3. Water Resources / Disaster Management

Operating Management of Earthquake-Tsunami-Volcano Eruption Observation System
地震津波火山観測システムの運用・管理

GROUP 0880035

Water Resources/Disaster Management－Earthquake Disaster

6 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
[Objective] This program will upgrade the potential of experts in developing countries by improving earthquake observation technology and the understanding of earthquake generation mechanisms, thus contributing to the implementation of the observation network on earthquake and others. [Expected Results] 1) To understand the fundamental theories of Earthquake, Tsunami and Volcano eruption and principles of seismometer, observation system 2) To learn the field practices, the Tsunami early warning system and observation methods used in the case of emergency 3) To understand the international cooperation observation and joint observation in plate subduction zones 4) To improve participants' capacities to apply knowledge and techniques learnt in lectures and practices through their studies on individual topics, and to make Action Plans in order to solve problems in their respective countries	[Target Organizations] Meteorological offices, geographic observatories, seismic research institutes and universities, etc. in charge of earthquake, tsunami and volcano eruption observation [Target Group] 1) Mid-ranking officials in charge of observation, researchers or university staff 2) Individuals with good experience and basic knowledge of observation technology and analysis, 3) Individuals with a university-level qualifications to conduct self research by themselves 4) Individuals proficient in speaking and writing English

CONTENTS		
The training program consists of lectures, practical exercises, and observation trips on the following: 1) An earthquake, tsunami and volcano eruption observation system 2) Principles of earthquake, tsunami and volcano eruption 3) Analysis of earthquake, tsunami and volcano eruption records 4) Crustal movement observation and its analysis 5) Real-time observation and its operation 6) Plate tectonics 7) Earthquakes and tsunamis in the plate subduction zone 8) Volcanic eruptions in the plate subduction zone 9) Earthquakes, tsunamis and volcanic eruptions as global disasters 10) Great disasters due to earthquakes, tsunamis and volcanic eruptions and their effects on people's lives 11) Others	PROGRAM PERIOD	Jul.7.2008～Mar.31.2009
	IMPLEMENTING PARTNER	Nagoya University
	JICA CENTER	JICA Chubu
	COOPERATION PERIOD	2006～2010
	REMARKS	Countries located in the vicinity of a plate subduction belt or plate collision region are encouraged to participate in this program. This course is mainly based on individual research to find solutions for the problems in the respective countries.

Disaster Mitigation, Preparedness and Restoration for Infrastructure
インフラ施設の自然災害に対する抑止・軽減対策及び復旧対策

GROUP 0880221

Water Resources/Disaster Management－Comprehensive Disaster Management

8 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
Participants in this training program will focus on the following 5 points to learn and utilize them in respective countries: 1. Disasters and their characteristics 2. Disaster prevention and restoration systems 3. Disaster prevention and mitigation methods 4. Disaster restoration methods 5. Infrastructure and disaster	(1) University graduates or with equivalent qualifications in infrastructure management, i.e. civil engineering, and with at least 3 years of experience in management, including administration of disaster mitigation (2) Officials of central or local government who hold, or will assume positions in charge of restoration works in the event of major disaster (3) Age: under 40 years old

CONTENTS		
This program includes lectures and practices on (1) the outline of the great Hanshin earthquake (2) the mechanism of earthquake disaster (3) aseismatic technology (4) predicting earthquake (5) mechanisms of ordinary disasters in rivers and roads (6) a disaster prevention plan (7) a disaster-prevention-city plan (8) activities during the initial stage and rescue system (9) evacuation measures (10) protection of lifeline (11) communication during disasters (12) disaster prevention (13) disaster rescue method and its application (14) administrative work of reconstruction for restoration (15) making an action plan for prevention of disaster individually (disaster restoration plan) * Participants are required to make and present an action plan at the end of the program. * The contents of the program above will be subject to change according to the disaster types encountered by the Target Countries.	PROGRAM PERIOD	May.12.2008～Jul.26.2008
	IMPLEMENTING PARTNER	Public Association for Construction Services, Kinki Region
	JICA CENTER	JICA Osaka
	COOPERATION PERIOD	2006～2010
	REMARKS	

Non-Revenue Water Management
上水道無収水量管理対策

GROUP 0880229

Water Resources/Disaster Management－Comprehensive Water Resources Management

8 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
The objective is to learn waterworks maintenance and management activities and the system in Japan as well as developing the capacity to apply them in the participant's home country and duties. Through the program, participants are expected to: 1. Acquire a comprehensive knowledge concerning various problems relating to non-revenue water 2. Understand the operation of leakage detectors 3. Understand the classification of leakage prevention works and diagnosis of the water distribution volume 4. Understand leakage prevention planning 5. Understand practical knowledge and techniques for planning, designing, construction and management of leakage prevention measures	[Target Organizations] 1. Waterworks bureaus of local government, waterworks public corporations, administration bodies in charge of water resources 2. Special organizations maintaining and managing waterworks systems [Target Group] 1. Technology university graduates or equivalent professional qualifications in this field 2. Individuals with at least 5 years of work experience in this field 3. Individuals with a sufficient command of spoken and written English

CONTENTS		
1. Outline of non-revenue water management 2. Outline of waterworks facilities and leakage prevention 3. Operation of leakage detectors 4. Leakage detection 5. Leakage prevention in the planning stage 6. Leakage prevention in the design stage 7. Leakage prevention in the construction stage 8. Water meter, mapping management, measures for illegal use, water charges 9. Measures in case of disaster	PROGRAM PERIOD	Oct.13.2008～Dec.6.2008
	IMPLEMENTING PARTNER	Nagoya Waterworks and Sewerage Bureau, Nagoya City
	JICA CENTER	JICA Chubu
	COOPERATION PERIOD	2006～2010
	REMARKS	The applicant should prepare a Country Report when applying. "Non-revenue water" is not defined as illegally used water, thus the program provides opportunities to learn about leakage management technology. http://www.water.city.nagoya.jp/english/

Integrated Water Resources Management
統合的水資源管理

GROUP 0880839

Water Resources/Disaster Management－Comprehensive Water Resources Management

Target Countries：Asia Monsoon Region (desert area are excluded)

14 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】This course aims at helping the participants to acquire the capacity (1) to consider / implement the management plan with the concept of IWRM and (2) to coordinate among stakeholders. 【Output】 By the end of the program, participants are expected to be able to: 1) Understand the concept of Integrated Water Resources Management (IWRM) in Japan and be able to explain main functions (flood control, water demand management, environmental protection, stakeholder coordination and participation etc.) and their relations. 2) consider the possible application in the respective country through learning the case of specific water resource management from the IWRM viewpoint (budget, technology, human resources, etc.) 3) Formulate an Action Plan* for a water resources management in respective country based on the knowledge gained through 1) - 2)	【Target Organizations】 Administrative organization concerning with IWRM, which belongs to central/local government 【Target Group】 (1) Univ. graduates or those with equivalent knowledge in WRM (Water Resources Management) and more than 15 years experience in the field (Age: 40-55 years old) (2) Senior officials who are directors or in higher positions (3) Individuals with decision-making powers for operating WRM

CONTENTS		
＜Preliminary Phase in home country＞ Making a Job Description Report describing job outlines, the status of water resource management in particular basin. ＜Core Phase in Japan＞ The set of lectures, site visits and discussion session will be conducted. The main subjects are: 1) Components and stakeholders of IWRM 2) Case study on IWRM in Japan and other countries 3) Action Plan Formulation and 4) Formulation and presentation of an Action Plan <Follow-up Phase> Participants are expected to implement the Action Plan and report on progress within three (3) months after the end of the phases in Japan.	PROGRAM PERIOD	July.27.2008～Aug.9.2008
	IMPLEMENTING PARTNER	Japan Water Agency
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2004～2008
	REMARKS	This program is targeted for senior officials who are directors or in higher positions in the field of water resources management.

Integrated Water Resources and Environmental Management in Arid Regions
乾燥地における統合的水資源・環境管理

GROUP 0880851

Water Resources/Disaster Management－Comprehensive Water Resources Management

Target Countries：Countries which has arid or semi-arid regions

9 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
The capabilities for planning and policy making of water resources development and environmental management will be enhanced. To reach the objective, the participants are expected: (1) To understand the basic theory of hydrologic system, aquatic eco-system and integrated water resources development and management, (2) To understand the new concept of "SHIMANTO" which comprises the initiatives of 1) low capital investment, 2) simple and low cost operation and maintenance, 3) less energy requirement, 4) eco-system approach to reduce-reuse-recycle for zero-emission, and 5) capacity building for community based management through environment education initiatives of rural development in semi-arid regions, (3) To acquire the methodologies of water resources and environmental management through project case studies,(4) To acquire project planning and evaluation methods, (5) To consider applicability of the "SHIMANTO" concept in respective countries and propose action plans.	Target Group: (1) Technical officers engaged in planning and policy making of water resources development and environmental management in central or local government bodies with over 5 years of practical and/or survey/research experience (2) University graduates or equivalent

CONTENTS		
Preparatory phase: Country Report including the outline of water resources development and environment management is prepared. Curriculum in Japan: (1) Outline of the development policy in water resources sector, (2) Hydrologic system and watershed management, (3) Groundwater resources development, (4) Aquatic eco-system management and bio-manipulation, (5) Regional/urban environmental management and planning, (6) Sewage and waste water treatment, (7) Water supply system and water quality management, (8) Planning and evaluation of model project, (9) Country Report presentation, final report presentation(Project Proposal)	PROGRAM PERIOD	May.13.2008～Sep.13.2008
	IMPLEMENTING PARTNER	Muroran Institute of Technology
	JICA CENTER	JICA Sapporo
	COOPERATION PERIOD	2004～2008
	REMARKS	Countries which have arid or semi-arid regions (The annual rainfall is less than 250mm) are targeted.

Seismology, Earthquake Engineering and Disaster Mitigation
地震・耐震・防災工学

GROUP 0880875

Water Resources/Disaster Management－Earthquake Disaster

13 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
To train personnel who have acquired advanced technologies and knowledge in the field of seismology and earthquake engineering and who are able to establish, utilize and disseminate earthquake disaster mitigation technologies applicable to their respective countries and/or regions in consideration of their actual conditions, regulations and institutions. Participants are expected to achieve the following: (1) Understand fundamental theories of seismology and earthquake engineering (2) Acquire applied techniques of seismology and earthquake engineering (3) Acquire techniques and knowledge for earthquake disaster mitigation (4) Understand policies for earthquake disaster mitigation (5) Improve participants' capacities to apply the techniques and knowledge learnt in lectures and practical exercises through their studies on individual topics. Action plans to solve problems in their respective countries.	Organs in the field of seismology and earthquake engineering (1)be university graduates in Seismology, Earthquake Engineering, Seismic Disaster Mitigation, or in other Science and Technology subjects with professional experience more than three years in the field of Seismology, Earthquake Engineering or Seismic Disaster Mitigation (2) be well versed in advanced mathematics such as differentiation and integration, partial derivatives, differential equations, matrix, vector algebra, Fourier analysis, etc. (3)be able to write research reports on the individual study in English

CONTENTS		
Participants will be divided into two groups. During the first 8 months they have lectures, discussions, exercises and site trips, followed by individual studies for 3.5 months. (1) Fundamental theory of seismology and earthquake engineering (2) Applied technology of seismology and earthquake engineering (3) Seismic hazard risk evaluation (4) Policy of earthquake disaster mitigation (5) Individual study	PROGRAM PERIOD	Sep.29.2008～Sep.19.2009
	IMPLEMENTING PARTNER	BUILDING RESEARCH INSTITUTE
	JICA CENTER	JICA Tsukuba
	COOPERATION PERIOD	2004～2008
	REMARKS	Upon achieving the required credits, the participants will be awarded a Master's Degree in "Disaster Mitigation" by the National Graduate Institute for Policy Studies (GRIPS).

Disaster Risk Management Technology on Volcanic Eruption, Debris Flow and Landslide
火山学・総合土砂災害対策

GROUP 0880876

Water Resources/Disaster Management－Soil and Water Disaster

Target Countries：Indonesia,Philippines,Peru,Ecuador,Venezuela

5 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
Participants of this course are expected to improve their capacity on volcanic observation or comprehensive sediment management skills and be able to contribute to the disaster prevention/mitigation efforts of their countries. This course consists of 3 components, i.e. Common Program, Thematic Program (Volcanology or Sabo) and Individual Program. The key component of this Course is the Individual Program. Each participant will conduct 2.5/4 months individual training/research at University, Volcano Observatory, Institution or Foundation based on interests of the participating personnel and their organization. The theme of the Individual Program will be set by the Curriculum Committee, according to the Needs Clarification Form. As a result of Individual training/research, each participant will be required to make a final report and present to the Curriculum Committee members. The Curriculum Committee will evaluate the results.	[Target Organizations] Organizations involved in volcanic and/or sediment-related disaster prevention/mitigation activities. [Target Groups] Engineers/Researchers who are engaged in Volcanic Observation or Engineers who are engaged in Sediment-related Disaster Prevention (Sabo Works)

CONTENTS		
【COMMON PROGRAM】 (1) Common knowledge of volcanology and erosion & sediment control engineering (2) Disaster management Admin. in consideration of inhabitants' participation 【THEMATIC PROGRAM (VOLCANOLOGY)】 (1) Latest geophysical and geological concept of volcanology (2) Theories of volcanic earthquakes, geodesy, geoelectromagnetism, geothermics, and geochemistry (3) Be able to carry out volcano observation, data analysis and interpretation 【THEMATIC PROGRAM (SABO)】 (1) Basic knowledge of erosion and sediment control engineering (2) Basic mechanism of sediment-related disasters such as debris flow (3) Comprehensive sediment-related disaster prevention measures, structural and non-structural measures (4) Environmentally-sound comprehensive sediment management 【INDIVIDUAL PROGRAM】 (1) Make a final report as a result of individual training/ research	PROGRAM PERIOD	Mar.22.2009～Sep.24.2009
	IMPLEMENTING PARTNER	Sabo Department, River Bureau, MLIT
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2004～2008
	REMARKS	・Countries with volcanoes or frequent sediment disasters should desirably attend this program. ・Presentation on TV meeting before departure to Japan (Reference) http://www.sabo-int.org/ite/index.html

Global Seismological Observation
グローバル地震観測

GROUP 0880887

Water Resources/Disaster Management－Earthquake Disaster

10 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
[Objective] Participants will be able to play important roles (global seismological observation, data analysis and report) in the monitoring system for nuclear tests. To achieve the above mentioned objective, participants are expected to produce the following outputs; (1) To Acquire knowledge of the the Comprehensive Nuclear-Test-Ban Treaty (CTBT) regime and the role of seismology in the International Monitoring System (IMS). (2) To Understand global seismological observation technologies for monitoring nuclear tests and earthquakes. (3) To acquire data analytical techniques to discriminate nuclear tests from natural earthquakes. (4) To make the Action Plans (Project Proposal), which they should do in their country after a homecoming.	【Target Organization】 Seismological, Geophysical and/or Meteorological Section of the Central Government, etc. 【Target Group】 (1) University graduates or the equivalent, with professional experience of more than three (3) years in the field of seismology (2)To be well versed in basic mathematics such as differentiation and integration (3)To be under thirty-five (35) years of age (4)To be proficient in spoken and written English

CONTENTS		
This program consists of lectures, practical exercises and field studies. The subjects are as follows: (1) Introduction of the CTBT regime concerning seismology, (2) Characteristics and progress status of the international monitoring system of the CTBTO, (3) Instrumentation and observation, (4) Introduction to UNI, (5) Data processing, (6) Analysis of teleseismic waves, (7) Seismicity and tectonics, (8) Source mechanism, (9) Hypocenter location, (10) Seismic array data analysis, (11) Observation and practice of seismic array, (12) Discrimination by mb-Ms, (13) Discrimination by short-period seismograms, (14) General discrimination technique, (15) Installation of LINUX and SAC	PROGRAM PERIOD	Jan.7.2009～Mar.7.2009
	IMPLEMENTING PARTNER	Ministry of Foreign Affairs, Building Research Institute
	JICA CENTER	JICA Tsukuba
	COOPERATION PERIOD	2004～2008
	REMARKS	

Irrigation Water Resources in Arid & Semi-Arid Region and E.I.A for Sustainable Development
乾燥地水資源の開発と環境評価

GROUP 0880890

Water Resources / Disaster Management－Water Resources / Disaster Management
Agricultural/Rural Development－Agricultural Development

Target Countries：arid and semi-arid regions where annual rainfall is less than 500mm

11 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 the core engineers engaged in the development of water resources in developing countries situated in arid and semi-arid regions develop the practical capabilities through the good command of technical know-how combined with the thorough understanding of the basic knowledge required for the present-day development to which due environmental consideration must be given 【Outputs】 Unit 1: Learn how to design water facilities Unit 2: Learn soil, water and crop management methods suitable for arid area Unit 3: Acquire knowledge and techniques of remote sensing and GIS. Unit 4: Learn nature of ground water and its utilization technology Unit 5: Acquire basic techniques to improve business management of farmers, who are the beneficiaries of water resource development, and to analyze food policy. Unit 6: Learn planning of a development project for the sustainable progress and acquire implementation skills of environmental impact assessment (E.I.A.)	【Target Organizations】 Department which deals with development irrigation water resource in the local/national government 【Target Group】 ・Those who have got involved in the development of irrigation water in arid and semi-arid regions ・Those who have practical job experiences of over two (2) to ten (10) years in the above field; ・Those who have the knowledge of the water utilization; ・Those who have university/college graduates or those with equivalent academic backgrounds

CONTENTS		
(1) Water Storage and Supply Facilities ・・Groundwater″ (2)Field Water and Soil Management ・・Farm Management and Food Polic″ (3)Applied Technology of Remote Sensing / Preservation of Greens・Evaluation of Salinized Soil, Water and Crop (4)Sustainable Development and E.I.A.	PROGRAM PERIOD	Jul.8.2008 ～ Nov.16.2008
	IMPLEMENTING PARTNER	Tottori University
	JICA CENTER	JICA Chugoku
	COOPERATION PERIOD	2008～2008
	REMARKS	

Mitigation Strategy for Urban Earthquake Disaster
都市地震災害軽減のための総合戦略

GROUP 0880892

Water Resources/Disaster Management－Comprehensive Disaster Management
Health－Health System

12 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 This program aims to understand comprehensive strategy for urban earthquake disaster risk reduction (DRR) in seismically hazardous countries. After learning the strategy, the participants should be able to propose the action plans for urban earthquake DRR that are suitable and required in their countries based on the individual country situations. 【Outputs】 The participants is expected to understand the following three approaches of the strategy; 1) Risk assessment techniques needed prior to the earthquake 2) Risk management techniques required during and after the event 3) Risk communication techniques to be provided before and after the event	【Target Organizations】 Organizations related to urban earthquake disaster risk reduction (DRR) for large cities in seismic hazardous country 【Target Group】 (1) Current Duties: be a public officers, technical specialists, researchers, engineers or medical staffs who is presently engaged in urban earthquake disaster risk reduction (DRR) for large cities (2) Experience in the relevant field: With more than 2 years of work experience (3) Language: have a competent command of spoken and written English

CONTENTS		
In this program, the following subjects will be taught by and discussed with Japanese and international experts on the subject: 1) Introduction of a comprehensive strategy for earthquake mitigation for mega-cities in seismically hazardous countries 2) Learn about risk assessment techniques such as preparing earthquake hazard maps needed prior to the earthquake event 3) Learn about risk management techniques such as emergency responses required during and after the event 4) Learn about risk communication techniques such as disaster information sharing and disaster preparedness to be provided before and after the event. This program is strongly supported by an international NGO of EMI (Earthquake Mega-cities Initiatives) to develop implementation schemes for earthquake disaster mitigation at each mega-city by considering the available social and technical conditions of each country.	PROGRAM PERIOD	Sep.29.2008～Nov.22.2008
	IMPLEMENTING PARTNER	KOBE UNIVERSITY
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2004～2008
	REMARKS	

Engineering on Water Supply Systems
上水道施設技術

GROUP 0880944

Water Resources/Disaster Management－Urban Water Supply

17 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】This course aims at developing capacity of engineers who take leadership roles in the planning and design of water supply systems or operation and maintenance of water supply. Particular focus shall be given to the planning skill of water supply systems. 【Outcomes】 Through the training course, participants are expected: 1) To gain the skill of basic planning and design for water supply systems, 2) To acquire comprehensive knowledge on water supply systems, which is required for planning, operation and maintenance, 3) To understand systems for waterworks and functions and roles of related organizations, 4) To formulate an Action Plan based on 1)～3) for improving water supply planning or design in their own countries	【Target Organizations】 Departments responsible for water supply planning or designing under water supply utility, national or local government (excluding mechanical and electric departments) 【Target Groups】 (1) Individuals presently in a management position or senior engineers with currently or expected to be engaged in the formulation of waterworks plan, (2) Engineers with more than 5 years of experience in water supply systems (3) University graduates from the faculty of engineering such as civil, sanitary, environmental, or with equivalent academic background

CONTENTS		
<Preliminary phase> Making a Country Report describing job outlines, problems of water utilities and the status of their service. After receiving acceptance notice, participants make the 1st version of Action Plan. <Core Phase in Japan> Lectures, field visits, discussion, practice and presentation in the following subjects: 1) Planning and design for water supply systems 2) Outline of water supply systems Water Resources, Intake facility of Surface Water, Water Purification Technology, Water Quality Control, Pumping Facility, Layout of Water Distribution Facilities, Construction of Water Supply and Distribution Facilities, Water Distribution Management, Water Leakage Reduction 3) Systems for waterworks and organizations concerned 4) Formulation of an Action Plan (2nd and Final version)	PROGRAM PERIOD	May.20.2008～Aug.6.2008
	IMPLEMENTING PARTNER	JAPAN WATER WORKS ASSOC.
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2005～2009
	REMARKS	This program targets officers of water utilities. Those with no working experience at water utilities, such as researchers or administrative officers in the ministries, may not be suited for the program.

Development and utilization of mitigative technologies for slope-induced disasters in developing countries (Master's or Doctor's Degree：Engineering)
開発途上国のための斜面災害軽減技術の構築と普及（長期）

L/T 0881113

Water Resources/Disaster Management－Soil and Water Disaster

Target Countries：Countries where countermeasures against the slope failure is needed.

3 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 Trainees complete course-work requirements, with an emphasis on geotechnical enginering, and carry out research which proposes technology and social systems that facilitate such self defense as mitigation of slope-failure disasters. Accordingly, the trainees become able to push forward the said disaster mitigation framework after coming back to home countries. 【Outputs】 (1) Course work on subjects such as geotechnical engineering (2) Case study on real slope failure (3) Research work on slope failure by model tests or material strength tests (4) Study on practical self defense against natural disaster, conducted in trainee's home country	【Target Organizations】 University or public research institute which develop young researchers and/or engineers and also are involved in disaster administration in the country 【Target Group】 Age: under 30 years old. Application for Master's or Doctor's can be accceptable.

CONTENTS		
(1) Foundation Engineering, Principles of Soil Mechanics, Geotechnical Engineering, Geotechnical Earthquake Engineering etc. (2) Case study on real slope failure with special attention on topography and soil conditions. Laboratory tests, if necessary, on soil samples collected from sites. Case study on real slope failure, assisted by specialists, gives the trainee a good opportunity to learn the reality of slope failure and to develop a professional capabilities. (3) Model tests and/or material tests are carried out in order to propose the use of inexpensive field monitoring equipments as well as logics of warning of urgent slope failure. The output from this work constitutes the main body of a master (doctoral) thesis. (4) The self defense against natural disaster is the final goal of the program. The self defense is supported by local peope in such aspects as installation, maintenance, and operation of field monitoring equipments as well as execution of emergency warning and evacuation. This study also becomes a part of thesis.	PROGRAM PERIOD	Mar.15.2009～Mar.14.2011
	IMPLEMENTING PARTNER	Department of Civil Engineering, The University of Tokyo
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2008～2010
	REMARKS	

Water Supply in Small and Medium Scale Cities in Central Asia
中央アジア地域　中小規模都市給水

R/F 0884027

Water Resources/Disaster Management－Urban Water Supply

Target Countries：Central Asia; Kazafstan, Tajikistan, Uzbekistan, and Kirgiztan　　12 participants ／ Russian

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 1. Participants from different countries will share their experiences in tackling their common problems with a limited budget, i.e. the management of complicated waterworks facilities constructed under the former Soviet Union. 2. Participants will gain a significant understanding of their problem in management and technical aspects and will prepare and present a Study Report to improve their waterworks management. 【Outputs】 1. Gain knowledge about the management of the water supply system in Japanese local cities, by studying the case of Yokohama City 2. Enhance general waterworks techniques 3. Through the above, find the keys to solve the problems on water supply systems in participants' country	【Target Organizations】Waterworks Utilities at Small and Medium Scale Cities in the following areas; Kazakhstan: North Kazakhstan Province and Akmora Province Tajikistan: Dushanbe and Khatlon Oblast Uzbekistan: Tashkent Province, Fergana Province, and the Republic of Karakalpakstan Kyrgyz：Issik-Kul Province and Osh Province 【Target Group】 Water treatment engineers of the target organizations.

CONTENTS		
This year, the curriculum is mainly focused on technical matters (No. 3 of the below), and in general the curriculum covers the followings; 1. Lectures; Management of Yokohama waterworks bureau (Japan's waterworks services, water rights, water resource and water quality control in Yokohama City, and the management of sewage) 2. Lectures; Planning, operation, and administration of Yokohama waterworks bureau (tariff, operation, and human resource development) 3. Lectures; Waterworks Techniques of Yokohama waterworks bureau (control of water purification plant, water purification, water quality control, water distribution control, and water leakage control) 4. Observations; Waterworks facilities, construction place, and sewage plant in Yokohama City and others 5. Presentations; Country report at the first stage of the course and Study Report at the final stage of the course	PROGRAM PERIOD	Feb.1.2009～Feb.28.2009
	IMPLEMENTING PARTNER	Yokohama Waterworks Bureau
	JICA CENTER	JICA Yokohama
	COOPERATION PERIOD	2006～2010
	REMARKS	A maximum of three per country will be able to participate in the course. The target group shall be as follows: 2008: Water treatment engineers 2009: Water distribution engineers 2010: Water quality control engineers

Disaster Prevention Management for Central Asia and Caucasus
中央アジア・コーカサス地域防災行政

R/F 0884047

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Central Asia and Caucasus　　11 participants ／ Russian

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 Participants are expected to understand the present situation and issues in his/her country before participating in the program, and to draft a plan to improve the system of disaster prevention in his/her organization at the end of the program. 【Outputs】 (1) To clarify the present situation and issues of disaster prevention in his/her country (2) To understand government's policies and measures for disastery prevention (3) To understand response to disaster and collaboration of related organizations (4) To draft action plans, which includes regional cooperation	【Target Organization】 Ministries or departments in charge of disaster prevention 【Target Group】 - Administrative officials of central or regional governments in charge of disaster prevention (Engineering officials, scientific officials and researchers are NOT expected as a part of the target group) - Experience of more than 2 years in the field of disaster prevention is required - Be able to submit the report about post-training activities in 6 months after returning to their home countries.

CONTENTS		
Basic concept of disaster prevention, Measures taken for earthquakes, Measures taken for sediment disasters, Disaster prevention management of Japanese central government, Disaster prevention management of Hyogo Prefecture, Lessons learned in the Great Hanshin-Awaji Earthquake, Observation of disaster drills, Role of mass media in disasters, Disaster prevention in enterprises, Disaster prevention in lifelines (electricity and gas), Workshop for formulating action plans, and Presentation of action plans to improve the system of disaster prevention.	PROGRAM PERIOD	Jul.7.2008～Aug.9.2008
	IMPLEMENTING PARTNER	Asian Disaster Reduction Center
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2007～2009
	REMARKS	

Management of Medical Service in Disaster for Andean countries
アンデス地域災害医療マネージメント

R/F 0884118

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Andean countries　　11 participants ／ Spanish

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】 The objective of this course is to formulate action plan on improving the management system integrated both administration and medical services in disasters 【Outputs】 To achieve above objective, participants expected to understand the following; (1) Policies and measures on disaster prevention of Japanese government and Hyogo prefecure (2) Coordination between administration and medical services at the time of disaster (3) Disaster medicine (4) Disaster prevention in community and region	【Target Organizations】 Organizations related to disaster medical care or emergency medicine 【Target Group】 - Officials in charge of disaster medical care in central or regional governments - Medical staff of emergency medical facilities such as doctors, nurses, paramedics, who are engaged in disaster medical care. - More than 2 years of work experience in the field of disaster medical care is required. - Be able to disseminate knowledge, experiences and techniques acquired from this training course after returning to their home countries

CONTENTS		
Disaster prevention in Japan and in Hyogo Prefecture, coordination between administration and medical services in disasters, response to disaster, disaster prevention in regions and drafting of action plans to improve management system between administration and medical services in disasters. This will include: Disaster prevention in Japan and in Hyogo Prefecture, emergency medical care in Japan, health care services in Japan, lessons learned at Great Hanshin-Awaji Earthquake, coordination between administration and medical services in disasters, role of Hyogo Emergency Medical Center, disaster nursing, development of community, health care services in disasters, observation of disaster drills, discussions with related organizations, observation trips to other areas in disaster, and workshop for formulation of action plans.	PROGRAM PERIOD	Oct.13.2008～Nov.29.2008
	IMPLEMENTING PARTNER	Hyogo Emergency Medical Center
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2007～2009
	REMARKS	

Control de Desastres
中米防災対策

R/F 0884133

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Central America　　13 participants ／ Spanish

OBJECTIVE	TARGET ORGANIZATION / GROUP
The objective of the course is to develop awareness of disaster prevention and to promote disaster reduction management by cooperation between various organizations involved in disaster prevention - central government, local governments, research institutes and civic organizations. Especially, to develop capability of central and local governments to respond to disasters is aimed in this course.	【Target Organizations】 Ministries or departments in charge of disaster prevention 【Target Group】 1. Officials who are in charge of disaster prevention in the central or local government (it is expected that 1 participant from central government and 1 from local government will participate for each country) 2. University degree and/or 2 or more years of work experience as a governmental official in the field of disaster prevention 3. Age: 26-50 yars old

CONTENTS		
【Third Country Phase before arriving in Japan】 Pre-course will be held by ex-participant of this course, CEPREDENAC etc. (1) Objective, activity and outcome of the course in Japan (2) Role and activity of CEPREDENAC (3) Sharing of the present situation of each country (4) PCM method and problem analysis 【Core Phase in Japan】 (1) Planning method and examples of social development which consider mitigation of risk from natural disaster (2) Systematization of information on natural phenomenon and its dissemination (3) Coordination between government, citizens, community and research institute, especially coordination between central and local governments (4) The way of raising public awareness of disaster prevention in community by education and training (5) Transfer of technical and scientific information to the public and the importance of mass media	PROGRAM PERIOD	Nov.3.2008～Dec.6.2008
	IMPLEMENTING PARTNER	Disaster Reduction and Human Renovation Institution
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2005～2009
	REMARKS	

Mental Health Services after Disaster for Asian Countries
アジア地域災害後のメンタルヘルスサービス

R/F 0884139

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Asian countries often affected by natural disasters

10 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】 To develop action plans for mental health care services after disaster in each country 【Outputs】 To achieve above objective, participants is expected to understand the following issues; (1) Traumatic stress (2) The current state of post-disaster mental health care services (3) Methods for evaluating traumatic stress (4) The effects which actual situations can have on aid workers and how to take care of them (5) Intervention and therapy for victims	【Target Organizations】 Organizations playing an important role in public health activities at community level. 【Target Group】 Doctors, psychiatrists, clinical psychologists, nurses and hygienists who play an important role in public health activities at community level. More than 3 years of work experience in the field of disaster prevention is required.

CONTENTS		
(1) Traumatic Stress Traumatic stress and PTSD, psychological effects of disaster, grief and its pathology and long-term effects (secondary symptoms) (2) Situation of Mental Health Services for Disasters Hanshin-Awaji Earthquake and correlations to general medical care (3) How to Evaluate Traumatic Stress Clinical diagnosis, structured interviews and self-rating depression scale, screening methods for local health care (4) Effects of Disaster Situations on Aid Workers and Associated Care Critical incident stress, secondary traumatic stress and methods of self-care (5) Actual State of Intervention and Therapy for Victims Early intervention, children and disasters, long term intervention at schools, therapy and intervention methods for PTSD, intervention methods, therapy methods and cognitive behavioral therapy	PROGRAM PERIOD	Feb.24.2009～Mar.9.2009
	IMPLEMENTING PARTNER	Hyogo Institute for Traumatic Stress
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2007～2009
	REMARKS	

Waterworks Engineering for Caucasus and East Asia Regions
コーカサス・東アジア地域　寒冷地水道

R/F 0884143

Water Resources/Disaster Management－Urban Water Supply

Target Countries：Caucasus, Mongolia, and Central Asia

4 participants ／ Russian

OBJECTIVE	TARGET ORGANIZATION / GROUP
This course is designed to obtain knowledge and technology of waterworks including water resources, design, facilities, water treatment, leak prevention and water management to ensure the supply of safe drinking water to people. Upon successful completion, following outputs will be expected; (1) To deepen the understanding of plan of waterworks (water resources, water demand, water supply system, etc.), (2) To deepen the understanding on management of waterworks (financial system/water charge), (3) To acquire the knowledge on basic/advanced water treatment methods (4) To obtain basic knowledge and practical skills on water leaks prevention (5) To be able to propose action plans for appropriate management of waterworks engineering in respective countries.	(1) Nominated by government in accordance with proper procedures (2) Managers or directors who supervise technical department/division/section of a public enterprise or local body which provides water supply services (3) More than 3 years of practical experience (4) Proficient in spoken and written Russian (5) In good health, both physically and mentally, to undergo the course of training.

CONTENTS		
<Preparatory phase> Participant should prepare a "Country Report" which describe the present situation and problems related to waterworks engineering. <In Japan> (1) Outline of water supplies (2) Plan of waterworks (water resources, water demand, water supply system) (3) Water treatment (outline and process control) (4) Plan and maintenance of transmission and distribution facilities, and distribution pipes (5) Water quality control (6) Management of waterworks (financial system, water charge) (7) Water leak prevention (8) Service installation (9) Advanced water treatment (10) Country Report and action plan presentation	PROGRAM PERIOD	Jan.14.2009～Mar.11.2009
	IMPLEMENTING PARTNER	Waterworks Bureau, City of Sapporo
	JICA CENTER	JICA Sapporo
	COOPERATION PERIOD	2005～2009
	REMARKS	

Tsunami Disaster Mitigation for Asian Countries
アジア地域 津波防災

R/F 0884165

Water Resources/Disaster Management－Earthquake Disaster

Target Countries：Asia

4 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
The course objective involves nurturing personnel who have acquired advanced technologies and knowledge in the fields of tsunami and who are able to establish, utilize and disseminate tsunami disaster mitigation technologies applicable to their respective countries and/or regions based on consideration of their actual conditions, regulations and institutions. Participants are expected to achieve the following: (1) Understand the fundamental theories of seismology and tsunami (2) Acquire applied techniques of seismology and tsunami (3) Acquire techniques and knowledge for tsunami disaster mitigation (4) Understand policies for tsunami disaster mitigation (5) Improve their capacities to apply the techniques and knowledge learnt in lectures and practical exercises through their studies on individual topics. Action plans to solve problems in their respective countries.	1) University graduates in Seismology, Tsunami or their Disaster Mitigation, or university graduates in Science and Technology other than the above mentioned subjects with three or more years of professional experience in the fields of Seismology, Tsunami or their Disaster Mitigation 2) Individuals well-versed in advanced mathematics, such as differentiation and integration, partial derivatives, different equations, matrix, vector algebra, Fourier analysis, etc. 3) Individuals able to write research reports on individual study in English

CONTENTS		
During the first 8 months they have lectures, discussions, exercises and site trips, followed by individual studies for 3.5 months. (1) Basic subjects related to Earthquake, Tsunami and Disasters (2) Advanced subjects related to Earthquake, Tsunami and Disasters (3) Tsunami Hazards and Risk Assessment (4) Earthquake and Tsunami Disaster Mitigation Policy (5) Individual Study	PROGRAM PERIOD	Sep.29.2008～Sep.19.2009
	IMPLEMENTING PARTNER	BUILDING RESEARCH INSTITUTE (GRIPS)
	JICA CENTER	JICA Tsukuba
	COOPERATION PERIOD	2006～2008
	REMARKS	Upon achieving the required credits, the participants will be awarded a Master's Degree in "Disaster Mitigation" by the National Graduate Institute for Policy Studies (GRIPS).

Management of Urban Water System for Southeast European Countries
南東欧地域 都市上下水道事業管理

R/F 0884184

Water Resources/Disaster Management－Comprehensive Water Resources Management

Target Countries：Southeast Europe

9 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
This course is designed to identify appropriate Urban Water management methods/techniques to each country's situation by learning those in Japan. Upon successful completion, following outputs are expected: (1) To grasp the overview of urban water service in Japan. (2) To understand financial management of urban water service. (3) To understand of water treatment systems and water quality control. (4) To understand maintenance of urban water service facilities. (5) Propose action plans to improve each countries urban water system	【Target Group】 (1)Be nominated by each government in accordance with the proper procedures (2)Either staff members of pubic water corporations or local government officers in charge of financial and/or operation management of water service (3)At least 3 years of practical experience in water service (4)Proficient in spoken and written English (5) Individuals in good health, both physically and mentally

CONTENTS		
<Preparatory Phase> By preparing Job Report, address current situation of urban water system in each country and expectation for the course. <Curriculum in Japan> -Lectures: Water supply and sewerage administration in Japan, Water supply and sewerage systems in Sapporo, Financial management system for water service, Collection of water charges from users, Water service facilities in watershed, Planning and designing of water and sewerage facilities, Process management at water and wastewater treatment facilities, Water quality control, Water purification by membrane, Maintenance of physical structures, Water conveyance and distribution system in Sapporo, Maintenance of pipe networks, -Practices: Financial management system for water service, Maintenance of physical structures, Water leak prevention, Project Cycle Management -Presentation: Job report presentation, Final report presentation, Action plan presentation	PROGRAM PERIOD	Jul.1.2008～Aug.2.2008
	IMPLEMENTING PARTNER	Hokkaido University
	JICA CENTER	JICA Sapporo
	COOPERATION PERIOD	2006～2008
	REMARKS	

Disaster Management and Preparedness in Southeast European Countries
南東欧地域　防災対策

R/F 0884185

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Southeast Europe

4 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
The objective of this program is to help participants formulate improvement plans for disaster management in each participant's organization based on total disaster risk management through general understanding of the disaster management systems of central and local governments of Japan against various kinds of disasters.	Officials currently responsible for natural disaster management: especially those who are involved in disaster prevention, mitigation preparedness, response, rehabilitation and reconstruction either in central or local level government.

CONTENTS		
An action plan for improving the participant's organization is to be submitted after undergoing training on the following: (1) Policy formation, enforcement and implementation of disaster countermeasures in Japan (2) International cooperation for natural disaster prevention and reduction (3) Implementation of disaster countermeasures of local government in Japan (4) Project Cycle Management Workshop	PROGRAM PERIOD	Jan.17.2009～Feb.28.2009
	IMPLEMENTING PARTNER	Asian Disaster Reduction Center
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2006～2008
	REMARKS	Expected number of participants per country: 1-2

Comprehensive Strategy for Recovery from Natural Disasters for Middle East and Asian countries -Lessons Learned from the Great Hanshin-Awaji Earthquake Case
中東・アジア地域　自然災害からの復興戦略～阪神・淡路大震災現場からの教訓

R/F 0884219

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Countries often affected by natural disasters

5 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 The participants will create specific action plans for reconstruction from disasters in their countries from the view point of "social capital". 【Outputs】 (1) To understand the issues (disaster emergency response, recovery, and reconstruction) that arose in the time sequence after disasters. (2) To understand the PDCA (Plan, Do, Check, and Act for improvement) Cycle in efforts for reconstruction. (3) To understand the importance of the concept of "social capital" from the experience of role sharing among residents, business operators, and administrative bodies in efforts to solve the problems. (4) To understand new viewpoints (efforts of individuals and communities, infrastructure development, and crisis-control structure) to develop safe towns. (5) To create action plans for reconstruction from disasters in their countries.	【Target Organizations】 Authorities related to reconstruction from disasters in countries where natural disasters frequently occur 【Target Group】 - Decision makers on-site for reconstruction from disasters - Minimum three years work experience in the corresponding field

CONTENTS		
(1) Outline of the Great Hanshin-Awaji Earthquake, Time sequence from the period of disaster emergency response to that of recovery/reconstruction Visit to an earthquake museum, etc., Study on other disaster damage cases, and Outline of natural disasters in participants' countries (2) Reconstruction plan, Promotion of reconstruction plan, Responses to the issues at each period from the time of disaster emergency response to that of recovery/reconstruction and evaluations, Case examples in public utility services including electricity, gas, and telephone, and Recovery and reconstruction plan in the participants' countries (3) Significance of social capital, Case examples of "mutual help" by enterprises, NGOs, volunteers, and local communities, Redevelopment projects (readjustment of town lots) and residents, and Mutual help in the participants' countries (4) Development of safe towns, Creation of safe cities in the participants' countries (5) Session to exchange views between the City employees and the participants	PROGRAM PERIOD	Jan.12.2009～Mar.7.2009
	IMPLEMENTING PARTNER	Kobe Institute of Urban Research, Kobe International Center for Corporation and Communication
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2007～2009
	REMARKS	

Integrated Arsenic Mitigation for Asian countries
アジア地域総合的砒素汚染対策

R/F 0884223

Water Resources/Disaster Management－Rural Water Supply

Target Countries：Asia　　6 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
This program aims to become able to set basic policy strategies for integrated arsenic contamination measures through: (1)To understand the severity of the damage through understanding the experiences of arsenic damage gone through by Tokuro, (2)To gain a basic knowledge of arsenic through acquiring knowledge of chemical arsenic analysis techniques, (3)To understand the environmental pollution and health damage caused by arsenic contamination in your country through lectures on the projects carried out by the Asia Arsenic Network, (4)To propose a basic strategy for integrated arsenic contamination measures in your own country based on the knowledge gained in this training course.	【Target Organizations】 Organizations (Governmental/NGO) responsible for arsenic mitigation 【Target Group】 (1) Specialists (doctors, engineers, chemists) who presently work in arsenic mitigation, with more than 3 years of experience (2) (Preferably) under the age of 45

CONTENTS		
This course consists of lectures, practice, field visits, group discussion and report presentations regarding the following subjects: (1) Patient relief by trail, Role of document, History of Minamata disease (2)Arsenic Contamination of Groundwater, Chemistry of Arsenic, Arsenic and Microbes, Arsenic Analysis I (3)Safe Water Supply, Project on enhancement and citizen participation, etc. (4)Job report presentation, Action Plan presentation	PROGRAM PERIOD	Oct.20.2008～Dec.12.2008
	IMPLEMENTING PARTNER	Asia Arsenic Network
	JICA CENTER	JICA Kyushu
	COOPERATION PERIOD	2007～2009
	REMARKS	Expected number of participants per country : 1 - 2

Integrated Water Resources Management for Middle East
中東地域統合的水資源管理

R/F 0884233

Water Resources/Disaster Management－Comprehensive Water Resources Management

Target Countries：Middle East　　9 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】<Under Planning>This course aims at developing capacity of participants This course aims at enhancing technical capabilities of participants and helping them develop action plans for promotion of IWRM. 【Outputs】<Under Planning> (1)To understand and be able to explain the concept of IWRM (2)To understand and be able to explain the method of monitoring, evaluation and analysis on hydrological and demand-supply balance as well as IWRM planning and implementation (3)To understand and be able to explain the planning and implementation methodology for water resources development, efficient utilization in equity an IWRM (4)To understand causes of water conflicts among sectors, among up-and-downstream basins, and among regions, and to explore a clue for the solution (conflict management)	【Target Organizations】 Ministry of Water (Irrigation) 【Target Group】 1. Engineers and/or officers in charge of river/water resources management/administration

CONTENTS		
<Preliminary phase> Making a Country Report describing job outlines, current situation and problems of water resources and water recourse management, the policy on IWRM. <Core Phase in Japan> Lectures, field visits, discussion, practice and presentation will be held in the following subjects: 1. Concept of IWRM 2. Method of monitoring, evaluation and analysis on hydrological & water-demand-supply balance and IWRM planning and implementation 3. Planning and implementation methodology for water resources development 4. Conflict management 5. Action Plan formulation and presentation	PROGRAM PERIOD	Mar.30.2009～April.22.2009
	IMPLEMENTING PARTNER	Japan Water Agency
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2007～2009
	REMARKS	

Urban Waterworks Engineering
都市上水道技術者養成

GROUP 0880083

Water Resources/Disaster Management－Urban Water Supply

Target Countries：African Countries

10 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 Participants acquire wide knowledges about waterworks and get abilities to improve the waterworks in respective countries with integrated views, and also share those with colleague after completion of the training in Japan. 【Outputs】 (1) To understand the system of purification plants and purified water processes (2) To understand water transmission and distribution system, and maintenance including water leakage control (3) To understand securing good water resources and water quality control (4) To get ideas on the effective management of waterworks considering environmental condition (5) To prepare and present an Action Plan using what have been acquired through the course	【Target Organizations】 Organization of mainly managing waterworks 【Target Group】

CONTENTS		
(1) Lectures and practices regarding the techniques of purified water processes and design of purification plant for operating and maintaining purification plant (2) Lectures and practices by providing the examples of water transmission and distribution system, and maintenance method including water leakage control. (3) Lectures and practices for securing good water resources and water quality control (4) To learn examples in Japanese knowledge and know-how for effective management of waterworks considering environmental condition (5) To prepare and present an Action Plan to be approved by participants' organization by the effort of each participant, using knowledge, techniques, and ideas acquired through the course	PROGRAM PERIOD	Jan.4.2009～Jan.29.2009
	IMPLEMENTING PARTNER	Yokohama Waterworks Bureau
	JICA CENTER	JICA Yokohama
	COOPERATION PERIOD	2008～2010
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Rescue Techniques
救急救助技術

GROUP 0880342

Water Resources/Disaster Management－Comprehensive Disaster Management
Water Resources / Disaster Management－Comprehensive Disaster Management
8participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
〈Outcome〉 Action plans to develop human resources in participants' respective organizations will be formulated by participants' organizations with utilizing obtained skills and knowledge in the training in Japan. 〈Outputs〉 1) Acquiring basic knowledge and skills to rescue people from life-threatening physical danger caused by disasters or accidents such as earthquakes, fires, and industrial or traffic accidents by means of various rescue techniques. 2) Acquiring basic knowledge and skills of first aid, such as artificial respiration, cardiopulmonary resuscitation, hemostat, and immobilization of victims in the disaster or accident. 3) Gaining the necessary knowledge to be a leader of the rescue service. 4) Preparing the draft action plans to develop human resources in participants' respective organizations will be formulated by participants' organizations with utilizing obtained skills and knowledge in the training in Japan.	1. Individuals with adequate rescue knowledge, with at least three years of experience in rescue operations, and currently engaged in the operations. 2. Individuals who are, in principle, under the age of 35 and physically capable of going through rescue training practices. 3. Rescue leaders, or expected to be leaders in the near future, and able to widely spread knowledge and skills obtained in the course in their own countries. 4. Individuals with the specified skills, such as a) tying and hitching ropes and lines, b) swimming, c) a three-point procedure for building entry via ladder.

CONTENTS		
〈Preparatory Phase in participants' home countries〉 Preparation and Submission of Country Report 〈Phase in Japan〉 A: Lectures: Fundamental theory, Emergency rescue outline, Special disaster countermeasures, Earthquake countermeasures, Statistical theory B: Practical Training: Rescue techniques, Emergency techniques, General training C: Observation, etc.: Facility observation, Observation in other cities 〈Finalization Phase in participants' home countries〉 Finalization of the Action plan, which is based on the results of the course and submission to JICA regional office	PROGRAM PERIOD	Jul.21.2008～Oct.19.2008
	IMPLEMENTING PARTNER	OSAKA MUNICIPAL FIRE DEPARTMENT
	JICA CENTER	JICA Osaka
	COOPERATION PERIOD	2007～2009
	REMARKS	This program will be conducted in hot and humid whether conditions so participants are requested to be physically and mentally strong.

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Waterworks Engineering
水道技術者

GROUP 0880763

Water Resources/Disaster Management－Urban Water Supply

8participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
This course is designed to acquire wide knowledge on waterworks, therefore, contribute to the improvement of waterworks in respective countries with integrated views. The participants is also expected to share the experience in Japan with colleague. Upon successful completion, following outputs are expected; (1) To understand the purification plants and purified water processes (2) To understand transmission, distribution, and service water system (3) To understand leak prevention (4) To understand securing good water resources and water quality control (5) To understand the management of environmentally considered waterworks (6) To Adress action plans to realize the learnings in Japan	【Target Organizations】 Organization of mainly managing waterworks 【Target Group】 (1)Be senior technical officers in charge of waterworks engineering in central or local government. (2)at least three 3 years of practical experience, (3)be university graduates or equivalent technical qualifications in waterworks engineering. (4)Proficient in spoken and written English

CONTENTS		
<Preparatory Phase> Prepare Country Report <In Japan> (1) Lectures/Practices on techniqes of water purifing processes and design of purification plant (2) Lectures/practices on provision plan of transmission, distribution, and service pipes (3) Lectures/practices on the reduction of leek ratio (4) Lectures/practices on securing good water resources and water quality control (5) Lectuers/Practices on environmentally concsiouns waterworks (6) Propose and present action plans to apply above learnings to participants home country's situation <Finalization Phase> Within 6 month after completion of the course, share the knowledge and experience in Japan at respective organizations	PROGRAM PERIOD	Jul.1.2008～Sep.20.2008
	IMPLEMENTING PARTNER	Waterworks Bureau, City of Sapporo
	JICA CENTER	JICA Sapporo
	COOPERATION PERIOD	2008～2010
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

The Group Training Course in Fire Prevention Techniques
火災予防技術

GROUP 0880933

Water Resources/Disaster Management－Other Water Resources/Disaster Management Issues
Governance－Public Safety
7participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
The participants are expected to enhance their ability to formulate fire prevention policy. To reach the objective, participants are expected to achive the follows. (1) To understand Japanese legislation and administration of fire prevention, followed by report making on the outline of his/her countries' fire prevention system and its problem (2) To understand the necessity of fire prevention management and obtain inspection/examination measures for possible objects for fire, followed by report making on his/her countries' fire prevention policy and possible measures for its improvement (3) To understand the necessity of post-fire verification, followed by report making on the proper reaction to fire incidents and construction or improvement of a post fire investigation system in his /her country (4) To present and share the knowledge and experiences gained from this program with concerned personnel of respective countries, and submit Final Report to JICA.	1. Administrative officers or candidates of a fire service implementation agency, who is or will be engaged in fire prevention activities 2. Those who can disseminate the knowledge and techniques obtained in Japan to their organizations

CONTENTS		
1. Japanese legislation relating to fire prevention (lecture) 2. Japanese legislation relating to building standard (lecture) 3. Japanese administration for fire prevention (lecture and observation) 4. Facilities and equipment for fire prevention (lecture, observation and practice) 5. Regulations on toxic and hazardous materials (lecture, observation and practice) 6. Investigation on the cause of fire (lecture, observation and practice)	PROGRAM PERIOD	Aug.10.2008～Oct.18.2008
	IMPLEMENTING PARTNER	TOKYO FIRE DEPARTMENT
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2005～2009
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Dissemination and Establishment of Disaster Prevention Culture for Asian Countries
アジア地域 防災文化の普及と定着

R/F 0884005

Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Countries which had or highly likely to have a big natural disaster

5participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 To review the lessons learned from the disasters and to utilize the experience as wisdom for daily life, and to inherit the importance of disaster prevention as an own culture of the region. 【Outputs】 (1) To understand the activities for disaster prevention at school in Japan (2) To learn the way to develop human resources for disaster prevention (3) To understand the way to inherit the disaster prevention culture (4) To draft an action plan for promotion of disaster prevention culture	【Target Organizations】 Central or local government in charge of disaster education 【Target Group】 1) Current Duties: be working in central or local government in charge of disaster education and can play a leading role in promotion of disaster education. Priority will be given to an applicant who is/was engaged in JICA's project. 2) Experience in the relevant field: have more than 3 years' experience in the field mentioned above 3) Language: have a competent command of spoken and written English.

CONTENTS		
(1) ・To visit the site of disaster prevention class ・To participate in an evacuation drill at school ・To take the classes about activities of diaster prevention at local government level (2) ・To receive an explanation on curriculum or classes of the school which has disaster prevention department ・To learn the importance of future human resources development through the discussion with students (3) ・To take the lecture from museum attendants who specialize in disaster issue ・To take the class about Disaster Anthropology (4) ・To learn the case example of disaster prevention with utilizing the mass-media, music or art. ・To draft an action plan for promotion of disaster prevention culture through participatory workshop	PROGRAM PERIOD	Jan.12.2009～Feb.21.2009
	IMPLEMENTING PARTNER	Asian Disaster Reduction Center
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2008～2010
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Flood Hazard Mapping for Asian Countries
アジア地域 洪水ハザードマップ作成

R/F 0884064

Water Resources/Disaster Management－Wind and Flood Disaster(Flood Control)

Target Countries：Asia

10participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
[Objective] The technology, knowledge and experience, which the participants acquired and experienced in Japan, are shared among the officials and engineers engaged in Flood and River management. [Course Output] (1) Understanding the effectiveness of flood hazard maps and acquiring the means to disseminate and utilize them for people. (2) Acquiring methods to enhance people's capability and promote public awareness to mitigate flood damage. (3) Acquiring the professional knowledge of hydrology and inundation analysis necessary to produce flood hazard maps. (4) Acquiring the general knowledge of flood hazard maps in the world/ in Europe/in Asia/in Japan. (5) Understanding the means of producing and applying flood hazard maps for their own countries/regions, and making an action plan via which they promote Flood Hazard Mapping after they go back to their country.	[Eligible/Target Organizations] Organization dealing with Flooding or River Management at the national or local level in the public sector such as government/Provincial ministries or municipalities [Qualifications of applicants] 1) Technical managers or engineers with at least 5 years experience (2 years doctorate holders) and currently engaged in river or flood management issues in their public sector 2) University graduates or equivalent 3) Individuals proficient in spoken and written English

CONTENTS		
[Preparatory Phase] 1) Preparation on the report under the title of "Review on Policies and Activities of Flood Risk Management" 2) Preparation on the data for Run-off [Program in Japan] Participants must study themselves using a text "Flood Hazard Mapping Manual", "Hydrology for River Engineers" and "Hydraulics for river Engineers" supplied by ICHARM in addition to Lecture, Exercise and Field Trip. <Subjects (Lectures, Exercise, Field Trips)> 1) Run-off Analysis Exercise 2) GIS Exercise 3) Inundation Analysis Exercise 4) Latest Technology 5) Town Watching 6) Field Trip 7) Making a Flood Hazard Map 8) Making Concluding Report (Action Plan) [Developing Phase] 1) All participants should share the outputs of this training within their organization 40 days after going back to their home country 2) All participants should submit a report on the above mentioned activities.	PROGRAM PERIOD	Oct.26.2008～Nlov.29.2008
	IMPLEMENTING PARTNER	ICHARM of PWRI
	JICA CENTER	JICA Tsukuba
	COOPERATION PERIOD	2004～2008
	REMARKS	ICHARM implemented the Seminar for ex-participants after the training course in cooperation with ICA in malaysia (2007) and China (2008).

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Safer School against Disasters (dissemination of anti-seismic building for communities) in South West Asian Countries
南西アジア地域　災害に強い学校
(コミュニティへの耐震建築の普及に向けて)

R/F 0884151

Water Resources/Disaster Management－Earthquake Disaster

Target Countries：Seismic-prone countries. principally in South west Asia regions

4participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 The participants can make a draft manual on the system of safer school building against disasters. 【Outputs】 Paticipants understand the following issues; (1) Appropriate seismic sysytem for a new school construction (2) Appropriate methodologies on seismic assessment of existing schools (3) Retrofitting system of existing schools (4) Administration on safer school and dissemination to communities	【Target Organizations】 Ministry of Eduation or regional educational committee 【Target Group】 1) Current Duties: Engineering or administrative official engaged in examination or design of school building, and engaged in disaster mitigation in school 2) Experience in the relevant field: have experience in archtecture and/or system on construction - more than 7 years experience is preferable 3) Educational Background: be graduated from university 4) Language: have a competent command of spoken and written English

CONTENTS		
(1) Appropriate seismic sysytem for a new school construction ・Principles on structural design ・Structural calculation ・Reinforced concrete structure ・Structural design (details etc.) ・Steel structure (2) Appropriate methodologies on seismic assessment of existing schools ・Principles on seismic assessment , diagnosis. ・Seismic diagnosis for reinforced concrete structure. ・Seismic diagnosis for masonry (bricks etc.) structure. (3) Retrofitting system of existing schools ・Principles on school retrofitting ・Seismic retrofitting for reinforced concrete strusture ・Seismic retrofitting for masonry (bricks etc.) structure (4) Administration on safer school and dissemination to communities ・Appropriate sysytem on the construction (fomulation of the standards, enforcement of the regulation, admission procedure) ・Making a draft manual ・Public awarness (participatory approach in planning and implementation, shake-table demonstration, easy-to-understand assesment methods, etc.)	PROGRAM PERIOD	Nov.17.2008～Dec.13.2008
	IMPLEMENTING PARTNER	Disaster Management Planning Hyogo Office, UNCRD
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2008～2010
	REMARKS	UNCRD has conducted projects in seismic-prone countries on safer school against disasters since 2001. The experience of the UNCRD projects will be shared and the experience of Hyogo prefecture and Kobe city will also be shared with participants.

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Development of Coordinators for Disaster Nursing for Middle East and Asian countries R/F 0884152

中東・アジア地域　災害に備えた看護コーディネーター育成 Water Resources/Disaster Management－Comprehensive Disaster Management

Target Countries：Countries often affected by natural disasters　4participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 This program aims to formulate and practice an action plan of developing coordinators for disaster nursing. 【Outputs】 I To achieve this program objective, participants are expected in Japan; 1. To understand disaster nursing and to understand importance of coordinators for disaster nursing 2. To understand role and method of disaster nursing at the response/relief stage of disaster 3. To understand role and method of disaster nursing at the stage of mid- and long- term after disaster 4. To understand role and method of disaster nursing at the preparatory/preparedness stage of disaster 5. To understand how to formulate programs for developing human resources and how to spread disaster nursing. II In participants' home country, it is also expected that the action plan is approved by the organization concerned.	【Target Organizations】 Organizations which can play a leading role in promotion of disaster nursing. (e.g. Medical/Educational institution, Central/local government, Nursing association, NGO) 【Target Group】 1) Current Duties: be working in organization which can play a leading role in promotion of disaster nursing. (e.g. Medical/Educational institution, Central/local government, Nursing association, NGO) and can play a leading role in developing coordinators for disaster nursing (who will be in charge for disaster correspondence in medical institution or public health institution). - Priority will be given to applicant with willingness/interest and/or with authority/duty on development and dissemination of coordinators for disaster nursing. 2) Experience in the relevant field: have more than 2-3 years' experience in the field mentioned above 3) Educational Background: have basic education on nursing 4) Language: have a competent command of spoken and written English.

CONTENTS		
【Preliminary Phase in a participant's home country】 Preparation for Job Report 【Core Phase in Japan】 (1) - Essence and concept of disaster nursing - International network in the field of disaster nursing - Case study of disaster nursing in recent disaster-stricken area (2) - Emergency medicine in Hyogo prefecture - Coordination before medical treatment and triage - Providing better environment for refugee - Prevention of infectious disease - How to coordinate volunteers - Support to disaster-stricken medical institution (3) - Prevention of second disaster - Continued support to vulnerable people - Role of nurses in provisional housing and to help afflicted people put their lives back in order - Support for formulation of communities - Metal health care for afflicted people (4) - Educating people on disaster prevention - Collaboration with government and medical institution - Networking among Nurses - Disaster Nursing Education (5) - Human resources development programs - Formulation of action plan and its presentation - Evaluation method for effect of education 【Finalization Phase in a participant's home country】 Application and implementation of the action plan back in the participant's country and submission of report on its progress	PROGRAM PERIOD	Aug.17.2008～Sep.13.2008
	IMPLEMENTING PARTNER	University of Hyogo, Research Institute of Nursing Care for People and Community
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2008～2010
	REMARKS	University of Hyogo, which has continuously been practicing, educating and researching disaster nursing after the Great Hanshin-Awaji Earthquake, has started consistent education from undergraduate education to graduate education (both master program and doctorate program) on disaster nursing. In this program, you can learn the role and method of disaster nursing at all the stage of disaster management cycle. You can also learn from many experts who have lots of experience of practicing disaster nursing, including lessons learned from the Great Hanshin-Awaji Earthquake.

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Community-based Disaster Prevention -Introduction of Kobe's Efforts for Middle East and Asian Countries 中東・アジア地域 コミュニティ防災の実践～神戸の取り組み	R/F	0884220
	Water Resources/Disaster Management－Comprehensive Disaster Management	
Target Countries：Countries often affected by natural disasters	10 participants ／	English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 This program aims to facilitate the concept of and how to promote community based disaster prevention. 【Outputs】 I To achieve this program objective, participants are expected in Japan; (1) To understand the significance of disaster prevention (2) To understand needs and mechanism of community based disaster prevention and how to take community into it (3) To understand how to operate and conduct drills in community based disaster prevention (4) To understand how to foster leaders for disaster prevention in community (5) To establish a simulated organization for community based disaster prevention and to formulate an action plan for community based disaster prevention II In participants' home country, it is also expected that the action plan is approved by the organization concerned.	【Target Organizations】 Organizations which can play a leading role in promotion of community based disaster prevention and dissemination of self-help organization of residents for disaster prevention. (e.g. Disaster management planning organization/division, town management/community support organization/division in central/local government) 【Target Group】 1) Current Duties: be executive officials of the above-mentioned organizations - Priority will be given to applicant with willingness/interest and/or with authority/duty on development and dissemination of self-help organizations for disaster prevention in communities. 2) Experience in the relevant field: have more than 2 years' experience in the field mentioned above. 3) Language: have a competent command of spoken and written English. 4) Health: must be in good health, both physically and mentally, to participate in the Program in Japan, as this program will contain some outdoor skill practice and drills, and will contain staying one night at school gymnasium as a participation of evacuation drill.

CONTENTS		
【Preliminary Phase in a participant's home country】 Preparation for Job Report 【Core Phase in Japan】 1. Significance of disaster prevention and Japanese system of disaster prevention 2. the needs and mechanism of community based disaster prevention and how to take community into it - Needs and mechanism of "disaster-safe welfare community" - Relationship between local community and "disaster-safe welfare community." - How to facilitate people and establish organization - How to select equipment and materials needed for community based disaster prevention - Listening to stories and experiences of storytellers in person - Visit and experience of "disaster-safe welfare community" - Visit to self-help organizations for disaster prevention in communities 3. How to operate and conduct drills in community based disaster prevention - Purpose of community safety map and how to formulate it - How to conduct drills with communities, and how to give instruction to communities 4. How to foster leaders for disaster prevention in community - The role of the leaders for disaster prevention in community - How to foster the leaders for disaster prevention in community - Education for disaster prevention - Visit and experience of "disaster-safe welfare community" including drills for preparation of hot meals outdoors 5) Establishment of a simulated organization for community based disaster prevention and formulation of an action plan 【Finalization Phase in a participant's home country】 Application and implementation of the action plan back in the participant's country and submission of report on its progress	PROGRAM PERIOD	Aug.18.2008～Sep.27.2008
	IMPLEMENTING PARTNER	Kobe City Fire Bureau
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2007～2009
	REMARKS	It is expected to contribute to promotion of community based disaster prevention in each country, by introducing Kobe's effort of "disaster-safe welfare community." In this program, experience and practice will be emphasized; especially you will have some chances to participate disaster drills in which residents play a leading role.

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Community Empowerment through Safe Water Management for Arid Regions in French Speaking Africa
仏語圏アフリカ 乾燥地域 村落飲料水管理

R/F 0884248

Water Resources/Disaster Management－Comprehensive Water Resources Management

Target Countries：French-Speaking Africa

11 participants ／ French

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 To acquire knowledge, awareness and techniques to organize a community participation system in order to ensure sustainable management of safe drinking water supply in a small-scale community. 【Achievement】To achieve the objectives, participants are expected: 1.To gain knowledge and skills necessary for safe drinking water supply in small-scale community, 2.To gain knowledge and skills relating to living environment such as toilet, sewage management, garbage collection, etc. 3.To learn examples (lessons learnt) of various projects and appropriate technologies implemented in arid areas in Africa and in Japan, 4.To understand the importance of gender mainstreaming in community development, 5.To learn a project management tool (Project Cycle Management), 6.To formulate an Action Plan.	【Requirements】 ・ The program is designed for administrative planners engaged in safe drinking water management in small-scale communities ・Individuals with practical experience of more than 3 years in the field of water resource management ・Fluent in French ・Individuals with states that can achieve the role of leader in community for improvement ・Individuals in good health, both physically and mentally, to undergo the course of training

CONTENTS		
<Preparatory Phase> Formulation of Job Report. <Curriculum in Japan> ・ Water resource development, management, and policies (in Japan and arid regions) ・ Management for groundwater development and rural water supply program ・ Transition of water supply and sanitation. ・ Water supply and the quality control ・ Water environmental engineering and groundwater management ・ Theory and training in "Project Cycle Management" ・ Theory and training in community management (including gender development, micro-credit) ・ Practice of presentation skills <Finalization Phase> Implementation of the Action Plan and the report of the progress.	PROGRAM PERIOD	Oct.21.2008～Dec.13.2008
	IMPLEMENTING PARTNER	Fuji Women's University
	JICA CENTER	JICA Sapporo
	COOPERATION PERIOD	2007～2009
	REMARKS	Expected number of participants per country: 2 (male 1, female 1)

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Training Course for Expert on Flood-related Disaster Mitigation
洪水関連災害防災専門家育成研修

GROUP 0880043

Water Resources/Disaster Management－Wind and Flood Disaster(Flood Control)

10participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
[Objective] The participant's organization will make or improve the projects related to the flood- related disaster mitigation in their own country. [Output] To achieve the above mentioned objective, participants are expected to produce the following outputs; (1)Participants will learn the history, systems and roles for preventing and mitigating Flood Disaster in Japan and extract problems and issues of their country by comparing the situation in each country and in Japan. (2)After studying and acquiring knowledge of Flood-related Disaster risk management, the participants make a flood hazard map for a river basin in Japan. (3)After understanding and acquiring the knowledge about techniques for plan and management of water control (including dam, sediment control), the participants make interim report about those applicability to their own countries. (4)Participants choose one area where often suffered from flood-related disaster in their own country as a model case and draw up draft plan for disaster prevention/ mitigation project. They will make an interim report about it which will be accepted as their master thesis. (5) The interim report will be presented at the participants' parent organization and they submitted Final report with revised points. They also submit monitoring report informing of the situation of their project.	【Target Organizations】 Governmental organizations - which are engaging in river management or Flood Control. - which are planning or carrying out the Water-related Disaster Mitigation Projects 【Target Group】 (1) University graduates in Civil Engineering, Water Resource Development, or Disaster Mitigation. (2) Engineers or technical officials who have more than three years of experience in the fields of flood control. (3) Individuals with basic knowledge of Civil Engineering, especially hydraulics and hydrology. (4) Individuals well versed in basic mathematics such as differentiation and integration. (5) Individuals capable of making the "Master report" in English, using PC software such as "Microsoft Word", "Microsoft Excel", etc. (6) Individuals with a good command of English (7) Those over 25 and under 36 years of age

CONTENTS		
[Preparatory Phase] Preparation of the Inception Report [Program in Japan] The course consists of Lectures, practical training, a field trip and Independent study concerning the following sub subjects: (1) Meteorology related to the hydrological process (2) How to get access to meteorological data (3) Hydrological observation (4) Analysis/prediction methods using models to simulate the hydrological process (5) River engineering and river ecology (6) Flood risk assessment and risk reduction (7) Methods of the flood risk assessment and flood risk reduction, (8) Sediment control (9) Disaster mitigation policy (10)Disaster risk management (11) How to make projects of the International organizations [Developing Phase] - Making and Submitting the monitoring report after 3, 6, and 12 months respectively. - Planning and implementation of the project, which the participants drafted in Japan.	PROGRAM PERIOD	Sep.29.2008～Sep.19.2009
	IMPLEMENTING PARTNER	ICHARM of the Public Works Research Institute (PWRI)
	JICA CENTER	JICA Tsukuba
	COOPERATION PERIOD	2007～2009
	REMARKS	Participants will be given the Master's degree of Disaster Management by the National Graduate Institute for Policy Studies (GRIPS), if they will pass examines on the prescribed units.

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Comprehensive Management of River and Dam
総合的な河川及びダム管理

GROUP 0880065

Water Resources/Disaster Management－Comprehensive Water Resources Management

10 participants ／

OBJECTIVE	TARGET ORGANIZATION / GROUP
By sharing the up-to-date technologies, knowledge and experience of flood control and water utilization in Japan, including global trends such as integrated water resources management and integrated flood management, improvement plans on flood/sediment disaster measures, water resources management policies, dam management policies and riverine environment conservation measures, etc in their native countries, are facilitated by the water governing agencies such as the department of water resources or the department of irrigation. To achieve the above mentioned objective, participants are expected to produce the following outputs. (1)To formulate and submit Inception report (2)To get the knowledge related to trends of the world in the water sector and the history of river projects and the current river system in Japan, and clarify the problems of participating organizations. (3)To get knowledge on planning and design techniques about flood control (including erosion control) and water use, and dams, which be able to propose improved business plans of participating organizations based on these technical knowledge. (4)To prepare Interim report by making use of the knowledge gained, and make an Action Plan on how to improve or get over the problems in their own countries. (5)To revise the Interim report (action plan) to be authorized by parent organization, and prepare and submit Final report.	【Target Organizations】 Water management organization such as Ministry of Water Resources, Ministry of Irrigation 【Target Group】 (1)Persons are currently to be engaged in flood control works or water resources development projects. (2)university graduates or the equivalent with basic knowledge in civil engineering and more than 5 years' experience in the field of flood control or in water resources development projects (3)To be proficient in spoken and written English.

CONTENTS		
1.Preparatory Phase Preparation for Inception Report and Presentation on present situation and problems related flood control , water resources management in their countries 2.Program in Japan (1)Pesentation on Inception Report and Discussion (2)Lecture on world trends in the water sector and history, system and legislation for river works in Japan (3)Individual Study Each participant will carry out an individual study for one (1) month at the research division/team of NILIM or PWRI. (4)Participants have several chances to visit actual sites in Japan related to flood control and water resources (5)By the end of the training course, all participants make and submit an Interim Report. Moreover, all participants have to give a presentation about the Interim Report (especially Action Plan) The Interim Report should include the following subjects. 1) Background, 2) Purpose, 3) Main topic, 4) Conclusion, 5) *Action Plan 3.Final Phase (activities in home country) Participants should share the outputs (the interim report), and report on progress in Final Report and submit within Six (6) months after the end of the phases in Japan.	PROGRAM PERIOD	Sep.8, 2008～Dec.13, 2008
	IMPLEMENTING PARTNER	River Bureau, Ministry of Land, Infrastructure and Transport, NILIM, PWRI
	JICA CENTER	JICA Tsukuba
	COOPERATION PERIOD	2008～2010
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Emergency / Disaster Medicine
救急・大災害医療

GROUP 0880796

Water Resources / Disaster Management—Water Resources / Disaster Management

25 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Overall Goal】 Activities for improvement of system and management of emergency /disaster medicine are implemented based on the Action plan approved by the participants' organization in their home countries. 【Objectives】 Participants' capacity to formulate an action plan to solve the problems/challenges which participants' organization are facing, and to improve the system and management of emergency /disaster medicine is improved. 【Outputs】 1) Participants will gain a general view of the Japanese emergency medical system and understand the cooperative system among related organizations, 2) Participants will gain a general view of Japanese disaster medical system through past experiences in Japan, 3) Draft action plan will be formulated to solve the problems/challenges which participants' organization are facing.	【Target Organizations】 Emergency medical organizations or medical administrative agencies 【Target Group】 1) senior medical doctors or administrators engaged in measures for emergency/disaster medicine and occupying a position of leadership in an emergency medical institution or a medical administrative organization, 2) be familiar with the recent situation of emergency medical research activities or disaster preparedness in their own country ※Participating Countries in "Medical Management in Disaster for Andes Area" (Held in JICA Hyogo) will not be allocated in this program.

CONTENTS		
〈Preparatory phase in participants' home countries〉 Formulation of Job Report 〈Phase in Japan〉 (1) Primary/secondary/tertiary emergency medicine, Poisonous & hazardous substance information management, Emergency medical training, Emergency-response personnel training (2) National disaster-medicine systems, Local disaster-medicine systems, The experience of the great Hanshin earthquake, Japanese red cross society roles & mobilization system, Hospital disaster-readiness practice (3) Action plan making 〈Finalization Phase in participants' home countries〉 Discussion and Finalization of Action Plan, Submission of final report to JICA regional Office	PROGRAM PERIOD	Aug.27.2008～Sep.30.2008
	IMPLEMENTING PARTNER	Saiseikai Senri Hospital
	JICA CENTER	JICA Osaka
	COOPERATION PERIOD	2008～2010
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Operation and Maintenance of Urban Water Supply Systems
都市上水道維持管理

GROUP 0880870

Water Resources/Disaster Management—Urban Water Supply
Health—Health System
10participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
Through the program of the Osaka Municipal Waterworks Bureau, participants are expected to achieve the following objects to contribute to a safe water supply in their own countries (local government): Outcome: Action plans to solve issues on urban water supply system in participants' respective organizations will be formulated by participants' organizations with utilizing obtained skills and knowledge in the training in Japan. Output: After the completion of this training course in Japan participants will be able To explain maintenance technologies of pipelines and service installations in Japan To explain operation technologies of intake, treatment and distribution facilities in Japan To explain technologies of water treatment and water quality control in Japan To make appropriate action plans to improve water supply in their respective organizations	(1) Engineers responsible for the operation and maintenance of urban water supply schemes/authorities using surface water resources (2) Individuals with at least 5 years experience in the area (3) Graduates from technical colleges or authorized water training institutes or equivalent (4) Age: 55 years old

CONTENTS		
1. General Information on the Water Supply System of Osaka City 2. Operation of Intake Facilities 3. Operation of Treatment Facilities 4. Operation of Distribution Facilities 5. Maintenance of Mechanical and Electrical Facilities and Measuring Instruments 6. Water Quality Control 7. Specialized Water Treatment and Advanced Water Treatment 8. Maintenance of Pipelines 9. Maintenance of Service Installations 10. Specialized Training (Maintenance of Service installations/distribution pipes)	PROGRAM PERIOD	May.19.2008～Jul.26.2008
	IMPLEMENTING PARTNER	OSAKA MUNICIPAL WATERWORKS BUREAU
	JICA CENTER	JICA Osaka
	COOPERATION PERIOD	2004～2008
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

The Seminar on administration by Competent Authorities for Better Management of Water
水道管理行政

GROUP 0880915

Water Resources/Disaster Management－Urban Water Supply

10participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】 This course aims at achieving consensus for challenges and shareing the idea of improvement plan for better management of water supply after the participants' returning. 【Outputs】＜Under Planning＞ Participants are expected to be able to: (1)Understand the water quality management, non-revenue water, guidelines of water supply to acquire the ability of applying the knowledge in their countries, (2)Specify the challenges which need to be tackled and formulate the improvement plan and (3)Share the idea of implemente plan which participants formulate among related persons in their organizations after returning back.	〈Target Organizations〉 Departments which are in charge of water supply administration at national/ regional authorities 〈Target Group〉 1) Individuals with 5 years experience in the field of water supply 2) Individuals expected to play major roles in the development of regulations and policies on water supply

CONTENTS		
＜Preliminary Phase in home country＞ Participants required to Make a Country Report and its presentation file. These contents are below: job outlines, challenge/issue in their organization and the status of water supply management. ＜Core Phase in Japan＞ Lectures, field visits, discussion and presentation will be held such as: 1)Country Report Presentation 2)Water Quality Management 3)Non-Revenue Water 4)Water Safety Plan 5)Improvement Plan Formulation and Presentation 〈Follow-up Phase〉 Participants are expected to share the idea of improvement plan among relaterd persons and report on the progress.	PROGRAM PERIOD	Sep. 28.2008～Oct. 11. 2008
	IMPLEMENTING PARTNER	Japan International Corporation of Welfare Services
	JICA CENTER	JICA Tokyo
	COOPERATION PERIOD	2007～2009
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Comprehensive Disaster Risk Management
総合防災行政

GROUP 0880999

Water Resources/Disaster Management－Comprehensive Disaster Management

11 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objective】 To help participants formulate improvement plans of disaster management in each participants' organization based on the total disaster risk management through general understanding of disaster management system of central and local governments of Japan against various kinds of disasters. To achieve this, participants will: 【Output】 (1) Understand disaster management of national and local governments, and identify their challenges and problems (2) Understand the role of non-governmental organizations such as mass-media and the private sector in disaster management, and examine how to use the acquired knowledge in each country (3) Understand Japanese approaches to different disasters, and select feasible approaches for respective country (4) To formulate action plan based on the disaster management cycle	[Target Organizations] Departments in charge of disaster management at central and local government. [Target Group] (1) Individuals presently working in government agencies responsible for disaster prevention (Especially, those who engaged in the disaster management, disaster mitigation, emergency response, reconstruction and rehabilitation) (2) Age: Under 45 years old (3) University graduates

CONTENTS		
Preparatory phase: Participants are requested to submit country reports describing the current situation and problems of their own organization, signed by the head of the organization. Program in Japan: An action plan for improving the participant's organization is to be submitted after undergoing training on the following: (1) Policy formation, enforcement and implementation of disaster countermeasures in Japan (2) International cooperation for natural disaster prevention and reduction (3) Implementation of disaster countermeasures of local government in Japan Post-program activities: The action plan is to be reconsidered by the participant's organization and submitted with the signature of the head of the organization after the program.	PROGRAM PERIOD	Jan.17.2009～Feb.28.2009
	IMPLEMENTING PARTNER	Asian Disaster Reduction Center
	JICA CENTER	JICA Hyogo
	COOPERATION PERIOD	2005～2009
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

Water Supply Management for Middle Eastern Countries ～Maintenance of distribution pipeline and Leakage prevention～
中東地域　上水道維持管理～配水管網の維持･漏水防止～

R/F 0884073

Water Resources/Disaster Management－Comprehensive Water Resources Management

Target Countries：Middle Eastern Countries.The country whose mother tongue is Arabic.

7participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 To make the improvement plan which contribute to solving the issues about distribution pipeline and underground leakage. 【Outputs】 (1) Participants understand the current conditions of water supply management in big-sized Japanese city and can explain the difference between their countries and Japan. (2) Participants acquire the practical knowledge and skills in order to build the appropriate distribution pipeline and can explain to their colleauge after returning their country. (3) Participants acquire the practical knowledge and skills in order to establish the leakage prevention systems and can explain to their colleauge after returning their country. (4) Participants make the report of the current issues and countermeasures in their countries using the knowledge and skills which you acquired through this training	【Target Organizations】 The organizations which implement the practical operations such as planning, designing, operation and mainatenance of distribution pipeline and investigation and repair of underground leakage. 【Target Group】 1) Current job: engineers who perform the practical operations of design and maintenance/control in the field of water supply projects. 2) Experience in water supply projects: have more than five (5) years of work experience in water supply projects. 3) Language: have a sufficient command of English to understand the training in English.

CONTENTS		
(1)・Introduction (lecture) ・Water resource maintenance (lecture) ・Maintenance and management of water treatment plant (lecture) (2)・Planning of water transmission and distribution systemss (lecture) ・Maintenance of water transmission and distribution systemss (lecture) ・Improvement and renewal plan of distribution pipes (lecture and practice) ・Maintenance of water supply system (lecture and practice) (3)・Introduction leakage prevention (lecture and practice) ・Planned detection and repair of underground leakage (practice) (4)・Making action plan (practice) ・Presentation of action plan (paractice)	PROGRAM PERIOD	Jul.8.2008～Aug.24.2008
	IMPLEMENTING PARTNER	Hiroshima City Waterworks Bureau
	JICA CENTER	JICA Chugoku
	COOPERATION PERIOD	2008～2010
	REMARKS	

: Learning Program, : Diffusion Program, : Solution Program, : International Dialogue Program

JICA Disaster Network for Asia
アジア地域 JICA災害ネットワーク

R/F 0884065

Water Resources / Disaster Management－Water Resources / Disaster Management

Target Countries：disaster-prone countries

9 participants ／ English

OBJECTIVE	TARGET ORGANIZATION / GROUP
【Objectives】 To strengthen and expand the network of disaster response to improve the lifesaving rate at the disaster area by smooth and effective international disaster cooperation. The network is also utilized to share the information that would contribute to the disaster prevention and rehabilitation from disasters. 【Outputs】 (1) To understand the general description of medical teams and international disaster relief to find out its commonality and a difference. (2) To discuss how smooth international disaster relief should be done in future disaster by simulation of disaster emergence. (3) To make an action plan for construction and strengthen the network in group and each participating country.	【Target Organizations】 Organizations which have responsibility as a contact point for international emergency assistance in disaster-prone countries 【Target Group】 Being in responsible positions in national, local government, hospitals, NGOs which have contact point for disaster response. *Ex-participants for the training and dialogue programs "Emergency/Disaster Medicine" will be preferably accepted.

CONTENTS		
This program is consists of following items ; (1) Discussion about general description of medical teams in each country, rule of international disaster relief (2) Simulation of international relief dispatch and acceptance, workshop to find out commonality and difference of each country (3) Making action plan for construction and strengthen the network in group and each participating country	PROGRAM PERIOD	Under planning
	IMPLEMENTING PARTNER	Saiseikai Senri Hospital
	JICA CENTER	JICA Osaka
	COOPERATION PERIOD	2008～2010
	REMARKS	