# 3.Water Resources / Disaster Management

Operating Management of Earthquake-Tsunami-Volcano Eruption Observation System		GROUP 1 0980035
地震津波火山観測システムの運用・管理 Wat	er Resources/Disas	ster Management-Earthquake Disaste
Target Countries: Countries located in the vicinity of a plate subduction belt or plate colli	sion region	6 participants / English
OBJECTIVE	TARG	ET 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 earthqu and others. [Expected Results] 1) To understand the fundamental theories of Earthquake, Tsunami and Volcano eruption an 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 of practices through their studies on individual topics, and to make Action Plans in order to so problems in their respective countries	<ul> <li>research institutearthquake, tsu [Target Group]</li> <li>Mid-ranking</li> <li>Mid-ranking</li> <li>researchers or u</li> <li>Individuals with conduct self rese</li> <li>Individuals prima</li> </ul>	offices, geographic observatories, seismic tes and universities, etc. in charge of nami and volcano eruption observation officials in charge of observation,
CONTENTS	PROGRAM PERIOD	Jul.6.2009 ~ Mar.31.2010
The training program consists of lectures, practical exercises, and observation tr on the following: 1) An earthquake, tsunami and volcano eruption observation system	ips IMPLEMENTING PARTNER	Nagoya University
2) Principles of earthquake, tsunami and volcano eruption	JICA CENTER	JICA Chubu
<ul> <li>Analysis of earthquake, tsunami and volcano eruption records</li> <li>Crustal movement observation and its analysis</li> <li>Real-time observation and its operation</li> </ul>	COOPERATION PERIOD	2006~2010
<ul> <li>6) Plate tectonics</li> <li>7) Earthquakes and tsunamis in the plate subduction zone</li> <li>8) Volcanic eruptions in the plate subduction zone</li> <li>9) Earthquakes, tsunamis and volcanic eruptions as global disasters</li> <li>10) Great disasters due to earthquakes, tsunamis and volcanic eruptions and their effects on people's lives</li> <li>11) Others</li> </ul>	REMARKS	This course is mainly based on individual research to find solutions for the problems in the respective countries.
Non-Revenue Water Management 上水道無収水量管理対策 Water Resources/Disaster	Management — Compr	GROUP (1) 0980229 rehensive Water Resources Managemen
		15 participants / English
OBJECTIVE	TARG	ET 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	waterworks pu bodies in char	s bureaus of local government, ublic corporations, administration ge of water resources anizations maintaining and managing
non-revenue water 2. Understand the operation of leakage detectors 3. Understand the classification of leakage prevention works and diagnosis of the	[Target Group 1. Technology	o] / university graduates or equivalent

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

and written English PROGRAM  $Oct.12.2009 \sim Dec.5.2009$ CONTENTS PERIOD 1. Outline of non-revenue water management IMPLEMENTING Nagoya Waterworks and Sewerage Bureau, Nagoya City 2. Outline of waterworks facilities and leakage prevention PARTNER 3. Operation of leakage detectors 4. Leakage detection JICA CENTER JICA Chubu 5. Leakage prevention in the planning stage COOPERATION 6. Leakage prevention in the design stage  $2006 \sim 2010$ PERIOD 7. Leakage prevention in the construction stage 8. Water meter, mapping management, measures for illegal use, water charges 9. Measures in case of disaster The applicant should prepare a Country Report when applying. "Non-revenue water" is not defined as illegally used REMARKS water, thus the program provides opportunities to learn about leakage management technology. http://www.water.city.nagoya.jp/english

professional qualifications in this field

experience in this field

2. Individuals with at least 5 years of work

3. Individuals with a sufficient command of spoken

GROUP 0980875 Water Resources/Disaster Management-Earthquake Disaster

Target Countries:Earthquake disaster prone countries	20 participants / Englis		
OBJECTIVE	TARG	TARGET ORGANIZATION / GROUP	
<ul> <li>[Program Objective]</li> <li>Fostering researchers and technical experts who are able to address the issues of earthquake disaster mitigation in their own countries making use of results achieved in the training course.</li> <li>[Expected Results]</li> <li>(1) To acquire fundamental knowledge on earthquakes and are able to explain basic concept and theory about earthquake mechanisms and aseismic design</li> <li>(2) To be able to explain basic concept and principle for earthquake hazard assessment, earthquake disaster mitigation policy, and earthquake countermeasures, which are indispensable for earthquake disaster mitigation.</li> <li>(3) To be able to apply acquired knowledge for solving the earthquake problems of their countries and compile master report based on capacity development for their application.</li> </ul>	research instit earthquake dis [Target Group (1) Administra and/or researce earthquake en Experience in years' experies in seismology, disaster mitiga science and te mentioned sub	e agency for constru- ute and other organ saster mitigation b) tive officers and/or chers in charge of se gineering and disast the relevant field: m nce, (3) To be unive earthquake enginee tion, or be universit chnology other thar	engineers eismology, er mitigation. (2) hore than 3 ersity graduates ering or seismic ty graduates in
CONTENTS	PROGRAM PERIOD	Sep.28.2009 $\sim$ Sep.1	8.2010
Fostering researchers and technical experts who can contribute to the governmental policy on seismology, earthquake engineering and disaster mitigation. [Preliminary Phase]	IMPLEMENTING PARTNER	Building Research In	stitute (BRI)
Participants make an Inception Report on current situation related governmental	JICA CENTER	JICA Tsukuba	
policy on seismology, earthquake engineering and disaster mitigation in their countries. [Program in Japan]	COOPERATION PERIOD	2009~2011	
Participants are expected to acquire the necessary skill and technique related governmental policy on seismology, earthquake engineering and disaster mitigation through lectures, discussions, research, practical exercises and site visits, etc. (1) Earthquake mechanisms and aseismic design (2) Technologies on seismic hazard assessment, countermeasures and policy making on earthquake disasters (3) Compilation of Master Report	REMARKS	Participants, who l achieved required awarded a Master' 'Master of Disaste GRIPS and BRI.	credits, will be s Degree,

l	Disaster Risk Management Technology on Volcanic Eruption, Debris Flo Landslide	w and	GROU	PÝ	0980876
	火山学·総合土砂災害対策	Water Resources/Disaster	Management—Soil	and Water	Disaster
	Target Countries: Volcanic and/or Sediment-related Disaster prone countries		13 participants	/	English

OBJECTIVE	TARGET ORGANIZATION / GROUP Ministry of Public Works, Ministry of Water Resources, Institute of Volcanology, Seismology, Geology or Geophysics.	
[Objective] Participants are to be expected to improve their technology on volcanic observation or Sabo and be able to enhance their capacity on taking counter measures to the disaster prevention/mitigation of their countries. [Expected Results] [Common Program ] understand and be able to explain: (1) basic common knowledge (2) administration of disaster management in consideration of inhabitants' participation [Volcanology Course] understand and be able to explain: (1) latest geophysical and geological concept of volcanology (2) theorie of volcanic earthquakes (3) volcano observation (4) individual training/research based on interest of each participant and presentation of a final report. [Sabo Course] understand and be able to explain: (1) Sabo (2) mechanism of debris flow (3) disaster prevention measures (4) environmentally sound comprehensive sediment management (5) individual training/research based on interest of each participant and presentation of a final report.		
CONTENTS	PROGRAM PERIOD	Mar.15.2010 ~ Sep.1.2010
This course is to improve participants' technology on volcanic observation or Sabo who will be keypersons in those field	IMPLEMENTING PARTNER	Sabo Technical Center
(1)understand basic common knowledge of volcanology and SABO	JICA CENTER	JICA Tokyo
field inspection (2)basic knowledge of volcanology	COOPERATION PERIOD	2009~2011
phenomena of volcanic eruptions methodology of observation (3)individual training/research for four months and making a final report. (4)basic knowledge of Sabo engineering structual measures non-structual measures field inspection	REMARKS	Throughout the whole training period, "Review and Discussion" session will be arranged on the turning point of the training. Each participant makes the report on the situation / status after returning to the country,
(5)individual training/research for two and half months and making a final report.		

Global Seismological Observation グローバル地震観測		GROUP	0980887
ッローバル忠説別 Water	Resources/Disas	ster Management—Earthquake	e Disaste
		10 participants /	English
OBJECTIVE	TARG	ET ORGANIZATION / GROU	P
<ul> <li>[Objective]</li> <li>Participants will be able to play important roles (global seismological observation, data analysis and report) in the monitoring system for nuclear tests.</li> <li>[Expected Results]</li> <li>(1) To Acquire knowledge of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) regime and the role of seismology in the International Monitoring System (IMS).</li> <li>(2) To understand global seismological observation technologies for monitoring nuclear tests and earthquakes.</li> <li>(3) To acquire data analytical techniques to discriminate nuclear tests from natural earthquakes.</li> <li>(4) To make the Action Plans, which they should do in their country after return home country.</li> </ul>	Seismological, Section 【Target Group - Administrati Geophysical al governmental - Experience i years' experie - To be well v	organizations in charge of Geophysical and/or Meteor p] ive officer in charge of Seism nd/or Meteorological Section organizations in the relevant field: more th	ological, n in nan 3
CONTENTS	PROGRAM PERIOD	Jan.6.2010 ~ Mar.6.2010	
[Preliminary Phase] Participants will make an Inception Report on the current situation of the global seismological observation in their country.	IMPLEMENTING PARTNER	Building Research Institute (B	RI)
	JICA CENTER	JICA Tsukuba	
[Program in Japan] This program consists of lectures, practical exercises and field studies. The subjects are as follows:	COOPERATION PERIOD	2009~2011	
(1) Introduction of the CTBT regime concerning seismology, (2) Introduction to UNIX, (3) Source mechanism, (4) Seismic array data analysis, (5) Installation of LINUX, (6) Characteristics and Progress Status of the International Monitoring System of the CTBTO, (7) Instrumentation and Observation of Seismometer, (8) Data processing, (9) Analysis of teleseismic waves, (10) Seismicity and tectonics, (11) Discrimination by mb-Ms, (12) Observation and practice of seismic array, (13) Discrimination by short-period seismograms, (14) General discrimination technique, etc	REMARKS		

### Engineering on Water Supply Systems 上水道施設技術

GROUP 🝸 0980944

Water Resources/Disaster Management-Urban Water Supply

18 participants / English

OBJECTIVE	TARGET ORGANIZATION / GROUP	
<ul> <li>[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.</li> <li>[Outcomes] Through the training course, participants are expected: <ol> <li>To gain the skill of basic planning and design for water supply systems,</li> <li>To acquire comprehensive knowledge on water supply systems, which is required for planning, operation and maintenance,</li> <li>To understand systems for waterworks and functions and roles of related organizations,</li> <li>To formulate an Action Plan based on 1)~3) for improving water supply planning or design in their own countries</li> </ol> </li> </ul>	<ul> <li>[Target Organizations]</li> <li>Departments responsible for water supply planni or designing under water supply utility, national local government (excluding mechanical and electric departments)</li> <li>[Target Groups]</li> <li>(1) Individuals presently in a management positic or senior engineers with currently or expected to be engaged in the formulation of waterworks plan (2) Engineers with more than 5 years of experient in water supply systems</li> <li>(3) University graduates from the faculty of engineering such as civil, sanitary, environmenta or with equivalent academic background</li> </ul>	
CONTENTS	PROGRAM PERIOD	May.19.2009 ~ Aug.5.2009
<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</preliminary>	IMPLEMENTING PARTNER	JAPAN WATER WORKS ASSOC.
1st version of Action Plan.	JICA CENTER	JICA Tokyo
<core in="" japan="" phase=""> Lectures, field visits, discussion, practice and presentation in the following subjects:</core>	COOPERATION PERIOD	2005~2009
<ol> <li>Planning and design for water supply systems</li> <li>Outline of water supply systems</li> <li>Outline of water supply systems</li> <li>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</li> <li>Systems for waterworks and organizations concerned</li> <li>Formulation of an Action Plan (2nd and Final version)</li> </ol>	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.

Water Supply in 3	mall and Medium Scale Cities in Central Asia
中央アジア地域	mall and Medium Scale Cities in Central Asia 中小規模都市給水

Water Resources/Disaster Management-Urban Water Supply

R/F İ

0984027

Target Countries:Central Asia; Kazafstan, Tajikistan, Uzbekistan, and Kirgiztan	10 participants / Russia		
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
<ul> <li>[Objectives]</li> <li>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.</li> <li>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.</li> <li>[Outputs]</li> <li>1. Gain knowledge about the management of the water supply system in Japanese local cities, by studying the case of Yokohama City</li> <li>2. Enhance general waterworks techniques</li> <li>3. Through the above, find the keys to solve the problems on water supply systems in participants' country</li> </ul>	Small and Med areas; Kazakhstan: N Akmora Provir Tajikistan: Du Uzbekistan: Ta and the Repub Kyrgyz:Issik-J [Target Group]	shanbe and Khatlon Oblast ashkent Province, Fergana Province, lic of Karakalpakstan Kul Province and Osh Province	
CONTENTS	PROGRAM PERIOD	Jan.13.2010 ~ Feb.11.2010	
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	IMPLEMENTING PARTNER	Yokohama Waterworks Bureau	
services, water rights, water resource and water quality control in Yokohama City, and the management of sewage)	JICA CENTER	JICA Yokohama	
<ol> <li>Lectures; Planning, operation, and administration of Yokohama waterworks bureau (tariff, operation, and human resource development)</li> </ol>	COOPERATION PERIOD	2006~2010	
<ol> <li>Lectures; Waterworks Techniques of Yokohama waterworks bureau (control of water purification plant, water purification, water quality control, water distribution control, and water leakage control)</li> <li>Observations; Waterworks facilities, construction place, and sewage plant in Yokohama City and others</li> <li>Presentations; Country report at the first stage of the course and Study Report at the final stage of the course</li> </ol>	REMARKS	A maximum of three per country will be able to participate in the course. The target group shall be changed as follows: 2006:Exectutive Manager 2007: Manager 2008-2010: Senior engineer	

# 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 İ 0984047

Water Resources/Disaster Management-Comprehensive Disaster Management

Target Countries: Central	Asia and Caucasus
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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 understand the issue for improvement of disaster management in his/her country throuth the system, current situation, vision and issue Japanese government faces. (2) To understand the issue for improvement of disaster management in his/her country throuth the system, current situation, vision and issue local government in Japan faces. (3) To understand the issue for improvement of disaster management in his/her country throuth the significance, current situation, vision and issue of non governmental sector such as mass media, private sector and community in disaster management (4) To consider the formulation and implementation of action plan for improving disaster management from the point of promoting regional coopertaion.	<pre>[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-traini activities in 6 months after returning to their ho countries.</pre>		
CONTENTS	PROGRAM PERIOD	Jun.28.2009 ~ Aug.8.2009	
Basic concept of disaster prevention, Measures taken for earthquakes, Measures taken for sediment disasters,	IMPLEMENTING PARTNER	Asian Disaster Reduction Center	
Disaster prevention management of Japanese central government,	JICA CENTER	JICA Hyogo	
Disaster prevention management of Hyogo Prefecture, Lessons learned in the Great Hanshin-Awaji Earthquake, Observation of disaster drills.	COOPERATION PERIOD	2007~2009	
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.	REMARKS		

		1	
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 10984118		
Water Resources/Disaster Management-Comprehensive Disaster Mana		t-Comprehensive Disaster Management	
Target Countries: Andean countries		13 participants / Spanish	
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
<ul> <li>[Objective] The objective of this course is to formulate action plan on improving the management system integrated both administration and medical services in disasters</li> <li>[Outputs] To achieve above objective, participants expected to understand the following;</li> <li>(1) Policies and measures on disaster prevention of Japanese government and Hyogo prefecure</li> <li>(2) Coordination between administration and medical services at the time of disaster</li> <li>(3) Disaster medicine</li> <li>(4) Disaster prevention in community and region</li> </ul>	<ul> <li>[Target Organizations]</li> <li>Organizations related to disaster medical care or emergency medicine</li> <li>[Target Group]</li> <li>Officials in charge of disaster medical care in central or regional governments</li> <li>Medical staff of emergency medical facilities such as doctors, nurses, paramedics, who are engaged in disaster medical care.</li> <li>More than 2 years of work experience in the field of disaster medical care is required.</li> <li>Be able to disseminate knowledge, experiences and techniques acquired from this training course after returning to their home countries</li> </ul>		
CONTENTS	PROGRAM PERIOD	$Oct.12.2009 \sim Nov.28.2009$	
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.	IMPLEMENTING PARTNER	Hyogo Emergency Medical Center	
between administration and medical services in disasters.	JICA CENTER		
This will include: Disaster prevention in Japan and in Hyogo Prefecture, emergency medical care in	COOPERATION PERIOD	2007~2009	
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.	REMARKS		
Control de Desastres 中米防災対策 Water Resources/Disas	ter Management	R/F 🚺 0984133 t-Comprehensive Disaster Management	
Target Countries: Central America		12 participants / Span i sh	
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
[Objectives] 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	[Target Organizations] Ministries in charge of disaster prevention / mitigation and local government [Target Group]		

respond to disasters is aimed in this course.(Outputs)(1) To understand the expamples and planning method of social development

considering disaster prevention and mitigation.

(2) To understand the phenomenon and information dissemination

(3) To understand collaboration between central and local government and

collaboration with citizen, community and research institutions.

(4) To understand the raising public awareness in community.

(5) To understand the methodology and role of mass media for disaster prevention.

CONTENTS	PROGRAM PERIOD	Oct.31.2009 ~ Dec.5.2009
[Third Country Phase before arriving in Japan] Pre-course will be held by ex-participant of this course, CEPREDENAC etc. (1) To understand objective, activity and outcome of the course in Japan through	IMPLEMENTING PARTNER	Disaster Reduction and Human Renovation Institution
understanding the activities by ex-participants	JICA CENTER	JICA Hyogo
<ul> <li>(2) PCM method and problem analysis</li> <li>[Core Phase in Japan]</li> <li>- Disaster Risk Management in Japan</li> </ul>	COOPERATION PERIOD	2005~2009
<ul> <li>Overview of Great Hanshin Awaji Earthquake and recovery</li> <li>Natural disaster and mass media</li> <li>Disaster prevention education and raising awareness of disaster prevention of residents</li> <li>Workshop based on Project Cycle Management (PCM) /Analysis of problems</li> <li>Action plan</li> </ul>	REMARKS	

1. Officials who are in charge of disaster

participate from each country)

prevention/mitigation

prevention / mitiation in the central or local

2. 2 or more years of work experience as a

governmental official in the field of disaster

government (it is preferable that 1 participant from

central government and 1 from local government

Mental Health Services after Disaster for Asian Countries		R/F 🚺 098413		
アジア地域災害後のメンタルヘルスサービス Water Resources/Disa	ster Management			
Target Countries: Asian countries often affected by natural disasters		8 participants / Englis		
OBJECTIVE	TARG	ET ORGANIZATION / GROUP		
[Objective] To develop action plans for mental health care services after disaster in each country		nizations】 playing an important role in public es at community level.		
<ul> <li>[Outputs]</li> <li>To achieve above objective, participants is expected to understand the following issues;</li> <li>(1) Traumatic stress</li> <li>(2) Current state of post-disaster mental health care services</li> <li>(3) Methods for evaluating traumatic stress</li> <li>(4) Affects that actual situations can have on aid workers and how to care for them</li> <li>(5) Actual state of intervention and therapy for victims</li> </ul>	[Target Group] Doctors, psychiatrists, clinical psychologists nurses and hygienists who play an important in public health activities at community level More than 3 years of work experience in the of disaster prevention is required.			
CONTENTS	PROGRAM PERIOD	Dec.3.2009 ~ Dec.18.2009		
(1) Traumatic Stress and PTSD/ Psychological Effects of Disaster/ Grief and Its Pathology/ Long-term Effects (Secondary Symptoms)	IMPLEMENTING PARTNER	Hyogo Institute for Traumatic Stress		
(2) Hanshin – Awaji Earthquake/ Building Services after the Taiwan Earthquake/ Other Disasters in Japan/ Correlations to General Medical Care/ Disaster and	JICA CENTER	JICA Hyogo		
Mental Health Care Activities & System in Japan after the Hanshin- Awaji Earthquake	COOPERATION	2007~2009		
(3) Clinical Diagnosis/ Structured Interviews and Self-Rating Depression Scale/ Screening Methods for Local Health Care	PERIOD			
<ul> <li>(4) Critical Incident Stress/ Secondary Traumatic Stress / Methods of Self-Care</li> <li>(5) Early Intervention/ Children and Disasters/ Long-Term Intervention at Schools/ Therapy and Intervention Methods for PTSD/ Therapy Methods</li> </ul>	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 Water	Resources/Disa	R/F I 098414 Ister Management—Urban Water Sup		
Waterworks Engineering for Caucasus and East Asia Regions コーカサス・東アジア地域 寒冷地水道 Water Target Countries:Caucasus, Mongolia, and Central Asia		ister Management—Urban Water Sup 5 participants / Russia		
Waterworks Engineering for Caucasus and East Asia Regions コーカサス・東アジア地域 寒冷地水道 Water Target Countries:Caucasus, Mongolia, and Central Asia OBJECTIVE 【Objective】 Each participant shares and implements its action plan, and reports progress to JICA	TARG Corganization Governmenta,	ister Management—Urban Water Sup 5 participants / Russia ET ORGANIZATION / GROUP		
Waterworks Engineering for Caucasus and East Asia Regions コーカサス・東アジア地域 寒冷地水道 Water Target Countries:Caucasus, Mongolia, and Central Asia OBJECTIVE 【Objective】 Each participant shares and implements its action plan, and reports progress to	TARG [Organization Governmenta, organizations i [Personal Qua <current duti<br="">Be waterworks <experience> at least 3 years university grac least 7 years c polytechnic gr <age> Under 40 year</age></experience></current>	ister Management—Urban Water Sup         5 participants       Russ is         5 participants       Russ is         ET ORGANIZATION / GROUP       s]         s]       semi-governmental, or corporate in charge of public water supply         alifications]       ses>         s of practical experience for those duate or equivalent; OR have at of practical experience for those raduates or equivalent         rs old		
Waterworks Engineering for Caucasus and East Asia Regions →-カサス・東アジア地域 寒冷地水道 Water Target Countries : Caucasus, Mongolia, and Central Asia OBJECTIVE [Objective] Each participant shares and implements its action plan, and reports progress to JICA [LExpected Modules] (1) To acquire knowledge and experiences to improve waterworks Planning in the participant's country (2) To acquire knowledge and experiences to improve waterworks Planning in the participant's country (3) To acquire knowledge and experiences to improve water treatment in the participant's country (4) To acquire knowledge and experiences to improve leak Prevention in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country	TARG [Organization Governmenta, organizations i [Personal Qua <current duti<br="">Be waterworks <experience> at least 3 year university grad least 7 years of polytechnic gr <age></age></experience></current>	ister Management—Urban Water Sup         5 participants       Russ is         5 participants       Russ is         ET ORGANIZATION / GROUP       s]         s]       semi-governmental, or corporate in charge of public water supply         alifications]       ses>         s of practical experience for those duate or equivalent; OR have at of practical experience for those raduates or equivalent		
Waterworks Engineering for Caucasus and East Asia Regions →一カサス・東アジア地域 寒冷地水道 Water Target Countries: Caucasus, Mongolia, and Central Asia OBJECTIVE [Objective] Each participant shares and implements its action plan, and reports progress to JICA [Expected Modules] (1) To acquire knowledge and experiences to improve waterworks Planning in the participant's country (2) To acquire knowledge and experiences to improve waterworks management in the participant's country (3) To acquire knowledge and experiences to improve water treatment in the participant's country (4) To acquire knowledge and experiences to improve leak Prevention in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country	TARG [Organization Governmenta, organizations i [Personal Qua <current duti<br="">Be waterworks <experience> at least 3 year university grac least 7 years c polytechnic gr <age> Under 40 year PROGRAM</age></experience></current>	ister Management—Urban Water Sup         5 participants       Russ is         5 participants       Russ is         ET ORGANIZATION / GROUP       s]         s]       semi-governmental, or corporate in charge of public water supply         alifications]       ses>         s of practical experience for those duate or equivalent; OR have at of practical experience for those raduates or equivalent         rs old		
Waterworks Engineering for Caucasus and East Asia Regions →一カサス・東アジア地域 寒冷地水道 Water Target Countries: Caucasus, Mongolia, and Central Asia OBJECTIVE [Objective] Each participant shares and implements its action plan, and reports progress to JICA [Expected Modules] (1) To acquire knowledge and experiences to improve waterworks Planning in the participant's country (2) To acquire knowledge and experiences to improve waterworks management in the participant's country (3) To acquire knowledge and experiences to improve water treatment in the participant's country (4) To acquire knowledge and experiences to improve leak Prevention in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country	TARG [Organization Governmenta, organizations i [Personal Qua <current duti<br="">Be waterworks <cexperience> at least 3 year university grad least 7 years of polytechnic gr <age> Under 40 year PROGRAM PERIOD MPLEMENTING PARTNER JICA CENTER</age></cexperience></current>	ister Management—Urban Water Sup         5 participants       Russ is         ET ORGANIZATION / GROUP         s]       semi-governmental, or corporate in charge of public water supply         alifications]       ies>         s engineers       s of practical experience for those duate or equivalent; OR have at of practical experience for those raduates or equivalent         rs old       Jan.13.2010 ~ Mar.6.2010         Waterworks Bureau, City of Sapporo		
Waterworks Engineering for Caucasus and East Asia Regions コーカサス・東アジア地域 寒冷地水道 Water Target Countries: Caucasus, Mongolia, and Central Asia OBJECTIVE [Objective] Each participant shares and implements its action plan, and reports progress to JICA [Expected Modules] (1) To acquire knowledge and experiences to improve waterworks Planning in the participant's country (2) To acquire knowledge and experiences to improve waterworks management in the participant's country (3) To acquire knowledge and experiences to improve water treatment in the participant's country (4) To acquire knowledge and experiences to improve leak Prevention in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire knowledge and experiences to improve mater quality control in the participant's country (5) To acquire knowledge and experiences to improve mater quality control in the participant's country (5) To acquire knowledge and experiences to improve mater quality control in the participant's country (5) To acquire knowledge and experiences to improve mater quality control in the participant's country (6) CONTENTS	TARG [Organization Governmenta, organizations i [Personal Qua <current duti<br="">Be waterworks <experience> at least 3 year university grac least 7 years c polytechnic gr <age> Under 40 year PROGRAM PERIOD MPLEMENTING PARTNER</age></experience></current>	ister Management—Urban Water Sup         5 participants       Russ is         ET ORGANIZATION / GROUP         s]       semi-governmental, or corporate in charge of public water supply         alifications]       ies>         s engineers       s of practical experience for those duate or equivalent; OR have at of practical experience for those raduates or equivalent         rs old       Jan.13.2010 ~ Mar.6.2010         Waterworks Bureau, City of Sapporo		

Comprehensive Strategy for Recovery from Natural Disasters for Middle East and		R/F 🚺 0984219		
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	Water Resources/Disaster Mana — Comprehensive Disaster Mana			
Target Countries: Countries often affected by natural disasters		5 participants / English		
OBJECTIVE	TARGI	ET ORGANIZATION / GROUP		
<ul> <li>[Objectives]</li> <li>Specific action plans for recovery from disasters in each country with an eye to "social capital" are created.</li> <li>[Outputs]</li> <li>(1) To understand the issues (disaster emergency response, recovery, and reconstruction) that arose in the time sequence after disasters.</li> <li>(2) To understand the PDCA (Plan, Do, Check, and Act for improvement) Cycle in efforts for reconstruction.</li> <li>(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.</li> <li>(4) To understand new viewpoints (efforts of individuals and communities, infrastructure development, and crisis-control structure) to develop safe towns.</li> <li>(5) To create action plans for reconstruction from disasters in their countries.</li> </ul>	TARGET ORGANIZATION / GROUP[Target Organizations] Authorities related to reconstruction from disasters or to emergency management in countries where natural disaster frequently occur[Target Group] Decision makers on the site of recovery from disasters/ Officials who are high motivated and in a position that enables them become involved with the formulation of recovery 			
CONTENTS	PROGRAM PERIOD	Jan.11.2010 ~ Feb.27.2010		
(1) Outline of the Great Hanshin-Awaji Earthquake/ Damages and emergency response in each field/ Visit on monument to the Great-Hanshin Awaji Earthquake/ Study on other disaster damage cases/ Outline of natural disasters in	IMPLEMENTING PARTNER	Kobe Institute of Urban Research, Kobe International Center for Corporation and Communication		
participants' countries	JICA CENTER	JICA Hyogo		
(2) Recovery plan/ Promotion of recovery plan/ Actions taken to the issues at each period from the time of disaster emergency response to that of recovery or reconstruction and evaluations/ Case examples; public utility services including	COOPERATION PERIOD	2007~2009		
<ul> <li>electricity, gas, and telephone/ Recovery and reconstruction plan in the participants' countries</li> <li>(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/ Mutual help in the participants' countries</li> <li>(4) Development of safe towns/ Creation of safe cities in each countries</li> <li>(5) Action plans for the respective countries</li> <li>Session to exchange views between the Kobe City officials and the participants</li> </ul>	REMARKS			
Integrated Arsenic Mitigation for Asian countries アジア地域総合的砒素汚染対策 Water	Resources/Disa	R∕F ⊻ 0984223 ster Management—Rural Water Supply		
Target Countries: Asia		6 participants / English		
OBJECTIVE	TARGI	ET ORGANIZATION / GROUP		
Overall goal of the training course is implementation of integrated arsenic mitigation designed through the course in central/local governments. At the end of the program, the participants are expected to achieve the following; (1) To learn serious damage by arsenic contamination understanding the experience of arsenic problem in Torokukuro (2) To gain basic knowledge acquiring analysis techniques of arsenic (3) To understand the environmental pollution and health damage by arsenic contamination in Asian countries through lectures of the projects implemented by Asia Arsenic Network (4) To propose a basic strategy for integrated arsenic mitigation	Organizations (Governmental/NGO) responsible for arsenic mitigation [Target Group] (1) Specialists (doctors, engineers, chemists) we presently work in arsenic mitigation, with more than 3 years of experience (2) (Preferably) under the age of 45			
CONTENTS	PROGRAM PERIOD	$Oct.12.2009 \sim Dec.6.2009$		
Following lectures, observations and practices are scheduled to achieve the	IMPLEMENTING			

Asia Arsenic Network

Expected number of participants per country : 1 - 2

 $2007 \sim 2009$ 

PARTNER

COOPERATION

PERIOD

REMARKS

JICA CENTER | JICA Kyushu

Following lectures, observations and practices are scheduled to achieve the objective.(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

		- /- 🕅		
Integrated Water Resources Management for Middle East 中東地域統合的水資源管理 Water Resources/Disaster Mar	nagement — Compr	R/F 🚺 0984233 ehensive Water Resources Management		
Target Countries: Middle East		12 participants / English		
OBJECTIVE	TARG	ET ORGANIZATION / GROUP		
[Objective] This course aims at the capacity development of the participants on the planning and implementation of IWRM.	e 【Target Organizations】 Ministry of Water (Irrigation)			
<ul> <li>[Outputs]</li> <li>(1)To be able to explain the concept of IWRM</li> <li>(2)To understand causes of water conflicts among sectors, up-and-downstream basins and regions</li> <li>(3)To be able to explain the skills for monitoring and assessment of water resources potential and demand</li> <li>(4)To understand the skills for planning of integrated water resources management and to explore the skills to ease water conflicts</li> </ul>				
CONTENTS	PROGRAM PERIOD	Mar.30.2010 ~ Apr.22.2010		
<preliminary phase=""> Formulation and submission of country report and preparation of country report</preliminary>	IMPLEMENTING PARTNER	Japan Water Agency		
core Phase in Japan>	JICA CENTER	JICA Tokyo		
(1)Outline of IWRM, Global warming issues and its impactWater resources and environment (2)Country Report PresentationWater conflict in JapanWater conflict	COOPERATION	2007~2009		
in the WorldCase Study on Conflict Management	PERIOD	2001 2003		
(3)Development, Utilization and Management of Surface WaterDevelopment, Utilization and Management of Groundwater,Utilization of Non-conventional water (reclaimed water, desalination, etc.), Water demand management (domestic water and agricultural water), Public Relationship on water resources, etc. (4)IWRM planning with conflict management, Consensus building for river development plan, Discussion on Conflict Management Decision Support System(DSS) for Water Resources Management, Water resources administration system and legislation in Japan	REMARKS			
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) Water Resou		L∕T ႃႃၴၴ 0981113 Management−Soil and Water Disaster		
developing countries (Master's or Doctor's Degree:Engineering)				
developing countries (Master's or Doctor's Degree: Engineering)       Water Resol         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)       Water Resol         Target Countries: Countries where countermeasures against the slope failure is needed       OBJECTIVE	urces/Disaster	Management—Soil and Water Disaster		
developing countries (Master's or Doctor's Degree:Engineering)       Water Resource         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)       Water Resource         Target Countries:Countries where countermeasures against the slope failure is needed	TARG Target Orgar University or p develop young also are involv country Target Group Age: under 30	Management—Soil and Water Disaster 2 participants / English ET ORGANIZATION / GROUP mizations] public research institute which researchers and/or engineers and red in disaster administration in the b]		
developing countries (Master's or Doctor's Degree : Engineering) 開発金上国のための斜面災害軽減技術の構築と普及(長期) Water Resou Target Countries : Countries where countermeasures against the slope failure is needed OBJECTIVE [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	TARG Target Orgar University or p develop young also are involv country Target Group Age: under 30 Application for accceptable.	Management—Soil and Water Disaster 2 participants / English ET ORGANIZATION / GROUP mizations] public research institute which researchers and/or engineers and ded in disaster administration in the b] years old.		
developing countries (Master's or Doctor's Degree: Engineering)       Water Resourties (Master's or Doctor's Degree: Engineering)         Target Countries: Countries where countermeasures against the slope failure is needed       OBJECTIVE         [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         CONTENTS         (1) Foundation Engineering, Principles of Soil Mechanics, Geotechnical Engineering, Geotechnical Earthquake Engineering etc.	TARG Target Orgar University or p develop young also are involv country Target Group Age: under 30 Application for accceptable.	Management—Soil and Water Disaster 2 participants / English ET ORGANIZATION / GROUP nizations ] public research institute which researchers and/or engineers and red in disaster administration in the b) years old. Master's or Doctor's can be		
developing countries (Master's or Doctor's Degree:Engineering)       Water Resource         Target Countries: Countries where countermeasures against the slope failure is needed       OBJECTIVE         [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         CONTENTS         (1) Foundation Engineering, Principles of Soil Mechanics, Geotechnical Engineering, Geotechnical self defense against natural disaster, conducted in trainee's home country         (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.	TARG TARG Target Orgar University or p develop young also are involv country Target Group Age: under 30 Application for accceptable. PROGRAM PERIOD IMPLEMENTING	Management—Soil and Water Disaster 2 participants / English ET ORGANIZATION / GROUP mizations ] public research institute which researchers and/or engineers and ed in disaster administration in the b) years old. Master's or Doctor's can be Mar.15.2010 ~ Mar.14.2012 Department of Civil Engineering, The		
developing countries (Master's or Doctor's Degree: Engineering)       Water Resourties (Master's or Doctor's Degree: Engineering)         Target Countries: Countries where countermeasures against the slope failure is needed       OBJECTIVE         [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 by model tests or material strength tests         (4) Study on practical self defense against natural disaster, conducted in trainee's home country         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	TARG TARG Target Orgar University or p develop young also are involv country Target Group Age: under 30 Application for accceptable. PROGRAM PERIOD MPLEMENTING PARTNER	Management—Soil and Water Disaster 2 participants / English ET ORGANIZATION / GROUP mizations] public research institute which researchers and/or engineers and ed in disaster administration in the b] years old. Master's or Doctor's can be Mar.15.2010 ~ Mar.14.2012 Department of Civil Engineering, The University of Tokyo		

Satellite Remote Sensing Data Analysis Technology for Disaster/Environmental		GROUP		30068
災害・環境監視のための衛星リモートセンシングデータ解析技術 Water Resol	urces / Disaste	r Management—Othe /Disaster	Management I	lssues
Target Countries: countries hoping for disaster/environment monitoring with SAR technology		10 participants	Eng	glish
OBJECTIVE		ET ORGANIZATION	I/GROUP	
Objective This program enables technicians and researchers to analyze SAR and other remote sensing data as a tool leading to solutions for disaster/environmental problem in their respective countries. Output To achieve the above Program Objective, participants are expected; 1) To be able to explain the principle and analysis method of SAR and other data, 2) To be able to carry out basic and advanced processing of SAR data, 3) To be able to apply SAR and optical sensor data to disaster/environmental monitoring and integrate the data into map information, and 4) To be able to make case study analysis and report the result by using SAR and other data.	This program organizations monitoring b data analysis is desirable t or planning s that facilitate learned tech Nominee Qu Applying Org adequately s (1) be univer a fundamenta mathematics (2) be techni remote sensi disaster/env (3) have mor optical digita	alifications: ganizations are exp elect nominees. No sity graduates, or t Il knowledge of phy	r/environmen ng remote ser chnology. An ns are prepar g environment itilization of ected to minees must; he equivalent sics and s in the field organizations nent, ars experience sis, but have l image analysis	nsing nd it red its t with of is of ces in little is,
CONTENTS	PROGRAM PERIOD	Aug.4.2009 $\sim$ Sep.1	2.2009	
Preliminary Phase: (1) Self study (2) Preparation for Presentation of Inception Report	IMPLEMENTING PARTNER	Remote Sensing T of Japan	echnology Co	enter
Core Phase in Japan:	JICA CENTER	JICA Tokyo		
<ul> <li>(1) Inception Report Presentation</li> <li>(2) Principles and analysis method of SAR and other data <ul> <li>Introduction of remote sensing and ALOS data</li> <li>Theory of SAR, data correction</li> </ul> </li> <li>(3) Basic and advanced processing of SAR and Optical Sensor data <ul> <li>SAR image interpretation</li> <li>Radiometric and Geometric correction</li> <li>Image processing from raw data</li> <li>Theory of interferometric SAR (InSAR) and polarimetric SAR (PolSAR)</li> <li>SAR analysis</li> </ul> </li> <li>(4) Integration of disaster/environmental SAR and Optical Sensor data into geographic information <ul> <li>Applied analysis of SAR and optical data for disaster monitoring</li> <li>Applied analysis of SAR and optical data for environment monitoring</li> <li>Integrated use of the analysis result and map information</li> </ul> </li> <li>(5) Output Presentation by using SAR and other data analysis <ul> <li>Case study analyses with respective countries' data</li> <li>Presentation and discussion</li> </ul> </li> <li>Finalization Phase: <ul> <li>Participant</li> <li>Presentation of his/her output</li> <li>Development of teaching materials</li> <li>Participating organization</li> <li>Submission of teaching materials, comments and Action Plan</li> </ul> </li> </ul>	COOPERATION PERIOD	2008~2010		

# Urban Waterworks Engineering 都市上水道技術者養成 GROUP 0980083 Water Resources/Disaster Management-Urban Water Supply 10 participants Target Countries: African Countries English / OBJECTIVE TARGET ORGANIZATION / GROUP [Objectives] [Target Organizations] Participants acquire wide knowledges about waterworks and get abilities to improve Organization of mainly managing waterworks the waterworks in respective countries with integrated views, and also share those [Target Group] with colleague after completion of the training in Japan. Current Duties: be senior technical officers in [Outputs] charge of waterworks engineering in central or (1) To understand the system of purification plants and purified water processes provincial government, or in local bodies. (2) To understand water transmission and distribution system, and maintenance Experience in the relevant field: have at least including water leakage control ten (10) years of practical experience. (3) To understand securing good water resources and water quality control Age: recommended to be between thirty-five (35) (4) To get ideas on the effective management of waterworks considering and fifty (50) years. environmental condition (5) To prepare and present an Action Plan using what have been acquired through the course PROGRAM PERIOD $Oct.6.2009 \sim Oct.31.2009$ CONTENTS (1) Lectures and practices regarding the techniques of purified water processes IMPLEMENTING and design of purification plant for operating and maintaining purification plant Yokohama Waterworks Bureau PARTNER (2) Lectures and practices by providing the examples of water transmission and distribution system, and maintenance method including water leakage control. JICA Yokohama JICA CENTER (3) Lectures and practices for securing good water resources and water quality control COOPERATION $\left(4\right)$ To learn examples in Japanese knowledge and know-how for effective 2008~2010 PERIOD 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 REMARKS

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		GROU	P ###	0980221
Water Resources/Disas	ster Management	-Comprehensive I	Disaster	Management
		15 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIC	N / GRO	UP
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	qualifications civil engineer experience ir administratio (2) Officials of hold, or will restoration w (3) Age: und	y graduates or wit is in infrastructure ring, and with at le n management, inco on of disaster mitig of central or local assume positions i vorks in the event er 40 years old	managem east 3 yea luding ation governme n charge	ent, i.e. ars of ent who of
CONTENTS	PROGRAM PERIOD	May.11.2009 $\sim$ Jul	.25.2009	
This program includes lectures and practices on (1) the outline of the great Hanshin earthquake (2) the mechanism of earthquake disaster (3) aseismatic technology	IMPLEMENTING PARTNER	Public Associatio Services, Kinki F		nstruction
<ul><li>(4) predicting earthquake</li><li>(5) mechanisms of ordinary disasters in rivers and roads</li><li>(6) a disaster prevention plan</li></ul>	JICA CENTER	JICA Osaka		
<ul> <li>(7) a disaster-prevention-city plan</li> <li>(8) activities during the initial stage and rescue system</li> </ul>	COOPERATION PERIOD	2006~2010		
<ul> <li>(9) evacuation measures</li> <li>(10) protection of lifeline</li> <li>(11) communication during disasters</li> <li>(12) disaster prevention</li> <li>(13) disaster rescue method and its application</li> <li>(14) administrative work of reconstruction for restoration</li> <li>(15) making an action plan for prevention of disaster individually (disaster restoration plan)</li> <li>* Participants are required to make and present an action plan at the end of the program.</li> <li>* The contents of the program above will be subject to change according to the disaster types encountered by the Target Countries.</li> </ul>	REMARKS			

Waterworks Engineering 水道技術者		GROUP <b>###</b> 0980763
<b>አይርክት</b> Water	Resources/Disa	ster Management—Urban Water Suppl
		8 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
<ul> <li>[Objective]</li> <li>Every participant shares and implements its action plan, and then reports progress to JICA</li> <li>[Expected Outputs]</li> <li>1) To acquire knowledge and experiences to improve water treatment facilities and water treatment method in the participant's country.</li> <li>2) To acquire knowledge and experiences to improve water distribution, service installation, and maintenance system in the participant's country.</li> <li>3) To acquire knowledge and experiences to improve leak prevention in the participant's country.</li> <li>4) To acquire knowledge and experiences to improve water quality control in the participant's country.</li> <li>5) To draft an Action Plan to clarify how to apply training in Japan</li> </ul>	organizations (Personal Qu <current du<br="">Be Waterwor <experience) At least thre for those uni least seven ('</experience) </current>	al, semi-governmental, or corporate s in charge of public water supply. halification] ties> ks engineers e (3) years of practical experience versity graduate or equivalent; OR at 7) years of practical experience for chnic graduates or equivalent
CONTENTS	PROGRAM PERIOD	Jun.30.2009 ~ Sep.19.2009
[Preparatory Phase] Each paticipant prepares Country Report and submits map of water distribution	IMPLEMENTING PARTNER	Waterworks Bureau, City of Sapporo
[Core Phase] <subject module="" per=""> (1)<lecture>planning and maintenance of waterworks facilities, outline and design</lecture></subject>	JICA CENTER	JICA Sapporo
of waterworks facilities, advanced water treatment (2) <lecture>plan and maintenance of distribution system and pipes, design pipe</lecture>	COOPERATION PERIOD	2008~2010
<ul> <li>A service installations, pipe network analysis of distribution</li> <li><practice>installation of distribution pipes, service installations</practice></li> <li>(3) <lecture> water leak prevention</lecture></li> <li><practice>water quality control, ground water resources</practice></li> <li><practice> water quality control, jar test, water quality assessment with aquatic organism, survey of ground water resources</practice></li> <li>**General topics; outline of water supplies in Japan and Sapporo, financial system of waterworks (contracts and water charge) environmentally-conscious business management, water circulation and its risks, human resource development in waterworks organization in developing countries</li> <li>(5) weekly discussion, country report presentation, lecture for action plan proposal, mid term action plan consultation, consultation for finalizing action plan action plan presentation</li> <li>[Finalization Phase]</li> <li>Within 6 month after completion of the course, every particpant is requested to share the knowledge and experience in Japan at respective organizations, then reports Action Plan progress to JICA</li> </ul>	REMARKS	Active participation is indispensable for successfull completion, because this course focuses Action Plan proposing process in order to facilitate finalization phase by every participant. (FYI; in 2008, 7/8 participants reported their progress)

Reinforcement of Meteorological Services 気象業務能力向上		GROU	IP া	0980780
	Water Resourc	ces/Disaster Mana	gement—	Meteorology
Target Countries: Member Countries of the World Meteorological Organization (WMO)		8 participants	/	English
<ul> <li>[Objectives] This course aims at promoting activities to reinforce the meteorological services of each country applying meteorological data/products such as numerical weather prediction and satellite images.</li> <li>[Outputs]</li> <li>(1) To be able to explain the fundamental technique such as numerical weather prediction, satellite meteorology.</li> <li>(2) To be able to make up meteorological information which meets users' requirements based on fundamental techniques such as NWP and satellite meteorology.</li> <li>(3) To be able to brief general condition of climate and global environment and make up climate prediction applying climatological and global environmental information. (Weather Forecasting Course)</li> <li>(4) To draw up a master plan to improve the meteorological services of the participants' organizations, and to be used in participants' countries. (Climatology )</li> </ul>	【Target Group】 "Meteorologist" according to the WM categories		D personnel	
CONTENTS	PROGRAM	Sep.14.2009 ~ De	c.11.2009	)
(1) Lectures on the basics of numerical weather prediction and its application. Lectures on the outline of satellite meteorology and application of satellite meteorological data.	PERIOD IMPLEMENTING PARTNER	-		
Lectures on the global telecommunications system. (2)Exercises on satellite meteorological data application. Exercises on operational forecasting.	JICA CENTER	JICA Tokyo		
Lectures on the knowledge and skill to make up meteorological information which meets users' requirements.	COOPERATION PERIOD	2008~2010		
<ul> <li>(3) Lectures on the climatological and global environmental information.</li> <li>Exercises on the application of climatological and global environmental information.</li> <li>(4) Creation of final report (including master plan).</li> <li>Presentation of final report and discussion.</li> <li>[After the training course] Implementation of activities to transfer the knowledge and expertise to colleagues in order to improve the meteorological services of participants' organizations (follow-up survey with questionnaire).</li> </ul>	REMARKS			

Operation and Maintenance of Urban Water Supply System 都市上水道維持管理		GROU	P ##	0980870
Wate Wate	r Resources/Disa	aster Management-	-Urban	Water Supply
		12 participants	/	English
OBJECTIVE	TARGET ORGANIZATION / GROUP			
【Objective】 Applicable Knowledge or skills of Japan will be shared in organizations which implements operation and maintenance of urban water supply system	0	is which implemen of urban water sy	-	
[Expected Results] (1)When the module completes, particiapnts will be able to explain maintenance technologies of pipelines and service installations used in Osaka City (2)When the module completes, particiapnts will be able to explain maintenance technologies of intake, treatment and distribution facilities. (3)When the training in Japan completes the plan to disseminat applicable technologies will be formulated. (4)Within five months after the training in Japan completes, engineers in participating organizations will participate in the disamination program(s).				
CONTENTS	PROGRAM PERIOD	Jun.22.2009 $\sim$ Aug	g.8.2009	)
This training aims to transfer and disseminate Japan's technology of operation and maintenance of urban water supply to filed engineers in developping countries.	IMPLEMENTING PARTNER	Osaka Municipa Bureau	Water	rworks
(1) <lecture>Maintenance of pipelines <observation> Factory of water supply equipments <practice> maintenance work, technical trainers' training</practice></observation></lecture>	JICA CENTER	JICA Osaka		
<discussion> Review, Applicable skills in participating organizations (2)<lecture>Maintenance of intake, treatment and distribution facilities <observation> Above mentioned facilities</observation></lecture></discussion>	COOPERATION PERIOD	2009~2011		
(Observation) Above mentioned facilities (Practice) maintenance work, technical trainers' training (Discussion) Review, Applicable skills in participating organizations (3)(Discussion) Applicable skills in participating organizations (Practice) Formulation and Presentation of Dissemination Plan (4)(Post-training activity) Dissemination program in participating organizations	REMARKS			

The Group Training Course in Fire Prevention Techniques 火災予防技術	GROUP 🚻 0980933
Water Resources/Disaster Management-	—Other Water Resources/Disaster Management Issues Governance—Public Safety 5 participants / English
OBJECTIVE	TARGET ORGANIZATION / GROUP
<ul> <li><objective></objective></li> <li>Fire prevention techniques will be shared with each participant's organization.</li> <li><output></output></li> <li>To reach the objective, participants are expected to achieve the following results:</li> <li>1. To identify the problems and challenges on the fire prevention activities and policies in the respective sections or organizations the participants belong to;</li> <li>2. To make an action plan that suggests the formation of more practical fire prevention system, and improvement of the fire prevention measures, duties, and service in the participants' organizations and which in consequence will solve the issues, and disseminates more widely what they have learned from this program.</li> <li>3. To implement the action plan in the respective countries, and submit final report to JICA.</li> </ul>	<ol> <li>Administrative officer or a candidate of a fire service implementation agency, who is or will be engaged in planning/ drafting fire prevention system and fire service systems;</li> <li>Those who can disseminate the knowledge and techniques obtained in Japan to their organizations;</li> <li>University graduates or equivalent;</li> <li>Individuals with a proficient command of written and spoken English;</li> <li>Individuals in good health.</li> </ol>
00175170	<b>PROCRAM</b> Aver 0 2000 a. Oct 17 2000
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. Making an action plan.	PROGRAM PERIOD       Aug.9.2009 ~ Oct.17.2009         IMPLEMENTING PARTNER       TOKYO FIRE DEPARTMENT         JICA CENTER       JICA Tokyo
6. <post-program (after="" activities="" participants'="" return)=""></post-program>	COOPERATION       2005~2009         REMARKS       Image: state

Dissemination and Establishment of Disaster Prevention Culture for Asian Countrie アジア地域 防災文化の普及と定着	S	R/F #	0984005
アンア地域 的反义にの自及こと者 Water Resources/Disa	ster Management	-Comprehensive Disaster	Manageme
Target Countries : Countries which had or highly likely to have a big natural disaster		4 participants /	English
OBJECTIVE	TARG	ET ORGANIZATION / GRO	JP
<ul> <li>[Objectives]</li> <li>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.</li> <li>[Outputs]</li> <li>(1) To be able to explain significance and characteristics of raising public awareness for DRR.</li> <li>(2) To be able to explain significance and characteristics of raising public awareness for DRR via disaster education in school.</li> <li>(3) To be able to explain significance and characteristics of raising public awareness for DRR via development of specialist in the next generation.</li> <li>(4) To be able to explain significance and characteristics of raising public awareness for DRR via various means for dissemination.</li> <li>(5) To formulate a proposal for raising public awareness for DRR, which is appropriate for each country, with concrete action and methods.</li> <li>(6) To formulate a final draft of proposal for raising public awareness for DRR, which is appropriate for each country, with concrete action and methods.</li> </ul>	government awareness fo and/or disas agency which agency which (Target Groo 1) Current D official/mana raising public education. It official/mana manager of in awareness fo 2) Experienc than 3 years public awaren	or agency in central or loca which is in charge of raising r Disaster Risk Reduction ( ter education. (e.g. Depart n is in charge of DRR, depa n is in charge of education/	g public DRR) ment or rtment or culture) role in r disaster ment or ses public cation. e more raising
	PROGRAM		
CONTENTS	PERIOD	Aug.23.2009 $\sim$ Oct.3.2009	
<ol> <li>To be able to explain significance and characteristics of raising public awareness for DRR.</li> <li>Activities for raising public awareness for DRR in community</li> </ol>	IMPLEMENTING PARTNER	Asian Disaster Reduction	Center
<ul> <li>Raising public awareness for DRR by museum and other forms of institution/facility</li> </ul>	JICA CENTER	JICA Hyogo	
<ul> <li>(2) To be able to explain significance and characteristics of raising public awareness for DRR via disaster education in school.</li> <li>- Disaster education implemented by central and local government in Japan</li> </ul>	COOPERATION PERIOD	2008~2010	
<ul> <li>Observation of disaster education in school</li> <li>(3) To be able to explain significance and characteristics of raising public awareness for DRR via development of specialist in the next generation.</li> <li>Curriculum and contents of lectures in high school or university which has department in the field of disaster risk reduction</li> <li>Discussion with students who major in disaster risk reduction in school.</li> <li>(4) To be able to explain significance and characteristics of raising public awareness for DRR via various means for dissemination.</li> <li>Development of contents of disaster education (e.g. disaster game, )</li> <li>Various ways to hand down the experience, memories and lessons of disaster to</li> </ul>	REMARKS		

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 10984151 Water Resources/Disaster Manageme
Target Countries: Seismic-prone countries. principally in South west Asia regions	—Earthquake Disast 3participants / English
OBJECTIVE	TARGET ORGANIZATION / GROUP
[Objectives] To build capacity of government officials and engineers to develop action plan and to implement school earthquake safety for their respective countries	【Target Organizations】 Ministry of Eduation or regional educational committee
<ul> <li>[Outputs]</li> <li>(1) To understand the importance of school safety and role of schools in disaster risk reduction</li> <li>(2) To understand the technologies and provisions for design, construction and maintenance of school buildings to ensure their safety</li> <li>(3) To understand the vulnerability assessment of existing school buildings</li> <li>(4) To understand the concept and technologies for retrofitting</li> <li>(5) To understand country strategic plan for school safety</li> <li>(6) To prepare an action plan to promote school safety in respective countries</li> </ul>	【Target Group】 Current Duties: Engineering or administrative official engaged in examination or design of school building, and engaged in disaster mitigation in school Experience in the relevant field: have experience in archtecture and/or system on construction - more than 7 years experience is preferable
CONTENTS	PROGRAM Oct.25.2009 ~ Nov.21.2009
<ul> <li>(1) Importance of school safety and role of schools in disaster risk reduction</li> <li>Disaster risk reduction and school</li> <li>School and communities in DRR</li> </ul>	PERIOD         Disaster Management Planning           IMPLEMENTING         Disaster Management Planning           PARTNER         Hyogo Office, UNCRD
- Country report on school safety	JICA CENTER JICA Hyogo
<ul> <li>(2) Technologies and provisions for design, construction and maintenance of school buildings to ensure their safety</li> <li>Construction of safe schools</li> </ul>	COOPERATION 2008~2010
<ul> <li>(seismic codes, philosophy, design, structural and non-structural issues)</li> <li>(3) Vulnerability assessment of existing school buildings <ul> <li>Vulnerability assessment methodologies</li> <li>Prioritization for intervention</li> </ul> </li> <li>(4) Concept and technologies for retrofitting <ul> <li>Retrofitting technology for different types of school structure (RCC, wooden, brick-masonry, adobe)</li> </ul> </li> <li>(5) Country strategic plan for school safety <ul> <li>Case studies (experience of Japan)</li> <li>National policy and country strategic planning</li> </ul> </li> <li>(6) Action plan to promote school safety in respective countries <ul> <li>Action plan</li> <li>Group work</li> </ul> </li> </ul>	UNCRD has conducted projects in seismic-prone countries on safer school against disasters since 2001. The experience of the UNCRD projects will be shared an the experience of Hyogo prefectur and Kobe city will also be shared with participants.         REMARKS

Development of Coordinators for Disaster Nursing for Middle East and Asian countries		R/		0984152
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				
Target Countries : Countries often affected by natural disasters		2 participants		English
OBJECTIVE [Objectives] This program aims to formulate and practice an action plan of developing coordinators for disaster nursing. [Outputs] 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 5. To understand how to formulate programs for developing human resources and how to spread disaster nursing.	(Target Org. organization promotion of Medical/Edu government, (Target Grou Person who corresponder health institu applicant wit authority/du of coordinato 2) Experience	which can play a disaster nursing. cational institutio Nursing associati	leading r (e.g. n, Centr on, NGC tors for o for disas titution o ill be give rest and/ it and dis rsing.	ole in al/local )) disaster ter or public en to /or with esemination
CONTENTS	PROGRAM	Aug.30.2009 ~ Oc	et.3.2009	
[Preliminary Phase in a participant's home country] Preparation for Job Report	PERIOD IMPLEMENTING PARTNER	University of Hy Institute of Nurs People and Com	sing Care	
<ul> <li>[Core Phase in Japan]</li> <li>(1) - Essence and concept of disaster nursing</li> <li>- International network in the field of disaster nursing</li> </ul>	JICA CENTER	JICA Hyogo		
<ul> <li>Case study of disaster nursing in recent disaster nursing</li> <li>Case study of disaster nursing in recent disaster-stricken area</li> <li>(2) = Emergency medicine in Hyogo prefecture <ul> <li>Coordination before medical treatment and triage</li> <li>Providing better environment for refugee</li> <li>Prevention of infectious disease</li> <li>How to coordinate volunteers</li> <li>Support to disaster-stricken medical institution</li> </ul> </li> <li>(3) = Prevention of second disaster <ul> <li>Continued support to vulnerable people</li> <li>Role of nurses in provisional housing and to help afflicted people put their lives back in order</li> <li>Support for formulation of communities</li> <li>Metal health care for afflicted people</li> </ul> </li> <li>(4) = Educating people on disaster prevention <ul> <li>Collaboration with government and medical institution</li> <li>Networking among Nurses</li> <li>Disaster Nursing Education</li> </ul> </li> <li>(5) = Human resources development programs <ul> <li>Formulation of action plan and its presentation</li> <li>Evaluation method for effect of education</li> </ul> </li> </ul>	REMARKS	2008~2010 University of Hy continuously be educating and r nursing after th Hanshin-Awaji i started consiste undergraduate educat program and do disaster nursing you can learn th of disaster nursi of disaster mana You can also lea experts who hav experience of pi nursing, includii from the Great Earthquake.	en practi esearchir e Great Earthqua education cion (both ctorate p . In this ne role ar ing at all agement arn from ve lots of racticing ng lesson	cing, ng disaster ke, has tion from a to a master program) on program, ad method the stage cycle. many disaster s learned

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Water Resources/Disas	ter Management	R⁄ −Comprehensive		0984220 Management
Target Countries : Countries often affected by natural disasters		7 participants	/	English
OBJECTIVE	TARG		)N / GRC	
<ul> <li>[Objectives]</li> <li>The concept and method of promotion of community based disaster prevention are acquired, through understanding the importance of comprehensive management for natural disaster.</li> <li>[Outputs]</li> <li>(1) To understand the significance of disaster prevention</li> <li>(2) To understand the needs and mechanism of community based disaster prevention and how to take community into it</li> <li>(3) To understand how to operate and conduct drills in community based disaster prevention</li> <li>(4) To understand how to foster leaders for disaster prevention in community</li> <li>(5) To Establish a simulated organization for community based disaster management and to formulate an action plan for promoting community-based disater management</li> </ul>	promotion of prevention at organization (e.g. Disaster organization/ organization (Target Grou 1) Current D above-mentio - Priority wil willingness/ir on developme organizations communities. 2) Experience	s which can play a community based and dissemination of of residents for di c management pla division, commun in central/local ge uties: be executive oned organization l be given to appli- nterest and/or wite ent and dissemina for disaster prev	l disaster of self-he isaster pr nning ity deve overnme ve official s icant wit h author tion of s ention in ield: hav	elp revention. lopment nt) ls of the h ity/duty elf-help h re more
CONTENTS	PROGRAM	Aug.9.2009 $\sim$ Sep.	.19.2009	
[Preliminary Phase in a participant's home country] Preparation for Job Report	PERIOD IMPLEMENTING PARTNER	Kobe City Fire I	Bureau	
【Core Phase in Japan】 1. Significance of disaster prevention and Japanese system of disaster prevention Disaster management in Japan and Hyogo Prefecture/ Disaster management in	JICA CENTER	JICA Hyogo		
Kobe City/ Emergency response communication network system/ Disaster education promoted by the Board of Education, Kobe City/ JICA's approach to	COOPERATION PERIOD	2007~2009		
<ul> <li>community based disaster prevention</li> <li>2. Needs and mechanism of community based disaster prevention and how to take community into it</li> <li>Self-help organization for community based disaster prevention in Kobe</li> <li>"Disaster-Safe Welfare Community (BOKOMI)"/ Experience of establishing a Disaster Safe Welfare Community/ How to organize people for establishing a Disaster-Safe Welfare Community/ Example of town reconstruction/ Examples of community based disaster prevention other than those in Kobe City</li> <li>3. How to operate and conduct drills in community based disaster prevention Equipment and materials used in self-help organizations for community based disaster prevention/ Community map for disaster prevention and its practical use/ Role of community radio in emergency response and reconstruction/ Dirlls for citizens and awareness programs</li> <li>4. How to foster leaders for disaster prevention in community How to instruct civil organization/ How to foster future leaders for disaster prevention/ Discussion with the leaders of Disaster-Safe Welfare Community/ Overnight drill</li> <li>5. Establishment of a simulated organization for community based disaster prevention and formulation of an action plan</li> <li>[Finalization Phase in a participant's home country]</li> </ul>	REMARKS	It is expected to promotion of con- disaster prevent country, by intr- effort of "disaster community." In this program, practice will be especially you w chances to parti- drills in which re- leading role.	mmunity ion in ea oducing er-safe w experien emphasiz vill have s icipate di	based ach Kobe's velfare nce and zed; some isaster

Community Empowerment through Safe Water Management for Arid Regions in French Speaking Africa		R/F 111 0984248
4語圏アフリカ 乾燥地域 村落飲料水管理 Water Resources/Disaster Mar	nagement—Compr	rehensive Water Resources Managemen
Target Countries:French-Speaking Africa	1	13 participants / French
OBJECTIVE	TARG	GET 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.	planners eng management • Individuals than 3 years management • Fluent in F • Individuals of leader in c • Individuals	am is designed for administrative gaged in safe drinking water in small-scale communities with practical experience of more in the field of water resource
CONTENTS	PROGRAM PERIOD	$Oct.18.2009 \sim Dec.18.2009$
<pre><preparatory phase=""> Formulation of Job Report. <curriculum in="" japan=""> • Water resource development, management, and policies (in Japan and arid</curriculum></preparatory></pre>	IMPLEMENTING PARTNER	Fuji Women's University
regions) <ul> <li>Management for groundwater development and rural water supply program</li> <li>Transition of water supply and sanitation.</li> </ul>	JICA CENTER	JICA Sapporo
<ul> <li>Water supply and the quality control</li> <li>Water environmental engineering and groundwater management</li> </ul>	COOPERATION PERIOD	2007~2009
<ul> <li>Theory and training in "Project Cycle Management"</li> <li>Theory and training in community management (including gender development, micro-credit)</li> <li>Practice of presentation skills (Finalization Phase)</li> <li>Implementation of the Action Plan and the report of the progress.</li> </ul>	REMARKS	Expected number of participants per country: 2 (male 1, female 1)

🖞 : Learning Program, 🎁 : Diffusion Program, 👁 : Solution Program, 🍞 : International Dialogue Program

Training on Firefighting command techniques 消防活動指揮技術研修 Water Resources/Disas	stor Managamont	- Comprohensi	R/F <b>fff</b>	0984309
	ster management	6 participant		Vietnamese
Target Countries : Vietnam OBJECTIVE	ТАРС	ET ORGANIZA		
[Objective] The fire prevention and fire fighting drills that are applicable to the actual conditions in Vietnam will be shared within the Fire and Disaster Management College of Vietnam. [Expected Results] JFY2009(1)Participants, as a commander of rescue engine, will be able to implement and command the high-grade (advanced) rescue operations with the use of facilities loaded on the rescue truck. JFY2009(2)After returning to the home country, participants will make a training plan based on the techniques obtained during the core phase in Japan, then will implement the plan in the education and training curriculum at the Fire and Disaster Management College in Vietnam. *The output of JFY2010 and 2011will be announced at in the General Information in each year.	The Universi	ty of Fire Figh ublic Security	ting and Pro	-
CONTENTS	PROGRAM	Apr.16.2009 ~	May.22.2009	9
<ul><li>To Aquire higher level techniques on firefighting and rescue activities which correspond urbamization.</li><li>(1) Being able to rescue safely and promptly the person in need.</li></ul>	PERIOD IMPLEMENTING PARTNER	Tokyo Fire D JICA Tokyo		
(2) Formulating a training plan based on the knowledge and techniques gained during the training in Japan, and after returning home country, implementing the training plan in the curriculum of the University of Fire Fighting and Prevention,	JICA CENTER COOPERATION PERIOD	2009~2011		
Ministry of Public Security of Vietnam *The contents of JFY2010 and 2011will be announced at in the General Information in each year.	REMARKS	In this course follow-up sup organizations develop the r further. For this purp TV-conferen months betwo JICA Tokyo all the person	pport to par s that intend result of the pose, JICA w ace every 3 een JICA V with the att	ticipating d to e program will hold a or 4 ietnam and endance of

Training Course for Expert on Flood-related Disaster Mitigation 洪水関連災害防災専門家育成研修		
Water Resources/Disaster	Management—Win	d and Flood Disaster(Flood Contro
		13 participants / Englis
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
<ul> <li>[Program Objective]</li> <li>The program objective is to develop the participant's capacity to practically manage the problems and issues concerning water-related disasters in local levels and to contribute for socio-economic and environmental improvements in regional and national levels in developing countries.</li> <li>[Expected Results]</li> <li>(1) To be knowledgeable about the recent practices in integrated flood risk nanagement in various localities in the world.</li> <li>(2) To be able to define the requirements for local/national effective risk reduction ncluding public policies and design a local/national risk management frameworks, nstitutional coordination and management mechanisms including all stakeholders.</li> <li>(3) To be able to develop local/national indicators to detect and monitor changes in the basis of emergency responses and disaster risk reduction policies and to nonitor the status and effectiveness of these policies.</li> <li>(4) To be able to contribute for the implementation of plans developed based on the dentified integrated risk management policy by making them underpinned by a clear inancial, institutional and legislative framework.</li> <li>(5) To be able to develop risk management strategies considering all the nanagement cycle components, namely emergency response, recovery, mitigation and preparedness taking into account risk perception and communication issues and emerging threats such as global warming and climate change.</li> </ul>	<ul> <li>management</li> <li>Target Grou</li> <li>Administra</li> <li>researchers i</li> <li>water-related</li> <li>organizations</li> <li>Experience</li> <li>years' experi</li> <li>To be unive</li> <li>water resource</li> <li>mitigation, et</li> <li>background.</li> <li>To be famili</li> </ul>	al Organizations concerning river and/or water-related disasters up] tive officers and/or engineers and/o n charge of river management and/ d disasters in above-mentioned e in the relevant field: more than 3
CONTENTS [Preliminary Phase] Participants will make an Inception Report on the current situation of the river	PROGRAM PERIOD	Sep.28.2009 ~ Sep.18.2010 Public Works Research Institute
management and/or water-related disasters management in their country.	PARTNER JICA CENTER	(PWRI) JICA Tsukuba
[Program in Japan] Participants are expected to acquire the necessary skill and technique related water-related disaster management and mitigation through lectures, discussions,	COOPERATION	2007~2009
<ul> <li>research, practical exercises and site visits, etc.</li> <li>(1) Meteorology related to the hydrological process</li> <li>(2) How to get access to meteorological data</li> <li>(3) Hydrological observation</li> <li>(4) Analysis/prediction methods using models to simulate the hydrological process</li> <li>(5) River engineering and river ecology</li> <li>(6) Flood risk assessment and risk reduction</li> <li>(7) Methods of the flood risk assessment and flood risk reduction,</li> <li>(8) Sediment control</li> <li>(9) Disaster mitigation policy</li> <li>(10) Disaster risk management</li> <li>(11) How to make projects of the International organizations</li> </ul> [[Finalization Phase]] The Action Plans made in the program in Japan should be shared in the participants' organization and should be elaborated as Final Report. Six months after going back to Japan, participants will report the progress of the Final Report to JICA.	REMARKS	Participants, who have successful achieved required credits, will be awarded a Master's Degree, by GRIPS and PWRI.

Comprehensive Management of River and Dam 総合的な河川及びダム管理 GROUP 0980065 Water Resources/Disaster Management-Comprehensive Water Resources Management 12 participants Fnglish OBJECTIVE TARGET ORGANIZATION / GROUP [Program Objective] [Target Organizations] Plans improved on flood/sediment disaster measures, water resources management Water management organization such as Ministry policies, dam management policies and riverine environment conservation measures of Water Resources, Ministry of Irrigation in their native countries, are made in the water governing agencies such as the department of water resources or the department of irrigation. [Target Group] - Administrative officer and/or engineer in charge Expected Results of flood control works or water resources (1) To understand the current situation on water use and water resource development projects in water management management in their countries. organizations. (2) To get the knowledge related to trends of the world in the water sector and the - Experience in the relevant field: more than 3 history of river projects and the current river system in Japan. years' experience in the field of flood control or (3) To get knowledge on planning and design techniques about flood control in water resources development projects. (including erosion control) and water use, and dams. (4) To prepare Interim report for improving or getting 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. PROGRAM Sep.6.2009 ~ Dec.12.2009 CONTENTS [Preliminary Phase] Infrastructure Development Institute (IDI) and Public Works IMPLEMENTING Participants make an Inception Report on present situation and problems related PARTNER flood control, water resources management in their countries. Research Institute (PWRI), etc JICA CENTER JICA Tsukuba [Program in Japan] Participants are expected to understand the overall view of water use and water COOPERATION resource management through lectures, discussions, practical exercises and site 2008~2010 PERIOD visits. (1) History, system and legislation for river works  $\Rightarrow$  History, system and legislation for river works in Japan  $\Rightarrow$  World trends in the water sector (2) History of water works and stuructural and non-structural measures in Japan  $\Rightarrow$  Planning and design for flood control in Japan  $\Rightarrow$  Planning and design for erosion control in Japan  $\Rightarrow$  Water utilization plan in Japan  $\Rightarrow$  Hydrological observation in Japan  $\Rightarrow$  Improvement of river environment in Japan (3) Dam project in Japan  $\Rightarrow$  Dam design and geological survey in Japan  $\Rightarrow$  Dam construction works and management in Japan (4) Formulation and Discussion on Interim Report for for improving or getting over REMARKS the problems in their own countries. Finalization Phase The Interm Report made in the program in Japan should be shared in the participants' organization and should be elaborated as Final Report. Participants will report the progress of the Final Report to JICA.

Effective use of industrial water and re−use of waste water 工業用水使用合理化及び廃水再生利用		GROL	JP 💿	0980074
Water Resources/Disaster Mar	nagement—Compr	rehensive Water R	lesources	s Management
Target Countries: Countries with water shortage by rapid industrial development		8 participants	/	English
OBJECTIVE			ON / GRO	DUP
[Objective] A method of subject solution which relates to effective use of industrial water and reuse of waste water is considered and made a policy & schedule to promote the solution.	industrial wa	ing administration ter supply	related	with
[Expected Results] To achieve this program objective, participants are expected to; 1. understand and explain the importance of policy on the effective use of industrial water and reuse of waste water. Also, trainees explain the difference of industrial water policy between Japan and the respective countries. 2. understand the basic technologies on effective use of water and reuse of waste water at plant. 3. understand the importance of the required policy planning and implementation to promote the effective use of water and reuse of waste water. 4. develop and present a feasible action plan to implement the effective use of industrial water and reuse of waster water in the respective countries.	charge of pra (3rd year) S who are resp target organi -Have at lea aforemention -Individuals	ear) Administrative actical works Genior/middle man ponsible for the de	agement ecision m xperience mastere	c officers aking in the e in the d basic
CONTENTS	PROGRAM	under planning		
<ul><li>(1) Presentation of the current situation on water, industrial water and waste water in the respective countries</li><li>(2) Lecture on the necessity of effective use of industrial water and re-use of</li></ul>	PERIOD IMPLEMENTING PARTNER	Water Re-use F	Promotion	n Center
waste water (3) Comparison and analysis the difference between trainee's countries and Japan (4) Field trip to plants which use/reuse the water effectively	JICA CENTER	JICA Tokyo		
<ul><li>(5) Field trip to plants which use/reuse the waste water effectively</li><li>(6) Lecture on the basic technologies of effective use of water and reuse of waste</li></ul>	COOPERATION PERIOD	2009~2011		
<ul> <li>water</li> <li>(7) Lecture on water treatment technologies which are easy to apply at developing countries</li> <li>(8) Lecture on the policy of industrial water and the role of METI (Ministry of</li> </ul>				
Economy, Trade and Industry) (9) Lecture on the law of industrial water (10) Lecture on the regulation and incentive for water saving (11) Lecture on the financial support system in Japanese developing assistance				
policy (12) Development and presentation of Action Plan (13) Discussion for Action Plan				
	REMARKS			

## Emergency / Disaster Medicine 救急•大災害医療

# Water Resources / Disaster Management-Water Resources / Disaster Management

onto	/	- · · ·

0980796

GROUP

		20 participants / E	nglish
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
<ul> <li>[Objectives]</li> <li>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.</li> <li>[Outputs]</li> <li>1) Participants will gain a general view of the Japanese emergency medical system and understand the cooperative system among related organizations,</li> <li>2) Participants will gain a general view of Japanese disaster medical system through past experiences in Japan,</li> <li>3) Draft action plan will be formulated to solve the problems/challenges which participants' organization are facing.</li> </ul>	administrativ [Target Grou 1) senior med engaged in m medicine and an emergency administrativ 2) be familiar emergency m preparedness ※Participati Management	nedical organizations or medic ve agencies	s er rship in ical isaster
CONTENTS	PROGRAM PERIOD	Sep.13.2009 ~ Oct.21.2009	
<pre></pre>	IMPLEMENTING PARTNER	Saiseikai Senri Hospital	
Poisonous & hazardous substance information management, Emergency medical training, Emergency-response personnel training	JICA CENTER		
(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	PERIOD	2008~2010	
(3) Action plan making (Finalization Phase in participants' home countries) Discussion and Finalization of Action Plan, Submission of final report to JICA regional Office	REMARKS		

Integrated Water Resources Management 統合的水資源管理 Water Resources/Disaster Management-	—Other Water F	GROUF Resources/Disaster		0980839 ent Issues
Target Countries: Asian monsoon region		15 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATIO	N / GROU	 P
<ul> <li>[Objective]</li> <li>To formulate a fundamental direction for improving the implementation system of integrated water resource management in the selected model basin(s).</li> <li>[Expected Results]</li> <li>(1)To preliminarily identify and define work-related problems in water resource management departments / organizations</li> <li>(2)To identify and define issues / problems concerning implementation of integrated water resource management.</li> <li>(3)To make improvement plans for priority implementation issues in water resource management</li> <li>(4)To examine the feasibility of the draft improvement plans in the participants' water resource management departments / organizations</li> </ul>	management	working on water r in water relevant a river basin organi:	administra	tive
CONTENTS	PROGRAM	Aug.23.2009 ∼ Sep	5 2009	
This program is designed for the staffs working on water resources management in administrative agencies etc. to get capacity which enables to implement the IWRM.	PERIOD IMPLEMENTING PARTNER	Incorporated Adr Agency Japan Wa	ninistrativ	
(1)To identify and define issues / problems regarding the basin(s) in which participants are involved (Information collection)	JICA CENTER	JICA Tokyo		
(2)The implementation system of water resource management in the respective countries, and issues / problems regarding the basin(s) in which participants are	COOPERATION PERIOD	2009~2011		
involved (Oral presentation, Discussion), The cases of integrated water resource management in Japan (Lecture, Site Visit), The implementation system of water resource management and the related legislation in Japan (Lecture, Site Visit) (3)PCM to make improvement plans (Exercise), Oral presentation of draft improvement plans (Presentation, Discussion) (4)Discussion and examination of draft improvement plans within the participants' water resource management departments / organizations (Discussion with related persons)	REMARKS			

DRR (Disaster Risk Reduction) Strategy for Urban Earthquake 都市地震災害軽減のための総合戦略 GROUP 0980892 Water Resources/Disaster Management-Earthquake Disaster Target Countries: seismic-prone countries 9 participants ★/ Fnglish OBJECTIVE TARGET ORGANIZATION / GROUP [Objective] [Target Organizations] DRR (Disaster Risk Reduction) strategy for urban earthquake, which is based on a Organizations which conduct urban earthquake pro-active approach of DRR utilizing various tools and knowledge in risk disaster risk reduction (DRR) (government, assessment, risk management, and risk communication, is to be studied and built at research institution, medical institution etc.) each organization to implement urban earthquake DRR. [Target Group] 1) Current Duties: be a public officer, technical Expected Results specialist, resercher, engineer or medical staff (1)Risk Assessment and its Tools and Knowledge presently engaged in practical service of DRR of (2)Risk Management and its Tools and Knowlede urban city. (3)Risk Communication and its Tools and Knowledge 2) Experience in the relevant field: have more than 2 years' experience in the field of DRR. (4)International Activities for Urban DRR and Education for Leaders (5)DRR strategy for urban earthquake is to be studied and built at each organizations to implement urban earthquake DRR PROGRAM May.10.2009  $\sim$  Jul.4.2009 CONTENTS To promote a holistic & comprehensive strategy urban earthquake DRR in seismic IMPLEMENTING Research Center for Urban Safety prone countries by training leaders of DRR to get the essential knowledge & tools. PARTNER and Security, Kobe University (1)Through the lectures of "Earthquake Mechanism","Seismic Ground Motion & Hazard Map", "Building Codes", "Lifeline Damage Assessment" and visits to JICA CENTER JICA Hyogo relevant institutions, the participants will learn the risk assessment tools & COOPERATION knowledge that are needed prior to the occurence of earthquake. 2009~2011 PERIOD (2)Risk management tools & knowledge required after the quake will be taught through the lectures of "Recovery of Kobe City & Community", "Disasters The participants will also atain Medical Response & Public Health", "Environmental Impacts of work credit to be eventually Disasters", "Economic Impacts of Earthquake" and visits to relevant institutions. counted toward completing an (3) Through the lectures of "IT for Emergency Management", "Disaster Information internationally-accredited Sharing","Education for DRR" and also visits to relevant institutions, the professional certification program participants will learn the risk communication tools and knowledge that are needed as "urban DRR specialists" currently being formulated by prior to and after the occurence of urban earthquake. (4) Through the lectures of "Int. Collaborations for DRR", "Inter-national several international organizations Organization on DRR and Educational System", the participants will learn how to including WBI, UNDP, UNISDR, and obtain an internationally accredited certification as an urban DRR specialists to others. support their own DRR activities at home country. (5)DRR strategy for urban earthquake, which is based on a pro-active approach of DRR utilizing various tools and knowledge in risk assessment, risk management, REMARKS and risk communication, is to be studied and built at each organizations to implement urban earthquake DRR.

The Seminar on administration by Competent Auth Water	norities for Better Management of		GR	oup 💿	0980915
水道管理行政	Water Resources/Disaster Man	agement—Compr	ehensive Water	r Resources	Management
			8 participants	s ★/	English
OBJECTIVE		TARG	ET ORGANIZA	TION / GRO	UP
[Objective] This course aims at achieving consensus for challer improvement plan for better management of water s returning. [Outputs] < Under Planning > Participants are expected to be able to: (1)Understand the water quality management, non- water supply to acquire the ability of applying the k (2)Specify the challenges which need to be tackled plan and (3)Share the idea of implement plan which participa persons in their organizations after returning back.	supply after the participants' revenue water, guidelines of knowledge in their countries, and formulate the improvement nts formulate among related	<target orga<br="">Departments administratio <target grou<br="">1) Individuals of water supp 2) Individuals</target></target>	anizations> which are in cl n at national/ n up> s with 5 years e	harge of wat regional autl experience ir ılay major ro	er supply horities n the field oles in the
CONTENTS <preliminary country="" home="" in="" phase=""> Participants required to Make a Country Report an contents are below: job outlines, challenge/issue in status of water supply management. <core in="" japan="" phase=""> Lectures, field visits, discussion and presentation w</core></preliminary>	in the presentation life. These is the interview of the such as:	PROGRAM PERIOD IMPLEMENTING PARTNER JICA CENTER COOPERATION	Jun.7.2009 ~ Ju Japan Interna Welfare Servi JICA Tokyo	tional Corpo	oration of
<ul> <li>1) Country Report Presentation</li> <li>2) Water Quality Management</li> <li>3) Non-Revenue Water</li> <li>4) Water Safety Plan</li> <li>5) Improvement Plan Formulation and Presentation (Follow-up Phase)</li> <li>Participants are expected to share the idea of impr persons and report on the progress.</li> </ul>	1	REMARKS	2007~2009 This course w year. The and held from Sep Sep.19.2009.	other course 5.6.2009 to	

Comprehensive Disaster Risk Management 総合防災行政	. <b>.</b> .	GROU		0980999
Water Resources/Disas	ter Management		Disaster	
	TADO	18 participants		English
OBJECTIVE	-	ET ORGANIZATIO	ON / GRO	JUP
[Objective] Participants formulate comprehensive plan of disaster management in each participants' organization.		anizations] in charge of disas ocal government.	ster man	agement at
<ul> <li>[Output]</li> <li>(1)To understand disaster management of national and local governments and examine how to adopt acquired knowledge in each country.</li> <li>(2)To understand the role of NGOs and private sectors such as mass-media and other private firms in disaster management and examine how to adopt acquired knowledge in each country.</li> <li>(3)To understand Japanese approaches to different disasters and examine how to adopt acquired knowledge in each country.</li> <li>(4)To formulate action plans for the challenging the problems in each country.</li> </ul>	disaster man involved in d preparedness	ip] rently responsible agement: Especial isaster preventior s, response, rehab on either in centra	ly those , mitiga ilitation	who are tion and
CONTENTS	PROGRAM	Jan.11.2010 ~ Feb	27 2010	
Preparatory phase:	PERIOD	Jan 11 2010 10.		
Participants are requested to submit country reports describing the current situation and problems of their own organization, signed by the head of the organization.	IMPLEMENTING PARTNER	Asian Disaster F	Reductio	n Center
	JICA CENTER	JICA Hyogo		
Program in Japan: (1) Lecture: disaster risk management of central, prefectural, and municipal government, disaster prevention education, Hyogo Framework of Action (HFA),	COOPERATION PERIOD	2005~2009		
<ul> <li>(2) Field visit: Disaster Prevention Organization of central, prefectural, and municipal level</li> <li>(3) Practice on improving the people's consciousness on disater prevention</li> <li>(4) Dsscussion for the action plan, Workshop of Project Cycle Management (PCM)</li> <li>Post-program activities:</li> <li>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.</li> </ul>	REMARKS			

Target Countries: Country with frequent flood disasters		9 participants / E	nglis
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
<ul> <li>[Program Objective]</li> <li>The direction and schedule to make local disaster management plan combined with flood hazard map and flood forecasting/warning system will be drawn.</li> <li>[Expected Results]</li> <li>(First year&gt;</li> <li>(1) To identify problems and issues on flood disaster countermeasures.</li> <li>(2) To set the direction for a local disaster management plan and to make a mid-term operation schedule.</li> <li>(Second year&gt;</li> <li>(3) To identifying problems and issues for obtaining data to conduct hydrological and flood analysis.</li> <li>(Third year&gt;</li> <li>(4) To understand of the relationship among flood hazard mapping (FHM), forecasting / warning systems and an evacuation plan in a local disaster management plan.</li> <li>(5) To develop an outline of the direction for a local disaster management plan and a mid-term operation schedule for a target area.</li> </ul>	operation of has authority relationship i disasters. 【Target Grou- Administra above-mentie ⇒ Division ⇒ Senior e (Second ⇒ Assistar promotir forecasti - Experience ⇒ Risk Ma (First ye ⇒ Dam and (Second ⇒ Risk Ma (Third y	al organizations which conduct flood disaster management pla over related laws or has closs in a country with frequent floo up] tive officers in charge of oned target organization. Director Level (First year) engineer in charge of FHM year) at director level in charge of flood hazard mapping (FHM ing/warning systems in the relevant field; nagement of flood disasters ear) d flood disasters Management year) nagement of flood disasters ear) be an officer who have knowle flood disasters management an	un and e d (),
CONTENTS	PROGRAM PERIOD	$Oct.25.2009 \sim Nov.25.2009$	
The direction and schedule to make local emergency operation plan combined with flood hazard map and flood forecasting/warning system will be drawn. (1) PCM, related organizations, hearing, understanding danger/damage of flood	IMPLEMENTING PARTNER	Public Works Resarch Institu (PWRI)	ute
disaster, establishing law system, frequency analysis, check danger points, general terms (including outline of local disaster mitigation plan)	JICA CENTER		
(2) PCM exercise, drafting action plan	PERIOD	2009~2011	
<ul> <li>(3) Runoff analysis, hydrological frequency analysis, GIS, inundation analysis, Google earth, Town Watching, general terms (including outline of local disaster mitigation plan)</li> <li>(4) Town Watching, evacuation plan combined with flood forecasting/warning system and FHM, communication network</li> <li>(5) PCM, related organizations, hearing to residents on awareness, understanding danger/damage of flood disaster, frequency analysis, check danger points, general terms, drawing local disaster mitigation plan</li> </ul>	REMARKS		

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~	Water Resources	R/F 🚳 s/Disaster Management—Com Water Resources I	0984073 prehensive Management
Target Countries: Middle Eastern Countries. The country whose mother tongue is Arabic.		6 participants /	English
OBJECTIVE	TARG	ET ORGANIZATION / GROU	JP
<ul> <li>(Objectives)</li> <li>The improvement plan prepared by each participant can be presented and shared with the appropriate people in his/her organization.</li> <li>(Outputs)</li> <li>(1) Job/Country Report should summarize the challenges of techniques of water supply management in each country</li> <li>(2) Each participant can outline the current water supply management in Japan</li> <li>(3) Each participant can explain the practical knowledge and techniques necessary for the establishment of an appropriate distribution network</li> <li>(4) Each participant can explain practical knowledge and techniques necessary for a leakage prevention system</li> <li>(5) Utilizing knowledge and techniques gained through the training, each participant can compile an improvement plan to solve problems in his/her own country's water supply projects</li> <li>(6) The improvement plan prepared by each participant can be presented and shared with the appropriate people in his/her organization</li> </ul>	operations su and mainater investigation (Target Gro 1) Current jo practical ope maintenance, projects. 2) Experienc	ations which implement the p uch as planning, designing, of nance of distribution pipeline and repair of underground up bb: engineers who perform the rations of design and /control in the field of water e in water supply projects: 1 years of work experience in	operation e and leakage. he r supply have more
		1	
CONTENTS	PROGRAM PERIOD	Jul.7.2009 $\sim$ Aug.23.2009	
(Preparatory phase (Before coming to Japan)> (1) Preparation of Job/Country Report Presentation ⇒Job/Country Report presentation will be held at the begininning of the core phase in Japan (2) Overview of the water supply management in Japan (a) Outline (Lecture) (b) Maintenance of purification plant (Lecture, Observation) (c) Water quality control (Lecture) (d) Maintenance of distribution facilities (Lecture, Observation) (3) Maintenance of distribution network (a) Outline of water-service installation (Lecture, Exercise) (b) Outline of water-service installation (Lecture, Exercise) (2)(3)(4) Elective Training (a)Choose one out of two topics below and have training on the chosen topic – Functional evaluation and improvement planning for distribution pipes – Planned detection and repair of underground leakage (b) Make presentation regarding the training on the chosen topic	IMPLEMENTING PARTNER JICA CENTER COOPERATION PERIOD	Hiroshima City Waterwork	not Drinking lization of

🖞 : Learning Program, 🇰 : Diffusion Program, 👁 : Solution Program, 🌍 : International Dialogue Program

Tsunami Disaster Mitigation 津波防災			F	0984165	
Water H Target Countries: Tsunami disaster prone countries in Asia and Pacific Ocean	Resources/Disaster Management—Earthquake Disaste 7 participants / English				
OBJECTIVE	TARG	ET ORGANIZATIO	N / GRO		
<ul> <li>[Program Objective]</li> <li>A draft for Tsunami Early Warning system and a draft for Tsunami Hazard</li> <li>Assessment are proposed in an organization such as meteorological agency.</li> <li>[Expected Results]</li> <li>(1) To identify Tsunami disaster-related problems as preparatory work.</li> </ul>	<ul> <li>[Target Organizations] Administrative agencies on tsunami disaster mitigation, national research institutes and universities</li> <li>[Target Group] - Administrative officers and/or engineers and/or reseachers in charge of tsunami disaster mitigation in above-mentioned target organizations.</li> <li>- Experience in the relevant field: more than 3 years' experience.</li> <li>- To be university graduates in Seismology, Tsunami or Their Disaster Mitigation, or be university graduates in Science and Technology other than the above mentioned subjects.</li> </ul>				
<ul> <li>(1) To identify Tsummi disaster related problems as preparatory work.</li> <li>(2) To acquire fundamental knowledge on earthquake and tsunami and are able to explain basic concept and theory about generation, propagation and run-up procedure of tsunami caused by earthquake.</li> <li>(3) To be able to explain basic concept and principle for Tsunami Early Warning system, Hazard assessment, disaster mitigation policy, and countermeasures, which are indispensable for Tsunami disaster mitigation.</li> <li>(4) To be able to apply acquired knowledge for solving the problems of their countries and compile master report based on capacity development for application of Tsunami Early Warning system and Tsunami Hazard Map.</li> <li>(5) To examine the feasibility of their draft for improvement plan at each division in charge of Tsunami disaster reduction.</li> </ul>				r e than 3 logy, or be chnology	
CONTENTS	PROGRAM PERIOD	Sep.28.2009 $\sim$ Sep	.18.2010		
<ul> <li>[Preliminary Phrase]</li> <li>Participants will make an Inception Report on the current situation of tsunami disaster mitigation, such as tsunami early warning system and tsunami hazard assessment, in their country.</li> <li>[Program in Japan]</li> <li>Participants are expected to understand the knowledge and technique for tsunami disaster mitigation in order to promote improving tsunami early warning system and tsunami hazard assessment through lectures, discussions, practical exercises and site visits.</li> <li>(1) Lectures, practical studies and field trips regarding Tsunami generation by earthquake, Tsunami propagation and its run-up procedure.</li> <li>(2) Lectures, practical studies and field trips from which the participants can learn technologies on Tsunami Early Warning system, Tsunami Hazard assessment and countermeasures and policy making on tsunami disaster.</li> <li>(3) Compilation of Master Report</li> <li>(4) Formulation of draft for improvement plan and its review</li> <li>[Finalization Phase]</li> <li>The improvement plan (Interim Report) made during the program in Japan should be shared in the participants' organization and should be elaborated as Final Report. Six months after leaving Japan, participants will report the progress of the Final Report to JICA.</li> </ul>	REMARKS	Sep.28.2009 ~ Sep Building Researc JICA Tsukuba 2009~2011 Participants, wh achieved require awarded a Maste 'Master of Disas GRIPS and BRI.	h Institu o have s d credit: er's Degi	uccessfully s, will be ree,	

🖞 : Learning Program, 🇰 : Diffusion Program, 👁 : Solution Program, 🌍 : International Dialogue Program

Management of Urban Water Systems for Soutneast European Countries 南東欧地域 都市上下水道事業管理 Water Resources/Disaster Mar	nagement - Compr			0984184 Management
Target Countries: Southeast countries	lagement — compr	7 participants		English
OBJECTIVE	TARG		) N / GRC	
OBJECTIVE [Objective] Every participant shares and implements "Action Plan" in respective organization, and then officially reports its progress to JICA [Expected Outputs] 1) To grasp the outline of urban water service in Japan, and identify issues of their own organizations 2) To identify the issues of financial management of urban water systems of participants' organization 3) To identify issues of water treatment systems and water quality control to improve quality of the water. 4) To identify issues in maintenance of urban water service facilities of participating organizations. 5) To propose "Action Plan" describing appropriate methods and techniques to improve urban water systems management	TARGET ORGANIZATION / GROUP         [Organization]         Governmental, semi-governmental, or corporate organizations in charge of management of urban water systems         [Personal Qualifications] <current duties="">         Managerial Officers, Staff members, Government officers, Engineers         (*Being engineer is NOT essential requirement; however, daily involvement to any kinds of urban water systems-related work is indispensable.)         <experience>         More than 3 years working experience</experience></current>			
CONTENTS [Preparatory Phase] Each participant prepares Job Report to identify each issues	PROGRAM PERIOD IMPLEMENTING PARTNER	Jun.30.2009 ~ Au Center for Envir Bio Engineering University	ronmenta	
<pre>[Core Phase] <subjects module="" per=""> (1) Water supply administration in Japan, Sewerage administration in Japan, Tour</subjects></pre>	JICA CENTER	JICA Sapporo		
the water purification plant in City of Sapporo, Tour the wastewater treatment plant in City of Sapporo, Tour the wastewater treatment plants in Tokyo	COOPERATION PERIOD	2009~2011		
<ul> <li>(2) Financial management system for water service (Basic theory and Case study), Collection of water charge from users, Asset management of water and wastewater treatment plants, Project cycle management(Lecture and workshop)</li> <li>(3) Global trend of watershed management, New concepts of water management and its application to urban water management, Process management at water purification plant and water quality control, Advanced wastewater treatment and reuse, Assessment of the human health risk of water, New technology for water and wastewater treatment, New trends and techniques (Wastewater treatment using Membrane, and Drinking water treatment using Membrane), World water situation</li> <li>(4) Maintenance of physical structures, Water conveyance and distribution system in Sapporo, Maintenance of pipe networks, Water leak prevention</li> <li>(5) Orientation, Discussion with the course leader, Preparing action plans and its Presentation and discussions, PCM workshop</li> <li>(4) Finalization Phase</li> </ul>	REMARKS			
Within 6 months, every participant is requested to present action plan and share its experience in Japan in home organization, then reports Action Plan progress to JICA				

Volcanic Disaster Prevention and Management for Central and South America 中南米地域 火山防災能力強化 Water Resources/Disaster Management-	—Other Water R	R/I		0984264 ent Issues
Target Countries: Central and South America		8 participants	/	Spanish
OBJECTIVE	TARG	ET ORGANIZATIO	N / GROI	•
[Objective] Respective community or society's capacity against volcanic disaster prevention / management shall be improved, though the implementation of the formulated plan [Expected Outputs] (1) To identify the issues of the volcanic disaster management in participants' country / area through understanding how to grasp volcanic disaster risk in Japan (2) To identify the issues of the volcanic disaster management in participants' country / area by understanding the disaster prevention plans and schemes in volcanic disaster vulnerable area in Japan. (3) To propose ideas for productive usage of volcanoes as resources for regional promotion by learning cases in Hokkaido (4) To propose appropriate and feasible "Action Plan" for volcanic disaster management in participants country/regions,	Research Ins the ground w management (Personal Qu <cuurent du<br="">Senior staff i prevention a <experience) More than fiv disaster prev <educational< td=""><td>cal government, U titutes and NGOs, rork for volcanic di ualification ] attes&gt; n charge of volcan nd management on &gt; ve (5) years in the rention and manage Background&gt; Natural disaster n</td><td>in charg isaster ic disaste the grou field of v ement.</td><td>er or und. olcanic</td></educational<></experience) </cuurent>	cal government, U titutes and NGOs, rork for volcanic di ualification ] attes> n charge of volcan nd management on > ve (5) years in the rention and manage Background> Natural disaster n	in charg isaster ic disaste the grou field of v ement.	er or und. olcanic
CONTENTS	PROGRAM	Aug.25.2009 ~ Oc	t.3.2009	
[Preparatory Phase] Each participant prepares country report to identify its issues	PERIOD IMPLEMENTING PARTNER	Crisis and Enviro Management Pol (CeMI)		ute
Core Phase <subjects module="" per=""></subjects>	JICA CENTER	JICA Sapporo		
(1) Volcanology, Eruption mechanism, Volcanic disaster(general remarks), Volcanic disaster(pyroclastic flow, pyroclastic surge, lahar, hazard map), Eruption forecast, Risk management	COOPERATION PERIOD	2009~2011		
<ul> <li>(2) Countermeasure against volcanic disaster(through the cases of Usu, Tokachi, Unzen, and Miyakejima volcanoes), Scheme of volcanic disaster organization (disaster management office etc), Eruption and mass media, Disaster psychology •Educational activities around volcanic disaster vulnerable area, Volcanic information device</li> <li>(3) National park and museum around volcanic area, UNESCO Geopark</li> <li>(4) Inception Report Presentation, Group discussion, Proposing Action Plan</li> <li>[Finalization Phase]</li> <li>(1) Within 6 months after completion of the course, every participant is requested to share its knowledge and experience in Japan at respective organization, then reports Action Plan progress to JICA</li> </ul>	REMARKS	<ul> <li>Through out th experienced cou- been playing key coordinating stal Mt.Usu regions participants</li> <li>In the selection special attention secure diversity organizations in the understandir importance of mu- disaster prevent;</li> </ul>	rse leade role in keholders will guide committ will be p of home order to ng for the ulti-stake	r, who has in the ee, aid to deepen

Policymaking of Water Environmental Management in Middle East, and African countries		R/F 🚳 098429	
中東・アフリカ地域 水環境管理政策 Water Resources/Disaster Management	—Other Water R	esources/Disaster Management Issu	
Target Countries:Middle East and African Countries (arid/semi-arid region)		6 participants / Englis	
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
<ul> <li>[Objective]</li> <li>A provisional policy plan to secure safe and stable water resources, and improve water environment shall be proposed by the participating organizations in the model area in the target countries.</li> <li>[Expected Results]</li> <li>(1)To deepen understanding on water sources, safe and stable water supply system and environmental management policy</li> <li>(2)To deepen understanding on methodologies of non-conventional alternatives</li> <li>(3)To understand the methods on environmental assessment, monitoring, analisis, and clearify the issues needed for sustainable planning</li> <li>(4)To propose an action plan to secure safe and stable water resources, and improvement of water environment based on its problem analysis.</li> <li>(5)To submit a progress report and final report which are further considerated at the respective organization based on the action plan</li> </ul>	<ul> <li>【Target Organizations】</li> <li>This program is designed for ministries and agencies in charge of water resources &amp; supply and environment management.</li> <li>【Target Group】</li> <li>Current Duties: be the government official in planning and policy making in the field of water resources development or environmental management in central government bodies and associating agencies.</li> <li>(Target Level (year): Director Level (1st year) (Note: The second applicant from the same country can be Section Manager Level.), Young Officer Level (2nd year), Section Manager Level (3rd year))</li> <li>Experience in the relevant field: have more than years' experience in the field explained above Age(1st year): No limitation as long as the applicant is in the director level (Target Age (year): below 35 years old (2nd year), around 45 years old (3rd year))</li> </ul>		
CONTENTS	PROGRAM	Aug.3.2009 ~ Aug.29.2009	
Provisional policy plan shall be proposed in order to secure safe and stable water resources, and improve water environment in Middel East and African Countries.	PERIOD IMPLEMENTING PARTNER	Japan International Cooperation Center, Kochi University of Technology	
<ul> <li>(1) [Lecture and Practice]</li> <li>• Hydrology and water resources including vulnerability assessment of climatic shapes</li> </ul>	JICA CENTER	JICA Shikoku	
<ul> <li>changes</li> <li>Development and management of surface water and groundwater</li> <li>Distributed type of safe water supply system and ecological sanitation</li> <li>Eco-engineering applications to conserve and/or restore aquatic eco-system and water quality environment</li> <li>Environment Impact Assessment (EIA)</li> </ul>	COOPERATION PERIOD	2009~2011	
<ul> <li>Water policy with non-conventional alternative strategies including recycling treated waste water, desalination and rainwater harvesting</li> <li>(2)[Lecture, Practice and Field Observation]</li> <li>Rainwater harvesting and infiltration to recharge groundwater</li> <li>Advanced wastewater treatment and recycling reclaimed water applying simple and low cost technologies (by SHIMANTO Concept)</li> <li>Conservation and/or restoration of aquatic eco-system and water quality environment applying bio-manipulation</li> <li>Appropriate technology applications of ecological slow sand filtration and bio-toilet</li> <li>(3)[Lecture, Practice and Workshop]</li> <li>Methods on planning and evaluation based on Project Cycle Management(PCM)</li> <li>Implementation of workshop for planning and evaluation of projects</li> <li>(4)[Practice and Discussion]</li> <li>Preparation of action plans for respective countries</li> <li>(5)[at participant's home countries]</li> <li>Submission of progress report of Action Plan (Annex 3) after 3 months of the</li> </ul>	REMARKS		

🖞 : Learning Program, 🎁 : Diffusion Program, 👁 : Solution Program, 🏈 : International Dialogue Program



Water Resources /	Disaster	Management-Water	Resources	/ Disaster	Manageme

R/F 🏈

0984065

Water Resources / Disaster Management—Water Resources / Disaster Management						
Target Countries:disaster-prone countries		9 participants / English				
OBJECTIVE	TARGET ORGANIZATION / GROUP					
<ul> <li>[Objectives]</li> <li>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.</li> <li>[Outputs]</li> <li>(1) To understand the current status of emergency/disaster medicine in participants and Japanese experts in the Mini Symposium.</li> <li>(2) To delineate the direction for 1) networking among stakeholders and 2)effective use of network among stakeholders at the time of disaster</li> </ul>	contact point assistance in o (Target Group 1) Being in re government, h point for disas 2) Ex-particip programs "Em	which have responsibility as a for international emergency lisaster-prone countries b sponsible positions in national, local iospitals, NGOs which have contact				
CONTENTS	PROGRAM PERIOD	$Oct.6.2009 \sim Oct.16.2009$				
This program is consists of following items ; (1)Presentation and discuttion about the current status of emergency/disaster medicine in participating countries and Japan in the Mini Symposium.	IMPLEMENTING PARTNER	Saiseikai Senri Hospital				
(2) Explanation of "JICA Global Network" and discussion about 1) networking among stakeholders and 2) effective use of network at the time of disaster (3) Site visit	JICA CENTER	JICA Osaka				
	COOPERATION PERIOD	2008~2010				
	REMARKS	Most of the program will be jointly conducted with the group training program, "Emergency Disaster Medicine"				