

3. Water Resources/ Disaster Management

Target Countries: <input type="text"/>		22 participants
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management		
Sub-Sector :		
Language : English		
Appeal		
This program is provided to technical officials, engineers or researchers of governmental organizations concerning river management or water-related disasters. This program aims to develop the participant's capacity to practically manage the problems and issues concerning water-related disasters in developing countries.		
Objective / Output	Target Organization / Group	
<p>【Objective】 The program objective is to develop the participant's capacity to practically manage the problems and issues concerning water-related disasters for contributing to mitigation of water-related disasters in their countries.</p> <p>【Outputs】 1. To be able to explain basic concept and theory on Generation Process of Water-related Disasters, Control measures for Landslide and Debris Flow. 2. To be able to explain basic concept and theory on Water-related Hazard Risk Evaluation, Disaster Risk Management Policy and Technologies. 3. To formulate the countermeasures (Master Thesis and Action plan) to solve the problems and issues concerning water-related disasters for applying techniques and knowledge acquired through the training course in their countries.</p>	<p>【Target Organizations】 This program is designed for the governmental organization concerning to river management or water-related disaster mitigation.</p> <p>【Target Group】 1. Administrative officers and/or engineers and/or researchers in the field of water management in above-mentioned organization. 2. Experience in the relevant field: more than 3 years' experience. 3. Be university graduates in civil engineering, water resource management, or disaster mitigation, etc. equivalent background.</p>	
Contents	Program Period	2011 / 10 / 2 ~ 2012 / 9 / 15
<p>【Preliminary Phase】 To make an Inception Report on current situation and problem of water-related disasters in their countries.</p> <p>【Core Phase in Japan】 To acquire the necessary skill and technique for reducing water-related disasters through lectures, discussions, research, practical exercises and site visits, etc. (1)Generation Process of Water-related Disasters, Control measures for Landslide and Debris Flow •Hydrology, Flood hydraulics and sediment transport, Mechanics of sediment transportation and river changes, Control measures for landslide & debris flow, etc. (2)Water-related Hazard Risk Evaluation •Disaster management policy, Disaster risk management, Integrated Flood Risk Management, Local disaster management and hazard mapping, etc. (3)To formulate flood countermeasures •Individual study (Formulation of Master thesis, Action Plan)</p>	Implementing Partner	ICHARM (Public Works Research Institute), GRIPS
	JICA Center	JICA Tsukuba (Training&Partnership)
	Cooperation Period	2010~2012
	Remarks and Website	Participants who have successfully achieved the required credits will be awarded a Master's Degree, 'Master of Disaster Management' by GRIPS and PWRI.

Target Countries:		8 participants
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management		
Sub-Sector :		
Language : English		
Appeal		
This program is designed for administrative officers who belong to the planning department of industrial water to learn effective use of water and re-use.		
Objective / Output	Target Organization / Group	
<p>【Objective】 Possible solutions to policy challenges relating to effective use of industrial water and re-use of waste water will be studied and a policy /plan for the solutions will be formulated.</p> <p>【Expected Results】To achieve this program objective, participants are expected to;</p> <p>1. Understand and explain the necessity of policy on the effective use of industrial water and reuse of waste water. Also, participants are expected to be able to explain the difference of industrial water policy between Japan and the respective countries.</p> <p>2. Understand the basic technologies on effective use of water and reuse of waste water at plant.</p> <p>3. Understand the importance of the required policy planning and implementation to promote the effective use of water and reuse of waste water.</p> <p>4. Develop and present a feasible action Report of the effective use of industrial water and reuse of waste water in the respective countries.</p>	<p>【Target Organizations】 Policy planning administration related with industrial water supply</p> <p>【Target Group】 (1st &2nd year) Administrative officers who are in charge of duties at practical level. (3rd year) Senior/middle management officers who are responsible for the decision making in the target organization. -Have at least five (5) years of experience in the aforementioned organization. -Individuals who have already mastered basic water treatment technologies in the university.</p>	
Contents	Program Period	2011 / 10 / 19 ~ 2011 / 11 / 3
<p>(1) Presentation of the current situation on water, industrial water and waste water in the respective countries</p> <p>(2) Lecture on the necessity of effective use of industrial water and re-use of waste water</p> <p>(3) Comparison & Analysis the difference between trainee's countries and Japan</p> <p>(4) Field trip to plants which use/reuse the water effectively (water treatment plant, Iron and steel production factory, barrage)</p> <p>(5) Lecture on the basic technologies of effective use of water and reuse of waste water</p> <p>(6) Lecture on water treatment technologies which are easy to apply at developing countries</p> <p>(7) Lecture on the policy, law and regulation of industrial water and the role of METI (Ministry of Economy, Trade and Industry)</p> <p>(8) Rain water use</p> <p>(9) Lecture on the financial support system in Japanese developing assistance policy</p> <p>(10) Development, Presentation and Discussion of Action Plan</p>	Implementing Partner	Water Reuse Promotion Center
	JICA Center	JICA Tokyo(Industrial Dev.&Finance)
	Cooperation Period	2009~2011
	Remarks and Website	

Target Countries: <input type="text"/>		8 participants
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management		
Sub-Sector : Nature Conservation/Other Nature Conservation Issues		
Language : English		
Appeal		
By increasing the scale/numbers of natural disasters, watershed management is not well implemented only by conventional measures such as construction of dams/embankments. Therefore it is needed to introduce adaptive management of watershed not depending on the conventional techniques. It enable to minimize the destruction of the natural environment.		
Objective / Output	Target Organization / Group	
<p>[Course Objective] Adaptive watershed management methods will be systematically shared by mid-level working and senior administrative officers whose organizations operate flood control and ecosystem conservation for watershed management. (three-year objective)</p> <p>[Expected Module Outputs]</p> <p>1. First and Second year program: (1) To be able to explain the effects of climate change on the watersheds of their respective areas and discuss the possibility of introducing adaptive watershed management method (2) To be able to analyze current flood risks and the conditions/patterns of ecosystem destruction in the watersheds of their respective areas and explain ongoing adaptive measures tackling with issues on watershed management method (3) To formulate the Action Plan (draft) for an adaptive watershed management project in the target area</p> <p>2. Third year program: In addition to the Outputs (1) to (3), (4) To formulate the Action Plan (Final draft) based on method for adaptive watershed management in the target area.</p>	<p>[Target Organizations] Project implementation organizations on flood countermeasures or ecosystem conservation in watershed areas</p> <p>[Target Group] 1. First and second year: Mid-level working officers for flood countermeasures and ecosystem conservations 2. Third year: Senior administrative officers of organizations for flood countermeasures and ecosystem conservation and academic experts. It is strongly recommended for the same organizations from flood countermeasures and ecosystem conservation every year.</p>	
Contents	Program Period	2011 / 6/12 ~ 2011 / 7 / 2
<p>[Preliminary Phase in home country] Submission of Inception Report (Present issues)</p> <p>[Core Phase in Japan] Following lectures, practical exercises, observations and discussions are provided.</p> <p>1. First and second year program: (1) Global environmental change/Kyoto Protocol, Countermeasures for mitigation and adaptation, Fundamentals of landscape ecology, Dams and watershed control. (2) Conservation method of ecosystem, Flood plain management methods, biodiversity and flood frequency, River flood control and biodiversity conservation, Basic knowledge and operation of GIS, Flood plain management methods using GIS. (3) Workshop for issue analysis and survey method, Capacity development, Consensus building, Cooperation with NGOs, Citizens' participation</p> <p>2. Third year program: In addition to reviewing the outputs (1) to (3), (4) Discussion on issues on Action Plan (Final draft).</p> <p>[Finalization Phase in home country] Submission of the Final Report within six months after returning home countries.</p>	Implementing Partner	Hokkaido University, Hokkaido Development Bureau
	JICA Center	JICA Obihiro
	Cooperation Period	2009~2011
	Remarks and Website	Since the program objective is to be attained over 3 years, the duration of each year differs as follows: 60 days (First and second year) and 21 days (third year).

Target Countries:		14 participants
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management		
Sub-Sector :		
Language : English		
Appeal		
This program is designed for an administrative officer concerning with IWRM to enhance the capacity on planning and implementation of IWRM. The program includes the case study of IWRM in Tone river basin by site visit and discussions [Coordination among stakeholders(between upstream and downstream, different sectors), Construction of dams, canals, barrages], Monitoring watertable and land subsidence, Application in respective countries.		
Objective / Output	Target Organization / Group	
<p>【Objective】 This course aims at the capacity development of the participants on the planning and implementation of IWRM.</p> <p>【Expected Results】</p> <p>(1) To understand the concept of IWRM</p> <p>(2) To understand the hydrological and water-demand-supply balance, the methods of monitoring, assessment and analysis for planning and implementing of IWRM</p> <p>(3) To understand the water resource development plan, the fair and efficient water utilization plan, the planning methods and the practice of IWRM</p> <p>(4) To understand the causes of water conflicts among different sectors, regions and those of between upstream and downstream, and to get the clues to solve water conflicts</p> <p>(5) To formulate an Action Plan to implement IWRM in the certain river basin which is identified as the candidate river basin for IWRM practice in the country report by prioritizing current problems and solving them by using acquired skills in the training course</p>	<p>【Target Organization】 Administrative organizations concerning with water resources management, which belong to the central/local government</p> <p>【Target Group】 (1) To be officers of the level of a director of department of central government or a director general of department in local government or equivalent belonging to water resources related ministries (2) To have more than 15 years of experience (3) To be university graduates or equivalent (4) To be over 40 and under 55 years old (in principle)</p>	
Contents	Program Period	2011 / 11 / 20 ~ 2011 / 12 / 3
<p>【Preliminary Phase】 Submission of country report</p> <p>【Core Phase】</p> <p>(1) Outline of IWRM</p> <p>(2) Sustainable groundwater use, Monitoring water table and land subsidence, Water supply and demand control in waterworks side, Water demand management (domestic and agricultural water)</p> <p>(3) Outline of water resources policy in Japan, Integrated dam operation and drought adjustment, Application of Japanese efficient water use and advanced water related technologies to foreign countries.</p> <p>(4) Consensus building for comprehensive river development, Implementation of IWRM in international rivers, Case study of water conflict management in Japan and the world, Planning for IWRM -Planning Process with Conflict Management-</p> <p>* Site Visit and Discussions</p> <p>(5) Presentation of Action Plan</p> <p>【Finalization Phase】 Sharing of Action Plan in respective organizations within 6 months after the training in Japan</p>	Implementing Partner	Japan Water Agency
	JICA Center	JICA Tokyo(Economy&Env.)
	Cooperation Period	2009~2011
	Remarks and Website	There is another area-focused program "Integrated Water Resources Management for Middle East" aside from this program.

Target Countries: <input type="text"/>		4 participants
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management		
Sub-Sector :		
Language : English, Spanish		
Appeal		
Participants will understand the importance of "Integrated Lake Basin Management (ILBM)", for the management of lakes and reservoirs, which aims at integral pursuit of six issues - Institutions, Policies, Participation, Technologies, Knowledge and Information and Finance		
Objective / Output	Target Organization / Group	
<p>[Program Objective] For the participants to become adequately knowledgeable about the fundamental of lake basin management, and to become able to play a major catalytic role in developing the needed governance framework.</p> <p>[Expected Module Output] <Preliminary Phase> 0) Participants will prepare a preliminary report and questionnaire about the management of the lake basin they are in charge of. / <Core Phase in Japan></p> <p>1) Participants will share difficulties and challenges to realize what to learn in this course.</p> <p>2) Participants are able to explain the resources of lakes and their utilization</p> <p>3) Participants are able to explain the challenges of governance in the field of Lake Basin management in general and in their respective country.</p> <p>4) Participants are able to propose an draft Action Plan, to solve the problems/challenges which participants' organization are facing, by properly integrating the components of the ILBM framework.</p> <p><Finalization Phase> 5) Draft Action Plans are shared and discussed by the participating organization.</p>	<p>1) Technical officer in charge of lake/wetland water management (including management of rivers flowing into such water bodies) who are expected to assume executive administrative posts in that field or researchers in water quality and ecosystem management who are expected to take leading roles in guiding the lake/wetland management programs in their country/ 2) Experience: more than 3years' experience in the field/ 3) Age: 25 -40 years of age/ 4) Language: have a competent command of spoken and written English</p>	
Contents	Program Period	2012 / 1 / 9 ~ 2012 / 3 / 10
<p>[Output 0-1]- Preparation, presentation and discussion of Country Report</p> <p>[Output 2] a) Share information about the State of Lakes: ILBM introduction, Water Purification of Lake Suwa/ b) Biophysical Characteristics: Lake Biwa Museum, Basic Limnology and Eutrophication of Lake/ c) Human use of Lakes: Specialties made of local reed, Economics of Lake Basin</p> <p>[Output 3] a) Institutions: Lake Biwa Environmental Research Institute/ b) Incentives and Regulations: Lake Basin Management Policies and Institutions/ c) Involving People: Accommodating for Stakeholder Interests and Restoration of Resource Values, Environmental NGO's Activities, Environment Conservation and Citizen Participation/ d) Technological Response : Biwa Lake Construction Work Office and Seta River Weir, Role of Irrigation and Agriculture in Lake Basin Management/ e) Information : ESD and Environmental Education, Basic GIS training, Remote Sensing for ILBM / f) Finance: Payment for Ecosystem Service, Financial Supply for Lake Management</p> <p>[Output 4-5]- Preparation, presentation, discussion, sharing and improvement of Action Plan</p>	Implementing Partner	International Lake Environment Committee
	JICA Center	JICA Osaka
	Cooperation Period	2010~2012
	Remarks and Website	Website of ILEC: http://www.ilec.or.jp/eg/index.html

Target Countries: Oceania (Samoa, Tonga, Marshall, Nauru, Cook, Niue, Solomon, Fiji) 13 participants

Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management

Sub-Sector :

Language : English

Appeal

Participants learn not only a principle of water resources management and concept of Integrated Water Resources Management including water policy and drought prevention program of Okinawa, but also are expected to formulate the red between the personnel of water project in Pacific Island Countries. Furthermore, it's expected to contribute to human resources development of water utility organization in Okinawa.

Objective / Output	Target Organization / Group
<p>【Course Objective】 To improve organizational management capacity of waterworks and the concerned government agencies in Pacific Island area with Okinawa's knowledge and skills about water conservation management and effective use which is applicable to Island countries.</p> <p>【Expected Module Output】</p> <p>(1) To acquire Okinawa's policy of water resouces and integrated water resources management.</p> <p>(2) To acquire methods of water source development in Islands area and study the possibility of application to own country.</p> <p>(3) To acquire methods of conservation management of water source in Islands area and study the possibility of application to own country.</p> <p>(4) To acquire slow filtration system and water supply system of Islands area and to be able to plan to introduce their own countries</p> <p>(5) To acquire the concept and works of Okinawa's water supply system, and to be able to plan of water supply facilities improvement planning based by actual situations of their problems.</p>	<p>【Target Organization】 Authority or government in charge of water supply in Pacific islands countries.</p> <p>【Target Group】</p> <p>(1) A engineer or government officer who has engaged in organization mentioned above.</p> <p>(2) At least more than 3 years' experience in the field of water supply.</p>

Contents	Program Period	2011 / 7 / 12 ~ 2011 / 9 / 3
<p>【Preliminary Phase in home country】 Formulation and Submission of Country Report</p> <p>【Core Phase in Japan】</p> <p>(1) Policy of water sources and the concept of integrated water resouces management in Okinawa</p> <p>(2) Water resources development (the case of Okinawa)</p> <p>(3) Water resources conservation mangement in Islands area.</p> <p>(4) Slow Sand Filtration system (low cost and easy maintenance) in Islands area.</p> <p>(5) Countermeasure for water leakage, Non-Revenue water mangement, water quality control system, planning of waterworks facilities maintenance and improvement.</p> <p>【Finalization Phase in home country】 Reporting in home country, application and implementation of action plan.</p>	<p>Implementing Partner</p>	<p>Okinawa Prefectural Enterprise Bureau</p>
	<p>JICA Center</p>	<p>JICA Okinawa</p>
	<p>Cooperation Period</p>	<p>2010~2012</p>
	<p>Remarks and Website</p>	<p>Okinawa Prefectural Enterprise Bureau http://www.eb.pref.okinawa.jp/jigyuu/kokusaikouryuu/index.html</p>

Target Countries: Middle East		12 participants	
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management			
Sub-Sector :			
Language : English			
Appeal			
This program is designed for an administrative officer concerning with IWRM to enhance the capacity on planning and implementation of IWRM. The program includes the case study of IWRM in Yoshino river basin by site visit and discussions [Coordination among stakeholders (between upstream and downstream, different sectors), Construction of dams, canals, barrages], Monitoring water table and land subsidence, Application for Middle East Area.			
Objective / Output		Target Organization / Group	
<p>【Objective】 This course aims at the capacity development of the participants on the planning and implementation of IWRM.</p> <p>【Expected Results】</p> <p>(1) To understand the concept of IWRM</p> <p>(2) To understand the hydrological and water-demand-supply balance, the methods of monitoring, assessment and analysis for planning and implementing of IWRM</p> <p>(3) To understand the water resource development plan, the fair and efficient water utilization plan, the planning methods and the practice of IWRM</p> <p>(4) To understand the causes of water conflicts among different sectors, regions and those of between upstream and downstream, and to get the clues to solve water conflicts</p> <p>(5) To formulate an Action Plan to implement IWRM in the certain river basin which is identified as the candidate river basin for IWRM practice in the country report by prioritizing current problems and solving them by using acquired skills in the training course</p>		<p>【Target Organization】 Administrative organizations concerning with water resources management, which belong to the central/local government</p> <p>【Target Group】</p> <p>(1) To be responsible for a plan on implementation of IWRM in an administrative organization or a department of central/local government concerning with IWRM</p> <p>(2) To have more than 5 years of experience</p> <p>(3) To be university graduates or equivalent</p> <p>(4) To be over 35 and under 45 years old (in principle)</p>	
Contents		Program Period	2012 / 1/22 ~ 2012 / 2/10
<p>【Preliminary Phase】 Submission of country report</p> <p>【Core Phase】 (1) Outline of IWRM, Global warming issues and its impact in Middle East</p> <p>(2) Surface Water -Development/Utilization/Administration-, Sustainable groundwater use, Monitoring water table and land subsidence, Water supply and demand control in waterworks side, Water demand management (domestic and agricultural water)</p> <p>(3) Outline of water resources policy in Japan, Integrated dam operation and drought adjustment, Application of Japanese efficient water use and advanced water related technologies to foreign countries, New Water Resources.</p> <p>(4) Consensus building for comprehensive river development, Utilization of Decision Support System (DSS) for IWRM, Implementation of IWRM in international rivers, Case study of water conflict management in Japan and the world, Planning for IWRM -Planning Process with Conflict Management-</p> <p>* Site Visit and Discussions (5) Presentation of Action Plan</p> <p>【Finalization Phase】 Sharing of Action Plan in respective organizations within 6 months after the training in Japan</p>		Implementing Partner	Japan Water Agency
		JICA Center	JICA Tokyo(Economy&Env.)
		Cooperation Period	2010~2012
		Remarks and Website	

Target Countries: Middle East and Africa		10 participants	
Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management			
Sub-Sector :			
Language : English			
Appeal			
This program aims to promote action plan in order to not only secure safe and stable water resources and supply, but also to improve water quality environment with application of non-conventional alternatives in Middle East and African countries.			
Objective / Output		Target Organization / Group	
<p>【Course Objective】 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.</p> <p>【Expected Module Output】 1: To deepen understanding on water sources, safe and stable water supply system and environmental management policy 2: To deepen understanding on methodologies of non-conventional strategic alternatives 3: To acquire methods on planning and evaluation based on Project Cycle Management 4: To propose action plans in considering its applicability in respective countries 5: To implement Action Plan and submission of the report</p>		<p>【Target Organizations】: This program is designed for ministries and agencies in charge of water resources & supply and environment management.</p> <p>【Target Group】: -Government official in planning and policy making (Section Manager Level (2011/3rd year)) -more than 5 years' experience in the field explained above</p>	
Contents		Program Period	2011 / 8 / 27 ~ 2011 / 9 / 24
<p>【Preliminary Phase in home country】 Making of Inception report 【Core Phase in Japan】(Lectures, Practices, Field visit, Discussion and Presentation) 1. Hydrology and water resources including vulnerability assessment of global climatic changes, Development and management policy of surface water and groundwater, Distributed type of safe water supply system and ecological sanitation, etc. 2. Rainwater harvesting and infiltration to recharge groundwater, Advanced wastewater treatment and recycling reclaimed water applying simple and low cost technologies (by SHIMANTO Concept), Appropriate technology applications of ecological slow sand filtration and bio-toilet 3. Methods on planning and evaluation based on PCM, Implementation of workshop for planning and evaluation of projects 4. Preparation of action plans for respective countries 【Finalization Phase in home country】 5. Submission of progress report</p>		Implementing Partner	JICA
		JICA Center	JICA Shikoku
		Cooperation Period	2009~2011
		Remarks and Website	

Target Countries: Asian Region		12 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
<p>JICA holds a forum inviting executives of relevant organizations in charge of water supply administration (central/local government), waterworks bureaus or public corporations, water associations in Asian region every 2 years. This 2nd forum focuses on "Dialogue and Collaboration", to build the partnership and enhance the cooperation among organizations in water supply sector to solve problems that respective organizations have encountered.</p>		
Objective / Output	Target Organization / Group	
<p>【Objective】 The objectives of the forum are to share information and experiences of participating nations including Japan and to promote the partnership-building and enhance cooperation among organizations in water supply sector to solve problems that respective organizations have encountered.</p> <p>【Expected Results】 (1) To assess the problems that respective organizations have encountered according to the following six (6) agendas analyzed in the 1st forum. a) Policy and administration of urban water supply b) Financing and Water Tariff System c) Measures against non-revenue water d) Urban water service for the poor people e) Safe water and water quality management f) Human resource development.</p> <p>(2) To promote the partnership-building through learning from experiences of participating nations including Japan and to enhance cooperation among organizations in water supply sector</p>	<p>【Target Organization】 Relevant organizations in charge of water supply administration (central/local government), waterworks bureaus or public corporations, water associations</p> <p>【Target Group】 Executives of Target Organizations</p> <p>* The applicants from the organizations that had participated in the 1st forum (2010, Yokohama) is preferable.</p>	
Contents	Program Period	2011 / 9/30 ~ 2011 / 10 / 6
<p>【Agendas of the sessions】 (1) Review of the 1st forum (2) Sharing information on the cooperation in water supply sector among nations, waterworks bureaus or public corporations, water associations - Case study of technical cooperation under JICA scheme - Water Links : Asia's network for Water Operator Partnerships (ADB scheme) - Case study of cooperation among waterworks bureaus in Japan (3) Collaboration between public and private sectors, businesses related water supply project (4) Hints to solve the problems that respective organizations have encountered through learning from experiences of each nation including Japan and cooperating among organizations in water supply sector - Concrete measures to enhance and promote the partnership-building (5) Wrap-up and monitoring for the progress of participating organizations for the next forum * This program includes a partial attendance at the 4th IWA-ASPIRE (International Water Association - Asia Pacific Regional Group) Conference & Exhibition.</p>	Implementing Partner	Under Planning
	JICA Center	JICA Tokyo(Economy&Env.)
	Cooperation Period	2011~2013 (Alternately)
	Remarks and Website	The 1st forum was held in January 2010 at Yokohama. The forum will be held every 2 years and will not be held in the year 2011.

Target Countries: <input type="text"/>		15 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
Japan has reduced the water leakage ratio by over 50% since the end of World War II (today 2.7% in Nagoya). Based on the experience, technicians of Nagoya teach practical techniques and skills through the various trainings at the staff training facilities which allows us to conduct a large pipe jointing training. This course is effective in solving problems on non-revenue water management fitting to developing countries.		
Objective / Output	Target Organization / Group	
<Course Objective> 1st year)Making a short-term solution plan for Non-Revenue water management 2nd)Making solution projects in the medium-to-long term plan. Updating the short-term solution plan by reweiving it. 3rd)Making an action plan including the result of long-term plan and short-term solution plan. <Objective for each unit> To understand and explain about situation of Japan Waterworks, to understand the outline of Leakage Control and to be able to make a plan for Leakage prevention, to learn and practice skill of leakage detection, to understand and explain about leakage Control on the planning and designing unit, to understand and explain about leakage Control on the construction and maintenance unit, to understand and explain about New technology of Distribution pipes and Water meter, to be able to make short-term problem solutions for Leakage Control	<Target Organization>Water Supply Utilities <Expected Job Title>1 persons, Chief class person familiar with business. <Expected Job Experience>Over 10years <Other Qualifications>Persons are expected as a core role for Leakage Control in same Water Supply Utilities during 3years.	
Contents	Program Period	2011 / 10 / 31 ~ 2011 / 12 / 17
The participant should understand the waterworks and management systems of the Nagoya Waterworks and Sewage Bureau, feature of leakage, water and leakage volume analysis, leakage control in Nagoya, leakage prevention works and planning, leakage detection equipment and operation principle, determination of the leakage, non-revenue water on construction, adjustment of distribution pressure, rehabilitation of distribution pipes, feature and selection of pipes, designing of distribution pipes, performance of jointing pipes and water-meters, corrosion prevention of distribution pipes, drawing information of DP-maps, structure of receiving tank system and pump, metering and leakage inspection, leakage control on distribution office and branch office, jointing of distribution and service pipes, drilling in ferrule, structure of pump, water-meter manufacturing factory, ductile iron pipe manufacturing factory, special joint manufacturing factory, and membrane purification plant.	Implementing Partner	Under Planning
	JICA Center	JICA Chubu
	Cooperation Period	2011~2013
	Remarks and Website	The applicant should prepare a Country Report when applying. "Non-revenue water" is not illegally used water. The program aims to learn about leakage management technology.

Target Countries:		10 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
<p>This course contains the total viewpoint including water source management, purification, supply&distribution, and wide knowledge to ensure water quality&quantity. It is very beneficial for problems solving in developing countries. Sapporo city is one of the rare large cities having all facilities about whole waterworks. Skillful engineers in Waterworks Bureau of Sapporo transfer systematic&concrete techniques to participants. The acquired skills to apply for their country are highly evaluated.</p>		
Objective / Output		Target Organization / Group
<p><Course Objective> Participants prepare action plan, which is essential for safe and stable water supply, to improve problems about waterworks system and appropriate activities are implemented based on the action plan after returning.</p> <p><Objective for each unit> To acquire knowledge and experiences to improve water purification plant and operation To acquire knowledge and experiences to improve water distribution and service To acquire knowledge and experiences to improve leak prevention To acquire knowledge and experiences to improve water source and water quality control To account eco-friendly water business management To acquire knowledge of public administration, plan overview and human resource development To consider the solution for water business problems in participant's country and to make a presentation of action plan To share the action plan in organization and to implement it after returning</p>		<p><Target Organization>Governmental, semi-governmental, or corporate organizations in charge of public water supply <Expected Job Title>Waterworks engineers for governmental, semi-governmental, or corporate organizations in charge of public water supply <Expected Job Experience>To have at least 3 years of practical experience for those university graduate or equivalent; or at least 7 years of practical experience for those polytechnic graduates or equivalent <Other Qualifications>in principal, under 40 years old</p>
Contents		Program Period
<p>Design/integrated operation/maintenance of rapid-filter water treatment plant, Advanced water purification, Mechanism of water purification process, Slow-filter water treatment plant visit Water supply&distribution, Distribution pipe design/laying plan, Pipeline maintenance, Network analysis of pipes, Outline of service installation, Pipe&meter manufacturing plant visit, Disaster control, Water rate system, Call center Leak prevention planning, Block metering plan/operation, Leak prevention method/Detection Water source development & water problems caused by algae, Water source control/monitor/patrol, Water quality control/judgement by aquatic organism, Design of pumping facilities/drilling technology for water well, Waterworks facilities utilizing ground water, Jar test Eco-friendly water supply business management and facilities Water supply & distribution in Sapporo & in Japan, Water circulation & its risk, Planning & demand projection, Water business in the world & Japan technology Country report presentation, Problem analysis, Mid-term consultation, Action plan, Progress report within 6 months</p>		2011 / 8 / 2 ~ 2011 / 10 / 15
		Implementing Partner
		JICA Center
		Cooperation Period
		Remarks and Website
		<p>Sapporo Waterworks Bureau</p> <p>JICA Sapporo</p> <p>2011~2013</p> <p>Candidates are strongly required to actively participate the training course, with strong will to improve their water supply system.</p>

Target Countries: <input type="text"/>		12 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
This training aims to transfer and disseminate Japan's technology of operation and maintenance of urban water supply to field engineers in developing countries.		
Objective / Output	Target Organization / Group	
<Course Objective> Applicable knowledge and techniques are shared among engineers in the organizations which implement operation and maintenance of urban water supply system in participating countries. <Expected Module Outputs> (1) Participants will be able to explain maintenance technologies of pipelines and service installations used in Osaka City. (2) Participants will be able to explain maintenance technologies of intake, treatment, distribution facilities. (3) Instruction plan about techniques of water supply which is applicable to participant's organization will be drafted. (4) Engineers in participant's organization will receive the instruction from the participant by 5 months after the training.	<Target Organization> Organization in charge of urban water supply system and in relation with Japanese bilateral cooperation program <Target Group> -Engineers working in organizations in charge of urban water supply system, and responsible for the training of other engineers -more than 5 years experience in the above-mentioned field	
Contents	Program Period	2011 / 6 / 6 ~ 2011 / 7 / 30
<Activity in Preliminary Phase in home country> (1) Discuss the issues and clear assignments for the participants among participating organizations. (2) Submit Inception Report and Questionnaire <Activity in Core Phase in Japan> Lectures (1) Maintenance of pipelines and water supply (2) Management of intake, treatment and distribution facilities Practice (1) Management of pipelines and water supply, technical trainers' training (2) Management of intake, treatment and distribution, trainers' training (3) Draft the instruction plan Observation (1) Factory of water supply equipments (2) Water origin, Facilities of water intake, drainage, purification Discussion -Applicable techniques in participating organizations <Activity in Finalization Phase in home country> Instruction to engineers in participating organizations in 5 month after the training	Implementing Partner	Under Planning
	JICA Center	JICA Osaka
	Cooperation Period	2009~2011
	Remarks and Website	

Target Countries: <input type="text"/>		14 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
<p>This course is designed for executive officers of water supply administration or waterworks bureau to share experience in Japan on administration for safe and stable water supply such as regulation, operation and maintenance, water quality control, countermeasures for non-revenue water, and performance indicators. This course focuses on "sound management of waterworks" and includes a discussion with executives/experts related to waterworks in Japan.</p>		
Objective / Output	Target Organization / Group	
<p>【Objective】 To understand water supply administration, management and operation and maintenance in Japan, in particular, water quality control, measures against non-revenue water and water supply standards, to clarify the future subjects through sharing information and to formulate an improvement plan on the feasible basis.</p> <p>【Expected Results】 (1) Sharing information on current situations and key problems in the participating countries (2) To be able to understand water supply administration, management and operation and maintenance in Japan (3) To be able to understand water quality management, in particular, water safety plans (4) To be able to understand the countermeasures for reduction of non-revenue water (leakage) (5) To be able to understand the water supply standards including water supply management guidelines and performance indicators</p>	<p>【Target Organization】 The division / department in charge of administration on management of water services in central / local government / waterworks bureau 【Target Group】 (1) To be executive officers or senior administrative officers such as - between Director Generals and Directors of Departments in Central Governments - Director Generals of Departments or equivalent in waterworks bureau (2) To be expected to continue their careers in the water supply field (3) To have a sufficient command of English</p>	
Contents	Program Period	2011 / 10 / 2 ~ 2011 / 10 / 22
<p>【Preliminary Phase】 Submission of the country report</p> <p>【Core Phase】 (1) Country report presentation, Improvement plan formulation (2) Water supply administration in Japan, History of water supply in Japan (3) Water quality control, Water safety plan, Public health and water supply (4) Countermeasures for non-revenue water, Relation to financial management (5) Appropriate management of water supply management (International standards and Japan's guidelines, Performance indicators, discussion on sound management) (6) Field Visit (Water Treatment Plant)</p> <p>【Finalization Phase】 Sharing of Improvement Plan in respective organizations within 6 months after the training in Japan</p>	Implementing Partner	Japan International Cooperation of Welfare Services
	JICA Center	JICA Tokyo(Economy&Env.)
	Cooperation Period	2010~2012
	Remarks and Website	This course will be held 2 times in the fiscal year 2011. 1st : 2011/10/2 - 10/22 2nd : 2012/ 1/22 - 2/4 * Normally the duration of the course is 2 weeks. "1st" includes IWA-ASPIRE.

Target Countries: <input type="text"/>		13 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
This program is designed for an engineer to obtain the integrated knowledge and technique of water supply plan, design, O&M, management regarding large-scale water supply services. <Curriculum> [Practice] Water Demand Forecasting, Pipeline Network Analysis(hydrologic), Basic Planning and Design (Pipeline Network, Water Purification Facility) [Lecture] Waterworks Management, Regulation, Tariff System [Observation] Manufacturing Factory, etc		
Objective / Output		Target Organization / Group
<p>【Objective】 To draw basic plan drawings for a purification facility and pipeline network, and to formulate an action plan to solve problems that respective organizations have encountered</p> <p>【Expected Result】 (1) To sort out the necessary technology for improvement of their water supply systems (2) To sort out the necessary functions and roles of related entities for improvement of their water supply management (3) To master the skill of basic planning and design for pipeline network and water purification systems (4) Through information and skill from this training, to formulate an action plan that solves problems their organizations have encountered, and to share the plan in respective organizations</p>		<p>【Target Organization】 Departments of water supply planning or designing in a water supply utility, central/local government 【Target Group】 (1) To be presently in a management position or a senior engineer who is currently or expected to be engaged in the formulation of waterworks plan (2) To be engineers with more than 5 years of experience in water supply and to be university graduates from the faculty of engineering such as civil, sanitary, environmental, or have equivalent academic background (3) To be between 30 and 45 years of age (in principle)</p>
Contents		Program Period
<p>【Preliminary Phase】 Submission of Country Report</p> <p>【Core Phase】 (1) Pipeline Network Analysis (hydrologic), Water Demand Forecasting, Basic Planning and Design (Pipeline Network, Water Purification Facility, Water Supply Systems) (2) Water Purification Process, Operation and Maintenance of Distribution Facilities, Construction of Water Supply Facilities, Countermeasures of Water Leakage Prevention (3) Waterworks Management and Tariff System in Japan, Observation of Manufacturing Factory, Sanitation Research Organization, Small-scale Hydraulic Power Generation Plant (4) Country Report Presentation, Action Plan Presentation,</p> <p>【Finalization Phase】 Sharing of Action Plan in respective organizations within 3 months after the training in Japan</p>		<p>2011 / 5/11 ~ 2011 / 7/27</p> <p>Implementing Partner Japan Water Works Association (JWWA)</p> <p>JICA Center JICA Tokyo(Economy&Env.)</p> <p>Cooperation Period 2010~2012</p> <p>Remarks and Website</p>

Target Countries: Those in Cold Climate Regions		6 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : Russian		
Appeal		
This program is for senior engineers to improve knowledge & techniques of waterworks engineering to propose feasible solutions for their issues.		
Objective / Output	Target Organization / Group	
<p>【Objective】 Each participant shares and implements its action plan in respective organization, and reports progress to JICA</p> <p>【Expected Outputs】 (1) To acquire knowledge and experiences to improve water treatment facilities and water treatment method in the participant's country (2) To acquire knowledge and experiences to improve water distribution, service installation, maintenance, and water charge systems in the participant's country (3) To acquire knowledge and experience to improve leak prevention in the participant's country. (4) To acquire knowledge and experiences to improve water quality control in the participant's country (5) To acquire particular knowledge and experiences in cold climate regions to improve water supply system in the participant's country</p>	<p>【organization】 Public corporation/governmental bodies in charge of water SUPPLY in cold climate regions</p> <p>【Personal Qualification】 <Current Duties> senior waterworks engineers (WATER SUPPLY ONLY; NOT for sewerage work) <Experience> at least three (3) years for those university graduate; OR have at least seven (7) years of practical experience for those not <Age> Preferably under forty (40) years old</p>	
Contents	Program Period	2012 / 1 / 11 ~ 2012 / 3 / 3
<p>【preparatory phase】each participant prepares country report to identify issues</p> <p>【core phase】 (1) visit/structure/design/operation of water purification plant, advanced water purification (membrane) (2) distribution reservoir/pipe laying plan, pumping station, maintenance, design & quantity calculation for new installation, construction site, networks analysis, manufacturing plant, metering, charge collection, call center, metering site, environmentally conscious management (3) leak prevention/planning/detection/on-site prevention method, block metering (4) water quality control, water source & algae, design/pump/drilling of pumping station, bioassay (5) country report presentation, problem analysis, discussion, action plan consultation/presentation</p> <p>【finalization phase】 share the knowledge based on action plan, then report its progress to JICA</p>	Implementing Partner	Sapporo Waterworks Bureau
	JICA Center	JICA Sapporo
	Cooperation Period	2010~2012
	Remarks and Website	participants will be strongly required to actively participate the training course to solve the issues in waterworks engineering in their countries.

Target Countries: Southeast European countries		10 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
Participants, urban water system responsables, propose action plans to improve their situation upon acquiring knowledge of Japanese system		
Objective / Output	Target Organization / Group	
<p>【Objective】Every participant shares and implements "Action Plan" in respective organization, and then officially reports its progress to JICA</p> <p>【Expected Outputs】</p> <ol style="list-style-type: none"> 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 	<p>【Organization】 governmental, semi-governmental, or corporate organizations in charge of management of urban water systems</p> <p>【Personal Qualifications】 <Current Duties> managerial officers, staff members, government officers, engineers (※being engineer is NOT an essential requirement; however, daily involvement to urban water systems-related work is indispensable.) <Experience>more than 3 years working</p>	
Contents	Program Period	2011 / 6/21 ~ 2011 / 7/30
<p>【Preparatory Phase】each participant prepares Job Report to identify each issues</p> <p>【Core Phase】</p> <ol style="list-style-type: none"> (1) water supply/sewerage administration in Japan, water supply/sewerage administration in sapporo, latest water treatment plant (2) financial management system(basic theory and actual case), collection of water charge, asset management of water and wastewater treatment plants, PCM (3) global trend of watershed management, new concepts of water management, water purification plant and water quality control, advanced wastewater treatment and reuse, assessment of the human health risk , new technology for water/wastewater treatment, new trends and techniques (membrane), world water situation (4)physical structures/networks maintenance of distribution system,leak prevention (5)discussion, action plan preparation/presentation, PCM workshop <p>【Finalization Phase】every participant share its AP in home organization, then reports its progress to JICA</p>	Implementing Partner	Hokkaido University
	JICA Center	JICA Sapporo
	Cooperation Period	2009~2011
	Remarks and Website	

Target Countries: African Region		10 participants
Sector : Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Appeal		
Following the statement of TICAD 4 which was held in May 2008, in Yokohama, this program is proposed to secure the safe water in the African Region by transferring useful and practical know-how on water supply for urban waterworks senior engineers engaging in the planning, constructing, and maintenance of water supply system.		
Objective / Output		Target Organization / Group
【Objectives】 Knowledge on integrated waterworks management and solution on specific issues will be understood and will be spread out through the program.		【Target Organizations】 Central or provincial government, or in local bodies in charge of waterworks engineering.
【Outputs】 1. To understand the history, system, and challenges of water works in Japan, and to be able to compare with the situation of the respective country 2. To understand the basic water works technology, such as filtration plan mechanism, water purifying, water supply system, and prevention of water leakage, and to be able to compare with the situation of the respective country. 3. To understand the integrated/efficient water works management system considering environment. 4. To formulate the Draft Action Plan to resolute the specific issue(s).		【Target Group】 1. Senior technical officers in charge of waterworks engineering in central or provincial government, or in local bodies. 2. At least ten (10) years of practical experience in this field. 3. University graduates or persons who have equivalent technical qualifications in waterworks engineering.
Contents		Program Period
[Preliminary Phase] 1. Preparation of Inception Report on waterworks in each country.		2011 / 11 / 6 ~ 2011 / 12 / 3
[Core Phase in Japan] 1. Lectures, observations, and discussions on followings will be conducted. * History, system, and challenges of water works in Japan * Basic water works technology, such as filtration plan mechanism, water purifying, water supply system, and prevention of water leakage in Japan, * Integrated/efficient water works management system. 2. Development of the draft action plan, and its presentation and discussion.		Implementing Partner Yokohama Water Co., Ltd, City of Yokohama
		JICA Center JICA Yokohama
		Cooperation Period 2011~2013
[Finalization Phase] 1. Presentation and discussion of the draft action plan among the stakeholders in respective countries. 2. Submission of the final report on action plan.		Remarks and Website City of Yokohama: http://www.city.yokohama.lg.jp/en/

Target Countries: Arid Region in French Speaking African Countries		12 participants
Sector : Water Resources/Disaster Management/Rural Water Supply		
Sub-Sector :		
Language : French		
Appeal		
This training program aims to enable participants to obtain necessary knowledge and skills for establishing and/or strengthening a sustainable, participatory and gender-sensitive operation and maintenance system for safe drinking water supply in a small-scale community.		
Objective / Output	Target Organization / Group	
<p>【Objective】 The official plan to establish/strengthen a sustainable, participatory and gender-sensitive operation and maintenance system for safe drinking water supply in a small-scale community is formulated/improved by the organizations to which the participants are belonging.</p> <p>【Expected Module Output】 1. To acquire knowledge and skills necessary for safe drinking water supply in small-scale community (quantity, quality, treatment and distribution of water) 2. To Acquire knowledge and skills for sustainable, participatory and gender-sensitive operation and maintenance system for safe drinking water supply 3. Propose an “Action Plan” for sustainable, participatory and gender-sensitive operation and maintenance system for safe drinking water supply</p>	<p>【Target Organization】 Central/local government and NGOs engaged in safe drinking water supply and /or management in small-scale communities</p> <p>【Expected Qualification】 1. Government officials/NGO staffs 2. More than three (3) years of practical/research experiences in the relevant field 3. More female participants are recommended 4. Competent language skill in French (spoken and written)</p>	
Contents	Program Period	2011 / 10 / 23 ~ 2011 / 12 / 17
<p>【Preliminary Phase】Prepare and submit a Country Report and Gender Report</p> <p>【Phase in Japan】 1) Safe drinking water supply in small-scale community: Health services and drinking water supply in small-scale communities, Appropriate technology for drinking water supply, Groundwater utility, Sanitation, Biomass circulation & environmental management, Environmental contamination, Drinking water utilization patterns 2) Knowledge and skills to organize a community participation system: Community development, Gender mainstreaming, Micro-credit, Communication for community participation 3) Action Plan: Project Cycle Management (PCM), Country Report presentation, Preparation and presentation of an “Action Plan”</p> <p>【Finalization Phase in a participant’s home country】Submission of the Final Report describing the progress/result of sharing Action Plan within 3 months after completion of the program in Japan</p>	Implementing Partner	Fuji Women’s University
	JICA Center	JICA Sapporo
	Cooperation Period	2010~2012
	Remarks and Website	

Target Countries: Country with frequent flood disasters		9 participants
Sector : Water Resources/Disaster Management/Wind and Flood Disaster (Flood Control)		
Sub-Sector :		
Language : English		
Appeal		
<p>There are increasing tendencies of occurrence of flood disasters especially in Asia and the importance of Flood Hazard Maps (FHM) has been recognized. However, preparation and dissemination of FHM is not sufficient to ensure early evacuation of residents. It is essential to enhance the local capacity by preparing "Local Disaster Management Plan". It is this training course, participants study knowledge and technologies related "Local Disaster Management Plan" which covers the information of disaster management facilities, FHM, flood forecast/ warning systems and evacuation plan, and draft future plans through the cooperation with their organizations to reduce flood damage.</p>		
Objective / Output	Target Organization / Group	
<p>【Objective】Strategies and schedules for the formulation of local disaster management plans combined with flood hazard maps and flood forecasting/warning systems are made.</p> <p>【Outputs】</p> <ol style="list-style-type: none"> To identify the current problems and issues on flood disaster countermeasure. To develop a training plan to set the direction for a local disaster management plan and a mid-term operation schedule. To identify the current problems and issues for obtaining data to conduct hydrological and flood analysis. To develop a flood hazard map and sample anticipated inundation area map for solving the current problem and issues in each country. To identify the relationship among flood hazard maps, forecasting/warning systems, and evacuation plans in local disaster management plans. To develop outlines of strategies and schedules for the formulation of local disaster management plans for selected target areas. 	<p>【Target Organizations】 This program is designed for government officials to make strategies and schedules for the formulation of local disaster management plan combined with flood hazard map and flood forecasting/warning system in each country.</p> <p>【Target Group】 Government officials in the field of flood disaster management plan with experience in flood disaster management or relevant field. -First year: the executive officers -Second year: technical officers -Third year: middle level officers</p>	
Contents	Program Period	2011 / 7 / 3 ~ 2011 / 8 / 3
<p>【Preliminary Phase】To make an Inception Report on present situation in the field of local emergency operation plan in each country.</p> <p>【Core Phase in Japan】 To understand the overall view of local emergency operation plan through lectures, practical exercises and site visits.</p> <ol style="list-style-type: none"> General knowledge of flood disaster countermeasures Awareness-raising of local residents' groups, Interviews with municipalities and local residents on disaster awareness, etc Fundamentals of flood hazard mapping (Inundation analysis, GIS, etc.), "Town Watching" exercises, Production of a sample anticipated inundation map General knowledge of flood disaster countermeasures Project Cycle Management exercise training Making an "Action Plan" for making a local disaster management plan <p>【Finalization Phase】To share the Action Report in the participants' organization, and develop/submit the Final report to JICA.</p>	Implementing Partner	ICHARM, Public Works Research Institute
	JICA Center	JICA Tsukuba (Training&Partnership)
	Cooperation Period	2009~2011
	Remarks and Website	This course is planned to develop participants' capacity to prepare local disaster management plan, joining in three-years' spirally stepped up sequences.

Target Countries: <input type="text"/>		15 participants
Sector : Water Resources/Disaster Management/Soil and Water Disaster		
Sub-Sector :		
Language : English		
Appeal		
This course is to improve participants' technology on volcanic observation or Sabo who will be keypersons in those field..		
Objective / Output	Target Organization / Group	
Participants of this course are expected to improve their technology on volcanic observation or comprehensive sediment management and be able to enhance their capacity on making countermeasures to the disaster prevention / mitigation of their countries. 【Common Program】to understand and be able to explain: (1) the basic common knowledge of volcanology and erosion & sediment control engineering (2) the administration of disaster management in consideration of inhabitants' participation. 【Volcanology Course】to understand and be able to explain: (1) basic knowledge of volcanology (2) and to be able to carry out volcano observation data analysis and interpretation【Sabo Course】to understand and be able to explain: (1) basic knowledge of erosion and sediment control engineering (2) basic mechanism of sediment-related disasters such as debris flow (3) comprehensive sediment-related disaster prevention measures, structural and non-structural measures (4) the environmentally sound comprehensive sediment management	<Target Organization>Ministry of Public Works, Ministry of Water Resources, Institute of Volcanology, Seismology, Geology or Geophysics.	
Contents	Program Period	2011 / 7/13 ~ 2011 / 12 / 17
This course consists of 3 components, i.e. common program, thematic program (volcanology or sabo) and individual program. The key component of this course is the individual program. Each participant will conduct 3/4 months individual training / research at university, volcano observatory, institution or fundation based on interests of the participating personnel and their organization. The theme of individual program will be set by the needs clarification form. As a result of individual training/research, each participant will be required to make a final report and present to the curriculum committee members. 【Common Program】(1)Basic common knowledge of volcanology and sabo 【Volcanology Course】(1) Basic knowledge volcanology (2) Methodology of observation 【Sabo Course】(1) Basic knowledge of sabo engineering (2) Structural measures (3) Non-structural measures 【Individual Program】(1) Individual training / research and making a final report	Implementing Partner	SABO Technical Center (STC)
	JICA Center	JICA Tokyo(Economy&Env.)
	Cooperation Period	2009~2011
	Remarks and Website	This course in FY2010 (originally starting from March) was postponed due to March 11 earthquake. This program is rescheduled and slightly shortened.

Target Countries: Frequently disasters by earthquake, tsunami, or volcano eruption. 6 participants

Sector : Water Resources/Disaster Management/Earthquake Disaster

Sub-Sector :

Language : English

Appeal

A simple concept such as evacuating a seashore after a strong quake should mitigate tsunami victims. However, developing countries have no mitigation programs, and damages are expanding. In the training, through lectures, field work, and discussions at the university, participants learn about disaster mitigation (including lessons from failures) and establishing strong monitoring systems. They develop the skills to act as key persons in the JICA mitigation programs in their countries.

Objective / Output

Target Organization / Group

<Course Objective>

The participant should understand the earthquake disasters based on our history and establish the disaster mitigation programs. The elemental knowledge on seismology and the disasters and fundamental skill are acquired. Cooperation including JICA projects is extended for the development of mitigation.

<Objective for each unit>

The participant should be able to understand and explain the seismic activity, the generation mechanism of the tsunami and the volcanic activity, and these historical disasters in the home countries and the world. S/he should be able to understand and explain some dominant features and problems of the onsite warning system. S/he should be able to explain precisely the feature and the problem of the earthquake, tsunami, and volcanic eruption disasters in Japan. S/he should be able to explain the current state and the problem of monitoring system of earthquakes, tsunamis and volcanic eruptions of the home country. S/he should understand the technique of observation and analysis of the earthquakes and conduct the observation and measurements.

<Target Organization>government agencies or universities, considering for earthquake, tsunami, and volcanic eruption disaster
<Expected Job Title>High-ranking employment title from higher rank or chief
<Expected Job Experience>an experienced person of at least 5-10 year in this employment
<Other Qualifications>Graduation from master degree or PhD are accepted

Contents

Program Period 2011 / 9 / 4 ~ 2012 / 2 / 29

Firstly, the participant understands the seismic activities of epicenter distribution and frequency, tectonic setting concerned with active fault, plate motions, and seismic disasters. S/he understands the historical tsunami disasters and tsunami generation model in the country, and correlation with earthquake, landslide and eruption. S/he understands the volcanic activity, history and eruption disaster in the home country and relationship with tectonic setting. S/he estimates the volcanic disaster in the home country and some effects of global volcanic eruption. S/he understands the current states and early warning systems of the tsunami warning and earthquake in Japan and considers how to apply the system in the countries. S/he studies the disasters in the home country through the historical data and discusses the matters with other participants. S/he points out and discusses the historical developments, steps and immediate problems on the monitoring system of earthquake, tsunami and volcanic eruption in the home country. S/he acquires techniques of seismological observations and geodetic surveys. S/he discusses the problems of the monitoring systems of the home country. S/he makes the private plan of the international cooperation/collaboration project in the home country. S/he arranges the poster presentation on the theme that s/he worked on.

Implementing Partner	Nagoya University
JICA Center	JICA Chubu
Cooperation Period	2011~2013
Remarks and Website	This course is mainly based on individual research to find solutions for the problems in the respective countries. http://www.seis.nagoya-u.ac.jp/index_e/

Target Countries: <input type="text"/>		19 participants
Sector : Water Resources/Disaster Management/Earthquake Disaster		
Sub-Sector :		
Language : English		
Appeal		
This program is provided to technical officials, engineers or researchers of governmental organizations concerning to seismology, earthquake engineering and disaster mitigation. This program aims to develop the participant's capacity to establish, utilize and disseminate earthquake disaster mitigation technologies for contributing to reduce the damage of earthquake disasters in their countries.		
Objective / Output		Target Organization / Group
<p>【Objective】 To enhance the participant's capacity to contribute to the development and dissemination of earthquake disaster mitigation techniques under consideration of actual conditions, regulations in their countries and region.</p> <p>【Outputs】 1. To be able to explain basic concept and theory on Earthquake Mechanism and Earthquake Resistant Design inevitable to establish the Seismic Disaster Mitigation. 2. To be able to explain basic concept and theory on Seismic Hazard Evaluation, Seismic disaster Mitigation Policy and Earthquake Countermeasures inevitable to establishing Seismic Disaster Mitigation Scheme. 3. To improve participant's capabilities to apply techniques and knowledge acquired through their studies on individual topics and to make Master Thesis / Action plans in order to solve problems in their respective countries.</p>		<p>【Target Organizations】 This program is designed for the governmental organization concerning to seismology, earthquake engineering and disaster mitigation.</p> <p>【Target Group】 1. Target person: Administrative officers/ engineers/ researchers in charge of seismology, earthquake engineering and disaster mitigation. 2. Experience in the relevant field: more than three years' experience. 3. Be university graduates in seismology, earthquake engineering or seismic disaster mitigation, or in science and technology.</p>
Contents		Program Period
<p>【Preliminary Phase】 To make an Inception Report on current situation related governmental policy on seismology, earthquake engineering and disaster mitigation in their countries.</p> <p>【Core Phase in Japan】 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.</p> <p>(1) Introduction to Seismology, Earthquake Engineering Earthquake mechanisms, Structural analysis, Basic concept of Seismic design (2) Seismic design, Seismic evaluation & retrofitting, etc (3) Technologies on seismic hazard assessment, Damage and risk assessment, etc. (4) Disaster Management Policy: Policy making on earthquake disasters, Disaster Risk Management, etc. (5) Others: PCM, On-site-visit, Practice of earthquake disaster prevention</p>		2011 / 10 / 2 ~ 2012 / 9 / 15
		Implementing Partner
		IISEE (Building Research Institute), GRIPS
		JICA Center
		JICA Tsukuba (Training&Partnership)
		Cooperation Period
		2009~2011
		Remarks and Website
		Participants, who have successfully achieved required credits, will be awarded a Master's Degree, 'Master of Disaster Mitigation', by GRIPS and BRI.

Target Countries: <input type="text"/>		participants
Sector : Water Resources/Disaster Management/Earthquake Disaster		
Sub-Sector :		
Language : English		
Appeal		
This program is designed to introduce up-to-date technologies and knowledge in the field of seismological observation and its application for nuclear test monitoring technology, and the participants are expected to play important roles in a global monitoring network for nuclear tests.		
Objective / Output		Target Organization / Group
<p>【Objective】 To acquire knowledge and advanced techniques of global seismological observation for playing important roles in the monitoring system of nuclear tests under the CTBT.</p> <p>【Outputs】 1. To acquire knowledge of the CTBT regime and the role of seismology in the International Monitoring System (IMS). 2. To understand global seismological observation technologies for monitoring nuclear tests and earthquakes. 3. To acquire data analytical techniques to discriminate nuclear tests from natural earthquakes. 4. To Make an Action Plan (Project Proposal) which they should do in their country after a homecoming.</p>		<p>【Target Organization】 This program is designed for a governmental organization which is expected to play important roles in a global monitoring network on nuclear tests.</p> <p>【Target Group】 1. Target Person: Administrative officers who are expected to play important roles in a global monitoring network on nuclear tests. 2. Experience in the relevant field: more than 3 years' experience 3. Others: be well versed in basic mathematics such as differentiation and integration.</p>
Contents		Program Period
<p>【Preliminary Phase】To make an Inception Report on the current situation of the global seismological observation in their country. 【Core Phase in Japan】 To understand the overall view of the global seismological observation through lectures, practical exercises and site visits. (1)Outline of CTBT & IMS • Introduction of CTBT Regime concerning seismology, etc. (2)Seismological Observation, National Data Center • Seismometer, Seismic Network, Design of Seismic Network, National Data Center (3)Data Processing, Data Analysis, Nuclear test identifying method • Retrieval of Digital Seismic Data and Disposal of Format, Introduction to UNIX, Analysis of Teleseismic waves, Seismic Array Data Analysis, Discrimination by mb-Ms, Seismicity and Tectonics, etc. (4)Formulation and Discussion on Action Plan. • Making an Action Plan, and Presentation of Action Plan</p>		<p>2012 / 1/11 ~ 2012 / 3/9</p>
		Implementing Partner
		IISEE (Building Research Institute)
		JICA Center
		JICA Tsukuba (Training&Partnership)
		Cooperation Period
		2009~2011
		Remarks and Website
		IISEE Web Site: http://iisee.kenken.go.jp/

Target Countries: <input type="text"/>		10 participants
Sector : Water Resources/Disaster Management/Earthquake Disaster		
Sub-Sector : Urban/Regional Development/Other Urban and Regional Development Issues		
Language : English		
Appeal		
To promote a holistic & comprehensive strategy urban earthquake DRR in seismic prone countries by training leaders of DRR to get the essential knowledge & tools.		
Objective / Output	Target Organization / Group	
<p>【Objective】 DRR (Disaster Risk Reduction) strategy for urban earthquake, which is based on a pro-active approach of DRR utilizing various tools and knowledge in risk assessment, risk management, and risk communication, is to be studied and built at each organization to implement urban earthquake DRR.</p> <p>【Expected Results】 (1)Risk Assessment and its Tools and Knowledge (2)Risk Management and its Tools and Knowledge (3)Risk Communication and its Tools and Knowledge (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 <Finalization Phase></p>	<p>【Target Organizations】 Organizations which conduct urban earthquake disaster risk reduction (DRR) (government, research institution, medical institution etc.)</p> <p>【Target Group】 1) Current Duties: be a public officer, technical specialist, researcher, engineer or medical staff presently engaged in practical service of DRR of urban city. 2) Experience in the relevant field: have more than 2 years' experience in the field of DRR.</p>	
Contents	Program Period	2011 / 6/12 ~ 2011 / 8/4
<p>【Preliminary Phase】 Preparation for country report</p> <p>【Core Phase】 (1)Earthquake Mechanism, Seismic Ground Motion & Hazard Map, Building Codes, Lifeline Damage Assessment. (2) Recovery of Kobe City & Community, Disasters Medical Response & Public Health, Environmental Impacts of Disasters, Economic Impacts of Earthquake (3) IT for Emergency Management, Disaster Information Sharing, Education for DRR (4) Int. Collaborations for DRR, Inter-national Organization on DRR and Educational System</p> <p>【Finalization Phase】 Formulation and submission of the action plan and its progress report within 3 month.</p>	Implementing Partner	Kobe Univ. (Research Center for Urban Safety and Security)
	JICA Center	JICA Hyogo
	Cooperation Period	2009~2011
	Remarks and Website	Intentionally-accredited certification (approved by WBI, UNDP, UNISDR, and others) can be obtained by taking extra remote lectures after returning home country. http://www.audrrkobe.org/

Tsunami Disaster Mitigation 津波防災		PRTD	Solution	1184165
Target Countries: Tsunami disaster prone countries in Asia and Pacific Region		6 participants		
Sector : Water Resources/Disaster Management/Earthquake Disaster				
Sub-Sector :				
Language : English				
Appeal				
This program is provided to technical officials, engineers or researchers of governmental organizations concerning to earthquake and tsunami disaster mitigation. This program aims to develop the participant's capacity to establish, utilize and disseminate tsunami disaster mitigation technologies, which is the establishment of Tsunami Early Warning system and development of Tsunami Hazard Assessment, contributing to reduce the damage of tsunami disasters in their countries.				
Objective / Output		Target Organization / Group		
<p>【Objective】 To develop and propose a draft for Tsunami Early Warning system and a draft for Tsunami Hazard Assessment in their countries.</p> <p>【Expected Results】 1. To sort out the problems concerning to tsunami disaster mitigation for establishment of Tsunami Early Warning System and Tsunami Hazard Maps. 2. To acquire basic concept and theory of generation, dispersion and regurgitation of tsunami caused by earthquake as a basic knowledge inevitable to tsunami disaster mitigation. 3. To acquire basic concept and theory of Tsunami Early Warning System, Tsunami Hazard Evaluation/maps, Tsunami Disaster Mitigation Policy, Tsunami Disaster Mitigation Countermeasures. 4. To make the improvement plan of both Tsunami Early Warning System and Tsunami Hazard Evaluation/maps.</p>		<p>【Target Organizations】 This program is designed for the governmental organization concerning to earthquake and tsunami disaster mitigation.</p> <p>【Target Group】 1. Target person: Administrative officers and/or engineers and/or researchers in charge of tsunami disaster mitigation. 2. Experience in the relevant field: more than 3 years' experience. 3. 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.</p>		
Contents		Program Period	2011 / 10 / 2 ~ 2012 / 9 / 15	
<p>【Preliminary Phase】 To make an Inception Report on current situation related governmental policy on tsunami disaster mitigation in their countries.</p> <p>【Core Phase in Japan】To acquire the necessary skill and technique related to tsunami disaster mitigation through lectures, discussions, exercises and site visits, etc. (1)Information Technology Related with Earthquake and Disasters: •Earthquake Phenomenology, Earthquake Circumstance, etc. (2)Tsunami Simulation, Tsunami Generation and Propagation, etc. (3)Tsunami Hazard Assessment, Tsunami Countermeasures: • Tsunami Hazard Map, Tsunami Early Warning System and Dissemination, etc. (4)Disaster Management Policy: Seismic Disaster Mitigation Policy, etc. (5)Others: PCM, On-site-visit, Practice of earthquake disaster prevention</p> <p>【Finalization Phase】 To share the technical report (Action Plan) in the participants' organization, and develop/submit the Final report to JICA.</p>		Implementing Partner	IISEE (Building Research Institute), GRIPS	
		JICA Center	JICA Tsukuba (Training&Partnership)	
		Cooperation Period	2009~2011	
		Remarks and Website	Participants, who have successfully achieved required credits, will be awarded a Master's Degree, 'Master of Disaster Mitigation', by GRIPS and BRI.	

Target Countries: Member States of WMO (World Meteorological Organization) 8 participants

Sector : Water Resources/Disaster Management/Meteorology

Sub-Sector :

Language : English

Appeal

This is a unique course that provides comprehensive knowledge and techniques on meteorology and climatology. Most of the lectures are provided by staff members of the Japan Meteorological Agency, one of the most advanced meteorological services. In this training course, participants also visit various kinds of fields which utilize weather information. At the end of the course, every participant is requested to formulate an action plan to improve the meteorological service in his/her country.

Objective / Output	Target Organization / Group	
<p><Course Objective> This course aims at promoting activities to reinforce the meteorological services of each country applying meteorological data/products such as numerical weather and climate prediction and satellite images for disaster risk reduction and climate change adaptation. <Objective for each unit> To be able to explain the fundamental technique such as numerical weather prediction (NWP), satellite meteorology. To be able to make up meteorological information which meets users' requirements based on fundamental techniques such as NWP and satellite meteorology. (Weather Forecasting Course) To be able to brief general condition of climate and global environment and make up climate prediction applying climatological and global environmental information. (Climatology Course) To draw up a master plan to improve the meteorological services of the participants' organizations, and to be used in participants' countries.</p>	<p><Target Organization>National Meteorological and Hydrological Services <Expected Job Title>Be meteorological officials classified as "Meteorologist" according to the World Meteorological Organization (WMO) personnel categories, <Expected Job Experience>Be presently engaged in meteorological services for their governments or government-related public organizations, <Other Qualifications>Be familiar with and have experiences of using basic PC software Not be serving in the military</p>	
Contents	Program Period	2011 / 9 / 13 ~ 2011 / 12 / 17
<p>Lectures on the basics of numerical weather prediction and its application. Lectures on the outline of satellite meteorology and application of satellite data. Lectures on the global telecommunications system. Exercises on satellite data application. Exercises on operational forecasting. Lectures on the knowledge and skill to make up meteorological information which meets users' requirements. Lectures on the climatological and global environmental information. Exercises on the application of climatological and global environmental information. Creation, presentation and discussion of final report [After the training course] Implementation of activities to transfer the knowledge and expertise to colleagues to improve the meteorological services of participants' organizations (follow-up survey with questionnaire).</p>	Implementing Partner	Japan Meteorological Agency
	JICA Center	JICA Tokyo(Economy&Env.)
	Cooperation Period	2011~2013
	Remarks and Website	Japan Meteorological Agency http://www.jma.go.jp/jma/indexe.html

Target Countries: Hoping for improving SAR data analysis 9 participants

Sector : Water Resources/Disaster Management/Comprehensive Disaster Management

Sub-Sector :

Language : English

Appeal

Remote-sensing data show actual land surface for disaster/environmental measurements. The synthetic aperture radar(SAR) can work for the damage analysis and the recovery planning during bad weather. This program deals with SAR data analysis technology with geographic information system for various measurements. Through this program trainees are expected to master the technology and to provide useful information to their related agencies.

Objective / Output	Target Organization / Group	
<p><Course Objective> This program enables engineers and researchers to analyze SAR and other remote sensing data as a tool leading to solutions for disaster/environmental problems in their respective countries and also enables them to make concrete proposal to use and disseminate this technology in their own and related organizations. <Objective for each unit> 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 other data to disaster/environmental monitoring and integrate the data into map information 4: to be able to make case study analysis and report the results by using SAR and other data, and make proposal to use and disseminate the technologies in their own and related organizations</p>	<p><Target Organization>Organizations responsible for remote sensing data analysis related to disaster/environmental monitoring <Expected Job Title>be engineers or researchers in the field of remote sensing related to disaster/environmental management, be likely promoted to managers <Expected Job Experience>People who have more than 3 years experience in optical data/image analysis, but have little experience in SAR data/image analysis</p>	
<p>Contents</p> <p>【At home】Report making of the situation of remote sensing their own country. 【In Japan】Introduction to remote sensing, ALOS system and product, case study for disaster/ environmental monitoring, online data search, principle of SAR, SAR data correction, Principle of interferometric SAR (InSAR), principle of polarimetric SAR (PolSAR), analysis of PALSAR level 1.5 data, analysis of PALSAR level 1.0 data, Interferometric SAR analysis, polarimetric SAR Analysis, applied analysis of optical data for disaster monitoring and environment monitoring, integrated use of the analysis results and map information (including ground truth), applied analysis of SAR data for disaster monitoring and environment monitoring, Integrated use of the analysis results and map information, case study analysis (analysis using the data of each participant's country) and report, making proposal to use and disseminate acquired technology in their own and related organizations, output presentation 【At home】Share the result of case study and a proposal to use and to disseminate in organizations.</p>	<p>Program Period</p>	<p>2011 / 8 / 2 ~ 2011 / 9 / 10</p>
	<p>Implementing Partner</p>	<p>Under Planning</p>
	<p>JICA Center</p>	<p>JICA Tokyo(Economy&Env.)</p>
	<p>Cooperation Period</p>	<p>2011~2013</p>
	<p>Remarks and Website</p>	

Target Countries: <input type="text"/>		15 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector : Urban/Regional Development/Other Urban and Regional Development Issues		
Language : English		
Appeal		
Japan has experienced various disasters, has taken various measures to protect infrastructures from those disasters. Especially in Kinki Region various data have been stored and various measures have been taken from Hanshin Earthquake in 1995. In this program participants will observe various measures to protect infrastructures such as road, river and port from kinds of disasters.		
Objective / Output	Target Organization / Group	
Participants acquire knowledge on applicable techniques for more practical, efficient and effective disaster mitigation, preparedness and restoration, and make dissemination plan for their organization in charge of relevant fields. Following are objectives for each unit. 【1 Disasters and their characters】 To analyse the nature of disaster in home country and to understand the similarities and differences with Japan. 【2 Disaster Prevention Systems and Restoration Systems】 To understand consider application, the introduction and improvement of disaster prevention systems and restoration system. 【3 Disaster Mitigation and Restoration】 To understand new confidence and capabilities for the application of special engineering methods for practical disaster prevention, mitigation and restoration. 【4.Balance of utility and disaster】 To understand the relation and the balance between utility and disaster or between lifecycle cost and disaster in infrastructure development projects. 【5 Dissemination Plan】 Plan to disseminate applicable techniques to the other engineers will be developed. 【6 Activity after the fact】 To completely disseminate and share the applicable technologies (knowledge) to their own countries learned in this training course to their office.	<Target Organization>Governmental organizations in charge of disaster prevention and recovery for public works (Road, River and Port) <Expected Job Title>be officials of central or local government who hold or will assume positions in charge of restoration works in the event of a major disaster <Expected Job Experience>More than five years in the related field <Other Qualifications> Educational Background: Be university graduates or have equivalent educational qualifications in infrastructure management, i.e. civil engineering <Age>30-45 years old	
Contents	Program Period	2011 / 7 / 4 ~ 2011 / 9 / 3
【Objective 1】 (1)Natural Disasters in Japan (2)Natural Disasters and its analysis in Each Country 【Objective 2】 (1)Observation techniques (2)Disaster prevention policy (3)Disaster mitigation and restoration systems (4)Warnig system / Hazard mapping 【Objective 3】 (1)River improvement(River, Dam) (2)Sobo works(Sabo, Landslide) (3)Road works(Road, Bridge) (4)Sea coast, Port (5)Quake-resistance 【Objective 4】 (1)Regional disaster mitigation plan (2)Restoraton plan for disaster prevention (3)Asset management 【Objective 5】 (1)Issue analysis workshop for planning (2)Formulation of dissemination plan (3)Presentation of dissemination plan 【Objective 6】 (1) Holding seminars for dissemination in their office after finishing this training course (2) Submitting the report on their dissemination activities six months after finishing this training course to JICA	Implementing Partner	Under Planning
	JICA Center	JICA Osaka
	Cooperation Period	2011~2013
	Remarks and Website	http://www.mlit.go.jp/index_e.html

Target Countries: <input type="text"/>		10 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
To help leaders of fire fighting and first rescue organizations improve emergency rescue techniques, disseminate the technique in the participants' home countries.		
Objective / Output	Target Organization / Group	
<p>Participants are required to obtain basic necessary knowledge as the leaders of firefighting and first rescue service, as well as to acquire the knowledge/technique to rescue victims from life-threatening circumstance.</p> <p>To learn the fundamental knowledge and skills to rescue the disaster victims facing dangerous situation caused by accidents such as earthquake, fire and unable to evacuate by themselves.</p> <p>To learn basic knowledge and techniques of emergency rescue measures including artificial respiration, cardiopulmonary resuscitation, stop bleeding method, immobilization techniques etc.</p> <p>To acquire necessary knowledge for a leader of first rescue activity.</p> <p>To gain necessary knowledge and technique so that the participants could formulate the draft plan of human resource development in participants' workplaces by disseminating the knowledge and technique they learned.</p>	<p>-Be a rescue leader and will be able to widely spread knowledge and skills obtained in the course in their own countries,</p> <p>-Experience in the relevant field: Have at least three-year experiences in rescue operations, and are currently engaged in the opera</p>	
Contents	Program Period	2011 / 9/26 ~ 2011 / 12 / 17
<ul style="list-style-type: none"> • Training (basic actions, using rescue instruments (ladder, ladder truck), water rescue, climbing techniques, descending techniques, mountain rescue, collapsed building, entry and rescue etc.) • Lectures and practical trainings • Joint training with Japan Disaster Relief Team (JDR) • Entry and rescue training etc. • Lectures on rescue command techniques • Visits to local fire service departments • Lectures and observations on countermeasures to special disasters caused by hazardous materials • Observation of relevant manufacturers and installation. 	Implementing Partner	Osaka Municipal Fire Department
	JICA Center	JICA Osaka
	Cooperation Period	2010~2012
	Remarks and Website	Training period for this course has potential to change slightly.

Target Countries: <input type="text"/>		8 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
<p>With 22-year experience, Kitakyushu Fire Department gives participants Japan's top-level fire fighting training. To establish participants' country's system after they return home, participants are able to analyze and make a plan for the problems their home countries are facing. Two-day OJT is planned to give participants a chance to experience fire drills and real fire scenes with Japanese fire units. Training facilities are well-equipped, and participants can experience various types of fire.</p>		
Objective / Output	Target Organization / Group	
<p><Course Objective> 1) To be able to practice fire and rescues technique by utilizing the equipment appropriately and using various fire extinguishing methods. 2) To be able to command a unit by using the above-mentioned techniques and knowledge. 3) To be able to plan dissemination activities after returning home.</p> <p><Objective for each unit> To acquire the knowledge and the techniques on fire fighting, rescue work, and safe control for various fire sites in Japan such as buildings, dangerous substances, forests, vehicles, ships, and aircraft. To acquire the knowledge and the techniques on operation of various fire fighting equipment in Japan. To understand and practice the knowledge and techniques of emergency rescue. to be able to plan activities of disseminating knowledge, techniques, and systems regarding fire fighting techniques after they return to their respective countries</p>	<p><Target Organization>Fire Service Organization (Central Government, Local Government or Private Sector) <Expected Job Title>be or will be a commander of fire fighting or an instructor of fire education institutions. <Expected Job Experience>be engaged in fire service and has more than 5 years of experience. <Other Qualifications>be university graduates or have the equivalent occupational experiences. Be under 40 years of age in principle. Be proficient in spoken and written English. Be in good health, both mentally and physically, to complete the course. not be pregnant. not be serving in the military.</p>	
Contents	Program Period	2011 / 8 / 3 ~ 2011 / 10 / 20
<p><Preliminary Phase>Formulation of report to present current situation in the participant's country</p> <p><Core Phase in Japan> •Fire suppression drills •Fire investigation(lecture and practice) •Safety control (lecture and practice) •Command theory (lecture) Handling fire trucks and fire fighting equipment (lecture and practice) Rescue and emergency measures in various fire sites (lecture and practice) Work-shop for the effective implementation of the action plan including invitation of outside lecturers.(lecture and practice)</p> <p><Finalization Phase> Implementation of the formulated plan, and report progress in the form of final report</p>	Implementing Partner	Fire Department ,Kita-Kyushu City
	JICA Center	JICA Kyushu
	Cooperation Period	2011~2013
	Remarks and Website	

Target Countries: <input type="text"/>		5 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
To help developing countries prevent and reduce the outbreak of fire related disasters by training and transferring the fire prevention techniques.		
Objective / Output	Target Organization / Group	
<p>【Objectives】 The knowledge and the techniques of fire prevention will be shared within participant's organization and other relevant institutions.</p> <p>【Outputs】 1. To identify the problems and challenges on the fire prevention activities and policies in the respective sections or organizations belong to, based on the newly acquired knowledge and experiences through training. 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 services in the participants' organizations. 3. To implement the Action Plan in their home countries after they return to the respective countries.</p>	<p>【Target Organization】 The fire department/brigade or the fire and disaster management sector.</p> <p>【Target Group】 (1) Be an 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. (2) Be proficient in spoken and written English. (3) Be under forty (40) years of age in principle.</p>	
Contents	Program Period	
<p>【Core Phase in Japan】 (1) Lectures and practical trainings about the outline of fire service system (central/local), legislation and practical measures (2) Visits/study tours to the relevant facilities, local fire stations (3) Practical trainings/ presentations and discussion about fire prevention techniques (4) Formulating and presenting Action Plan which features feasible plan to their organizations and their countries.</p> <p>【Finalization Phase in a participant's home country】 (1) Application and implementation of Action Plan in respective home countries (2) Submission of the Final Report explaining what the participants have done to make their Action Plan come true as well as what goals/constraints they still have (in three months after returning to their home countries).</p>	Implementing Partner	Fire and Disaster Management Agency of Japan
	JICA Center	JICA Tokyo(Public Policy)
	Cooperation Period	2010~2012
	Remarks and Website	<p>【URL】 •Fire and Disaster Management Agency of Japan http://www.fdma.go.jp/en/ •Tokyo Fire Department http://www.tfd.metro.tokyo.jp/eng/index.html</p>

Target Countries:		17 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
Officers of central or local Government will obtain the knowledge and experience on disaster reduction in Japan, and develop their capacity on disaster management		
Objective / Output	Target Organization / Group	
【Objectives】 Participants are requested to contribute to the institutional capacity development on disaster management through elaborating and implementing action plan in terms of disaster prevention and mitigation 【Outputs】 1. To understand roles of national and local governments in disaster management in Japan and examine how to adopt acquired knowledge in each country 2. To understand the role of private sectors such as NGOs and mass-media in disaster management and examine how to adopt acquired knowledge in each country. 3. To understand Japanese approaches to different disasters and examine how to adopt acquired knowledge in each country. 4. To formulate action plans for the challenging the problems in each country.	【Target Organization】 Ministry in charge of disaster risk management and local government 【Target Group】 <Position> Officers in charge of disaster risk management <Experience> More than 2 years in the relevant field	
Contents	Program Period	2012 / 1 / 9 ~ 2012 / 2 / 25
【Preliminary Phase】 Preparation of Job Report 【Core Phase】 -Disaster risk management in Japan -Overview of Great Hanshin Awaji Earthquake and recovery -Disaster prevention education -Activities for raising awareness of disaster prevention -Community based disaster risk management -Collaboration between disaster and development/tourism in recovery pase -Role of mass media in disasters -Funciton of community radio -Preparation of Action Plan 【Finalization Phase】 -Implementation of Action Plan	Implementing Partner	Asian Disaster Reduction Center
	JICA Center	JICA Hyogo
	Cooperation Period	2010~2012
	Remarks and Website	

Sector

気候変動適応策水分野における政策策定能力向上

Target Countries: Indonesia, Philippines, VietNam, Myanmar, Kazakhstan

6 participants

Sector : Water Resources/Disaster Management/Comprehensive Disaster Management

Sub-Sector :

Language : English, Vietnamese

Appeal

Policy makers at secretary and director general levels of disaster management and water management will strengthen their policy making capacity of CCA

Objective / Output	Target Organization / Group	
<p>【Objectives】 Policy makers at secretary and director general levels of disaster management and water management will strengthen their policy making capacity of CCA</p> <p>【Output】 (1) To share most advanced knowledge in climate change among overseas participating countries and Japan (2) To have new idea through exchange of opinion about climate change among overseas participants and Japanese central governmental officers</p>	<p>【Target Organizations】 ministry in charge of water resource or disaster risk management 【Target Group】 High rank officer of the above-mentioned ministry (undersecretary, director)</p>	
<p style="text-align: center;">Contents</p> <ul style="list-style-type: none"> - Concept of policy making - Current situation on the CCA - Collaboration with local government and its example - Raising citizen's awareness on CCA - Development of the estimation model for climate change - Exchange of opinions with the officers in charge of CCA who work for the central governments and JICA 	<p>Program Period</p> <p>Implementing Partner</p> <p>JICA Center</p> <p>Cooperation Period</p> <p>Remarks and Website</p>	<p>2011 / 11 / 27 ~ 2011 / 12 / 3</p> <p>Under Planning</p> <p>JICA Hyogo</p> <p>2010 ~ 2012</p>

Target Countries: Kazakhstan, Uzbekistan, Armenia, Tajikistan		9 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : Russian		
Appeal		
This program is designed for governmental officials to develop the DRM capacity as well as to deepen the Network DRM organization in the Region		
Objective / Output	Target Organization / Group	
<p>【Objectives】Action Plan to improve the DRM capacity in Participant's organization in accordance with the 5 priority actions in Hyogo Framework of Action 2005-2015 (HFA) is prepared by the participant.</p> <p>【Output】(1) To understand the Priority Action 1 of HFA, and are able to arrange to "Make Disaster Risk Reduction a Priority"</p> <p>(2) To understand the Priority Action 2 of HFA, and are able to propose a concrete plan for "Know the Risks and Take Action"</p> <p>(3) To understand the Priority Action 3 of HFA, and are able to propose a concrete plan for "Build Understanding and Awareness"</p> <p>(4) To understand the Priority Action 4 and 5 of HFA, and are able to propose a concrete plan for "Reduce Risks" and "Be Prepared and Ready to Act"</p> <p>(5) Participants plan Action Plan in accordance with the HFA for improving DRM capacity in their organization. At the same time, regional Network of DRM organization is deepened.</p>	<p>【Target Organization】 Ministry in charge of disaster risk management or local government</p> <p>【Target Group】 <Position> General or technical officer in charge of disaster risk management in central or local government</p> <p><Experience> More than 2 years' experience in the relevant field</p>	
Contents	Program Period	2011 / 6/26 ~ 2011 / 8/6
<p>【Preliminary Phase】 Preparation of Job Report</p> <p>【Core Phase】 Creating effective, multi-sectoral national platforms for DRM Integrating DRM into development policies and planning Ensuring community participation Evolution of risks in DRM in National and Regional level Early Warning system Institution for observation and forecasting of Disaster Risk Re-strengthening of DRM capacity in Region, Nation and communities Promotion of DRM Education DRM program in Communities</p> <p>【Finalization Phase】 Implementation of Action Plan</p>	Implementing Partner	Asian Disaster Reduction Center
	JICA Center	JICA Hyogo
	Cooperation Period	2010~2012
	Remarks and Website	

Target Countries: Philippines, Thailand, VietNam, Myanmar		6 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
This course is designed to develop Human Capital in Volunteer management for Disaster Resilient Communities (DRCs) in Asian Countries.		
Objective / Output	Target Organization / Group	
<p>【Objectives】 This course aims to build/strengthen the capability for organizing and managing volunteers in community level towards "Disaster Resilient Communities".</p> <p>【Output】 (1)Participants share approaches to establish the "Disaster Resilient Communities" in Japan, as well as in the participants' countries.(2) Participants understand the role of Government and NGO/NPO in DRM in disaster management at community level in Japan. (3) Participants understand and practice the skills and methods for organizing and managing volunteers at community level. (4) Participants prepare Action Plans to fulfill "Disaster Resilient Communities" in their involved communities. (5) Action Plans prepared by the participants are reviewed and approved in their respective organizations in order to achieve "Disaster Resilient Communities".</p>	<p>【Target Organization】 NGO/NPO, local government, and ministries which organizes and promotes community based disaster risk management</p> <p>【Target Group】 < Position > Staffs of NGO/ NPO, or Local/Central government officers who are promoting community based disaster risk management. < Experience > Experience in the relievant field, should have more than 3 year's experience. (You can count similar duties or activities.)</p>	
Contents	Program Period	2012 / 3 / 18 ~ 2012 / 4 / 28
<p>【Preliminary Phase】Preparation of Job Report</p> <p>【Core Phase】 (1)Sharing the efforts and issues in realizing Disaster Resilient Communities in participating countries /history, present situation and current issues on disaster management in Japan/ Case studies in Kobe city, and Hyogo prefecture (2) Government support for community level disaster management in Kobe city, Hyogo prefecture/Group Exercises in DRM-Welfare Communities in Kobe (3) "Participatory Group Dynamism" Training by Participatory Development Institute/Establishment and management of Volunteer Center/Shelter (4) Preparation and sharing the Action Plan (5)Sharing the prepared "Action Plan" with concerned organization(s)/communities/Reporting the progress on revision and realization of Action Plan to JICA Hyogo</p> <p>【Finalization Phase】 •Reporting the progress on revision and realization of Action Plan to JICA Hyogo</p>	Implementing Partner	Kobe Empowerment Center, Institute of Participatory Development
	JICA Center	JICA Hyogo
	Cooperation Period	2010~2012
	Remarks and Website	

Target Countries: 6 Countries in Central America		13 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : Spanish		
Appeal		
This program is designed for governmental organization to develop the capacity of disaster risk management for the reduction of damage from natural disasters. Especially, the participants are requested to acquire the knowledge on the concrete countermeasure of evacuation of residents in the case of disaster, focusing on the transmission of the information on disasters		
Objective / Output		Target Organization / Group
<p>【Objectives】 Ministry or central governmental organization in charge of promoting disaster prevention or mitigation and/or local government enhance the capacity of disaster management through implementing the activities on disaster prevention or mitigation in a certain municipality.</p> <p>【Outputs】 To be able to explain the function and the methodology of the collaboration of administrative bodies through understanding the history of natural disasters and their damage in Japan To understand the collaboration among administrative bodies, citizen, community, mass media and research institutes about the information management on natural disaster To understand the concrete methodology for the dissemination on raising awareness of disaster prevention and information management, considering disaster risk reduction in communities To understand the methodology for project management in each country To make action plan</p>		<p>【Target Organization】 Central government in charge of Disaster Risk Management or Local Government</p> <p>【Target Group】 (1) Current Duties: Officials in charge of Disaster Risk Management in Central or Local Government (2) Experience in the relevant field: have experiences for more than 2 years (3) Others: The person who will be in touch with JICA BOSAI project in the future is preferable.</p>
Contents		Program Period
<p>【Preliminary Phase】 Preparation of Country Report Exchange of opinion with ex-participants</p> <p>【Core Phase】 - Overview of Great Hanshin-Awaji Earthquake and recovery - Early warning system for natural disasters in Japan - Function of mass media in disasters - Risk communication - Examples of community-based disaster management in Japan - Methodology about raising awareness of disaster prevention for residents, - Preparation of Action Plan</p> <p>【Finalization Phase】 Implementation of Action Plan after discussing the action plan with the relevant persons like JICA officers in overseas offices and BOSAI Project</p>		<p>2011 / 11 / 5 ~ 2011 / 12 / 10</p> <p>Implementing Partner</p> <p>JICA Center</p> <p>Cooperation Period</p> <p>2010 ~ 2012</p> <p>Remarks and Website</p>
		<p>Under Planning</p> <p>JICA Hyogo</p>

Target Countries: Disaster-prone countries		15 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
The participants will formulate action plans for recovery from disasters in their countries.		
Objective / Output	Target Organization / Group	
<p>【Objectives】Specific action plans for making preliminary recovery program in each country with an eye to “social capital” are created. After the training , the action plan should be shared in the department in charge of disaster recovery.</p> <p>【Outputs】 (1) The participants will understand the outline of the Great Hanshin-Awaji Earthquake and emergency response to it. (2) The participants will understand the PDCA (Plan, Do, Check, and Act for improvement) Cycle in efforts for recovery. (3) The participants will understand the importance of the concept of “social capital” from the experience of role sharing among residents, business operators, and administrative bodies in the efforts to solve problems caused by the Great Hanshin-Awaji Earthquake. (4) The participants will understand new viewpoints (efforts of individuals and communities, infrastructure development, and crisis-control structure) to develop safe towns based on the lessons from the Great Hanshin-Awaji Earthquake. (5) Action plans for the respective countries will be created.</p>	1) Current duties: be or will be officials who are highly motivated and in a position that enables them to become involved with the formulation of recovery plans from disasters (i.g. urban planning, housing reconstruction, economic recovery, disaster victims livelihood recovery) and to promote them in their countries, and be officials who will continue to become involved with the formulation of recovery plans from disasters and to promote in their countries after the completion of this training program. 2) Experience : have work experience of more than three (3) years in the field mentioned above. 3) Educational background: university graduate or equivalent	
Contents	Program Period	2012 / 1 / 9 ~ 2012 / 2 / 25
<p>【Preliminary Phase】 Preparation of Job Report</p> <p>【Core Phase in Japan】 (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 (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 (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 (4) Development of safe towns/ Creation of safe cities in the participants’ countries (5) Session to exchange views between the Kobe City officials and the participants</p> <p>【Finalization Phase】 Implementation of Action Plan</p>	Implementing Partner	Kobe International Center for Cooperation and Communication
	JICA Center	JICA Hyogo
	Cooperation Period	2010~2012
	Remarks and Website	JICA recommend participants to read below website before the training. http://www.city.kobe.lg.jp/safety/hanshinawaji/revival/promote/index-e.html

Target Countries: Disaster-prone countries		15 participants
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management		
Sub-Sector :		
Language : English		
Appeal		
The participants will understand the significance of disaster risk management for natural disasters and needs of self-help and mutual help, and acquire the concrete method for promotion of community based disaster risk management in each country through the activities of self-help organization of residents for disaster risk management in Japan.		
Objective / Output	Target Organization / Group	
<p>【Objectives】 The concept and method of promotion of community based disaster prevention are acquired, through understanding the importance of comprehensive management for natural disaster</p> <p>【Outputs】 (1) Significance of disaster prevention (2) Needs and mechanism of community based disaster prevention and how to take community into it (3) How to operate and conduct drills in community based disaster prevention (4) How to foster leaders for disaster prevention in community (5) Establishment of a simulated organization for community based disaster prevention and formulation of an action plan</p>	<p>【Target organization】 organizations which can play a leading role in promotion of community based disaster prevention and dissemination of self-help organization of residents for disaster prevention. (e.g. Disaster management planning organization/division, community development organization in central/local government)</p> <p>【Target Group】 Position: Officials who can play a leading role in promotion of community based disaster prevention Experience in the relevant field: more than 2 years' experience</p>	
Contents	Program Period	2011 / 10 / 17 ~ 2011 / 11 / 26
<p>【Preliminary Phase】 Preparation of Job Report</p> <p>【Core Phase】 - Overview of Disaster Risk Management in the world - Disaster Risk Management in Japan - Great Hanshin Awaji Earthquake - "Disaster-Safe Welfare Community", promoted by Kobe city - Necessary equipment for the community-based disaster risk management - Planning and implementation of community-based disaster risk management - Disaster Prevention Education in schools and communities - Preparation of Action Plan</p> <p>【Finalization Phase】 Implementation of Action Plan</p>	Implementing Partner	Under Planning
	JICA Center	JICA Hyogo
	Cooperation Period	2010~2012
	Remarks and Website	

Target Countries: Vietnam Only		6 participants	
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management			
Sub-Sector :			
Language : Vietnamese			
Appeal			
This training is aims to quire higher level techniques on firefighting and rescue activities which correspond urbanization for the instructors of the University of Fire Fighting and Prevention, Ministry of Public Security of Vietnam, who are in charge of education and trainings for the fire prevention personnel in Vietnam, or preferably be commanders of fire vehicles and/or have ever experienced as trainers in the field of fire fighting.			
Objective / Output		Target Organization / Group	
<p>【Objective】 The fire fighting and rescue technique drills that can be adapted to the fire service situation of Vietnam will be shared within the University of Fire Fighting and Prevention, Ministry of Public Security of Vietnam.</p> <p>【Outputs】 1. Ability as a fire commander to command and control a fire scene , applying the firefighting techniques acquired in technical transfer to date. 2. Ability to design simulation drills and to train team members in basic firefighting ,rescue and HAZMAT operations through the simulations.</p>		<p>【Target Organization】 The University of Fire Fighting and Prevention, Ministry of Public Security of Vietnam</p> <p>【Target Group】 Instructors of the University of Fire Fighting and Prevention of Vietnam, who are in charge of education and trainings for the fire prevention personnel in Vietnam, or preferably be commanders of fire vehicles and/or have ever experienced as trainers in the field of fire fighting. Participate in throughout 3 year-program (from 2009 to 2011) as a whole.</p>	
Contents		Program Period	2011 / 8/21 ~ 2011 / 9/8
To Aquire higher level techniques on firefighting and rescue activities which correspond urbanization. 1. Participants learn how to command and control a fire scene through a map training. 2. Participants learn how to design a practical firefighting, rescue and HAZMAT operation training (Lectures and Drills at Fukuoka, Yokohama, Kawasaki and Tokyo Fire Department). 3. Formulating a training plan based on the knowledge and techniques acquired during the training in Japan, and implementing the training plan in the curriculum of the University of Fire Fighting and Prevention, Ministry of Public Security of Vietnam.		Implementing Partner	Fire and Disaster Management Agency
		JICA Center	JICA Tokyo(Public Policy)
		Cooperation Period	2009~2011
		Remarks and Website	JICA will extend follow-up cooperation (dispatch of study team) within JFY2011.

Volcanic Disaster Prevention and Management for Central and South American Countries 中南米地域 火山防災能力強化		PRTD	Solution	1184264
Target Countries: Central and South American Countries		10 participants		
Sector : Water Resources/Disaster Management/Other Water Resources/Disaster Management Issues				
Sub-Sector :				
Language : Spanish				
Appeal				
Improve the countermeasure against volcanic disaster by creating good coordination between government and community, referring to Hokkaido's experiences.				
Objective / Output		Target Organization / Group		
<p>【Objective】 Respective community or society's capacity against volcanic disaster prevention / management shall be improved, though the implementation of the formulated plan</p> <p>【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</p>		<p>【Organization】 Central / Local government, University, Research Institutes and NGOs, in charge of on the ground work for volcanic disaster management</p> <p>【Personal Qualification】 <Current Duties>Senior staff in charge of volcanic disaster prevention & management on the ground. <Experience> More than five (5) years in the field of volcanic disaster prevention and management. <Educational Background> Volcanology, Natural disaster management etc. <Age>Be between 25 to 45</p>		
Contents		Program Period	2011 / 6 / 6 ~ 2011 / 7 / 14	
<p>【Preparatory Phase】Each participant prepares country report to identify its issues</p> <p>【Core Phase】 (1) Volcanology, Eruption mechanism, Volcanic disaster(general remarks), Volcanic disaster(pyroclastic flow, pyroclastic surge, lahar, hazard map), Eruption forecast, Risk management (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 (3) National park and museum around volcanic area, UNESCO Geopark (4) Inception Report Presentation, Group discussion, Proposing Action Plan</p> <p>【Finalization Phase】(1) Within 3 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</p>		Implementing Partner	Crisis & Environment Management Policy Institute	
		JICA Center	JICA Sapporo	
		Cooperation Period	2009~2011	
		Remarks and Website	<p>•In the selection committee, special attention will be paid to secure diversity of home organizations in order to deepen the understanding for the importance of multi-stakeholders in disaster prevention</p>	