiences, in the process of broadcasting development as well as present broadcasting activities and its related industries in Japan, to the participants, and to examine common problems in the field and to seek solutions through lectures, discussions and observations.

2. DURATION

From November 11, 1993 to November 27, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar covers the following themes;

1) broadcasting situation in the participating countries
2) outline of Japanese broadcasters
   (organizations, activities, finances, management in general, etc.)
3) personnel management and training
4) different types of broadcasting technologies and their utilization
5) role and utilization of broadcasting in education

5. QUALIFICATION OF APPLICANT

director general or equivalent high-ranking official responsible for management or administration of broadcasting in governmental or operational organizations

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Communication Policy Bureau, Ministry of Posts and Telecommunications

7. REMARKS

No. 124 音声放送技術

AUDIO BROADCASTING ENGINEERING

1. PURPOSE

The purpose of the course is to provide audio broadcasting engineers with theoretical and practical knowledge of the intermediate level of audio technique, and MW and FM transmitting, through lectures, exercises and practices.

2. DURATION

From July 13, 1993 to September 12, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Lectures and practice are provided upon a) audio technique, b) theory and practice of MW broadcasting, and c) theory and practice of FM broadcasting. Field practice and observation trips to relevant broadcasting facilities are organized to enhance the curriculum.

5. QUALIFICATION OF APPLICANT

1) person in a technical line who has practical experience in the field of audio broadcasting enough (more than three years) to undergo this training course
2) between 25 and 35 years of age
3) college graduate or equivalent in audio broadcasting

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) NHK Communications Training Institute

7. REMARKS

AGRICULTURE

農　　業

AGRICULTURAL CO-OPERATIVES II

1. PURPOSE

The purpose of this course is to provide the participants engaged in the agricultural cooperative services with the necessary information on methods and techniques for promoting agricultural cooperative movement, by introducing the Japanese experience in this field, so that they would be able to contribute to the further development of agricultural cooperative movement in their respective countries.

2. DURATION

From May 17, 1993 to July 18, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seventeen (17) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lecture/discussion mainly, and more than 30% of the program is allocated to field trip. Main topics are (1) agricultural production method through farm management group, (2) cooperative activities for improvement of home life, and (3) measures for democratic operation/ administration of agricultural cooperatives.

5. QUALIFICATION OF APPLICANT

1) university of professional school graduate who is now engaged in the offices of cooperative service
2) expected to work in the co-operative movement at least for more than five years after participation in the course
3) under 45 years of age

6. TRAINING INSTITUTIONS

1) Hachioji International Training Centre (HITC), JICA
2) Institute for Development of Agricultural Cooperation in Asia (IDACA)

7. REMARKS

No. 126 農業普及指導者 II

AGRICULTURAL EXTENSION SERVICES FOR LEADER II

1. PURPOSE

The purpose of the Course is to provide participants with opportunities to understand agricultural extension services in Japan through lectures, practice, and observation tours.

The Course is also designed to give the participants practical suggestions on the application of agricultural guidance and to impart them with competence for leadership in agricultural guidance, through explanations of background, history, theory and practical methods of extension work.

2. DURATION

From April 13, 1993 to July 18, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects will be covered in the course:

(1) background of extension service
(2) outline of extension service
(3) practice of extension activities
(4) cultivation and training of extension workers
(5) agribusiness
(6) country report

5. QUALIFICATION OF APPLICANT

1) administrator for agricultural extension service or subject-matter specialist (S.M.S.), engaged in training of extension workers, and have more than five years of occupational experience in this field
2) under 50 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japan Agricultural Development and Extension Association
3) Extension and Education Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 127 農家生活水準向上女性指導者

WOMEN LEADERS OF FARM HOUSEHOLD DEVELOPMENT

1. PURPOSE

The purpose of the course is to provide knowledge and technology related to the improvement of farm household lifestyles, and also to teach knowledge and technology necessary for rural women to develop their ability to utilize regional resources, such as agricultural products, etc.

2. DURATION

From August 10, 1993 to October 30, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course includes a homestay program at Japanese families in addition to common forms of training such as lectures and practices.

The course mainly covers the following themes.

1) utilization of existing agricultural products and resources in the region
2) human resources development (training and guidance) for rural women
3) improvement of living standard of farm households

5. QUALIFICATION OF APPLICANT

1) engaged in the improvement of rural living standards by developing women's abilities through planning and execution of instruction and training for persons such as rural women, agricultural extension officials and/or home living improvement extension officials in agricultural departments
2) female under 45 years of age and have experience of more than five years in this field

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Rural Home and Family Living Improvement Study Association
3) Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 128 米生産

RICE PRODUCTION

1. PURPOSE

The purpose of the course is to introduce practical knowledge and techniques of rice production to the participants who are engaged in agricultural extension or training of farmers.

2. DURATION

From February 28, 1994 to October 21, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures, practices, experiments and study tours.

It mainly covers:

1) lecture
   - rice agronomy
   - rice physiology
   - plant protection
   - soil and fertilizer
   - breeding
   - agricultural extension
   - farm economy
   - agricultural machinery
   - land improvement

2) practice and experiment
   - field experiment on specific subjects
   - laboratory experiments
   - field practices

3) study tour
   - farm household survey
   - agricultural research stations
   - agricultural cooperatives
   - extension offices
   - industries related to agriculture

5. QUALIFICATION OF APPLICANT

Applicants should be:

1) technical official presently in charge of extension service of rice or training on rice
2) university graduate or equivalent
3) over 26 and under 35 years of age

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted along with the technical training for three weeks (50 hours).

PRODUCTION DU RIZ

1. BUT DE STAGE

Le stage a pour but, le transfert de connaissances de la riziculture pratiquée au Japon, aux stagiéres, et l'amérioration de leur niveau technique par le biais d'expérimentations pratiques. Ainsi ils pourront contribuer à l'amélioration de la production du riz dans leur pays, par la diffusion des connaissances techniques acquises au Japon.

2. DUREE

de Fevrier 28, 1994 à Octobre 21, 1994

3. NOMBRE DE PARTICIPANTS QUI SONT ACCEPTEE

Cinq (5) (Un participant d'nn pays en principe)

4. PROGRAMME DE FORMATION

Les cours seront dispensés sous forme de conférence (25%), d'empérience, des travaux pratiues (50%), des observations (20%) et de présentation de rapport d'expérimentation.

5. QUALIFICATION DES CANDIDATS

Les candidats doivent être:

1) chargés des services de formation agricole ou de mise en valeur dans le domaines rizicole,
2) titulaire d'un diplôme universitaire ou équivalent
3) capables de par ler et comprendre parfaitement le français
4) agés de moins de 35 ans

6. ORGANISME RESPONSABLE DU STAGE

Centre Internationale de Formation Agricole de Tsukuba

7. AUTRE

En règle générale, la langue française sera utilisée au cours du stage, lorsque le cours sera donné en japonais, l'imterprète francophone se présentera.

Le cours intensif de langue japonaise est organisé avant le stage de formation, pour trois semaines (50 heures).

No. 130 稲作技術

RICE CULTIVATION TECHNOLOGY

1. PURPOSE

The course is designed to introduce useful knowledge and new techniques in the field of rice to the participants who are engaged in research or education and to enable them master research methods.

2. DURATION

From January 31, 1994 to November 18, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of three major categories - lecture, experiment and field practice, and study tour. Knowledge and techniques of rice cultivation and method of research work are obtained . Above all, individual experiments are regarded as the utmost importance.

5. QUALIFICATION OF APPLICANT

1) presently engaged in the research work or education in the field or rice
2) university graduate or equivalent with occupational experience of more than five years in their specialities
3) between 27 and 40 years of age

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for three weeks (50 hours).

No. 131 野菜生産 II

VEGETABLE CROPS PRODUCTION II

1. PURPOSE

The purpose of this course is to introduce participants to the scientific knowledge and technology of vegetable crops cultivation through their own observation of crops so that they can modify the technology they have acquired and apply it to the respective condition.

2. DURATION

From February 28, 1994 to September 23, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures, experiments, practices and observations in study tours, on major vegetable crops in Japan. The emphasis is put on experiments and practices in the field and laboratory in this course. Individual experiments will be conducted by participants respectively besides the above practices.

The main themes are:

1) applicable method of intensive growing of major vegetable crops
2) fundamental knowledge on plant physiology, plant protection and soil in relation to high yielding in vegetable crops
3) principal matters pertaining to rationalization of vegetable marketing and circulation

5. QUALIFICATION OF APPLICANT

1) presently engaged in the vegetable crops production, in the field of research, extension, education or administration
2) university graduate with the occupational experience of more than three years in their specialities
3) over 27 and under 37 years of age

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

An intensive Japanese language course will be conducted prior to the technical training for ten days (50 hours).

No. 132 野菜採取

VEGETABLE SEED PRODUCTION

1. PURPOSE

The purpose of this course is to bring up agricultural engineers on vegetable seed production having a broad viewpoint and scientific knowledge both in theory and technology, through lectures on specialized subjects, experiments and practices on major vegetables and various study tours.

2. DURATION

From February 7, 1994 to November 24, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures, experiments, practices and observations in study tours, on major vegetable crops in Japan. The emphasis is put on experiments and practices in the field and laboratory in this course. Individual experiments will be conducted by participants respectively besides the above practices.

The main themes are:

1) seed production method of major vegetable crops
2) seed technology on sorting, drying, storage and germinating of vegetable seeds
3) applicable method of varietal improvement of major vegetable crops

5. QUALIFICATION OF APPLICANT

1) presently engaged in the vegetable seed growing, seed technology or varietal improvement
2) university graduate with the occupational experience of more than three years in their specialities
3) over 27 and under 37 years of age

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

An intensive Japanese language course will be conducted prior to the technical training for fifteen days (50 hours).

No. 133 サトウキビ栽培

SUGAR CANE CULTIVATION

1. PURPOSE

The purpose of this course is to introduce the Japanese know-how for the improvement of sugarcane productivity to agricultural technicians who are engaged in research activities. The participants will learn the technology and knowledge of breeding, cultivation method, soil/fertilizer management, mechanization, and the pest / disease controls through lectures, laboratory practices, field work, field surveys, and observation tours.

2. DURATION

From June 24, 1993 to February 27, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and individual works at laboratory and field. Each participant is to take one of the following subjects for their individual work.

1) sugarcane agronomy
2) soil and fertilizer
3) sugarcane cultivation and mechanization

5. QUALIFICATION OF APPLICANT

1) presently engaged in research work or extension service in the field of sugar cane cultivation
2) university graduate or equivalent
3) under 35 years of age

6. TRAINING INSTITUTIONS

1) Okinawa International Centre (OIC), JICA
2) Okinawa Prefectural Agricultural Experiment Station

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for eight weeks (220 hours).

No. 134 農薬の利用と安全性

PESTICIDE UTILIZATION AND SAFETY

1. PURPOSE

The purpose of the course is to provide graduates who majored in plant protection (agricultural chemistry, plant pathology, entomology, weed science or environmental science and toxicology) in a university or the equivalents with fundamental and practical knowledge required for the safe use of pesticides for crops and environment protection.

The course aims at upgrading their capability of selecting the most effective pesticide for a given pest, applying it at the most appropriate time and employing the most adequate application method. It also aims at assaying the pesticide residues in agricultural products and in the environment in order to evaluate the safety of pesticides.

2. DURATION

From March 22, 1994 to August 31, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip.

1) administration and laws pertaining to the use of pesticides
2) bioassay of pesticides
3) exposition of pesticides
4) pesticides in crops, foods and environment
5) application and application equipments
6) new technology

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) qualified in their respective fields
3) occupational experience of more than three years
4) between 26 and 40 years of age

6. TRAINING INSTITUTIONS

1) Hyogo International Centre (HIC), JICA
2) Department of Plant Protection, Faculty of Agriculture, Kobe University
3) Hyogo Prefectural Agricultural Institute
4) National Institute of Hygenic Sciences, Osaka Branch

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 135 植物保護のための総合防除

INTEGRATED PEST MANAGEMENT FOR PLANT PROTECTION

1. PURPOSE

The course is designed to upgrade knowledge and skills of the participants in the field of plant protection, so as to train technical officials capable of playing practical role in these fields.

2. DURATION

From June 3, 193 to September 24, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip.

1) characteristics of host plants, pest and pathogen, environmental factors and the mutual relationships between the three
2) integrated pest management
3) individual studies:
   laboratory of plant pathology, entomology, genetics, agrochemical science
4) group studies: transplanting

5. QUALIFICATION OF APPLICANT

1) technical official presently in charge of plant protection in government or in local bodies or collage staffs with three years or more experience in this field,
2) university graduate
3) above 25 and under 35 years of age

6. TRAINING INSTITUTIONS

1) Hyogo International Centre (HIC), JICA
2) Department of Plant Protection, Faculty of Agriculture, Kobe University
3) Agricultural Experiment Station, Hyogo Prefectural Agricultural Institute

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for about 40 hours.

PLANT GENETIC RESOURCES

1. PURPOSE

This course is designed to contribute to upgrading knowledge and skills of the junior researchers in the field of plant genetic resources, so that they will be capable of playing important roles in collection and preservation of plant genetic resources in their own countries.

2. DURATION

(not conducted this year)

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and individual training at laboratory. Each participants is to take one of the following subjects for their individual research;

1) variations in seed protein and isozymes and their geographical distribution of grain legumes
2) dna variation in cereal crop species
3) genetic variation in Wx protein responsible for amylose production in grain legumes
4) genetic variation in germinability of rice under high temperature condition
5) seed pathology
6) development of a passport data management system of plant genetic resources
7) cryopreservation of cultured cells, meristems, recalcitrant seeds and pollen
8) production of interspecific hybrid in genous Cucamis
9) utilization of tissue culture technique in wheat breeding
10) evaluation of resistance to powdery mildew in the world collections of wheat and barley germplasms
11) clarification of phisicochemical characteristics related to white noodle-making quality in the flour of wheat germplasm
12) virus free technology of fruit tree
13) hormonal regulation of seed longevity and preservability

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) presently engaged in research works in the field of plant genetic resources with more than three years' experience
3) over 25 and under 35 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) National Institute of Agrobiological Resources (NIAR)

7. REMARKS

1) This course is conducted every other year in principle. This year (in Japanese fiscal 1993) it will not be conducted, it is planned to be conducted in Japanese fiscal 1994.
2) A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 136 植物検疫（ミバエ類殺虫技術）

PLANT QUARANTINE (DISINFESTATION OF FRUIT FLIES)

1. PURPOSE

The course is designed to introduce the advanced techniques required for disinfestation of fruit flies to the participants who are engaged in plant quarantine. It is also hoped that this course will ultimately contribute to the promotion of fruits and vegetables exportation.

The method of fruits fly eradication and the applicability of the method in each country will be also introduced and examined in the course.

2. DURATION

From May 13, 1993 to October 18, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, workshop practice and field trips.

The main themes are:

1) plant quarantine in Japan
2) morphology and taxonomy of fruit flies
3) physiology and ecology of fruit flies
4) artificial rearing of fruit flies
5) disinfestation method of fruit flies (outline)
6) disinfestation test by vapor heat treatment and cold treatment
7) injury test of fruits by vapor heat treatment and cold treatment
8) eradication of fruit flies

5. QUALIFICATION OF APPLICANT

1) university graduate equivalent
2) having experience in the plant quarantine works and having sufficient knowledge about the pest such as fruit flies
3) being presently engaged in the disinfectation programme of fruit flies or will be engaged in it as a technical expert
4) being not exceeding 40 years of age

6. TRAINING INSTITUTIONS

1) Okinawa International Centre (OIC), JICA
2) Naha Plant Protection Station, Ministry of Agriculture, forestry and Fisheries
3) Fruit-fly Eradication Project Office, Okinawa Prefectural Government

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for seven weeks (175 hours).

No. 137 土壌分析改良

SOIL ANALYSIS AND IMPROVEMENT

1. PURPOSE

The course is designed for specialists and technicians of soil analysis to be leaders in their fields by providing basic and practical knowledge about the techniques essential to strengthening soil analysis and soil-improvement techniques for maintaining higher agricultural food production, and to contribute to international relationships and the promotion of science.

2. DURATION

From June 3, 1993 to August 19, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese experience and basic theories of soil analysis and improvement including laboratory experiments by participants.

1) general method of soil analysis and improvement
2) high techniques of soil analysis by optical instruments
3) method of soil reforming based on organic and inorganic fertilizers
4) soil improvement systems using computers

5. QUALIFICATION OF APPLICANT

1) presently engaged in soil analysis or have experience in soil improvement
   * soil analysis includes fertilizer, water quality or plant nutrition
2) neither expert nor beginner in the field of soil analysis, and have at least two-years experience in this field
3) over 25 and under 45 years of age

6. TRAINING INSTITUTIONS

1) Hokkaido Branch Office, JICA
2) Obihiro River Sewerage Treatment Plant
   * The City of Obihiro supports and assists the course throughout the duration along with the Obihiro University and other institutions.

7. REMARKS

No. 138 熱帯農林資源の有効利用

EFFECTIVE UTILIZATION OF TROPICAL AGRICULTURE AND FORESTRY RESOURCES

1. PURPOSE

The purpose of the course is to introduce participants to the concept, research and techniques concerning a cultivation system of tropical agricultural production and an effective utilization of biological resources in the tropics, through lectures, experiments, practices and observation tours.

2. DURATION

From July 15, 1993 to March 21, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on lectures, discussions, indoor experiment, practices, field practices and observation tours.

The main themes are:

1) technical applications to the study of crop production
   - photosynthesis and biotechnology
   - green-house techniques and hydroponics culture
2) fundamental techniques for forest management and utilization of wood
   - stand structure and mensuration
   - silvicultural operation system
   - forest policy and economy
   - physical properties of wood
   - chemical properties of wood

5. QUALIFICATION OF APPLICANT

1) have experience of more than three years' laboratory research
1)' engaged in research works
2) university graduate or equivalent
3) under 41 years of age

6. TRAINING INSTITUTIONS

1) Okinawa International Centre (OIC), JICA
2) College of Agriculture, University of the Ryukyus

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (130 hours).

ENVIRONMENTAL PLANNING AND MANAGEMENT IN AGRICULTURAL AND RURAL DEVELOPMENT

1. PURPOSE

The purpose of the training course is to provide improvement of planning and implementation technology of engineers for agricultural and rural development projects mainly composed of irrigation and drainage, and agricultural land development.

This training course is the general course that focuses on the introduction of agricultural and rural development under the consideration with environmental aspects.

2. DURATION

From August 31, 1993 to December 3, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty-one (21) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course mainly covers the following themes.

1) environmental considerations in survey, planning, design and implementation of agricultural and rural development projects
2) conservation technology for agricultural and rural development
3) framework of agricultural and rural development projects and environmental management and policies in Japan

5. QUALIFICATION OF APPLICANT

1) presently engaged in agricultural engineering (irrigation and drainage or rural development of agriculture) and have more than seven years of occupational experience in the field of the irrigation and drainage or rural development of agriculture
2) under 45 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japanese Institute of Irrigation and Drainage (JIID)
3) Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 140 青果物流通

DISTRIBUTION OF FRESH FRUITS AND VEGETABLES

1. PURPOSE

This course aims at giving opportunities to the participants to learn various aspects related to fresh food distribution both by theory and practice.

By the end of the training period, the participants are expected to:

1) have acquired thorough knowledge on the development process of wholesale market through the study of Japanese cases
2) have learned how the distribution systems are managed under the integrated rules based on the law concerning the wholesale market, and how the market system functions at present
3) have learned production techniques and shipping systems at the producing districts, and retail sales techniques at the consumption districts

2. DURATION

From September 23, 1993 to December 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on introduction of Japanese experience and basic theories of distribution of fresh fruits and vegetables.

The main themes are:

1) lectures
   - wholesale market
   - producing district
   - retail
   - consumer
   - distribution of meat
   - distribution of marine products
2) practical training
   - wholesale market
3) field training
   - retail market and large scale retail store
   - producing districts

5. QUALIFICATION OF APPLICANT

1) administrator in charge of implementation of modernization measures for fresh food distribution, with practical experience of at least five years
2) under 40 years of age

6. TRAINING INSTITUTIONS

1) Osaka International Training Centre (OITC), JICA
2) Osaka International House Foundation
3) Central Wholesale Market, Economic Affairs Bureau, Osaka Municipal Government

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

No. 141 灌漑排水 II

IRRIGATION AND DRAINAGE II

1. PURPOSE

The purpose of this course is to introduce systematically to the civil engineers who are engaged in land improvement works, scientific knowledge and technology of the small scale irrigation and drainage schemes.

2. DURATION

From February 7, 1994 to November 18, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on practices.

The main practices are;

1) soil mechanics
2) hydraulics
3) concrete
4) irrigation water requirement
5) survey

5. QUALIFICATION OF APPLICANT

1) presently engaged in practical works in irrigation and drainage
2) university graduate or equivalent with occupational experience of more than five years in their specialities

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

An intensive Japanese language course will be conducted prior to the technical training for three weeks (50 hours).

No. 142 農地水資源開発 II

AGRICULTURAL LAND AND WATER RESOURCES DEVELOPMENT II

1. PURPOSE

The purposes of this course are to provide senior engineers in the field of agricultural land and water resources development with opportunities to learn about advanced agricultural land and water resources development technology in Japan and to increase their capability to make plans for agricultural and rural development projects (including planning, designing, and execution).

2. DURATION

From May 11, 1993 to July 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course covers the following themes.

1) concept and ideas of agricultural land and water resources development
2) engineering aspects of agricultural land and water resources development
3) agricultural and rural development projects
   - method of planning and implementation
   - design criteria and standard for irrigation and drainage facilities
4) current situation and prospect of agricultural land and water resources development in the world
5) utilization of computer technology for agricultural land and water resources development

5. QUALIFICATION OF APPLICANT

1) presently engaged either in the task of agricultural land and water resources development or irrigation and drainage and have more than ten years of occupational experience in this field
2) under 50 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japanese Institute of Irrigation and Drainage
3) Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 143 水管理

IRRIGATION WATER MANAGEMENT

1. PURPOSE

The purpose of this course is to introduce systematically to the civil engineers who are engaged in water management, scientific knowledge and technology of water management with gate operation, design of water management facilities for rice cultivation mainly.

2. DURATION

From May 10, 1993 to November 4, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on practices.

The main practices are;

1) hydraulic model simulation in open canal by using computer
2) design of irrigation facilities

5. QUALIFICATION OF APPLICANT

1) presently engaged in practical works in water management
2) university graduate or equivalent with occupational experience of more than five years in their specialities
3) between 25 and 35 years of age.

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

An intensive Japanese language course will be conducted prior to the technical training for two weeks (25 hours).

No. 144 乾燥地水資源の開発と利用

WATER RESOURCES DEVELOPMENT AND ITS USE IN ARID AREAS

1. PURPOSE

The purpose of the course is designed to enable the participants who are in charge of water resources development in arid and semi-arid areas to acquire the basic knowledge and techniques for the development of water resources and effective use of water in the field of agriculture, thereby contributing to the solution of the problems which arise from shortage of water and hence food in those areas.

2. DURATION

From August 10, 1993 to November 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course the emphasis is put on report presentation, lectures which introduce Japanese experience of agricultural practice and water resources use at arid or sandy area, and discussion by participants.

It mainly covers:

1) national environment of arid areas
2) run-off analysis
3) river and groundwater engineering
4) facilities of water storage and water supply
5) agriculture practice of arid areas
6) irrigation, drainage and water quality
7) water management
8) water resources planning

5. QUALIFICATION OF APPLICANT

1) presently engaged in either research or educational activity and have more than two years of occupational experience in this field
2) university graduate or equivalent
3) not more than 40 years of age

6. TRAINING INSTITUTIONS

1) Chugoku Branch Office, JICA
2) Tottori University

7. REMARKS

No. 145 農業機械化 II

FARM MECHANIZATION II

1. PURPOSE

The purpose of the course is to systematically introduce the scientific knowledge and technology on farm mechanization such as effective selection, introduction and utilization of farm machinery, and systematic mechanized farming in the extension field.

2. DURATION

From February 14, 1994 to November 18, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on the field and laboratory experiments on Farm Mechanization for paddy cultivation and for upland crop cultivation.

It mainly covers:

1) field performance tests of farm machinery and analysis of the result before its introduction to their countries
2) mechanization planning and its evaluation process, and applicable knowledge concerned with farm mechanization system
3) accurate and safety utilization method of measuring instruments and tools
4) experiment method such as field performance test of farm machinery under the existing conditions at the necessary level
5) technical know-how on trouble shooting and minor repair of farm use engine
6) safety operation and maintenance technique of farm machinery
7) study on micro-computer for experiments and farm mechanization system analysis

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) agricultural engineer and/or agronomist having more than three years experience on farm mechanization
3) between 27 and 40 years of age

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA

7. REMARKS

1) A compulsory intensive Japanese language will be conducted prior to the technical training for two weeks (50 hours).
2) During training period the participants are to join the annual meeting of Japanese Society of Agricultural Machinery.

No. 146 農業機械設計

FARM MACHINERY DESIGN

1. PURPOSE

The purpose of the course is to introduce the scientific knowledge and technology on designing, trial making and performance testing of farm machinery, mainly for crop production, which is adoptable to the participants' country conditions.

2. DURATION

From January 31, 1994 to October 21, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on the actual designing and trial making of farm machinery and the performance testing of trial-made machinery.

The main themes are:

1) mechanism and performance of farm machinery and farm energy such as windmill and solar-dryer
2) designing methodology, trial-making process and testing methodology of trial-made farm machinery
3) accurate and safety utilization method of measuring instruments, tools and applicable utilization of micro-computer
4) analyzing and processing methodology of metallic and other materials concerned of manufacturing farm machinery
5) report making and presentation for symposium
6) study tour to University, Research Institutes and farm machinery manufacturing companies

5. QUALIFICATION OF APPLICANT

1) university graduate from faculty of agricultural engineering or mechanical engineering
2) design engineer or research engineer with experience of more than three years in the design, research or development of farm machinery
3) between 27 and 42 years of age

6. TRAINING INSTITUTIONS

Tsukuba International Agricultural Training Centre (TIATC), JICA.

7. REMARKS

1) A compulsory intensive Japanese language will be conducted prior to and along with the technical training for two weeks (50 hours).
2) During training period the participants are to join and to present the report at the annual meeting of Japanese Society of Agricultural Machinery.

No. 147 農業機械管理

AGRICULTURAL MACHINERY MANAGEMENT

1. PURPOSE

This course is designed for the leading agricultural engineers in the field of agricultural machinery management, in order to offer them a chance to acquire the following knowledge and technique.

1) Better understanding on agricultural machinery's performance
2) Proper selection of agricultural machinery appropriate to the operation area, soil quality and variety of crops
3) Improvement managing ability, i. e. cost analysis, etc.
4) Practical knowledge on agricultural machinery maintenance and repair
5) Instruction ability on workshop management

(Notice: The agricultural machinery in this course is especially for rice cultivation.)

2. DURATION

From May 13, 1993 to November 26, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on the workshop practice and lectures at agricultural machinery companies.

The main themes are:

1) principal agricultural machinery
   - fundamentals of mechanical engineering
   - principles and structure of agricultural components
   - disassembling, reassembling and maintenance
   - field operation
2) agricultural machinery management
   - farm mechanization planning, machine selection, cost analysis, mechanized farming system, working management, etc.

5. QUALIFICATION OF APPLICANT

1) leading agricultural engineer with at least three years experience in the field of agricultural machinery management and/or instruction in their respective organizations
2) over 30 and under 45 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Osaka International Training Centre (OITC), JICA
2) Kyoto University
3) some Japanese agricultural machinery companies

7. REMARKS

No. 148 農業機械評価試験

AGRICULTURAL MACHINERY TESTING AND EVALUATION

1. PURPOSE

The purpose of this course is to introduce systematically the knowledge and technology required for the testing and evaluation of agricultural machinery.

2. DURATION

From February 28, 1994 to June 24, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on the actual testing and evaluating methodology of agricultural machinery. The actual testing practices are conducted under the authorized testing cord.

The main themes are:

1) testing and evaluation of agricultural machines to determine the performance characteristics, rate of work, durability, safety, ease of operation
2) testing and Evaluation method in laboratory and field
3) accurate utilization of testing and measuring instruments
4) data acquisition, data processing and data analyzing by micro-computer
5) agricultural machinery testing system and administration
6) agricultural mechanization features
7) study tour to university, research institutes and farm machinery manufacturing companies.

5. QUALIFICATION OF APPLICANT

1) university graduate in agricultural engineering or mechanical engineering
2) test engineer or qualified engineer in testing of agricultural machinery with experience of more than three years
3) between 25 and 50 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Agricultural Training Centre (TIATC), JICA
2) Bio-oriented Technology Research Advancement Institution (BRAIN)
3) Institute of Agricultural Machinery (IAM)

7. REMARKS

1) A compulsory intensive Japanese language will be conducted prior to the technical training for two weeks (50 hours).
2) During training period the participants are to join the annual meeting of Japanese Society of Agricultural Machinery.

No. 149 米の収穫後処理技術

POST-HARVEST RICE PROCESSING

1. PURPOSE

The purpose of the course is to contribute to the planning, guidance and extension of the technical improvements in this field in the government and the public organizations of each country and also to the improvements in effective processing technologies and prevention of quantitative and qualitative losses by giving participants the knowledge and information on the post-harvest rice processing in Japan, namely harvesting, drying, husking, grading, inspection, storage, milling, utilization of by-products, etc.

2. DURATION

From August 26, 1993 to November 25, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects will be covered in the course.

1) rice production and marketing
2) characteristics of rice (indica and japonica subspecies)
3) harvesting, threshing and drying - machinery operation
4) storage - facility control and management
5) milling - machinery/equipment operation
6) quality control and inspection - system and testing equipment
7) utilization of by-products (husks, bran and brokens)

5. QUALIFICATION OF APPLICANT

1) senior technical administrator in government or public organizations engaged in planning and promoting the improvement of all post-harvest rice processes (not be researcher, instructor or professor at college or university)
2) under 45 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japan Grain Inspection Association
3) Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

ANIMAL HUSBANDRY

畜　　産

No. 150 鶏育種・生産技術

POULTRY PRODUCTION AND BREEDING TECHNOLOGY

1. PURPOSE

The purpose of the course is to provide those technologists directly engaged in the poultry industry in the developing countries with the basic and practical knowledge and technology of the poultry production and breeding based on the Japan's experiences. It is designed to enable them to become the better-trained technologists who can give the comprehensive guidance of the poultry production and breeding to the producers in poultry industries. It is not designed to train testing specialists or researchers.

2. DURATION

From June 1, 1993 to October 8, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this Course, participants are expected to be able to acquire knowledge and techniques in the following items.

1) feeding and management
2) breeding
3) other peripheral techniques of production and breeding

5. QUALIFICATION OF APPLICANT

1) presently in charge of poultry raising activities, with more than two years' experience in this field
2) university graduate or equivalent with occupational experience
3) over 26 and under 40 years of age

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) National Livestock Breeding Centre, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

No. 151 牛育種・人工授精

BREEDING AND ARTIFICIAL INSEMINATION IN CATTLE

1. PURPOSE

The purpose of this course is to provide participants with basic knowledge and practical techniques coupled with the latest information on cattle breeding, knowhow of A. I. and its administration system and thus to assist them in designing their own systems in their respective countries.

2. DURATION

From March 8, 1994 to June 28, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and research work at laboratory and field. All participants are to take the following subjects.

1) general aspects of livestock industries
2) cattle breeding
3) artificial insemination
4) extension of artificial insemination
5) deep frozen semen
6) reproductive disorder
7) cattle management

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent with practical experiences
2) presently engaged in livestock administration, holding veterinary licenses of artificial inseminator's licenses;
3) under 40 years of age
4) will be engaged in systematic development and promotion after absorbed from this training.

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) National Livestock Breeding Center, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

No. 152

受精卵移植技術

EMBRYO TRANSFER FOR CATTLE

1. PURPOSE

The purpose of the course is to provide the latest ET technique in Japan for livestock breeding personnel in countries faced with the necessity of it, and ultimately to contribute to the progress of animal industry by the application and improvement of the techniques under their respective countries' condition. The course provides basic theory an practical use of ET as well as its administration.

2. DURATION

From June 22, 1993 to September 30, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course will consist mainly of lectures and practical training, in which the Center Staff and visiting professionals will give expertise and instruction on the respective subjects. This will be supplemented by observation trips to the related agencies and institutions.

The subjects are as follows:

1) general aspects of livestock industry
2) cattle breeding and reproduction
3) feeding management for cattle
4) artificial insemination
5) embryo transfer

5. QUALIFICATION OF APPLICANT

1) *hold veterinarian's license, or artificial inseminator's license, and have sufficient experience and knowledge about artificial insemination technique
2) university graduate or equivalent
3) staff member of institute or university that participates in the improvement of animal reproduction
4) over 25 and under 40 years of age, in principle

* In this course, a non-surgical method is applied for practice drills in recovery and transplantion of embryo. This method requires proficiency in applicants must have enough knowledge and at least three years practical experience in AI.

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) National Livestock Breeding Center, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

No. 153 双子生産・体外授精技術

TWINNING AND INVITRO FERTILIZATION TECHNOLOGY FOR CATTLE

1. PURPOSE

The purpose of the course is to provide the latest technique of Twinning and IVF (for cattle) in Japan to technical specialists in animal reproduction from countries that need such technology and to contribute to the progress of livestock industries. The participants are expected to apply and improve upon the technique introduced in this course so as to adapt it to the situation in their respective countries.

2. DURATION

From September 20, 1993 to December 18, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course will consist mainly of lectures and practical training, in which the Center Staff and visiting professionals will give expertise and instruction on the respective subjects. This will be supplemented by observation trips to the related agencies and institutions.

The subjects are as follows:

1) general aspects of livestock industry in Japan
2) embryo transfer
3) twinning
4) in vitro fertilization

5. QUALIFICATION OF APPLICANT

1) *hold veterinarian's license, or artificial inseminator's license, and have sufficient experience and knowledge in the field of Animal Reproduction
2) university graduate or equivalent

* Twinning and IVF techniques are based on ET techniques. In this course, a non-surgical method is applied for practice drills in recovery and transplantion of embryo. This method requires proficiency in artificial insemination (AI) by the Rect-vaginal method. Therefore, applicants must have enough knowledge and at least three years practical experience in AI.

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) National Livestock Breeding Center, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

DAIRY FARMING AND RELATED INDUSTRIES

1. PURPOSE

The Course is designed to train dairy specialists and technicians to be leaders in their fields, by providing basic, practical knowledge about the techniques essential to strengthening dairy farming such as livestock health inspection techniques, sanitary methods and inspection techniques for maintaining meat and milk quality, etc., and to contribute to international relationships and the promotion of science.

2. DURATION

From August 26, 1993 to November 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and elective specialized subjects.

The followings are main items in common subjects.

1) feeding, management and reproduction in dairy cattle
2) diseases and their prevention in dairy cattle
3) improvement of sanitary conditions for housing and equipment
4) processing of meat and milk, and inspection techniques

Participants will be divided into two groups to cover one of the following subjects:

1) quality tests and sanitary inspection techniques in meat and milk products
2) animal husbandry techniques

5. QUALIFICATION OF APPLICANT

1) engaged in fields related to animal husbandry
2) university graduate or equivalent
e) over 25 and under 40 years of age

6. TRAINING INSTITUTIONS

1) Hokkaido Branch Office, JICA
2) Obihiro University of Agriculture and Veterinary Medicine

FORESTRY

林　　業

No. 155 森林造成技術者

REFORESTATION TECHNIQUES AND FOREST MANAGEMENT

1. PURPOSE

The purpose of this course is to upgrade the planning capacity of senior forestry officials for reforestation and forest management, through introducing Japanese reforestation techniques and forest management system as well as discussing the problems with which participating countries confronted.

2. DURATION

From July 13, 1993 to October 21, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects will be covered in the course:

1) outline of forestry and wood industry in Japan
2) forestry and forest products administration in Japan
3) forestry technique
   a. nursery technique
   b. silvicultural technique
   c. forest protection (prevention of fire, disease, insect and animal)
   d. forest road and erosion control
   e. forestry machinery
   f. forest survey
   g forestry education and extension
4) silvicultural technique in the tropics
5) forestry in participating countries

5. QUALIFICATION OF APPLICANT

1) presently engaged in planning work in the governmental forestry organizations (not be researcher of public organizations or instructor or professor of colleges/universities)
2) under 40 years of age
3) forestry university/college graduate or equivalent with occupational experience of more than five years in the field of forestry administration

6. TRAINING INSTITUTIONS

1) Tokyo International Center (TIC), JICA
2) Japan Overseas Forestry Consultants Association (JOFCA)
3) Forestry Agency

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 156 森林土壌

FOREST SOIL

1. PURPOSE

The course is designed to introduce the knowledge on forest soils and the method of the forest soil survey in Japan to those who are presently engaged in practice and research work in forestry in governmental organizations.

2. DURATION

From August 19, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course the following major subjects.

1) forest soil science
   - general description of forest soils
   - formulation, classification and distribution of forest soils
   - vegetation, productivity and water conservation with forest soils
   - soils and fertilizers for forestry nursery
   - forest soils in Okinawa
2) investigation into forest soils
   - methods of forest soil investigations (sampling and analysis)
   - soil mapping and utilization on forest maps
   - field research and investigations

5. QUALIFICATION OF APPLICANT

1) university graduate
2) having more than five years of experience in the field of forest soil research
3) presently serving at forestry research organizations or universities
4) under 40 years of age

6. TRAINING INSTITUTIONS

1) Okinawa International Centre (OIC), JICA
2) Japan Forest Technical Association
3) College of Agriculture, University of the Ryukyus

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

No. 157 森林管理計画

FOREST MANAGEMENT AND PLANNING

1. PURPOSE

The purpose of this course is to provide participants with an opportunity of;

1) studying the technology, knowledge on the various land survey which form the basis of the Japanese system of forest management and planning
2) practicing the forest management planning

so that they may contribute to the conservation and development of forest resources in their home countries.

2. DURATION

From August 16, 1993 to November 14, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is designed to balance lecture and practice, and the main themes are:

1) forest management in Japan
2) methods of forest management planning
3) rural development and forest policy
4) final forum

5. QUALIFICATION OF APPLICANT

1) technical staff in charge of forest management in the governmental organizations and have more than five years of experience
2) university graduate or equivalent
3) not more than 45 years of age

6. TRAINING INSTITUTIONS

1) Hachioji International Training Centre (HITC), JICA
2) Forestry Training Institute, Forestry Agency

7. REMARKS

A compulsory intensive Japanese language will be conducted prior to the technical training for two weeks (50 hours).

FOREST RESEARCH

1. PURPOSE

The course is designated to contribute to upgrading knowledge and skills of the participants in the field of Bio-resources Technology, Forestry Technology, and Forest Management, so as to train researchers capable of playing important roles in these field.

2. DURATION

From August 16, 1993 to November 28, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5), (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course is composed of the three sub-courses; "Forest", "Forestry" and "Forest Products". Each sub-course is conducted every three years. In this year (Japanese fiscal 1993), the sub-course on "Forestry" will be given, and it's training field is as follows.

1) forest tree genetics and biotechnology
2) forest regeneration and tending technology
3) forestry mechanization
4) forest management

5. QUALIFICATION OF APPLICANT

1) university / college graduate or equivalent with occupational experience of more than five years in the field of forest research
2) qualified in their respective fields
3) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) Forestry and Forest Products Research Institute, Ministry of Agriculture, Forestry and Fisheries

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

FISHERIES

水　　産

No. 159

漁業協同組合

FISHERY COOPERATIVES

1. PURPOSE

The course is designed to upgrade the administrative skills of personnel who are currently in charge of fishery cooperatives and then to contribute a rational fishery development.

2. DURATION

From June 29, 1993 to December 12, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This curriculum put more emphasis on learning the experiences of Fishery Cooperatives in Japan and studying the future development of Fishery Cooperatives in participant's country through lectures, discussions and study tours from various aspects.

All participants should write the report on those two themes.

The Key subjects are:

1) marketing activities
2) credit activities
3) fishery resources management
4) management of fishery cooperatives
5) fishery administration and fishery cooperatives
6) cooperatives principles and fishery cooperatives

5. QUALIFICATION OF APPLICANT

1) staff of fishery cooperative or official of the government which support it, presently in charge of management of fishery cooperatives, with more than three years of experience in this field
2) university graduate or equivalent
3) under 40 years of age

6. TRAINING INSTITUTIONS

Kanagawa International Fisheries Training Centre (KIFTC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

No. 160 漁具漁法学

FISHING SCIENCE AND TECHNOLOGY

1. PURPOSE

The purpose of the course is to transfer knowledge and techniques of fishing gear and methods (e. g. design, fabrication, and operation) to those who are engaged in education and research work in this field.

2. DURATION

From January 4, 1994 to March 18, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The Lectures are principal part of the curriculum and they cover all subjects in Fishing Science. The time allocated for each lecture is usually one day.

The curriculum is designed to enable the participants to understand the all aspects of Fishing Science, without concentrating a certain subject.

Several laboratory experiments, practices (on boat, gear making) and study tours are also included in the curriculum.

The key subjects are:

1) trawl fishing and gill net fishing
2) fishing gear materials
3) dynamics of fishing gear
4) fish behavior to fishing gear

5. QUALIFICATION OF APPLICANT

1) have more than three years occupational experiences of fishing gear and methods improvement in the field of research and education
2) university graduate or equivalent
3) under 40 years of age

6. TRAINING INSTITUTIONS

Kanagawa International Fisheries Training Centre (KIFTC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (30 hours).

No. 161 沿岸漁業技術

COASTAL FISHING TECHNOLOGY

1. PURPOSE

The course is designated for the persons who are engaged in guidance and extension service in the field of fishery as well as bone fide fishermen to impart basically and systematically the practical technique and knowledge of the fishing gear and methods in coastal fisheries.

2. DURATION

From April 6, 1993 to December 12, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The purpose of this course is to provide the participants with knowledge and techniques of the matters as follows:

1) general knowledge concerning coastal fisheries in Japan
2) theory of fishing gear and methods
3) construction and improvement of fishing gear and methods
4) proper operational skill of coastal fishing gear
5) basic knowledge on the proper utilization of fishing grounds, management of fishery resources and proper use of fishing machines and other auxiliary equipment

5. QUALIFICATION OF APPLICANT

1) senior high school graduate or equivalent
2) more than three years of occupational experience in the field of coastal fishery
3) under 35 years of age

6. TRAINING INSTITUTIONS

Kanagawa International Fisheries Training Center (KIFTC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

GENERAL AQUACULTURE

1. PURPOSE

The course is designed to upgrade basic knowledge and technique of aquaculture for those who have an involvement with extension or research works.

The training program is managed to cover various kinds of aquatic organisms, such as finfishes, molluscans, crustaceans and algae in not only seawater, but also brackishwater and freshwater. However, species delt with in practices are restricted according to geographic and seasonal conditions of Japan.

2. DURATION

From January 4, 1994 to June 19, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is placed on introduction of Japanese technical experience and basic scientific theories of aquaculture through lectures, laboratory experiment, and study tours.

The main themes are:

Lecture : seed production, ichthyology, nutrition, genetics, physiology, histology, pathology, water quality management, biostatistics.

Practice : artificial insemination and seed production including larval rearing,
food organisms culture (marine chlorella, diatom, rotifer and artemia),
pituitary extraction and hormone injection,
fish anatomy and histology,
formula food manufacture, and its digestibility analysis
water quality analysis

Besides lecture time, one month is approximately allocated for an individual experiment in which following aquatic animals could be delt with upon the request of participant. As a result of the experiment, each participant is requested to submit and present a report to JICA.

Paralichthys olivaceus, Pagrus major, Oreochromis niloticus, Cyprinus carpio, Penaeus japonicus, Macrobrachium rosenbergii

5. QUALIFICATION OF APPLICANT

1) presently engaged in aquacultural extension or research work with more than two years of experience in this field
2) university graduate or equivalent
3) under 35 years of age

6. TRAINING INSTITUTIONS

Kanagawa International Fisheries Training Centre (KIFTC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

No. 163 エビ増養殖技術

PRAWN PROPAGATION TECHNIQUE

1. PURPOSE

The purpose of the course is to train the participants to become a technical supervisor for prawn farm workers in prawn propagation and to contribute to the development and expansion of prawn propagation in their respective countries. For this purpose, the participants are to learn prawn propagation technique in Yamaguchi Prefecture, which faces the Seto Inland Sea and has been enjoying the leading position in Penaeus japonicus culture technique in Japan. Related general aquaculture techniques will be also taught.

2. DURATION

From February 22, 1994 to August 1, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on report presentation, lectures which introduce Japanese experience and basic theories of Prawn (P. J.) culture, and workshop practice of Prawn (P. J.).

It mainly covers:

1) biology of Penaeus japonicus
2) seedling production of Penaeus japonicus
3) technique of Penaeus japonicus
4) sickness control and feeds of Penaeus japonicus
5) freshness preservation and marketing system of prawns
6) seedling production of fishes and shellfishes
7) aqua propagation in general

5. QUALIFICATION OF APPLICANT

1) presently engaged either in practical production or research and have more than one year of occupational experience in this field
2) above junior college graduate or equivalent
3) not more than 35 years of age.

6. TRAINING INSTITUTIONS

1) Chugoku Branch Office, JICA
2) Fisheries Bureau of Yamaguchi Prefecture
3) Yamaguchi Prefectural Naikai Sea Farming Center

7. REMARKS

No. 164 海洋牧場システム

MARINE RANCH (MARINE FARM) SYSTEM

1. PURPOSE

The purpose of the course is to enable the participants who belong to fisheries research institutes (university) and fisheries offices to understand the basic theory and techniques for the management of marine ranch (marine farm). After this course, they can plan a suitable system for the fishery resources in their respective countries.

2. DURATION

From July 13, 1993 to December 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on understanding the idea of the marine ranch (marine farm) system, not on learning a certain specialized field or a technique in fisheries.

It mainly covers:

1) theory of marine ranch (marine farm) management
2) method of fisheries hydrography
3) method of preparing seaweed beds
4) method of seed production of shrimp, shellfish and marine fish
5) method of artificial reefs
6) making his/her own marine ranch (marine farm) programme for his/her country

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent and be experienced in business over five years
2) presently engaged in either research or educational activity in fisheries
3) not more than 40 years old

6. TRAINING INSTITUTIONS

1) Shikoku Branch Office, JICA
2) Usa Marine Biological Institute, Kochi University

7. REMARKS

A compulsory intensive Japanese language course will be conducted for two weeks in the early days of the course.

No. 165 魚類生理・防疫

FISH PHYSIOLOGY AND PREVENTION OF EPIZOOTICS

1. PURPOSE

The purpose of this course is to enable the participants who belong to institution of education and research to understand the basic theory and techniques for fish physiology and prevention of epizootics which are important theme in aquaculture industries in their respective countries.

2. DURATION

From March 7, 1994 to June 19, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

In this course, the emphasis is put on basic knowledge of fish physiology, fish nutrition and bacteriology, as well as mastering practical techniques to solve specific problems in epizootics which fish cultivation industry in developing countries is facing.

The subjects covered in the course are:

1) principles of aquaculture
2) fish nutrition
3) water quality management
4) fish physiology
5) bacteriology
6) fish pathology
7) prevention of epizootics in fish

5. QUALIFICATION OF APPLICANT

1) presently engaged either in research or educational activity and have more than three years of occupational experience in this field
2) university graduate or equivalent
3) be not more than 40 years of age

6. TRAINING INSTITUTIONS

1) Kyushu International Centre (KIC), JICA
2) Shimonoseki University of Fisheries

7. REMARKS

1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 25 hours.

No. 166 小型漁船の船体・機関保守

HULL AND ENGINE MAINTENANCE OF SMALL FISHING BOAT

1. PURPOSE

The purpose of the course is to provide the participants with knowledge of hull and engine maintenance, and full and engine repair of small fishing boat (less than 50 G. T. approximately) with emphasis on practical aspect, so that the participants who have completed the whole training course can diffuse the knowledge they learned in Japan to the fishermen of their countries.

2. DURATION

From January 4, 1994 to June 19, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course will provide the knowledge and techniques of maintenance and repair of small fishing boat, engine and related equipment which are important means of fishing, with emphasis on practical aspect.

Major subjects are as follows:

1) diesel engine
2) outboard motor
3) refrigerating equipment
4) electric equipment for marine use
5) maintenance of FRP fishing boat

5. QUALIFICATION OF APPLICANT

1) senior high school graduate or equivalent
2) fishery boat of engine experience of more than three years
3) under 40 years of age

6. TRAINING INSTITUTIONS

Kanagawa International Fisheries Training Centre (KIFTC), JICA

7. REMARKS

A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

No. 167 水産加工流通経営

FISH PROCESSING (WITH MARKETING AND MANAGEMENT)

1. PURPOSE

The purpose of this training course is to cultivate the human resources who will play important roles in various fields of fisheries in developing countries.

2. DURATION

From August 9, 1993 to December 17, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

Besides providing theoretical knowledge, the course puts emphasis on experiments and practice. The main Subjects are as follows.

lecture

1) fishery economy (economy management)
2) theory of fishery products distribution and consumption
3) theory of fishery industry cooperative association
4) theory of fish processing, processing economy
5) theory of fish processing facilities, machines and tools
6) fishery chemistry
7) food sanitation
8) refrigeration
9) introduction to food inspection
10) study for manufacturing canned products
11) theory of packing materials

experiment and practice

1) refrigeration
2) fish processing
3) fishery chemistry
4) food sanitation
5) manufacturing canned products
6) know-how for cooking fish and shell fish

5. QUALIFICATION OF APPLICANT

1) have three years' occupational experience in the field of Fish Processing, or those who are to be engaged in the mentioned fields in the near future
2) university graduate or equivalent
3) 40 years of age or less

6. TRAINING INSTITUTIONS

1) Kyushu International Centre (KIC), JICA
2) Propulsion Conference of Nagasaki International Fisheries Training Centre

7. REMARKS

1) A compulsory intensive Japanese language course will be conducted prior to the technical training for 100 hours.

No. 168 水産食品加工

MARINE FOOD PROCESSING AND TECHNOLOGY

1. PURPOSE

The purpose of the course is to provide practical knowledge required for marine food processing and technology for leading technical officials and researchers who are presently engaged in the field of marine food processing. Participants are given lectures and laboratory practices, as well as demonstrations arranged by national universities, governmental research institutes and private industries.

2. DURATION

From June 29, 1993 to December 12, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The course consists of lectures, practices, and study trips.

In field training, the participants have much practice at typical marine food processing plants in different regions.

Throughout the course they will obtain a lot of information and technologies on the following subjects for the effective utilization of marine resources and its improvements, which can be applied to their countries.

1) Lectures:
outline of fishery industry in Japan, raw materials for marine food processing, catching method of marine products for processing, aquatic processing and bacterial infection and intoxication, chemistry of protein from marine animals, marine toxins, preservation of fishery food with chemical components, freshness judging method of marine products, food analyzing method, fish jelly products, canning technology, processing retort-pouched food, fish drying, smoking and salting technology, freeze-drying method of marine food, seasoned processing

2) Practice:
micro-organism test of fish and shellfish.
food analyzing method.
material freshness and product quality.
smoking and salting technology.

5. QUALIFICATION OF APPLICANT

1) presently technical expert practically engaged either in production or research on marine food processing and technology, and have more than three years of occupational experience in this field
2) university graduate or equivalent
3) under 40 years of age.

6. TRAINING INSTITUTIONS

Kanagawa International Fisheries Training Centre (KIFIC), (JICA)

7. REMARKS

1) A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

MINING AND MINERALS

鉱　　業

No. 169 石炭鉱山保安

COAL MINE SAFETY

1. PURPOSE

The course is designated to introduce practical technology and knowledge in the field of coal mine safety to participants, who are safety engineers at coal mines, mine safety officers or official field inspectors so that they can play important roles in their fields.

2. DURATION

From January 24, 1994 to April 24, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and individual study at laboratory. Each of participants is to take one of the following subjects for their individual study:

1) rock mechanics, AE measurement
2) mine ventilation
3) safety appliances
4) explosion proof instruments

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent who have basic knowledge of mine safety with occupational experience of more than three years
2) under 35 years of age in principle

6. TRAINING INSTITUTIONS

1) Tsukuba International Centre (TBIC), JICA
2) National Institute for Resources and Environment, Ministry of International Trade and Industry
3) Japan Technical Co-operation Center for Coal Resources Development

7. REMARKS

No. 170 選鉱製錬

MINERAL PROCESSING AND METALLURGY

1. PURPOSE

The purpose of the course is to introduce the participants to the essential and latest knowledge and various experimental techniques for instrumental analysis in the field of Mineral Processing and Extractive Metallurgy envisaging that participants may become competent enough to assume responsibilities and thereby contributing to the progress of the industries and research laboratories in their own countries.

2. DURATION

From August 10, 1993 to August 9, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The following major subjects are covered in this course.

1) applied mineralogy
   physical chemistry of minerals, mineral engineering, resource and environmental management
2) mineral processing
   crushing and grinding of ore, particulate technology, physical chemistry of flotation
3) ferrous extractive metallurgy
   pretreatment of ore, ironmaking, steelmaking, solidification
4) non-ferrous extractive metallurgy
   pyrometallurgy, hydrometallurgy, electrometallurgy, environmental chemistry
5) process analysis and simulation of metallurgical processes
   transport phenomena, process simulation, optimum design of processes
6) material science for metallurgist
   introduction to materials science, ceramics and metal processing
7) selected topics in mineral processing and metallurgy
   energy resources, data bank system, system engineering, seminar

5. QUALIFICATION OF APPLICANT

1) engineer or researcher
2) university graduate or equivalent in mining and metallurgy or similar subjects, with more than three years of occupational experience in the related field
3) presently engaged in the research works at universities, vacational institutes, research and development divisions in industries
4) over 25 and under 35 years of age

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) Institute for Advanced Materials Processing (SOZAIKEN), Tohoku University

7. REMARKS

A compulsory intensive Japanese language course will be conducted for 200 hours prior to the technical training and for about 100 hours more along with it.

MINING AND METALLURGY

1. PURPOSE

The purpose of the course are

1) to deepen understanding of the present situation in Japanese mining industry and of relationship between the mining industry and other industries through lectures and field trips, and
2) to enhance the knowledge and technology necessary for their mining business after going back to their respective countries

Coal mining industry will not be covered in this course.

2. DURATION

From July 27, 1993 to November 22, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of lectures and observation tour.

Participant will be devided into three groups to cover one of the following subjects:

1) Exploration
2) Mining
3) Mineral Processing and Metallurgy

5. QUALIFICATION OF APPLICANT

1) university / college graduate or equivalent who have basic knowledge of mineral mining
2) mining geologist, mining engineer, milling engineer, metallurgist and other engineer concerned with mining industry who are presently employed at government institution or private company in the field of mining development
3) have more than five years of practical experience
4) under 40 years of age

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) International Institute for Mining Technology (Minetec)

7. REMARKS

No. 172 材料および資源に関する技術研究

RESEARCH AND DEVELOPMENT ON MATERIALS AND RESOURCES

1. PURPOSE

The purpose of the course is to assist the participants in understanding the essential aspects of research and in cultivating a pioneer spirit of research through participation in the research themes with GIRIT and discussion with GIRIT's researchers. The GIRIT's researchers will help participants become technical experts and research planners who can carry out similar work by themselves so as to promote this field in their own countries. The purpose of this course is not to acquaint the participants with known technologies that can be immediately applied in their countries, but rather to assist the participants in mastering methods of research and planning with the objective of gaining greater technical knowledge.

2. DURATION

From August 24, 1993 to April 20, 1994

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

After technical orientation, participants pursue individual research work under a designated research subject about eight months.

The following six groups in GIRIT would offer programs for the technical training.

1) Separation and Chemical Analysis Group
2) Electrochemical Corrosion-Testing Group
3) Mechanical Property Group
4) Thermal Science-Design and Analysis Group
5) Computer Aided Instrumentation Group
6) Ultrasonic Measurement of Materials Group

5. QUALIFICATION OF APPLICANT

1) university graduate in the field of chemical, mining, mechanical or other related technology with occupational experience of more than three years. Master's or doctoral degree is preferable.
2) between 25 and 35 years of age

6. TRAINING INSTITUTIONS

1) Tohoku Branch, JICA
2) Government Industrial Research Institute, Tohoku, (GIRIT), Agency of Industrial Science and Technology, Ministry of International Trade and Industry.

7. REMARKS

INDUSTRY

工　　業

No. 173 中小工業開発セミナーII

SENIOR CLASS SEMINAR ON SMALL INDUSTRY DEVELOPMENT II

1. PURPOSE

The purpose of the seminar is to provide senior class officials in governmental or semi-governmental agencies with some hints and ideas for formulating and implementing better development policies for small industry through review and comparison of policies taken in Japan and those of participating countries. Participation in the seminar will be of great value to participants in development and promotion of small industry in their countries.

2. DURATION

From July 1, 1993 to July 31, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This seminar will be conducted in the form of lecture, observation and discussion and the curriculum consists of four main parts as follows;

1) orientation (lecture and observation)
   - general environment for small industries
2) Japanese case study (lecture and observation)
   - financing
   - tax and credit
   - management
   - technology
   - human resources
3) international comparative study (presentation and discussion)
   - ancilarization
   - rural industrialization
   - export-oriented industrialization
   - institutional set-ups (industrial estate, cooperative)
4) applicability study (presentation and discussion)
   - Subjects are decided according to the needs of the participants

5. QUALIFICATION OF APPLICANT

1) university graduate or equivalent
2) senior administrative official in charge of implementation and/or planning of small industry development
3) occupation experience of more than five years
4) more than 30 years of age

6. TRAINING INSTITUTIONS

1) Nagoya International Training Centre (NITC), JICA
2) Aichi Industrial Research Association
3) Special Steering Committee for S. I. D. Seminar

7. REMARKS

No. 174 TQC・標準化活動実践 II

IMPLEMENTATION OF TQC AND STANDARDIZATION ACTIVITIES II

1. PURPOSE

The purpose of this course is for managers and engineers in developing countries who are involved in promoting quality control and performing the related actual work in standardization organizations, quality control organizations or enterprises to acquire knowledge about the necessity for TQC and Standardization, as well as the related philosophy and techniques, as the foundations for the development of manufacturing industries. Upon return to their respective countries, it is expected that the participants will effectively apply this knowledge in actual operations, as well as provide an active basis for TQC and standardization to flourish, as supporters and advisors in these fields.

2. DURATION

From June 24, 1993 to September 5, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The purpose of this course is for the participants to acquire this knowledge through lectures on the concepts of overall theory, quality theory, control theory regarding the basics of and need for TQC and Standardization, and the techniques for solving quality problems and the methods of managing a TQC organization, and through group seminars and visits to factories where these concepts are in actual use.

5. QUALIFICATION OF APPLICANT

1) working for promotion of standardization and/or quality control with experience of more than three years in government office, public corporation, public or private institute, or private company.
2) under 40 years of age
3) university/college graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Standards Department, Agency of Industrial Science and Technology, Ministry of International Trade and Industry
3) Japanese Standards Association (JSA)

7. REMARKS

No. 175 工業標準化・品質管理シニアセミナー

SEMINAR ON INDUSTRIAL STANDARDIZATION AND QUALITY CONTROL

1. PURPOSE

This Seminar is designed to give informative knowledge and ideas on actual implementation of standardization and quality control activities to participants;

(i) by showing the experiences and the current situation of Japanese activities, and

(ii) by having discussion with Japanese leaders and policy makers of such activities.

2. DURATION

From October 26, 1993 to November 20, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

The main themes of this course are:

1) role of standardization in industrial development
2) how to promote nation-wide standardization
3) the current situation and the future direction of international standardization activities
4) what QC is and how to promote it in companies

5. QUALIFICATION OF APPLICANT

1) working for promotion of industrial standardization and/or quality control either in government office, public corporation, public or private institute, or private company
2) senior-class staff (director of department or its equivalent) presently engaged in policy-making of industrial standardization and/or quality control
3) university graduate or equivalent
4) between 35 and 50 years of age

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Standards Department, Agency of Industrial Science and Technology, Ministry of International Trade and Industry
3) Japanese Standards Association

7. REMARKS

No. 176 工業所有権制度

INDUSTRIAL PROPERTY SYSTEM

1. PURPOSE

The purpose of this course is to offer an opportunity to the participants to obtain basic practical knowledge and techniques needed for smooth operation of the industrial property system, especially concerning the role of this system in technological development and transfer of technology. Participants will also be provided with a basic knowledge of the Japanese legal system of the industrial property rights, and organizations responsible for implementation of the industrial property system and patent documentation. Participants will then be able to contribute to the further development of the industrial property system in their respective countries.

2. DURATION

From September 9, 1993 to November 10, 1993

3. TOTAL NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9) (One participant from one country in principle)

4. MAIN FEATURES OF CURRICULUM

This course consists of common subjects for all participants and group work.

After common lectures, participants will be divided into two groups in accordance with their specialities as follows:

Group A) For general administration officers in industrial property offices or related organizations

Group B) For patent, design or trademark examiners or prospective examiners

5. QUALIFICATION OF APPLICANT

1) official who has experience as:
   a general administration officer in the industrial property offices or related organizations (Group A), or
   an examiner for patent, design or trademark applications or its equivalent (Group B)
2) under 40 years of age
3) university graduate or equivalent

6. TRAINING INSTITUTIONS

1) Tokyo International Centre (TIC), JICA
2) Japanese Patent Office (JPO), Ministry of International Trade and Industry
3) Japan Institute of Invention and Innovation (JIII)

7. REMARKS