# 3.Water Resources/ Disaster Management

1684461 Integrated Water Resource Management 総合水資源管理 Continuing 26 participants Target Countries : Course No. : J1604377/J1604391 Sector :Water Resources/Disaster Management/Comprehensive Water Resources Management Sub-Sector : Language : English Outline This program is designed for an administrative officer to gain the knowledge and to plan countermeasures against Water Resources Management issues in the respective countries by applying the concept of Integrated Water Resources Management(IWRM). Objective/Outcome Target Organization / Group [Objective] [Target Organization] This course aims at the capacity development of the participants on the planning and Administrative organization or a implementation of IWRM. department of central/local government concerning with IWRM or River Basin [Outcome] 1. To understand the concept of IWRM Organizations (RBOs) 2. To understand the hydrological and water-demand-supply balance, the methods of [Target Group] monitoring, assessment and analysis for planning and implementing of IWRM 1. To be responsible for a plan on implementation of IWRM in an 3. To understand the water resource development plan, the fair and efficient water utilization plan, the planning methods and the practice of IWRM administrative organization or a 4. To understand the causes of water conflicts among different sectors, regions and department of central/local those of between upstream and downstream, and to get the clues to solve water government or RBOs To have more than 5 years of occupational experience in water conflicts 5. To formulate an action plan to implement IWRM in the certain river basin by prioritizing current problems and solving them by using acquired skills in the resources management training course Contents Course Period  $2016/05/11 \sim 2016/06/04$ [Lecture] Outline of IWRM, Global Warming issues and its impact Japan Water Agency [Lecture] Surface and ground water -Development/Utilization/Administration-Implementing , Water demand management (domestic and agricultural water), Sustainable Partner groundwater use, Water supply and demand control in waterworks side [Lecture /Site Observation] Monitoring water table and land subsidence [Lecture] Outline of water resources policy in Japan, Application of Japanese efficient water use and advanced water related technologies to foreign Department Global Environment Department countries in Charge [Lecture / Site Observation] Integrated dam operation and drought adjustment JICA Tokyo (Economy&Env.) [Lecture/Site Observation/Discussion] Consensus building for comprehensive river JICA Center development, Utilization of Decision Support System, Implementation of IWRM in international rivers, Case study of water conflict management in Japan and the world, Planning process with conflict management Cooperation  $2015 \sim 2017$ [Discussion] Job Report Presentation, Action Plan Presentation Period (A) 2016/05/11-2016/06/04 (English:Tokyo) (B) 2016/08/28-2016/09/17 Remarks (English:Tokyo) and Website

Management of Water Resources and Water Supply Services 島嶼における水資源管理・水道事業運営 1684463 Updated 12 participants Target Countries : Pacific Island Countries Course No. : J1604001 Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management Sub-Sector :Water Resources/Disaster Management/Other Water Resources/Disaster Management Issues Language : English Outline Participants are expected to learn the concept of Integrated Water Resources Management including water Policy and drought prevention program, but to formulate a network of the personnel of water sector in Pacific Island Countries. Objective/Outcome Target Organization / Group (Objective) [Target Organization] Water Authority and Relevant [Objective] Ministry/Agency To improve capacity for organizational management and waterworks of the concerned [Target Group] government by transferring Okinawa's knowledge and skills about water resources Water Authority or senior engineer in management and effective use which is applicable to Island countries. the field of water sypply more than [Outcome] five(5) years of work experience in [Outcome] the field water suppluy. 1. To acquire policy of water resources and integrated water resources management in Okinawa 2. To acquire methods of water source development in Islands area and study the possibility of application to own country. 3. To acquire methods of water resource management in Islands area and study the possibility of application to own country. 4. To acquire Ecological Purification System (slow sand filtration system) and water supply system of Islands area and to be able to plan to introduce their own countries Contents Course Period  $2016/06/15 \sim 2016/08/24$ Under Planning 1. Water related policies and changes in Water Service in Japan and Okinawa. Implementing 2. Concept and necessity of integrated water resources management in Okinawa. Partner 3. Water resources development in small rivers, the case of Okinawa. Department Global Environment 4. Countermeasures for fresh water lens and underground dam. Department in Charge 5. Water resources management and water cycle in Islands area. JICA Okinawa JICA Center 6. Environmental conservation and Regional development. 7. Ecological Purification System (Slow Sand Filtration) on underground water and Cooperation  $2016 \sim 2018$ river source. Period Okinawa Prefectural 8. Maintenance and control of Water Treatment Plant (remove the sand, water level, Enterprise Bureau. etc.,) Remarks 9. Water leakage detection and repair, Countermeasure for non-revenue water, Public and services, Reading and Collecting water rate, Water quality control system, Management http://www.pref.okinawa.jp Website analvsis. /site/chijiko/kohokoryu/fo reign/english/index.html 10. Planning method for improvement of waterworks management.

1684464

Continuing

31 participants

Target Countries :

Course No. : J1604311/J1604312/J1604263

Non-Revenue Water Management (Leakage Control) 上水道無収水量管理対策(漏水防止対策)

Sector:Water Resources/Disaster Management/Urban Water Supply

Sub-Sector :

Language :English

# Outline

Capacity development in non-revenue water management including detection and prevention of leakage, analysis of leakage volume, and planning of leakage prevention, through practical training contents such as practical exercises, field visits, practical lectures, and a knowledge sharing among participants.

Objective/Outcome	Target Organization / Group		
[Objective] Action Plans for the respective cities is implemented and non-revenue water management on participant's organization is strengthened. [Outcome] 1 (Module=1)	【Target Org Department c central/loca public organ	anization】 f water supply in l governments, or other izations	
Participants can explain a comprehensive technique and knowledge on non-revenue water. 2. (Module-2) Participants can operate leakage detection equipment. 3. (Module-3)	[Target Group] (Expected job title> fechnical officials or middle-class administrative officials		
Participants can analyze distribution flow and leakage volume. 4. (Module-4) Participants can explain planning of leakage prevention. 5. (Module-5) Participants can explain practical knowledge and techniques of design and construction supervision. 6. (Module-6)	<expected jo<br="">More than 5- in the relev</expected>	b experience> year working experiences ant sector	
Action Plans on non-revenue water management will be proposed for the respective cities.			
Contents	Course Period	$2016/09/07 \sim 2016/10/22$	
<ol> <li>(Module-1)</li> <li>(1)Outline of water supply business and non-revenue water management of a local government in Japan</li> <li>(2)Relationship between non-revenue water and water supply management</li> <li>(Module-2)</li> <li>(1)Characteristics of leakage</li> <li>(2)Mechanism and operation method of leakage detection equipment</li> <li>(Module-3)</li> </ol>	Implementing Partner Department in Charge	(A)Nagoya City Waterworks & Sewerage Bureau,Toyohashi City Waterworks & Sewerage Bureau,Hamamatsu City Waterworks & Sewerage Global Environment Department	
<ul> <li>(1)Analysis of distribution flow and leakage volume</li> <li>3. (Module-4)</li> <li>(1)Planning of leakage prevention work</li> <li>(2) Cost-effectiveness analysis</li> </ul>	JICA Center	JICA Chubu/JICA Kyushu	
<ul> <li>4. (Module-5)</li> <li>(1) Design and supervision of main facilities</li> <li>(2) Rehebilitation and conlagoment of pipes</li> </ul>	Cooperation Period	2014~2016	
5. (Module-6) (1)Preparing and sharing the Action Plan	Remarks and Website	<pre>(A) 2016/09/07-2016/10/22 (English:Chubu) (B) 2016/11/03-2016/12/17 (English:Chubu) (C) 2016/11/06-2016/12/09 (English:Kyushu)</pre>	

Operation and Maintenance of Urban Water Supply System(Water Quality and Purification) 1684468 都市上水道維持管理(浄水・水質) Continuing 24 participants Target Countries : Course No. : J1604303/J1604359 Sector : Water Resources/Disaster Management/Urban Water Supply Sub-Sector : Language : English Outline This intensive and practical training aims technical transfer and dissemination, especially targeting at field engineers who are engaged in "Water Quality and Purification" in Urban Water Supply organizations in developing countries. Objective/Outcome Target Organization / Group [Objective] [Target Organization] <Course Objective> Organization in charge of Operation This program aims at Human resource development for "Water Quality and Purification", and Maintenance of Urban Water Supply and applicable knowledge and techniques of this field being obtained through the Svstem training course in Japan are shared among engineers. [Target Group] Outcome <Expected Module Outputs> 〈Target Group〉 Engineers working in organizations in charge of "Water Quality and Purification" of urban water supply 1. Participants will be able to understand general theory of Japanese water supply and sewerage system. and to explain to the others. Participants will be able to acquire the knowledge and skills of operation, maintenance and administration of "Water Quality and Purification" in Osaka City, system, and responsible for the training of other engineers More than 5 years of experience in and to explain it to others. 3. Participants are able to acquire basic techniques of "Water Distribution and Service" in Osaka City and to explain it to others. the above-mentioned field Participants are able to draw up Action Plan relating to the "Water Quality and Purification" and being applicable to the organization of the participant at the end of the course in Japan Contents Course Period  $|2016/07/06| \sim 2016/08/11$ [Activity in Preliminary Phase in home country] Osaka Municipal Waterworks Bureau, Kobe Discuss issues and clear assignments for the participants among participating Implementing City Waterworks Bureau organizations. Partner Submit Inception Report and Questionnaire [Activity in Core Phase in Japan] (Lecture) (1) Water quality control (2) Management of intake, purification and distribution. (3) Disaster Management Department Global Environment <Visitation> (1) Facilities of water intake, distribution, purification (2) Pump Department in Charge Manufacturer (3) Water Science Museum JICA Kansai (I) <Practice> (1) Check and Maintenance of Water Leakage (2)Management of Water JICA Center Purification Facility (3) Check and Maintenance of Water-chemistry-control apparatus <Discussion> (1)Consultation (2)Discussion among participants for drawing up Cooperation  $2015 \sim 2017$ Action Plan Period <Activity in Finalization Phase in home country> Disseminate Action Plan to the engineers in participating organizations within 4 months after the training [Remarks] Remarks (A) 2016/07/06-2016/08/11 and (English:Kansai) (B) 2016/07/04-2016/08/06 Website (English:Kansai) First 8 working days of technical training in Japan is to be conducted together with "Water Supply and Distribution" course, thus it's possible to learn its basic knowledge and skills as well.

1684470 Operation and Maintenance of Urban Water Supply System (Water Distribution and Service) 都市上水道維持管理(給·配水) Continuing 28 participants Target Countries : Course No. : J1604384/J1604119 Sector : Water Resources/Disaster Management/Urban Water Supply Sub-Sector : Language : English Outline This intensive and practical training aims technical transfer and dissemination, especially targeting at field engineers who are engaged in "Water Distribution and Service" in Urban Water Supply organizations in developing countries. Objective/Outcome Target Organization / Group (Objective) [Target Organization] [Program Objective] Organization in charge of operation This program aims at Human resource development for "Water Distribution and and maintenance in urban water supply Service", and applicable knowledge and techniques of this filed are shared among svstem [Target Group] engineers. Engineers working in organizations in charge of "Water Distribution and Service" of urban water supply Outcome system, and responsible for the [Expected Outputs] 1. Participants will be able to understand General Theory of Water Supply Utilities training of other engineers. of Japan and explain to the others. 2. More than 5 years of experience in 2. Participants will be able to acquire the knowledge and skills of development of the above-mentioned field. distribution network and maintenance and explain to the others. 3. Participants will be able to acquire the knowledge and skills of maintenance and water quality management of Water Purification Plant and explain to the others. 4. Participants will be able to draw up an Action Plan aimed at tackle issues of the knowledge and technique by utilizing the outcomes acquired through the Core Phase Program in Japan. Contents Course Period 2016/07/06  $\sim$ 2016/08/11 [Preliminary Phase] Under Planning 1. Participants will be able to summarize the present status, issues and problems Implementing concerning their respective countries in Country Reports. Partner [Core Phase in Japan] 1. Lecture and Issue Analysis Workshop:Disaster Management, Maintenance of pipelines and water supply, Management of intake and distribution facilities Department Global Environment 2. Observation: Factory of water supply equipment, Water origin, Facilities of water intake, drainage, purification Department in Charge 3. Practical of training Leakage Detection, Management of pipelines and water supply, JICA Kansai (I) /JICA technical trainers' training "Management of intake and distribution", trainers' training "Draft and present technical instruction plan". Chugoku JICA Center [Finalization Phase] 1. Sharing and implementing of the Action Plan in the participant's organization, Cooperation  $2015 \sim 2017$ Submission of the Progress Report during the Core Phase in Japan. Period [Remarks] (A) 2016/07/06-2016/08/11 (English:Kansai) (B) 2016/06/27-2016/08/12 Remarks (English:Chugoku) and (B) course is characterized by both thereotical lectures and practical training for contributing the development of mid-level technical perssonel comprehensively. Website

1684472 Water Supply Administration for Better Management of Water Supply Services 水道管理行政及び水道事業経営 Updated 29 participants Target Countries : Course No. : J1604389/J1604392 Sector :Water Resources/Disaster Management/Urban Water Supply Sub-Sector : Language : English Outline 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, O&M, water quality control, countermeasures for non-revenue water, and PI. This course focuses on "sound management of waterworks" through discussions with executives/experts related to waterworks in Japan. Objective/Outcome Target Organization / Group [Objective] [Target Organization] The division / department in charge of To understand water supply administration, management and operation and maintenance in Japan, in particular, water quality control, measures against non-revenue water administration and/or management of and water supply standards, to clarify the future subjects through sharing water services in central / local information and to formulate an improvement plan on the feasible basis. government / waterworks bureau [Target Group] Outcome (1)Sharing information on current situations and key problems in the participating To be senior administrative officers countries through country report presentations, discussions, lectures and field or expected future administrative visit, to draft and submit practical improvement plan on management of water supply officers of water services in central / local government / waterworks services. bureau, To have sufficient experience (2) To be able to prioritize the issues to promote better management of water supply in the field of water supply services by refering the Japanese administration, management and operation and administration and manegement maintenance. (3)To be able to aim a safe water supply by refering the Japanese water quality management, water safety plans, and water quality standards. (4) To be able to prioritize the issue to tackle on measures for reduction of non-revenue water (leakage) by refering the Japanese experiences. (5)To be able to understand the water supply service standards water supply management guidelines and Contents Course Period  $2016/06/05 \sim 2016/06/18$ [Discussion] Country Report Presentation Japan International Corporation of Welfare Implementing Service Discussion Improvement Plan Preparation and Presentation Partner [Lecture] Water supply Administration in Japan - History and Current situations -, [Lecture] Experiences of Tokyo Waterworks Bureau [Lecture, Discussion] Sound Management of Urban Water Supply Service [Lecture, Discussion] Asset Management, Crisis Management Department Global Environment Department in Charge [Lecture, Discussion] Public-Private Partnership JICA Tokyo (Economy&Env.) JICA Center [Field Observation] Training Center [Lecture, Discussion] Public Health and Water Supply Cooperation  $2016 \sim 2018$ [Lecture, Discussion] Water quality control, Water Safety Plan and PI Period (A) 2016/06/05-2016/06/18 [Lecture, Practice] Measures for reduction of non-revenue water (Relation to (English:Tokyo) financial management & Water Quality) (B) 2016/10/16-2016/10/29 Remarks (English:Tokyo) and Website

1684474 Comprehensive Engineering on Water Supply Systems 上水道施設技術総合 Updated 22 participants Target Countries : Course No. : J1604378/J1604232 Sector:Water Resources/Disaster Management/Urban Water Supply Sub-Sector : Language : English Outline This program is designed for core engineers of medium - large waterworks to learn overall skill and knowledge related to planning, designing, and operation and maintenance to supply safe and stable drinking water. In addition, participants are requested to clarify the issues of their organizations and formulate an action plan for future activities by utilizing knowledge obtained through this program. Objective/Outcome Target Organization / Group [Objective] [Target Organization] To learn methodology of basic planning of system and facilities for safe and stable Departments of water supply planning drinking water supply based on a mid- to long- term plan. And with this, to clarify or designing in a water supply utility, central/local government 【Target Group】 the issues that respective organizations have encountered and formulate an action plan for future activities by utilizing knowledge and know-how through this program. To be or expected an engineer in the Outcome (a) To understand the Japanese water supply systems and technologies formulation of waterworks plan with more than 5 years of experience in (b) To learn methodology of basic planning and designing of system and facilities water supply (c) To understand and compare related laws and regulations in Japan, and functions and roles of Japanese related entities (d) To clarify the issues of water supply systems of participants countries (e) Through information and skill from this training, to formulate an action plan for future improving activities and to share the plan in respective organizations Contents Course Period  $2016/06/01 \sim 2016/08/13$ [Discussion] Country Report Presentation Japan Water Works Association, Sapporo [Lecture, Site Observation] Related Laws and Regulations for water supply systems in Implementing Water Works Japan, Mid- to Long- Term Plan of Waterworks in Japan, Waterworks Management and Partner Tariff System in Japan, Public Private Partnership, Observation of Manufacturing Factory, Sanitation Research Organization, Small-scale Hydraulic Case Study for Disaster Management Department Global Environment [Lecture, Site Observation] Water Purification Process, O/M of Distribution, Countermeasures of Water Leakage Department in Charge JICA Tokyo (Economy & [Practice] Pipeline Network Analysis (hydrologic), Water Demand Forecasting, Basic Env.)/JICA Hokkaido JICA Center Planning and Design (Pipeline Network, Water Purification Facility, Water Supply (Sapporo) [Discussion] Action Plan Formulation and Presentation Systems) Cooperation  $2016 \sim 2018$ Period (A) 2016/06/01-2016/08/13 (English:Tokyo) (B)2016/06/01-2016/08/13 Remarks (English:Hokkaido(Sapporo) and Website

African Region Urban Waterworks Engineering アフリカ地域都市上水道技術者養成		1684476 Continuing
Target Countries : Maiser Countries		12 participants
Course No. : 11604286		
Sector :Water Resources/Disaster Management/Urban Water Supply		
Sub-Sector :		
Language : English		
Outline		
There are still many countries and regions in need of safe water in developing countriex ceeded seven billion in 2011 continues to grow, and is expected to reach nine billion growth is taking place in developing countries where, in most cases, leads to increase populations comprised 50.6% of the world population, and are expected to reach 70% by concentration, particularly in Asia and Africa). How to provide ever-increasing urban services is a major challenge faced by water supply utilities in developing countries. Responding to this situation, Japan has been actively playing its international role of the leading countries in the field of water supply. In May 2008, the 4th Tokyo International Conference on African Development (TICAD IV) necessity of continuous support on water supply to the Africa was recognized. Since the	ries. The wor on by 2050. M ed urban popu 2050 (with a residents with to tackle with was held in pen. IICA in	rld population that Most of this population ulations. In 2010, urban considerable urban ith stable water supply ith this challenge as one n Yokohama, Japan, and the corporation with the City
Objective/Outcome	Target	Organization / Group
[Objective] This program aims to develop action plans to solve the problems in each participant's waterworks utility in his/her nation. [Outcome] 1. To understand the overall waterworks in Yokohama, and to be able to compare with the situation of the respective country 2. To understand the principal waterworks, such as water supply system, NRW and maintenance of facilities and to be able to compare with the situation of the respective country 3. To understand the integrated/ efficient water management system considering environment 4. To formulate the Action Plan to resolute the specific issue(s)	<pre>[Target Org This program class engine utilities, a officers in engineering provincial g bodies [Target Grot 1. Senior te of waterw than 10 y experiend 2. Graduates with an a waterwork 3. Have a su English.</pre>	<pre>ganization] main offered to middle evers in the waterworks und senior technical a charge of waterworks in the central or government, or in the local even corks engineering with more vears of practical even s degree or the equivalents academic background in as engineering. officient command of</pre>
Contents	Course Period	$2016/07/04 \sim 2016/08/04$
[Preliminary Phase]		Yokohama Water
1. Participants shall prepare detail information of background, after the discussion with their supervisors and colleagues on the specific issue of the utilities in order to solve or find a trigger of the issue.	Implementing Partner	
[Core Phase in Japan]		
1. Lectures, observations, and discussions on followings will be conducted.	Department	Global Environment
(2) Water Safety Plan	in charge	IICA Vokohama
<ul> <li>(3) History, system, and challenges of water works in Japan</li> <li>(4) Basic water works technology, such as filtration plan mechanism, water purifying, water supply system, prevention of water leakage, reduction of non-revenue water</li> </ul>	JICA Center	JION IONOHAIIIA
in Japan.	Cooperation	2014~2016
<ul> <li>(5) Conservation of water resource forest, water quality control, distribution block management, aged pipe renewal plan, water tariff system, management and fiscal balance plan, customer service and public relations</li> <li>(6) Site visit to water intake facilities, water treatment plant, ground water facility and training yard for pipeline maintenance etc.</li> <li>2. Development of the draft action plan, and its presentation and discussion.</li> </ul>	Period Remarks and	
[Finalization Phase] 1. To share the action plan and implementation in each participant's home country	Website	

Participatory Safe Water Management in Rural Areas in African Countries アフリカ地域 村落飲料水管理 1684477 Updated 27 participants Target Countries : African Countries Course No. : J1604018/J1604101 Sector : Water Resources/Disaster Management/Rural Water Supply Sub-Sector : Language : English/French Outline Many African countries are still facing a major challenge in the severe shortage and the lack of appropriate operation and maintenance (O&M) system of water supply facilities especially in rural areas. In the Sustainable Development Goals (SDGs) which was adopted in 2015, "access to clean water and sanitation" is also set as one of the 17 global goals, and it aims to secure a universal access to safe drinking water by 2030". Besides, especially in the relatively small-scaled communities in rural areas, active participation and cooperation of the community residents are necessary for the sustainable O&M system of water supply facilities such as deep wells. This program aims to confirm basic techniques for the proper water supply and O&M system of water supply facilities in rural areas, and to advance necessary knowledge for ensuring a "participatory" and "gender-sensitive" O&M system in the small-scaled rural communities. Target Organization / Group Objective/Outcome [Objective] [Target Organization] The departments of rural water supply Analyzing the challenges in terms of water supply and operation and maintenance and/or O&M service in the central or system in rural areas, necessary and sound countermeasures are proposed with utilizing the outcomes of the training in japan. loral government Outcome [Target Group] 1) Analyze current situation and problems on water supply and operation and Central or local government officials in charge of for rural water supply maintenance (O&M) system in rural areas 2) Understand necessary knowledge and basic techniques for safe drinking water supply and/or O&M of water supply facilities and O&M system of water supply facilities in rural areas • have more than 3 years' practical 3) Examine the appropriate and sustainable O&M system of water supply facilities by experience in the relevant field reference to the experiences of Japan and the other countries • have a competent language skill • be under forty-five (45) years old 4) Examine necessary measures for improving water supply and ensuring proper and sustainable 0&M system of water supply facilities in rural areas as an "Action Plan"

Contents         [Preliminary Phase]       • Preparation and submission of country report         [Core Phase in Japan] <lecture>water quality control, water treatment, 0&amp;M of small-scaled water supply system in rural areas, maintenance of water supply facilities (pumps), sanitation, gender and water, integrated water resource management, etc.         <site-visit> (A) Furano-city and Higashikawa-town (Hokkaido), Numata-city (Gunma) (B) Takamatsu-city (Kagawa)         <group discussion=""> small-scaled water supply and 0&amp;M system (case study)         <practice> participatory approach for the control of disarrheal diseases,</practice></group></site-visit></lecture>	Course Period Implementing Partner Department in Charge JICA Center	2016/05/05 ~ 2016/06/11 (A)Earth & Human Corporation (B)Under planning Global Environment Department JICA Hokkaido (Sapporo)/JICA Shikoku
<pre>[Finalization Phase] • Preparation and submission of progress report</pre>	Cooperation Period Remarks and Website	2016~2018 (A)2016/05/05-2016/06/11 (French:Hokkaido(Sapporo)) (B)2016/10/24-2016/12/10 (English:Shikoku)

Flood disaster risk reduction 1684478 洪水防災 Updated 20 participants Target Countries : Flood disaster-prone countries Course No. : J1604013 Sector : Water Resources/Disaster Management/Wind and Flood Disaster(Flood Control) Sub-Sector : Language : English Outline This program aims to develop the participants' capacity to practically manage and reduce risk of flood disasters in local levels in developing countries which are suffering from flood disasters consistently. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Governmental organizations concerning The participant's capacity to practically manage and reduce risk of flood disasters in developing countries which is suffuring from flood disasters consistently will be river management or flood-related enhanced. lisasters [Outcome] [Target Group] (1) To be able to explain basic concept and theory on generation process of flood Technical officials, engineers or disasters, hazard risk evaluation, disaster risk managemant policy and technologies. researchers who are expected to be core human resources in the organization. Those who have three or more year of experience in the field (2) To be able to explain basic concept and theory on flood countermesures including of river management or flood-related landslide and debris flow. disasters in governmental organization. (3) To formulate the countermesures to solve the problems and issues coucerning flood disasters in participants' countries by applying techniques and konwlledge acuired through the program. Contents Course Period  $2016/10/02 \sim 2017/09/16$ Public Works Research • Lectures, exercises and site visits on social engineering knowledge requierd in Institute flood control ( disaster management policy, disaster management, integrated flood Implementing risk management, local disaster management) Partner GRIPS Department Global Environment · Lectures, exercises and site visits on theoritical knowledge required in flood control (hydrology, hydraulics, river engineering, etc.) and practical konwledge Department in Charge required in flood control (sediment transportation, sabo engineering, dam JICA Tsukuba(Training) engineering, etc.) JICA Center Cooperation  $2016 \sim 2018$ · Lectures and exercises on theory and practice of problem-solving methods (Project Period Cycle Management, etc.) Continue of Target group: Those who are universitiy graduates, preferably in Remarks civil engineering, water • Wrinting Master's thesis/ Action Plan resource management, and disaster mitigation, or Website related department. English proficiency: TOEFL iBT 79

1684479

Continuing

22 participants

Target Countries : Countries or areas frequetly affected by floods Course No. : J1604050

Sector : Water Resources/Disaster Management/Wind and Flood Disaster(Flood Control)

Capacity Development for Flood Risk Management with Integrated Flood Analysis System (IFAS) 統合洪水解析システム(IFAS)を活用した洪水対応能力向上

Sub-Sector:

Language : English

### Outline

This training course aims to mitigate flood damage by strengthening the participating countries' coping capacity including the development of local flood risk management plans with early evacuation of local residents through the application of the Integrated Flood Analysis System (IFAS) to flood vulnerable areas.

Objective/Outcome	Target Organization / Group		
<ul> <li>[Objective]</li> <li>Coping capacity for flood damage mitigation including appropriate flood forecasting and early evacuation of residents is strengthened in each participating country.</li> <li>[Outcome]</li> <li>The participants are expected to become able to: <ol> <li>Understand the problems and possible solutions for flood damage mitigation based on the analysis of flood risk management concept, system or structures in the respective countries.</li> <li>Understand concept and actual calculation of run-off and flood analyses and flood risk management by learning the operation of IFAS and outline of disaster management/ evacuation plan.</li> <li>Develop draft local flood management plan (Action Plan) for a flood vulnerable area.</li> <li>To report about the presentation of the draft local flood management plan (Action Plan) to JICA as Final Report.</li> </ol> </li> </ul>	Target Organization / Group [Target Organization] National / local governmental organizations responsible for flood forecasting, early warning system, flood risk management and flood prevention / evacuation of residents [Target Group] Government officials in charge of meteorological observation, river management, and flood prevention / evacuation of the same river basin i each participating country		
Contents	Course Period	$2016/07/03 \sim 2016/07/30$	
[Preliminary Phase] The applicants submit Inception Reports describing social and hydrological data, current situation and issues of flood risk management for selected target flood vulnerable area.	Implementing Partner	Public Works Research Institute (PWRI)	
through lectures, exercises and study tours briefly explained below. 1. PCM exercise to improve objective problem-analysis skills	Department in Charge	Global Environment Department	
<ol> <li>Lectures on flood countermeasures</li> <li>Lectures and exercises on run-off and flood analyses including operation of IFAS</li> <li>Study tours on flood countermeasures (including early flood forecasting/warning systems and interviews with local municipalities)</li> </ol>	JICA Center	JICA Tsukuba(Training)	
5. Development of a feasible local flood risk management plan by applying IFAS to the target flood vulnerable area in his/her country	Cooperation Period	2015~2017	
(Finalization Phase) The participants present their flood management plans (Action Plans) in their organizations, and submit the meeting minutes (and finalized Action Plan, if possible) to JICA within three months after they return.	Remarks and Website		

1684836 Strategic utilization of hydrological and meteorological data ovservation technology 戦略的な水文観測技術の活用 New 16 participants Target Countries : Countries and areas which have to manage surface water (river etc.) Course No. : J1604408 Sector : Water Resources/Disaster Management/Wind and Flood Disaster(Flood Control) Sub-Sector : Water Resources/Disaster Management/Comprehensive Water Resources Management Language : English Outline This program is designed for managerial officials to obtain and understand meanings, basic knowledge of technology and know-how of the meteorological and hydrological data observation as well as analytical technique and applied technology. In Japan, technology of flood control and water utilization has been developed based on the long-term observation and accumulated meteorological and hydrological data. Objective/Outcome Target Organization / Group [Objective] [Target Organization] This program aims to enhance knowledge for installation and utilization of the Administrative hydrological and meteorological data observation and management technology. (Surface organizations/departments of the water is the main target in this program) government for river/water resources [Outcome] management (including irrigation and 1. To understand observation meanings, and observation technique and technology in river basin organizations) the river basin for implementation of the flood control plan and the river water [Target Group] 1) Responsible for water resources utilization plan management (water utilization and 2. To understand technique and technology of the data sorting, data quality control, flood control) or the meteorological data filing and data management of the collected data and hydrological data observation and management 2) Managerial officials or 3. To understand the statistics and analytical technique including methodology of the to have more than 10 years of river basin data experiences in the said fields 4. To understand necessity and importance of the application of the river basin meteorological and hydrological data to the flood control plan and the river water utilization plan as well as basic methodology of formulating the plans by the collected data 5 To understand methodologies of water level monitoring water information Contents Course Period  $2016/11/06 \sim 2016/11/19$ [Preliminary Phase] Preparation and submission of country report Japan Water Agency Implementing [Core phase in Japan]Lectures, practical works, observations, and discussions on Partner followings will be carried out. 1Implementation structure in Japan for the river basin meteorological and Department Global Environment hydrological data observation and management (comprehensive strategy, roles and Department responsibilities of organizations, rules, regulations and guidelines, necessary in Charge proficiency for the technical staff, points to consider for outsourcing), 2Practical JICA Tokyo (Economy&Env.) routine and data management of the observation, 3Formulation and utilization of the JICA Center flood control plan and the river water utilization plan, 4Cooperation with other organizations, and information sharing and disclosure, 5Practical routine for water level monitoring and flood alerts, 60 and M for the river structure and equipment, 7 Cooperation  $2016 \sim 2018$ Water examination in catchment area, reservoir and river, and water quality Period conservation, 8Information management for international river, 9Application to the Staff in charge of making climate change, 10Action plan presentation policy(rules, regulations and guidelines) is [Final Phase]Submission of reports Remarks expected to participate in for the structure and improvement Website

WATER RELATED DISASTER MANAGEMENT (PREPAREDNESS, MITIGATION AND RECONSTRUCT 水災害被害の軽減に向けた対策	TON)		1684838 New
		20	participants
Target Countries : Countries or areas frequetly affected by floods			
Sector : Water Resources/Disaster Management/Wind and Flood Disaster(Flood Control)			
Sub-Sector :			
Language : English			
Outline			
Intensity and frequency of floods are expected to increase due to the effect of clima targets to administrative officials responsible for water related disaster management, seminars on disaster management and flood control systems and measures in Japan to imp policy planning and its implementation.	te change. Th , includes le prove partici	is training co ectures, site v pants' capabil	urse, which isits and ity to
Objective/Outcome	Target	Organization /	Group
<ul> <li>[Objective]</li> <li>[Objective]</li> <li>The program aims to strengthen participants' own capabilities to make/develop policies and implement measures to reduce water related disaster damages through learning policies and systems on flood control and disaster management in Japan.</li> <li>[Outcome]</li> <li>Participants clarify issues through analyzing damages, policies and plans on water related disaster in their countries.</li> <li>Participants understand basic concepts and theories on flood control and disaster management as essential knowledge of river management.</li> <li>Participants understand cases of implementation of flood control measures in Japan.</li> <li>Participants design policies to solve issues on river management in their countries based on the knowledge acquired in this course.</li> </ul>	[Target Org Organization management, watershed ma [Target Gro National/loc for flood ma disaster man and more tha experience r disaster man management.	anization] a responsible f flood control anagement al official re nagement/river agement. Bache n 5 years of w regarding flood agement/ water Good English s	or disaster and sponsible management/ lor degree ork control/ resource kills
Contents	Course Period	$2016/05/22 \sim$	2016/06/18
<ol> <li>Preliminary Phase:</li> <li>Participants analyze damages and countermeasures/plans on water related disasters, summarize their results and make Inception Report on them.</li> <li>Core Phase in Japan:</li> <li>The program appointed model will T's leatures which contributes to consider</li> </ol>	Implementing Partner	Under Planning tner	
building on policy planning and its implementation, is conducted.	Department in Charge	Global Environ Department	ment
Lectures: Rivers in Japan and Outline of River Governance, River Management Policy and Plan includes, Dam projects and systems in Japan, Hydrological observation and water disaster monitoring / prediction, Flood Fighting, Climate Change Adaptation, Maintenance of Flood control facilities, IWRM, etc.	JICA Center	JICA Tsukuba(T	raining)
Field trip: Sites related to above lectures	Cooperation Period	2016~2018	
Excises: Draft, present and discuss on flood control action plan in participant's country.			
3. Finalization Phase Participating organizations produce final outputs by making use of results brought back by participants. Participants submit Final Report on the progress on implementing action plans.	Remarks and Website		

Disaster management for landslide and sediment-related disasters (triggered by heavy rainfall, earthq volcanic activity)	uake and		1684481 Continuing
土砂災害防止マネージメント(豪雨、地震、火山噴火起因) 		20	participante
Target Countries :		20	participants
Course No. : J1604387			
Sector:Water Resources/Disaster Management/Soil and Water Disaster			
Sub-Sector:			
Language : English			
This course is designed for engineering officials or researchers in administrative org on the phenomenon of disasters, method of survey, countermeasure planning, and adminis regulations, budgetary system, implementation and maintenance, to implement effective sediment-related disasters.	ganizations t strative proc countermeasu	co enhance thei cedures, such a ures against la	r knowledge s laws and ndslide and
Objective/Outcome	Target	Organization / 0	Group
[Objective] Participants are expected to improve their skill and knowledge concerning disaster management for landslide and sediment-related disasters triggered by heavy rainfall, earthquake and volcanic activity	[Target Organization] Governmental organization involved in management for landslide or sediment-related disasters		
[Outcome] <ol> <li>to understand the process and phenomenon of landslide and sediment-related disasters (triggered by heavy rainfall, earthquake or volcanic activity)</li> <li>to understand the methods of survey, observation, analysis and evaluation of landslide and sediment-related disasters (triggered by heavy rainfall, earthquake or volcanic activity)</li> <li>to understand the plans for prevention and mitigation against landslide and sediment-related disasters (structural and non-structurtal measures)</li> <li>to understand the structure of the governmental organization against landslide and sediment-related disasters</li> </ol>	[Target Gro Engineering in administr more than 3 field of dis landslide an disasters ( rainfall, ea activity)	up] officials or re ative organizat years of exper- aster managemen d sediment-rela triggered by he rthquake or vo	esearchers tions with ience in the nt for ated eavy lcanic
Contents	Course Period	$2016/10/02 \sim$	2016/12/10
<ol> <li>Lecture concerning administration for disaster prevention (including law and regulation, budgetary system, countermeasure planning and disaster prevention education)</li> <li>Lecture and field study concerning prevention for landslide and sediment-related disasters triggered by heavy rainfall, earthquake or volcanic activity</li> <li>Group workshop and practice in a specific theme such activity</li> </ol>	Implementing Partner	Sabo & Landsli Technical Cen	de ter
(1) field survey after landslide and sediment-related disaster	Department	Global Environ	ment
(2) formulation of countermeasure against landslide and sediment-related disaster (3) setup of standard precipitation for alarming and evacuation	in Charge	Department	0
4. Formation of Final Report and presentation	JICA Center	JICA IOKYO (ECO	nomy&Env.)
	Cooperation Period	2014~2016	
	Remarks and Website	former course title:Disaste Management Tec Volcanic Erupt Flow and Lands	r Risk hnology on ion, Debris lide

Seismology, Earthquake Engineering and Tsunami Disaster Mitigation 地震学・耐震工学・津波防災			1684482 Continuing
Target Countries : Earthquake and tsunami disaster prone countries		28	participants
Course No. : J1604067			
Sector :Water Resources/Disaster Management/Earthquake Disaster			
Sub-Sector:			
Language : English			
Developing countries are wilperable to threats of earthquakes and tsuperis. This course	so aims to ir	arosso consait	ios of
officials, engineers or researchers who are conducive to earthquakes and tsunamis. This cours participants will acquire Japan's leading knowledge and technologies on Seismology, E Disaster Mitigation.	e anms to fr cer managemer Carthquake Er	trease capacit nt. In this cou ngineering and	irse, Tsunami
Objective/Outcome	Target	Organization /	Group
[Objective]	Target Org	anization	-
<ul> <li>Capacities of technical officials, engineers and researchers in the field of Seismology, Earthquake Engineering and Tsunami Disaster Mitigation who are conducive to earthquake and tsunami disaster management and disaster recovery policy are increased.</li> <li>[Outcome]</li> <li>1. To acquire basic concepts and theories on Seismology, Earthquake Engineering, or Tsunami which are essential to establish the Earthquake Disaster Mitigation Scheme,</li> <li>2. To acquire basic concepts and theories on Seismic/Tsunami Hazard Estimation, Disaster Management and Disaster Recovery Policy in the fields of Seismology, Earthquake Engineering or Tsunami Disaster Mitigation Scheme,</li> <li>3. To complete a Master thesis for solving problems in participant's country applying techniques and knowledge acquired in the course.</li> </ul>	<pre>[Target Organization] Governmental organs, research institutes or universities having public interest in Seismology, Earthquake Engineering or Tsunami Disaster Mitigation. [Target Group] 1. Technical officials, engineers on researchers having a university degree in Seismology, Earthquake Engineering, Tsunami or equivaler and 3 years working experience. 2. English proficiency equivalent to TOEFL PBT 550.</pre>		rch having ogy, Tsunami gineers or iversity arthquake equivalent, erience. ivalent to
Contents	Course Period	2016/10/02	2017/00/14
Desliningen Dhars in Hang Country	course reriou	2016/10/02 ~~	2017/09/14
To draft an Inception Report on Seismology, Earthquake Engineering or Tsunami Disaster Mitigation by the analyses on disaster management and disaster mitigation policies of participant's country.	Implementing Partner	Institute	
[Phase in Japan]	Donartmont	Clobal Environ	mont
related with Earthquake and Disasters, Earthquake Phenomenology, Soil Mechanics,	in Charge	Department	lillent
Structural Mechanics) and advanced subjects (Earthquake Circumstance, Characteristics of Earthquake Disasters, Seismic Design, Seismic Evaluation and Retrofitting, Tsunami generation by earthquake, tsunami propagation and its run-up procedure),	JICA Center	JICA Tsukuba(T	raining)
	Cooperation	2015~2017	
Lectures, practices and field trips on Seismic/Isunami Hazard and Kisk Assessment, Seismic/Tsunami Disaster-Recovery Management Policy Tsunami Farly Warning System		0	1
<ul><li>Disaster Mitigation and Development Assistance.</li><li>Individual study: writing a Master thesis applying knowledge and techniques acquired in the course with instructions by supervisors.</li></ul>	Remarks and Website	On the complet required credi participants w awarded a Mast in Disaster Ma GRIPS.	ts, ts, vill be er's degree nagement by
		Website: http://iisee.k	enken.go.jp/

Enhancement and Dissemination of Earthquake-resistant Technology for Buildings in Latin American 中南米 建物耐震技術の向上・普及	Countries		1684483 Continuing
		14	participants
Target Countries : Earthquake prone countries in Latin America			
Course No. : J1004048			
Sector : Water Resources/Disaster Management/Earthquake Disaster			
Sub-Sector:			
Latin America is a guake prope region However, technology of carthqueke-registant av	struction is	not wat nonul	nly used in
the area, and building collapse causes huge impacts on human suffering and property da damage from future earthquakes by enhancing and disseminating the earthquake-resistant participants' countries.	amage. This c	ourse aims to son technology in	reduce 1 the
Objective/Outcome	Target	Organization / (	roup
	Target Org	anization]	
<ul> <li>[Objective]</li> <li>Participants develop and start working on Action Plans to disseminate earthquake resistant technology and system based on learned approaches of seismic design, construction, diagnosis and retrofitting for buildings.</li> <li>[Outcome]</li> <li>1. To analyze issues on earthquake resistant construction in participants' country.</li> <li>2. To understand fundamentals of earthquake engineering and seismic design methods.</li> <li>3. To understand earthquake-resistant technology by types of structure, such as RC or masonry construction.</li> <li>4. To understand the techniques for seismic diagnosis and retrofitting.</li> <li>5. To understand promotion systems on construction of earthquake resistant buildings including Building Standards and guidelines.</li> <li>6. To understand frameworks of training programs of structural and construction engineers.</li> <li>8. To develop Action Plan to promote earthquake-proof construction in participant's country.</li> </ul>	<pre>[larget Org Government o responsible technology, institutions [Target Gro 1. Education universit 2. Working e years in 3. Current d dissemina earthquak technolog</pre>	anization] or related organ for earthquake- universities on a in the field. bup] hal background: by graduate or e experience: have earthquake engi luties: be respo tion or education tion or education sy.	be equivalent. over five neering. on of on of onstruction
Contents	Course Period	$2016/05/17 \sim$	2016/07/09
<pre>[Preliminary Phase] 1. Preparation of Inception Report. [Phase in Japan] 1. Presentation of IcR. Discussion on problems in seismic construction. 2. Lectures on introduction of Farthquake Engineering and Structural Engineering</pre>	Implementing Partner	Building Resea Institute	cch
<ol> <li>Lectures on RC and masonry construction, response control and seismic isolation.</li> <li>structural experiment and visits to construction sites.</li> </ol>	Department in Charge	Global Environ Department	nent
<ol> <li>Lectures and site visits on diagnosis and reformating.</li> <li>Lectures on promotion system for construction of quake-resistant buildings.</li> <li>Lectures and site visits on construction management and supervision.</li> <li>Lectures on frameworks of training programs of structural and construction</li> </ol>	JICA Center	JICA Tsukuba(T	raining)
engineers. 8. Preparation/presentation/discussion of Action Plan.	Cooperation Period	2014~2016	
<pre>【Complementary training in Third country】 Lectures on masonry construction, structural experiment, site visits, and discussion. 【Finalization Phase】 Sharing training outcome, finalization of Action Plan, proposal to participant's organization and submission of Progress Report.</pre>	Remarks and Website	University pro: lecturers are the target per	fessors and included in sonals.

1684484 Reinforcement of Meteorological Services 気象業務能力向上 Continuing 8 participants Target Countries: Member States of WMO (World Meteorological Organization) Course No. : J1604287 Sector : Water Resources/Disaster Management/Meteorology Sub-Sector : Language : English Outline In this training course, most of the lectures are provided by staff members of the Japan Meteorological Agency, one of the most advanced meteorological services. Participants also visit various kinds of fields which utilize weather information. Every participant is requested to formulate an action plan to improve the meteorological service in his/her country. Objective/Outcome Target Organization / Group [Objective] [Target Organization] National Meteorological and This course aims at promoting activities to reinforce the meteorological services of each country applying meteorological data/products such as numerical weather and Hydrological Services climate prediction and satellite images for disaster risk reduction and climate [Target Group] change adaptation. be meteorological officials (1)[Outcome] classified as Meteorologists according to the World Meteorological 1. To be able to explain the fundamental technique such as numerical weather prediction (NWP), satellite meteorology. Organization (WMO) personnel To be able to make up meteorological information which meets users' requirements categories; based on fundamental techniques such as NWP and satellite meteorology. (2)be presently engaged in 3. To be able to brief general condition of climate and global environment and make meteorological services for their up climate prediction applying climatological and global environmental governments or government-related public organizations; information. To draw up a master plan to improve the meteorological services of the participants' organizations, and to be used in participants' countries. (3)have a Bachelor of Science and/or an Engineering degree; be under 40 years of age; (4)have considerable experience (5)of meteorological services; have knowledge and experience (6)<u>of using hasic PC software (especially</u> Course Period  $2016/09/12 \sim 2016/12/09$ Contents 1. Lectures on the basics of numerical weather prediction and its application. Japan Meteorological Lectures on the outline of satellite meteorology and application of satellite Agency Implementing data. Partner Lectures on the global telecommunications system. 2. Exercises on satellite data application. Exercises on operational forecasting. Department Global Environment Lectures on the knowledge and skill to make up meteorological information which Department in Charge meets users' requirements. JICA Tokyo (Economy&Env.) JICA Center 3. Lectures on the climatological and global environmental information. Exercises on the application of climatological and global environmental information. Cooperation  $2014 \sim 2016$ Period 4. Creation, presentation and discussion of final report http://www.jma.go.jp/jma/i ndexe. html After the training course Implementation of activities to transfer the knowledge and expertise to colleagues to Remarks improve the meteorological services of participants' organizations (follow-up survey and with questionnaire). Website

Strategy for Resilient Societies to natural disasters 災害に強いまちづくり戦略 1684485 Continuing 15 participants Target Countries : Course No. : J1604124 Sector : Water Resources/Disaster Management/Comprehensive Disaster Management Sub-Sector : Language : English Outline 1. Sharing the Components of Disaster Resilient Society, which were revealed by the lessons learned from past disasters such as earthquake, flood and landslide etc. in Japan. 2. Creating disaster management plan, which considered the social background of each participant's country. 3. Strengthen the disaster resilience by creating disaster management plan with participatory methods. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Create disaster management plan for disaster resilient society, which necessary Disaster management planning components were shared by lessons and experiences from the Japanese administration organization, community development and civil society. organizations in Local government(or Central Government). [Outcome] 1. To understand the components and process of quick and sustainable recovery from the [Target Group] disaster. Officials who are highly motivated and in a position that enables them to be 2. To understand the importance of multiple disaster prevention measures. 3. To understand the importance of raising awareness of disaster reduction through involved with the formulation of prevention plans from disasters. (Local disaster mitigation education. 4. To learn the methods and tools to promote the mutual help by community. and central government officer), Work 5. To make action plan with strategy for resilient societies to natural disasters. experience with more than 3years in the related field. Contents Course Period  $2017/01/09 \sim 2017/02/25$ [Preliminary Phase] Kobe International Center for Cooperation and Job report to be submitted. Implementing Communication Partner Kobe Institute of Urban [Core Phase] 1. Understand the importance of Social Capital /PDCA cycle /Community safety map /Town Research watching /disaster management drill /disaster mitigation education. Introduction of Department Global Environment community based disaster risk management activities. Department 2. Learning facilitation method for conducting disaster drill. Understand the role of in Charge Community, NGO/NPO JICA Kansai (Ⅱ) 3. Infrastructure reconstruction: electricity/gas/communication, Emergency Response: JICA Center volunteer management, opening evacuation shelter, mass media management. City planning/ safe and secure city development. Discussion with municipal government officers. Cooperation  $2014 \sim 2016$ 4. Consultation for making action plan with workshop/participatory methods. Period [After Training] Conduction action plan, Progress report of action plan. Remarks and Website

Comprehensive disaster management in the African region			1684486
アフリカ地域総合災害対策			Continuing
Target Countries : African countries including north Africa (Countries subject to TICAD)		16	participants
Course No. : J1604411			
Sector:Water Resources/Disaster Management/Comprehensive Disaster Management			
Sub-Sector: Language :English			
Outline			
Based on lessons and experiences on preparedness and response to disasters in Japan, p counter-measures to various forms of disasters through lectures, discussions and site apply these lessons to their respective situations and subsequently establish appropri to disasters.	participants visits to st ate systems	will learn rengthen their to prepare for	ability to and respond
	1		
Objective/Outcome	Target	Organization / (	Group
<ul> <li>[Objective]</li> <li>This training course is designed to develop and strengthen participants' basic ability necessary for establishing appropriate disaster management systems in each country, by learning various cases of preparedness and response to disasters in Japan through interactive lectures, discussions and site visits.</li> <li>[Outcome]</li> <li>1. To identify disaster risks and challenges for improving disaster management systems in respective participants' countries;</li> <li>2. To learn basic concepts and counter-measures of disaster management and reduction through cases and lessons learned from past disasters in Japan;</li> <li>3. To obtain basic knowledge on disaster management and reduction, and ability to translate Japanese experiences into each country's context through interactive lectures, using a participatory approach;</li> <li>4. To formulate action plans to improve existing disaster management strategies and institutional frameworks in respective countries in a feasible manner.</li> </ul>	<pre>[larget Org Central and in charge of and/or respo [Target Gro 1. Officials managemen central/1 2. High comm 3. Middle ma (recommen 4. Participa central a (recommen</pre>	anization] local governmer disaster manag nse up] responsible fo t and/or respor ocal government and of English nagement of hig ded) tion paired by nd local goverr ded)	nt offices gement or disaster nse in cs gher both nments
Contents	Course Period	$2016/09/25 \sim$	2016/10/29
<ol> <li>Participants will analyze challenges on disaster management systems in respective countries through preparation of country reports, PCM workshop and stakeholder analysis;</li> <li>Participants will learn basic concepts and approaches of disaster management and reduction, such as common/different points in preparedness and response to disasters of different nature through lectures on cases of disaster preparedness</li> </ol>	Implementing Partner	Research Insti Urban Sfety and Kobe Universit	tute for d Security, y
and emergency response in Japan;	Department	Global Environ	ment
3. Participants will obtain basic ability to think on their own and apply Japanese experiences and lessons to improve their disaster management systems through	in Charge	Department IICA Kansai (I	)
<ul><li>interactive lectures, discussions and site visits;</li><li>4. Participants will formulate action plans to improve existing disaster management strategies and institutional frameworks in respective countries, using knowledge</li></ul>	JICA Center	Jion Kalisai (I	- /
and skills obtained through the training course.	Cooperation	2015~2017	
	Period		
	Remarks and Website		

Raising Awareness of Disaster Reduction 防災意識の啓発・向上 1684487 Continuing 20 participants Target Countries : Course No. : J1604236 Sector:Water Resources/Disaster Management/Comprehensive Disaster Management Sub-Sector : Language : English Outline The program provides introduction of raising awareness activities on disaster reduction, such as community-based disaster management activities, story-teller and so on, so that participants can understand significance and effectiveness of these activities. Participant is also expected to formulate an action plan on raising awareness of disaster reduction to reduce disaster damages in respective country. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Department in charge of raising Each Participant is expected to formulate an action plan for raising awareness activities on disaster reduction so that citizens in respective country can acquire awareness on disaster reduction and/or necessary knowledge and skills to respond disasters. disaster management education in [Outcome] central or local government 1. To understand the significance and activities of raising awareness on disaster [Target Group] reduction in school education. 1. Person in charge of raising 2. To understand the significance and activities of raising awareness on disaster awareness on disaster reduction in reduction for community. central or local government 3. To understand the significance and function of the institutions and facilities for 2. Person who has more than 2 years' raising awareness on disaster reduction. experience in the relevant field To understand the significance and activities of raising awareness on disaster 3. Person who has English skills to 4 communicate and present reduction through mass media. 5. To make an action plan so that citizens in respective country can acquire the necessary knowledge and skills to respond disasters. Contents Course Period  $2017/01/09 \sim 2017/02/11$ 1. Participants learn the strategy and activities on disaster management education in Asian Disaster Reduction local government, especially programs in high schools and universities for future Center Implementing leaders to promote disaster prevention. 2. Participants learn cases of raising awareness activities in community, especially Partner activities which is designed to receive attention from ordinary citizens make more effectiveness in the view point of raising awareness on disaster reduction. Department Global Environment 3. Participants learn roles of institutions and facilities as well as storytellers Department which contribute to raising awareness on disaster reduction over region and in Charge generation. JICA Kansai (Ⅱ) 4. Participants learn cases of raising awareness activities by mass media which JICA Center treats information on disasters as well as activities of disaster management 5. Each participant makes an each action plan for promoting raising awareness on disaster reduction, referring to the output of training program, modules 1 to 4 Cooperation  $2015 \sim 2017$ mentioned above. Period XAs the program will be collaborated with KOICA(Korea International Cooperation Remarks Agency) on 2015, some Korean experts will lecture based on Korean experiences on and raising awareness of disaster reduction Website

1684489 Promotion of Mainstreaming Disaster Risk Reduction 防災主流化の促進 Continuing 20 participants Target Countries : contry with high risk of natural disater. Course No. : J1604412 Sector:Water Resources/Disaster Management/Comprehensive Disaster Management Sub-Sector : Language : English Outline World conference on Disaster Reduction was held in March, 2015. As a result of the conference, mainstreaming disaster risk reduction is required to improve disaster resilient country, which is consisted of (1) high prioritization of DRR, (2) development plan taking into consideration of DRR and (3) promoting investment to DRR. This training program has objective to promote mainstreaming DRR in participant's countries. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Department/division/institution in To learn concept of mainstreaming DRR and formulate Action plan to promote mainstreaming DRR is made based on good practice of Japan and other countries. charge of DRR in national/local government or other sector's Outcome 1. To understand importance of relation between development and DRR and high organization prioritization of DRR into national policy. To understand importance of consideration of development policy and plan taking [Target Group] into consideration of DRR To understand effectiveness of investment to DRR <Job title> 4. To formulate action plan to promote mainstreaming DRR based on good practices of Officials working for DRR(Director or Japan and other countries. equivalent position) <Working experience> More than 2 years working experience of administrator in charge of DRR(response, recovery/reconstruction, prevention, mitigation). Contents Course Period  $2016/11/06 \sim 2016/11/19$ NPO SEEDS Asia 1. Country report presentation 2. Disaster management administration in Japan(national, prefectural and city, town Implementing and village) Partner Policy of high prioritization of DRR (National and local government) 4. Importance of investment to DRR Administrative support to community for disaster resilient society Department Global Environment 6. Good practices of mainstreaming DRR in Japan (earthquake resistant building for community facility such as school, hospital and government office, education of Department in Charge disaster prevention, Infrastructure for DRR, evacuation facility, warning system JICA Kansai (Ⅱ) etc.) JICA Center DRR by private sector(Business continuity plan, recovery of lifeline)
 NGO/NPO's responsibility Gender and DRR Cooperation  $2015 \sim 2017$ 10.Observation of DRR related facilities Period 11. Disaster resilient city development planning 12. Action plan presentation Remarks and Website

# Disaster Management on Infrastructure (River, Road and Port) インフラ(河川・道路・港湾) における災害対策

1684490

Continuing 24 participants

#### Target Countries :

Course No. : J1604117/J1604118

Sector:Water Resources/Disaster Management/Comprehensive Disaster Management

Sub-Sector:

Language :English

# 

In this training course, participants will learn measures of disaster prevention, mitigation, and rehabilitation for infrastructure (River, Road and Port) against various natural disasters (ex. earthquake, landslide, flood, typhoon, etc.) through lectures and site visits in Japan.

Objective/Outcome	Target Organization / Group		
[Objective] To acquire knowledge on applicable techniques for more practical, efficient and effective disaster prevention, mitigation and rehabilitation for infrastructure (River, Road and Port), and make Action plan for their country or organization.	[Target Organization] Governmental organizations in charge of disaster management for infrastructure (River, Road and Port)		
<ul> <li>[Outcome]</li> <li>1. To understand the similarities and differences of the feature of natural disaster between the participant's country and Japan.</li> <li>2. To understand the national and municipal governmental policies, plans and measures in Japan.</li> <li>3. To understand weather forecast, early warning system, information sharing system, etc.</li> <li>4. To understand the engineering techniques for disaster prevention, mitigation, and rehabilitation for infrastructure (River, Road and Port) against various natural disasters in Japan.</li> <li>5. To prepare Action Plan and propose the applicable techniques / knowledge to participant's country or organization.</li> </ul>	<ul> <li>Infrastructure (Kiver, Koad and Port)</li> <li>[Target Group]</li> <li>Engineering officials who have been in charge of disaster management for infrastructure (River, Road and Port) more than 5 years.</li> <li>2. University graduate in civil engineering or equivalent educational qualification holder.</li> </ul>		
Contents	Course Period	$2016/05/16 \sim 2016/07/16$	
[Preliminary Phase in Home Country] Making an inception report which describe the issues and problems about disaster prevention, mitigation, and rehabilitation for infrastructure (River, Road and Port) in participant's organization or country.	Implementing Partner	Construction Services in Kinki Region	
<ol> <li>Similarities and differences of the feature of natural disaster between the participant's country and Japan</li> </ol>	Department in Charge	Global Environment Department	
<ol> <li>National and municipal governmental policies, plans and measures in Japan</li> <li>Weather forecast, early warning system, information sharing system etc.</li> <li>Engineering techniques for disaster prevention, mitigation, and rehabilitation for infrastructure (River, Road and Port) against various natural disasters</li> </ol>	JICA Center	JICA Kansai (II)	
5. Problem analysis, solution finding, Action Plan(A/P) preparation	Cooperation	2014~2016	
【Finalization Phase in Home Country】 Submitting the report on the progress of participant's Action Plan to JICA six months after the training	Remarks and Website	(A)2016/05/16-2016/07/16 (English:Kansai) (B)2016/10/24-2016/12/17 (English:Kansai)	

1684492 Rescue Techniques 救急救助技術 Updated 14 participants Target Countries : Disaster prone countries in the wold Course No. : J1604115 Sector:Water Resources/Disaster Management/Comprehensive Disaster Management Sub-Sector : Language : English Outline This training is designed for the rescue instructors or the future rescue instructors. The participants are expected to make "action plan" in order to disseminate knowledge and skills obtained through this course upon returning to their respective countries. The training institute has much experience in providing rescue training program to international participants with highly qualified instructors. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Fire Service Organization (Central The training program is designed to equip the rescue instructors with the relevant knowledge and skills on how to rescue victims from life-threatening disasters. Government,Local Government or Private Outcome Sector) 1. Participant will acquire basic knowledge and skills in order to rescue people who are faced with life-threatening disasters and also unable to escape by himself. [Target Group] 2. Participant will acquire basic knowledge of first aid, such as fracture fixation, Instructors/ trainers or those who are hemostasis , cardiopulmonary resuscitation at rescue scene and understand education expected to be instructors/ trainers in the area of rescue techniques. The method of disaster risk reduction to community. expected participants have basic 3. Participant will acquire the necessary knowledge as an instructor of rescue knowledge on rescue operation and have more than three-year experience in techniques. rescue operation. 4. At the end of training, participant will be able to plan for human resource development in the home country, accordance with the rescue techniques that they acquired through training. Contents Course Period  $2016/05/09 \sim 2016/07/09$ · Lectures and training on various rescue techniques Under Planning Implementing Basic (climbing, rope bridge crossing,rope descent) Use of the rescue tool. Water Partner rescue. Mountain rescue. Rescue from vehicle accident. Rescue from the collapsed house Department Global Environment · Lectures and training on first aid. Department in Charge Cardiopulmonary resuscitation, Hemostasis, Fixation etc. JICA Kansai (Ⅱ) JICA Center Lecture on safety management. Lectures on rescue command procedure. Lectures and training on international rescue team. Lectures on planning training. Diagram training. Scenario training. Comprehensive training, disaster education to community Cooperation  $2016 \sim 2018$ Period Lectures on rescue command procedure Lectures on simulation training Visit each The expected participants fire department, Lectures on large-scale disasters and special incident, aged 35 and below in International response mechanism. principle mastered rope Remarks work, method of climbing ladder and entering method and from a ladder to building Website and can swim more than 50m

Fire and Disaster Management			1684493
消防・防災			Continuing
		8	participants
Target Countries : Countries which are strengthening fire and disaster management			
Course No. : J1604248			
Sector:Water Resources/Disaster Management/Comprehensive Disaster Management			
Sub-Sector:			
Portiginante con take a high quality training program chaut fire fighting techniques	fire proven	tion and dispat	on
prevention based on experience and resource of implementing partner who is continuing In training course, participants learn Fire Fighting and rescue techniques on various participants also learn effort of fire and disaster management department of Japan su prevention towards community and etc.	g training cot s situation. I uch as awarene	urse more than In addition to ess activities	25 years. above, of disaster
Objective/Outcome	Target	Organization /	Group
		organization /	orouh
[Objective] Fire Fighting techniques, fire prevention and disaster prevention is implemented based on action plan, and system of Fire and Disaster Management on participant's organization is enhanced.	Fire Service Government, Private Sect	ganization] e Organization Local Governme cor)	(Central ent or
[Outcome]	[Target Gro	aug	
1. To be able to practice fire and rescues technique by utilizing the equipment	Be		
appropriately and using various fire extinguishing methods. 2. To understand fire prevention and disaster management in community in Japan	I. engaged 1 vears.	in fire service	e more than b
3. To be able to command a unit by using the above-mentioned techniques and	, our o.		
knowledge.	2. or will b	pe a commander	of
4. To be able to plan and disseminate activities after returning nome.	education i	ng or an Instru Institutions	ictor of fire
	3. universit	cy graduates or	have the
	oquitaione	occupational e	
	4. under 45	years.	
	5. proficier	nt in English.	
Contanta			0010/11/00
	Course Period	$2016/09/04 \sim$	2016/11/26
[Preliminary Phase] Formulation of report to present current situation in the participant's country		Management Bur	ster reau City
roundation of report to present current situation in the participant's country	Implementing	of Kitakyuushu	1
[Core Phase in Japan]	Partner		
2. Fire investigation (lecture and practice)			
3. Safety control (lecture and practice)	Department	Global Enviror	nment
4. Command theory (lecture) 5. Fire prevention and disaster management in community in Japan	in Charge	Department	
6. Handling fire trucks and firefighting equipment (lecture and practice)		JICA Kyushu	
7. Rescue and emergency measures in various fire sites (lecture and practice)	JICA Center		
8. Preparation and presentation of Action plan.	Cooperation	$2014 \sim 2016$	
[Finalization Phase]	Period	2014 - 2010	
Implementation of the formulated plan, and report progress in the form of final			
I ODOT 0			
	Remarks		
	and		
	Website		

Target Countries : Countries which have disaster risk

Course No. : J1604299/J1604095/J1604301

Sector:Water Resources/Disaster Management/Comprehensive Disaster Management

Sub-Sector:

Language : English/Portuguese

# Outline

This course is designed for persons in charge of disaster management, mitigation, preparedness, response, recovery and reconstruction either from central government or local government.

Participants get the basic knowledge and plan on disaster management as well as lessons and experiences in Japan and Hyogo/Kochi Prefecture, and are expected to identify problems / challenges in their countries. They are also expe

Objective/Outcome	Target Organization / Group	
[Objective] Participants are requested to contribute to the capacity development on disaster management in their countries throuth formulating and implementing their Action Plans in terms of disaster management and mitigation based on experiences and lessons in the course. [Outcome] 1) To understand roles of national and local governments in disaster management in Japan and effectiveness of prior investemnt for DRR in order to 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 type of disasters and lessons from past disasters in order to examine how to adopt acquired knowledge in each country. 4) To formulate the Action Plan (Draft) to solve issues in each country. 5) To share the drafted Action Plan in participant's organizations and to implement the Action Plan (Draft).	[Target Organization] Central government or local governm in charge of disaster management [Target Group] The officials who are in charge of disaster management sector either i central government or local government, and are the university graduates and/or those who have practical experiences in disaster management sector more than three years	
Contents	Course Period	$2017/01/09 \sim 2017/02/25$
<preparatory exercise=""> * Making Job Report <course in="" japan="" period=""> * Disaster risk management in Japan(Prior investment in DRR and DRR by both structual</course></preparatory>	Implementing Partner	(A)Asian Disaster Reduction Center / (B)Kochi University
* Overview of past disasters and recovery experiences in Japan(concept of "Build Back Better")	Department in Charge	Global Environment Department
<ul> <li>* Disaster risk reduction education</li> <li>* Activities for raising awareness of disaster management</li> <li>* Community based disaster risk management</li> <li>* Function of mass-media on disaster</li> </ul>	JICA Center	JICA Kansai (2)/JICA Shikoku
<pre>* Function of community radio on disaster * Recovery of life line such as electricity and water</pre>	Cooperation Period	2016~2018
<pre>* Function of Japanese Red Cross Society * Insurance on disaster * Local governments' countermeasures against disasters caused by storm, flood and mud * Research Institutions' avtivities against each disaster * Countermeasures against earthquake and Tsunami, such as quake-resistant building and seawall construction * Practice in disaster management skill * PCM (Project Cycle Management) training * Review the whole training * Formulate the Action Plan (Draft)</pre>	Remarks and Website	(A)2017/01/09-2017/02/25 (English:Kansai) (B)2016/08/23-2016/09/30 (English:Shikoku) (C)2016/09/12-2016/10/29 (Portuguese:Kansai) Global Issue & ODA (disaster Risk Reduction) http://www.mofa.go.jp/ic/g ic/page22e_000636.html

Updated

1684494

Comprehensive Disaster Risk Reduction for Central Asia and Caucasus 中央アジア・コーカサス総合防災行政

 Target Countries : Central Asia and Caucasus Countries

 Course No. : J1604297

Sector:Water Resources/Disaster Management/Comprehensive Disaster Management

Sub-Sector :Water Resources/Disaster Management/Earthquake Disaster

Language :Russian

# Outline

This course aims to improve the capability as to disaster risk management against natural disaster in Central Asia and Caucasus region for persons in charge of disaster management in central or local government. Participants get the basic knowledge and experiences on natural disaster management in Japan and Hyogo Prefecture and will identify problems in their countries and tackle them by their Action Plans.

Objective/Outcome	Target Organization / Group [Target Organization] Ministry or local government related to disaster management / mitigation [Target Group] The officials who are in charge of the DRM administration either in central or local government, and are the university graduates and/or those who have practical experiences in the relevant field of more than three years.	
[Objective] Participants are requested to contribute to the capacity development on disaster management in their countries throuth formulating and implementing their Action Plans in terms of disaster preventnion and mitigation based on experiences and lessons in the course. [Outcome] 1) Participants are able to arrange to "Make Disaster Risk Reduction a Priority" 2) Participants are able to propose a concrete plan for "Know the Risks and Take Action" 3) Participants are able to propose a concrete plan for "Build Understanding and Awareness" 4) Participants are able to propose a concrete plan for "Reduce Risks and Be Prepared and Ready to Act" 5) Participants plan Action Plan for improving DRM capacity in participant's organization. At the same time, regional Network of DRM organization is deepened.		
Contents	Course Period	$2016/06/20 \sim 2016/07/30$
<preparatory exercise=""></preparatory>		Under Planning
* Making Job Report <course in="" japan="" period=""></course>	Implementing Partner	
* Disaster risk management in Japan		
* Overview of past disasters and recovery experiences in Japan	Denentment	
* Disaster prevention education * Activities for raising awareness of disactor management		Department
* Community based disaster risk management	in Charge	
* Function of mass-media on disaster		JICA Kansal (II)
* Function of community radio on disaster	JICA Center	
* Recovery of life line such as electricity and water		
* Function of Japanese Red Cross Society	Cooperation	2016~2018
* Insurance on disaster	Period	
<pre>* Research Institutions' avtivities against each disaster * Countermeasures against earthquake and Tsunami, such as quake-resistant building and seawall construction * Practice in disaster management skill * PCM (Project Cycle Management) training * Review the whole training * Formulate the Action Plan (Draft)</pre>	Remarks and Website	Global Issue & ODA (disaster Risk Reduction) http://www.mofa.go.jp/ic/g ic/page22e_000636.html
<pre><finalization country="" in="" participant's="" phase=""> * Submitting the report as to the progress of Action Plan (Draft) to JICA in about 6</finalization></pre>		

15 participants

Disaster Risk Reduction for Central America			1684497
甲苯防災対束			Updated
		12	participants
Target Countries : Member countries of CEPREDENAC			
Sector : Water Resources/Disaster Management/Comprehensive Disaster Management			
Sub-Sector :			
Language :Spanish			
Outline			
This program is designed for governmental organization to develop the capacity of the focusing on the transmission of the information on disasters for local redidents and participatns are requested to acquire the knowledge on the concrete countermeasure for the each stage of disaster management.	disaster mar the persons o r the impleme	nagement. Espec on disaster man entaion and pro	ially, agement, the motion of
Objective/Outcome	Target	Organization /	Group
[Objective]	[Target Org	ganization	
The officials belong to central government office or local government in charge of promoting disaster risk reduction and mitigation enhance the capacity of disaster management through implementing the activities on disaster risk reduction and mitigation. <outputs> 1. To be able to explain the function and the methodology of the collaboration of administrative bodies through understanding the history of natural disasters and policies based on the disaster experiences in Japan 2. To understand the collaboration among administrative bodies, citizen, community, mass media and research institutes about the information management on natural disaster 3. To understand the concrete methodology for the dissemination on raising awareness of disaster risk reduction and information management, considering disaster risk reduction in local communities 4. To understand the challenges of project management and consider the improvement plan in each country, 5. To make action plan</outputs>	Central government or Local Government in charge of Disaster Risk Reduction and Mitigation [Target Group] Current Duties:Officials in charge of Disaster Management in Central or Local Government Experience in the relevant field:have experiences for more than 2years Others:The person who will be in touch with JICA BOSAI project in the future is preferable		
Contents	Course Period	2017/01/09 $\sim$	2017/02/18
<pre>[Preliminary Phase] Preparation of Country Report, Exchange of opinion with ex-participants [Core Phase] - Overview of Great Hanshin-Awaji Earthquake and recovery and reconstruction - Early warning system for natural disasters in Japan</pre>	Implementing Partner	Under Planning	
- Function of mass media in disasters (Radio Act, the actual operation and provision of Disaster Countermeasures Basic Act)	Department in Charge	Global Environ Department	ment
<ul> <li>- Kisk communication</li> <li>- Examples and experiences of community-based disaster management in Japan</li> <li>- Methodology about raising awareness of disaster prevention for residents,</li> <li>- Preparation of Action Plan</li> </ul>	JICA Center	JICA Kansai (I	I)
[Finalization Phase]	Cooperation Period	2016~2018	
Implementation of Action Plan after discussing the action plan with the relevant persons like JICA officers in overseas offices and BOSAI Project	Remarks and Website		

Community-Based Disaster Risk Reduction コミュニティ防災			1684498 Updated
		26	participants
Target Countries : Countries with occurence of natural disasters			
Course No. : J1604302/J1604096			
Sub-Sector : water Resources/Disaster Management/Comprehensive Disaster Management			
Janguage Finglish			
Outline			
This program aims for the participants from national/local government to understand t reduction for natural disasters and needs of self-help and mutual help, acquire the c community based disaster risk reduction in each country through the activities of res schools, private companies, NPOs etc, of Japan.	he significan oncrete metha idents (self	nce of disaster od for promotic -help organizat	risk n of ion),
Objective/Outcome	Target	Organization /	Group
[Objective] The participants will understand the significance of disaster risk reduction for natural disasters and needs of self-help and mutual help, how to promote community-based disaster risk reduction in each country, through the disaster management activities at community level in Japan, especially in Kansai and Shikoku Region.	<pre>[Target Organization / Group [Target Organization] Organizations which can play a leading role in promotion and dissemination of community-based disaster risk reduction [Target Group] 1. Person in charge of promotion and dissemination of community-based disaster risk reduction in central or local government 2. Person who has more than 3 years' experience in the relevant field 3. Must be in good health, both physically and mentally</pre>		
[Outcome] 1. The participants will be able to understand the significance of disaster risk reduction			
2. The participants will be able to understand the concepts of community-based disaster risk reduction and the needs of self-help and mutual help			
3. The participants will be able to understand how to operate drills through the activities of community organizations and drills			
4. The participants will be able to understand disaster education and the concrete method for its dissemination and awareness raising at community level			
Contents	Course Period	2016/10/10 ~	2016/11/19
1. Disaster risk reduction in each participating countries (Job Report preparation), Global tides of disaster risk reduction (The Sendai Framework for DRR), Disaster management of Japan, Overview of Great Hanshin Awaji Earthquake and its recovery, Disaster and crisis management of local government, Role of fire station and related facilities, (A course only) Gender conscious community-based disaster risk reduction	Implementing Partner	(A)Kobe Interr Center for Coc (B)Kochi Unive	ational operation / rsity
2. Community-based disaster risk reduction (CBDRR), Establishment & management of	Department in Charge	Global Enviror Department	ment
BDRR organization, disaster risk reduct activities against various disasters, ontermeasures against Nankai Trough Earthquake, Visit to the affected area of Great ast Japan Earthquake	JICA Center	JICA Kansai (2 Shikoku	2)/JICA
3. Promotion of tsunami evacuation, Volunteer fire corps, First aid and its dissemination to citizens, Town walk for disaster risk reduction, Community drill participation	Cooperation Period	2016~2018	0010/11/10
4. CBDRR and university, CBDRR in overseas, Disaster education programs (event "Iza! Kaeru Caravan!", evacuation shelter management game "HUG", etc)	Remarks	(A) 2016/10/10- (English:Kar (B) 2017/02/08- (English:Shi	2016/11/19 Isai) 2017/03/19 koku)
5. Disaster management by local government (Crisis management, promotion of community-based disaster risk reduction, promotion of disaster education, recovery city planning)	and Website	Special Textbo CBDRR will be	ook & DVD on distributed
6. Preparation and presentation of action plan,Group discussion, (A course only) Problem analysis and project cycle management method (PCM)			

1684500

Continuing

11 participants

Target Countries : Volcanic countries in Central and South America Course No. : J1604011

Course no. . j10040

Sector:Water Resources/Disaster Management/Other Water Resources/Disaster Management Issues

Sub-Sector : Language : Spanish

# Outline

Participants' countries will improve the countermeasure against volcanic disaster by creating good coordination between government and community, referring to Hokkaido's experiences. Also we will provide latest information of counter measure activities by sharing Japanese experiences in reconstruction from catastrophe of the Great East Japan Earthquake.

	Objective/Outcome	Target Organization / Group			
Ра vo pa 1. 2. 3.	Objective] rticipants' organization officially formulate plan to improve the capacity of lcanic disaster management based on the proposed "Action Plan" by respective rticipants. Outcome] To identify the issues of the volcanic disaster management in participants' country / area through understanding how to grasp volcanic disaster risk in Japan. 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. To propose ideas for productive usage of volcanoes as resources for regional promotion by learning cases in Hokkaido. To propose appropriate and feasible "Action Plan" for volcanic disaster management in participants country/regions.	<pre>[Target Org Central/Loca Research Ins of the groun disaster pre [Target Gro 1. Senior st disaster on the gr 2. Five (5) in the fi preventio</pre>	Target Organization / Group [Target Organization] entral/Local government, University, esearch Institutes and NGOs in charge 2 the ground work for volcanic (saster prevention and management [Target Group] Senior staff in charge of volcanic disaster prevention and management on the ground. Five (5) years or more experience in the field of volcanic disaster prevention and management		
	Contents	Course Period	$2016/05/31 \sim 2016/07/14$		
1. 2.	Volcanology, Volcanic disaster, case study, Local government's operation for volcanic eruption and disaster (evacuation ), Volcanic mudflow and sediment control in Hokkaido, Volcanic eruption and risk management in the world Science of real-time monitoring, Eruption forecast and damage mitigation, Volcanic, Earthquake & tsunami disaster and Remote sensing, Cooperation among stakeholders for reducing damage. Human being and Disaster, Disaster recovery.	Implementing Partner	Crisis & Environment Management Policy Institute(CeMI)		
	Education program for following generation	Department	Global Environment		
3.	Live symbiotically with volcanic mountain, lourism around Volcanic area / UNESCO Geopark	in Charge	Department		
4. 5.	Field trip( Hokkaido Komagatake, Mt.Usuzan, Mt.Tokachidake,Mt.Fuji) Country Report Presentation, Mid-Term Discussion (see Annex II for Mid-Term Discussion), Group discussion, Proposing Action Plan	JICA Center	JICA HOKKAIDO (Sapporo)		
		Cooperation	2015~2017		
		Period	1++		
		Remarks and Website	mitp.//www.npo-cem1.com/ce mi.html (Japanese only)		

Capacity-building for school-based disaster risk reduction 学校を中心とした防災能力向上 1684837 New 10 participants Target Countries : Disaster prone countries in the wold Course No. : J1604131 Sector : Water Resources/Disaster Management/Other Water Resources/Disaster Management Issues Sub-Sector : Language : English Outline · Sharing the Components and good practic of disaster prevention education, which were revealed by the lessons learned from the past disasters in Japan. · Learning the concept and activiites of Emergency And Rescue Team by school staff in Hyogo(EARTH) . • Obtaining skills to create Disaster Prevention Education Plans, which contribute to enhance school-based dister risk reduction. Objective/Outcome Target Organization / Group To obtain skills to create disaster prevention education plans, which contribute to [Target Organization] Disaster Prevention Education planning enhance school-based disaster risk reduction through sharing the components of disaster prevention education based on lessons and experiences of Japan. organizations in central and local government. [Target Group] "Educational officials who are in a position to be involved with the formulation of disaster prevention education plans in central and local gevernment. Work experience with more than 3years in the related field. Contents Course Period 2016/06/06  $\sim$ 2016/07/30 Under Planning (Before Training) Job report to be submitted. Implementing Partner (During Training) Department Global Environment 1. To understand the significance and activities to develop future leaders for disaster risk reduction in school education. Department in Charge JICA Kansai (Ⅱ) 2. To understand the significance and activities of raising awareness on disaster JICA Center management for community. 3. To understand the activities of Emergency And Rescue Team by school staff in Cooperation  $2016 \sim 2018$ Hyogo(EARTH) on disaster prevention education . Period 4. To understand the significance and function of the institutions and facilities for raising awareness on disaster prevention education. Remarks 5. Consultation for making action plan with workshop/participatory methods. and Website (After Training) Conduction action plan, Progress report of action plan.