## 18. Environmental Management

Capacity Building towards Air Quality Management 大気環境管理に向けたキャパシティビルディング

Target Countries :

Course No. : J1604290

Sector : Environmental Management/Air Pollution/Acid Rain

Sub-Sector :

Language :English

## Outline

To reduce potential adverse impacts of air pollutants on human health and ecosystems in developing countries, proper air quality management is required at all levels. This project aims to develop capacity for air quality management based on scientific tools, including atmospheric monitoring, emission inventory and model simulation, making use of the knowledge and experiences that Japan possesses.

Objective/Outcome	Target	Organization / Group
<pre>[Objective] Through obtaining the module outputs indicated below, participants are to develop a proposal which contributes to the improvement of the air quality management capacity of the countries of participants at local, national and regional level, through making use of the knowledge and techniques obtained in Japan. [Outcome] 1. To understand a whole scheme of air quality management. 2. To understand the techniques of air quality monitoring and the key issues in establishing air quality monitoring scheme, and to examine the applicability to the participant's country or region. 3. To understand the sources of air pollutants and the key issues in determining emission levels, and to examine the applicability to the participant's country or region. 4. To formulate a feasible Action Plan for air quality management in a country or region.</pre>	<pre>institute, p responsible [Target Gro Participants conditions. 1. Nominated 2. Veteraria quality mana central or 1 3. At least</pre>	l government, research ublic organization for air quality management
Contents	Course Period	$2016/07/10 \sim 2016/08/11$
(Prior Activity) Develop a report on the current situation and challenges of air quality management of the participant's country or locality.	Implementing Partner	Japan Environmental Sanitation Center
(Training in Japan)		Global Environment
The following lectures, practices and site visits are to be conducted.	in Charge	Department IICA Tokvo(Economv&Env.)
(1) Japan's Air Quality Manamagement Policy, Policy Framework for Stationary and Mobile Sources, Effects of Air Pollutants, Environmental Quality Standards.	JICA Center	JICA TOKYO (ECONOMIY&ENV.)
(2) Outline of Air Quality Monitoring, Monitoring Techniques, Monitoring Scheme at	Cooperation	2016~2018
National and Local Levels, Quality Assurance and Quality Control, Analysis and Evaluation of Monitoring Data, Observation of Monitoring Stations.	Period	The contents have been
<ul> <li>(3) Source of Air Pollutants, Development of Emission Inventory, Modeling of Transportation and Chemical Processes, Characteristics and Selection of Models, Verification of Effectiveness of Countermeasures through Models, Practices of Simulation Models.</li> <li>(4) Development and Presentation of Action Plan.</li> </ul>	Remarks and Website	reviewed and improved based on the experience in the previous training course "Air Quality Management Policy".
(Post-training Activity)		

Updated

1684789

12 participants

Control of Air Pollution from Motor Vehicles 1684834 自動車大気汚染対策 New 15 participants Target Countries : Countries that require automobile pollution prevention plans Course No. : J1604267 Sector : Environmental Management/Air Pollution/Acid Rain Sub-Sector : Language : English Outline This course offers methods to design road traffic environment management plan, focusing on automobile pollution countermeasures, taking into account not only technical aspects of automobile exhaust gas countermeasures but also social aspects such as urban transport planning and approach to Environmentally Sustainable Transport (EST) centering on public transport as Environmentally Sound Technology (EST). Objective/Outcome Target Organization / Group [Objective] [Target Organization] Ability to prepare plans for automobile pollution countermeasures will be improved in National and local government participating organizations. organization in charge of drafting policies for automobile pollution [Outcome] 1. Identify problems about automobile pollution in their organizations (in charge of countermeasures and urban traffic automobile pollution control and urban / traffic planning). measures [Target Group] 2. Understand about outlines of automobile pollution countermeasures through case Administrative or engineering studies of Osaka (countermeasures, methodologies, relationship with citizens). official who belongs to the above mentioned organization. 3. Understand automobile emissions in participating country and methods of emission management as the basis of preparing automobile pollution countermeasures. 3 years of experience working with environmental controls. 4. Understand the planning principle for introduction and dissemination of sustainable transport system and acquire methods of public education. Have a competent command of spoken and written English 5. Prepare a draft action plan for countermeasures against automobile pollution. 6. Share and examine the draft action plan in the participating organizations. Contents Course Period  $2016/11/01 \sim 2016/11/30$ Under Planning [Preliminary Phase] Implementing Preparation of Job Report Partner [Phase in Japan] Department Global Environment 1. Laws and ordinances, history and case studies of automobile pollution countermeasures in Osaka City, experiences of automobile pollution prevention plans Department in Charge of Osaka City JICA Kansai (Ⅱ) JICA Center Observation: air pollution constant monitoring facility, real vehicle experiment of automobile exhaust gas Cooperation  $2016 \sim 2018$ Practice: measurement of automobile exhaust gas, calculation of emissions, Period atmospheric dispersion simulation 3. Urban traffic planning, investigation and projection of traffic volume, Environmentally Sound Technology (EST) and Environmentally Sustainable Transport Remarks (EST), traffic jam countermeasures, mobility management, Energy saving and 4. Presentation of Job Report, workshop and presentation of Action Plan Website [Finalization Phase] Sharing and implementation of Action Plan in the participating organization

1684790 Operation and Maintenance of Sewerage System 下水道システム維持管理 Continuing 30 participants Target Countries : Course No. : J1604273/J1604338/J1604381 Sector : Environmental Management/Water Pollution Sub-Sector : Language : English Outline By the cooperation of the local city governments, who owns and manages the sewerage systems in Japan, the participants will grasp the overview of the sewerage system, including the management aspect. The course mainly deals with the sewerage systems for large cities, but the systems for small-medium scale will be also introduced. Objective/Outcome Target Organization / Group The Action Plans drafted based on this training course is implemented and the [Target Organization] Governmental organization engaged in sewerage condition is improved. sewerage 1. be able to explain the laws in Japan regarding the sewerage system and the policies and practices by the local government. [Target Group] 2. be able to explain the basic technologies for the planning and designing of 1. Engineers engaged in sewer works sewerage system (sewer networks and treatment facilities) and characteristics of 2. Occupational experience of more than 5 years in the area each treatment method. Bachelor or equivalent. 3. be able to explain the basic technologies for the maintenance management of 3. sewerage system (sewer networks and treatment facilities). 4. Fluent in English. 4. be able to explain the practices of financial management of sewerage systems and public relations activities. be able to explain the regulations of the sewer treatment imposed on the business sector and its practices. 6. be able to formulate sewerage systems improvement plans as "Action Plans". Contents Course Period  $|2016/08/14 \sim 2016/10/01|$ 1. Laws in Japan for the sewerage systems, History of sewerage system development in Road and Sewerage Bureau, City of Fukuoka Japan, History of environmental protection, Practices for river project and Implementing Kitakyushu International drinking water project by the local government including disaster management Partner Techno-cooperative Planning of sewerage systems, Planning and designing of sewage networks and plant, Association Sewage treatments methods, Small-medium scale sewerage systems <u>Urban Infrastructure</u> Maintenance management for sewer networks, treatment plants and pumping stations Department Global Environment 4. Financial management and public relation activities by the local government Water quality regulations imposed on business sectors (plants and factories), Department 5. in Charge Practice of wastewater treatment by business sectors JICA Kyushu/JICA 6. Action plan preparation & presentation, formulation & submission of final report |Kansai (I) JICA Center Cooperation  $2014 \sim 2016$ Period (A) 2016/08/14-2016/10/01 (English:Kyushu) (B) 2017/01/08-2017/03/04 Remarks (English:Kyushu) (C) 2016/09/04-2016/10/29 and (English:Kansai) Website

Water Environment Administration 水環境行政 1684793

Continuing

Target Countries :

13 participants

Course No. :J1604279 Sector:Environmental Management/Water Pollution

Sub-Sector : Environmental Management/Environmental Administration

Language :English

Outline		
Participants learn experience of pollution related to water environment, and sustainab water environment in Japan. Especially learn history and outline about preparation of roles of administration, private sector and citizens. Finally aims to enhance the abil policy in participant's organization.	legal struct	ure. Based on it, learn
Objective/Outcome		a
[Objective]	[Target Org	Organization / Group
<ul> <li>Water Environment Administration on participant's organization is strengthened.</li> <li>[Outcome]</li> <li>1 To be able to explain water environment administration and effort of local government. And utilize it to water environment administration in participant's country.</li> <li>2. Understand about countermeasures for water environment, then to be able to explain measures for adaptation to prepare water environment policy which is suited to situation of each country and area.</li> </ul>	making or managemen 2. Public or water env [Target Gro 1. Person wh making or managemen governmen 2. Person wh environme	ganization in charge of ironment management
Contents	Course Period	$2016/05/08 \sim 2016/07/30$
1. Outline of water environment management in Japan, history of pollution related to water environment and damage conditions and cause of it. History of enactment, the entire systems and roles of various measures (source of water supply, inland water, closed sea area, ground water, and soil environment in farm land and urban area which effect to water environment) for overcome of pollution, and sustainable conservation and utilization of water environment. Water environmental		Kitakyushu International Techno-cooperative Assosiation(KITA)
quality standard, role of central/local government, private sector and citizens. Issues of water environment in the world and international agreement.		Global Environment Department
2. Countermeasures for conservation of water quality for source of water supply.	in onaige	JICA Kyushu
water quality monitoring, water supply project, management of wastewater, water use regulation, waste water treatment technique with septic tank and without septic tank, sewerage project.	JICA Center	
3. Exercises for policy-making method, issue analysis through preparing job report, sharing information among each country by presentation, preparing action plan and		2015~2017
guidance by lecturer.	Period	
	Remarks and Website	

Wastewater Treatment Techniques 排水処理技術 1684794 Updated 9 participants Target Countries : Course No. : J1604042 Sector : Environmental Management/Water Pollution Sub-Sector : Language : Spanish Outline This program is designed for participants to gain necessary knowledge and techniques to implement wastewater treatment system suited to their respective countries, and to formulate measures adaptive to their own countries. Objective/Outcome Target Organization / Group (Objective) [Target Organization] Central/local government or pulic To acquire the knowledge and skills for planning and implementation of wastewater treatment system, which are suitable for their countries, and to be shared at their organizations that are in charge of planning, operation and maintenance of countries. [Outcome] sewage treatment facilities (1) To understand the measures of wastewater treatment in Japan and explain issues [Target Group] comparing those of countries. Technical officials in charge of sewage treatment at central/local governments or public organizations (2) To understand the importance of wastewater treatment in relation to the preservation of water environment and living environment, and explain effective measures and treatment technology in their countries. (3) To gain basic knowledge and skills on sewage treatment planning and techniques, maintenance and management of wastewater treatment facilities and propose techniques which are applicable in their countries. (4) To be proposed the policies of the sewage treatment system, based on the knowledge and skills acquired during the training course and submitted the progress report to IICA after upon. Contents Course Period 2016/08/30  $\sim$ 2016/10/29 (Module.1) • Overview of local administration • Issue Analysis Workshop Under Planning Implementing (Module.2) • Water quality control • General theory of wastewater treatment technique Partner (Module.3) • Sewage treatment planning • Sewage treatment management • Septic tank • Maintenace and management of wastewater treatment facilities Department Global Environment (Module. 4) • Review Discussion • Action Plan Preparation • Action Plan Presentation (Module. 5) • Dissemination activities (Post-Program) • Submission of dissemination Department in Charge activity report (Post-Program) JICA Chugoku JICA Center Cooperation  $2016 \sim 2018$ Period Remarks and Website

Sewage and Urban Drainage Management 下水道・都市排水マネージメント 1684795 Updated 27 participants Target Countries : The countries are planning to develop sewerage (GDP1000~4000\$ per capita) Course No. : J1604112/J1604137 Sector : Environmental Management/Water Pollution Sub-Sector : Urban/Regional Development/Urban Development Language : English Outline In order to improve the hygienic environment and to reduce flood damages in developing countries, it is essential to draft plan and implement a project for appropriate sewage and urban stormwater drainage management. Participants will understand the basic concept of sewage (sewerage) and urban stormwater drainage (removal of rain water) management and draft a master plan for sewage and urban stormwater. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Central/local government or public To acquire basic knowledge on planning necessary for sewage and urban stormwater drainage, and to understand the necessary approaches and process to formulate master organizations which have implemented/are planning to implement plans in the future. [Outcome] sewage treatment (sewerage system 1. (Preliminary Phase) To understand the present situation of sewage and urban project). stormwater drainage management, and to identify challenges in each respective [Target Group] 1. Officials in charge of upgrading country. sewerage system 2. To understand the basic concept of sewage and urban stormwater drainage management, and be able to consider appropriate approaches to tackle their 2. To have more than three years of challenges. operational experience in the fields 3. To be able to explain the approaches and process from planning to construction of 3. To be a university graduate (civil sewage and urban stormwater drainage management. engineering) or a person with equivalent qualification 4. To make an action plan including a master plan (draft) for sewage and urban stormwater drainage management, the decision-making process (draft) considering 4. To be thirties in principle. community participation and challenges and prospect in the participants' countries. Contents Course Period Under Planning Under Planning 1. Preliminary Phase (1) Preparation of a country report. Implementing Partner Core Phase in Japan (1) To understand the basic concepts of sewage and urban stormwater drainage management. Department Global Environment (2) To learn about the project implementation in Japan (3) To understand the process of formulating project plans and technical aspects of Department in Charge each technology. JICA Tokyo (Economy&Env.) (4) To understand sewerage financing, methods for operation and maintenance JICA Center (5) To consider the implementation system for projects, public education, low-cost technologies etc. Cooperation  $2016 \sim 2018$ Finalization Phase Period (1) To share and consider the action plan among participants' organizations. (A)Under Planning (English:Tokyo) (B)Under Planning Remarks (English:Tokyo) and Website

1684815 Development of Recycling Policy リサイクル制度設計 Continuing 12 participants Target Countries : Course No. : J1604134 Sector : Environmental Management/Industrial Solid Wastes Sub-Sector : Private Sector Development/Small and Medium Enterprises/Supporting Industries Promotion Language : English Outline To achieve sustainable economic growth in developing countries, there is a growing necessity for establishing a society with environmentally-sound material cycle by effective utilization of resources. For this purpose, industrial policy approach which promotes development of recycling industry is essential. This course fosters talent to plan recycling policy through learning Japanese experience such as EPR. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Participants will be able to understand key concepts related to recycling policy, and Ministries engaged in development of enhance their capacity for planning policy which promotes development of recycling recycling policy, industrial waste management or development of recycling industry in their home country. [Outcome] industry such as supporting for SMEs. 1. (Preparatory activity) To understand and recognize the current situation, issues and problems of the recycling industry to be tackled in their home country. [Target Group] 2. To be able to explain the background and necessity of creating a society with an 1. be core person in charge of development of recycling environmentally-sound material cycle in each developing country, and an essential policy approaches for this purpose. policy, industrial waste management 3. To understand recycling systems and policies in Japan and explain difference from or development of recycling industry in related ministries. 2. be over 30 years old in principle. systems in their countries. To be able to explain key concepts related to 3R Industrial Policy. 5. To understand and explain the differences in recycling facilities between Japan and their countries through visits to facilities related to recycling. 6. To be able to explain the applicability of recycling systems and approaches in Japan and issues to achieve it. To be able to discuss specific future activities to promote recycling policy in their countries. Contents 2016/08/10 Course Period 2016/07/24  $\sim$ [Preliminary Phase] Under Planning . Preparation of Inception Report Implementing Core Phase 1. Presentation of Inception Report/Discussion Partner Lectures regarding (1) background of the necessity for society with an environmentally-sound material cycle, 3R policy, Recycling Industrial Policy approach. Department Global Environment (2) laws relating to 3R, Environmental organization, comparison of each country Department in Charge (3) key concepts related to 3R Industrial Policy (Extended Producer Responsibility, JICA Tokyo (Economy&Env.) industrial parks (EIP), quality standards for recyclables and products made from JICA Center recycled material, and role for ministry in charge of industrial etc.) 3. Visits to recycling facilities and productions facilities. Group discussion on recycling policy in their countries in the view of 4. Cooperation  $2015 \sim 2017$ environmental regulation policy and industrial policy. Group discussion on outcomes of the training and future activities in their Period 5. countries. Remarks and Website

Enhancement of Solid Waste Management Capacity (Advance, Planning&Policy) 廃棄物管理能力向上(応用、計画・政策編) 1684798 Continuing 40 participants Target Countries : Course No. : J1604086/J1604087/J1604099/J1604088 Sector : Environmental Management/Urban Solid Wastes Sub-Sector : Language : English/Portuguese Outline Through lectures and field visits about Japanese strategies and activities by government (central and local), corporates and communities, this course aims to clarify the issues and enhance capacity of solid waste management, especially recourses circulation, 3Rs, social awareness and participation. Through the above, participants will formulate action plans towards sustainable recycle-oriented society. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Participants clarify their respective countries' issues on SWM, and formulate action Central and local government, related plans concerning measures for a sustainable recycle-oriented society. organizations, or corporates engaged in solid waste management Outcome 1. To clarify the common issues and country specific issues regarding SWM. [Target Group] 2. To comprehend the laws, regulations and systems of solid waste management of Expected job title> Japanese central and local government, and to clarify the differences between Administrative officers of Japan and participants' respected country. governments(central and local) and 3. To comprehend concepts and methods of resource recycling and 3Rs and to find the related organizations way to apply to participants' country. <Expected job experiences>
more than 3 years experiences in SWM 4. To acquire the know-how to build a sustainable society through the cases or activities of government, communities, and corporates. 5. To formulate an action plan towards a sustainable recycle-oriented society . <0ther> participants should stay engaged in SWM after the programme Contents Course Period  $2016/06/13 \sim 2016/07/09$ 1-1. Inception report presentation and discussion Learning and Ecological Activities Foundation for 1-2. Present situation of solid waste problems Implementing Children, Kyoto Municipal 2-1. Environmental plans, policies, laws of Japan and local government Partner Center For Promotion of Government operations of SWM 2 - 2Environment Protection 3-1.Reduce (3R) Recycle (3R) 3-2. Department Global Environment PPP, cooperation with private sectors 3-3. Department Environmental Education 4-1. in Charge 4-2. Social awareness and participation, Environmental Education JICA Kansai (Ⅱ) Discussions and formulation of action plans JICA Center Cooperation  $2014 \sim 2016$ Period (A) 2016/06/13-2016/07/09 (English Kansai) (B) 2016/10/24-2016/11/19 Remarks (English:Kansai) (C) 2016/08/15-2016/10/08 and (Portuguese:Kansai) Website (D) 2016/08/22-2016/09/17 (English:Kansai)

Advancement of Solid Waste Management Technologies (Advance, Technique) 廃棄物管理技術(応用、技術編) 1684801 Continuing 24 participants Target Countries : Course No. : J1604268/J1604272 Sector : Environmental Management/Urban Solid Wastes Sub-Sector : Language : English/Myanmar Outline This program is designed for engineering officers engaged in waste management. In particular, it focuses on treatment processes of sanitary landfill and 3R rather than collection and transportation as an advanced course. Participants will be able to learn about relevant techniques such as an innovative project of Eco-town, semi aerobic landfill, composting, industrial waste treatment and so forth. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Governmental organization engaged in Participants will be able to elaborate and propose their action plans to technically improve existing processes (in particular, final disposal and intermediate treatment) waste management through the course contents. [Target Group] 1. Engineering officers in charge of [Outcome] 1. Be able to explain an outline of waste management policy and administration in waste treatment processes on Japan including Kitakyushu City. collection, transportation, Be able to explain concrete technologies that are applied to treatment processes intermediate treatment and final of collection, transportation, incineration, intermediate treatment and final disposal Occupational experience of more disposal in Japan. than three (3) years in relevant 3. Be able to explain policy outline, resource recycling technology and final disposal for dealing with industrial wastes. field 4. Be able to examine and identify possible ideas to be applied for technical improvement. Contents Course Period  $2016/07/10 \sim 2016/09/10$ Participants will learn the followings through lectures, site visits, practices and Kitakyushu International Techno-cooperative discussions. Implementing Association (KITA) Partner 1. Waste management administration and planning of Kitakyushu City, Establishment of sound material cycle society, Eco-town project, Life cycle assessment of waste, Overview of solid waste management in developing countries and Japanese assistance Separate collection, Incineration technology, Recycling technology (Eco-town), Department Global Environment 2. Composting technique, Biogass recovery, Refuse Derived Fuel (RDF), Structure and Department in Charge maintenance of semi aerobic landfill site, Leachate treatment, Composition JICA Kyushu analysis of refuse JICA Center Industrial waste administration, Countermeasures against illegal dumping, 3 Treatment and recycling technologies for sludge, waste oil and plastic refuse 4. Job report presentation, Issue analysis workshop, Group review discussion, Cooperation  $2014 \sim 2016$ Instruction of action plan Period (A) 2016/07/10-2016/09/10 (English:Kyushu) (B) 2016/10/02-2016/12/03 Remarks (Myanmar:Kyushu) and Website

1684803 Continuing 15 participants

Target Countries : Island Countries or countries with islands

Course No. : J1604028

Sector:Environmental Management/Urban Solid Wastes

Management of Sustainable Recycling Business in Islands Areas 島嶼地域における持続可能なリサイクル事業運営

Sub-Sector :

Language :English

## Outline

Compared to the situation in landlocked countries, recycling companies (or NGOs) in island countries do more important roll for sound recycling society as an entrance and exits of recyclable materials. However, they are facing with many disadvantages such as little scale merits and high exporting costs, etc. This course will enhance sustainability of their business and thus make the firm recycling society.

Objective/Outcome	Target	Organization / Group
<ol> <li>To summarize the current situation, issues, and best practices etc. in the business report.</li> <li>To acquire the framework and History of recycling in Japan.</li> <li>To acquire solutions for the efficient recycling business.</li> <li>To make the business plan by using recycling business management and management consultation.</li> </ol>	priority. Central or 1 supervises acceptable. [Target Gro Have more th experience i Have a good Not be servi This course background t	trepreneurs or NGOs have ocal ministries which recycling business is up] an three (3) years of n recycling field. command of English. ng in military. doesn't expect educational o the participants, but sic PC skill such as
Contents	Course Period	$2016/05/11 \sim 2016/06/11$
<ul> <li>1-1 Presentation of business report.</li> <li>2-1 Law and measure of recycling in Japan.</li> <li>2-2 History, current situation and issues of recycling of Japan.</li> <li>2-3 International trend of recyclable resources.</li> <li>3-1 Technology, techniques and knowhows of recycling equipment, dismantlement, discretion, compression and packing, etc.</li> </ul>	Implementing Partner	Under Planning
3-2 How to approach information on recycling business, Mechanism of pricing of recyclable resources.	Department in Charge	Global Environment Department
<ul> <li>3-3 Business management, social responsibility (CSR), and safety management of recycling business.</li> <li>3-4 Cash flow and sustainability of recycling business.</li> <li>4-1 Making short-term business plan or business improvement plan utilizing what</li> </ul>	JICA Center	JICA Okinawa
participants acquired in Okinawa. 4-2 Presentation and discussion on business plans with Okinawan specialists.	Cooperation Period	2015~2017
	Remarks and Website	

Compre 総合的 <sup>7</sup>	hensive Waste Management な廃棄物管理(全般)			1684805 Continuing
			60	participants
-	Countries :			
Co	urse No. : J1604121/J1604089/J1604091/J1604300/J1604313			
	Sector : Environmental Management/Urban Solid Wastes			
	b-Sector : Environmental Management/Industrial Solid Wastes			
	Language:English/Spanish Outline			
TT1 ·			<u> </u>	
policy,	ogram aims to draw applicable solution for waste management by learning from Ja appropriate technology of SWM, social awareness and citizen participation. In a good examples of respective country's SWM and finally make action plan.			
	Objective/Outcome	Target	Organization /	Group
particip discharg		management i	anization】 esponsible for n local or cent or equivalent of	tral
[Outcom 1. Under manag diffi 2. Under in Ja respe 3. Under	me] rstanding and sharing the situation, activities and good examples of waste gement in respective countries to get idea for the solution of each iculty.	managemen governmen organizat 2. Person wh	in charge for a it in central/le it or in equival	ocal lent e of
and f 4. Under citiz 5. Under	final disposals. rstanding the management policy and activities for promoting social awareness, zen participation and recycling-oriented societies through 3R. rstanding the policy, plan, treatment and resource recycling technology of strial waste			
	Contents	Course Period	$2016/06/06 \sim$	2016/07/09
2. Histo manag and p	try report presentation / Action plan presentation/Discussion etc. orical development of waste management and world trend/Basic plan for waste gement/consensus formation/outsourcing to the private sector private-public initiative/Organization of waste management/Legal system of e management etc.	Implementing Partner	(A)City of Sap Environmental Center/(B)Lear Ecological Act Foundation for children/(C/D)	Sanitation ning and ivities
0 01			Global Environ	ment
maint and M ∕Tr€	and system of collection and transportation of municipal waste/Operation and tenance of garbage truck/Intermediate waste transportation facility//Time Motion Study/waste incineration treatment/intermediate treatment technology eatment facility for bulk waste/resource recycling facility/Treatment of egradable waste, compost and bio gas/Type and structure of final disposal	in Charge JICA Center	Department JICA Hokkaido (Sapp Kansai (II) /J	
site	etc.	Cooperation Period	2014~2016	
parti 5. Indus	ronmental and waste education/Social awareness for the waste/Citizen icipation etc. strial waste management/Field survey and plan for industrial waste/ termeasure for illegal dumping of industrial waste/infectious medical waste	Remarks and Website	(A) 2016/06/06- (Spanish:Hokka ) (B) 2017/02/06- (Spanish:Kan (C) 2016/08/15- (English:Kan (D) 2017/01/09- (English:Kan (E) 2017/01/11- (English:Chu	ido (Sapporo) 2017/03/04 sai) 2016/10/08 sai) 2017/03/04 sai) 2017/02/25

Management of Composting Project コンポスト事業運営	1684810
	Continuing
Target Countries :	20 participant
Course No. : J1604396/J1604397	
Sector: Environmental Management/Urban Solid Wastes	
Sub-Sector :	
Language:English/Spanish	
Outline	
This training program intends to transfer techniques and know-hows on management of co information, quality control, marketing, and capacity development of stakeholders. Sin of total waste in developing countries, promotion of composting is effective as a meas	nce organic waste represents around 60
Objective/Outcome	Target Organization / Group
<ul> <li>it is planned in the organizations in charge of composting projects in the local government and, as a result, composting projects are disseminated.</li> <li>[Outcome]</li> <li>1. Be able to explain about overview of national/local policies and systems on waste management.</li> </ul>	<pre>[Target Organization] Departments that deal with waste management in the local government, especially using composting methods. [Target Group] 1. Be in charge of waste management a the local government 2. Have more than 3 years of occupational experience in the are of waste management at the local government</pre>
Contents	Courses Deried 0010 /10 /01 0010 /11 /01
	Course Period $2016/10/01 \sim 2016/11/01$
<ol> <li>Legal framework of sound material cycle society in Japan, overview of solid waste administration, policies and strategies of waste management in Kitakyushu City</li> <li>Theories and practices on composting methods according to scales, observations of compost center</li> <li>Socialization of composting projects, source separation and collection of organic waste, cost-benefit analysis of projects, observation and discussion on successful</li> </ol>	Implementing Partner Kitakyushu International Techno-cooperative Association (KITA)
case 4. Action plan formulation and discussions	Department Global Environment in Charge Department
-	JICA Kyushu
	JICA Center
	Cooperation 2015~2017
	Period           (A) 2016/10/01-2016/11/01 (English:Kyushu) (B) 2016/08/01-2016/09/01 (Spanish:Kyushu)           and           Website

Design and Maintenance of Semi Aerobic Landfill Site (Fukuoka Method)		168481:
準好気性埋立(福岡方式)処分場の設計・維持管理		Continuin
		10 participan
Carget Countries :		10 participan
Course No. : J1604274		
Sector :Environmental Management/Urban Solid Wastes		
Sub-Sector :		
Language : English		
Outline		
This training program intends to promote introduction and effective management of sem one of techniques for final disposal site. Participants are able to enhance practical curriculum covers design, maintenance, and conservation of surrounding environment, f	knowledge ar	nd techniques, as the
Objective/Outcome	Target	Organization / Group
[Objective]	[Target Org	
The drafted action plan is actually implemented, construction plan of "Semi Aerobic andfill Site (Fukuoka Method)" will be proposed, then method of Aerobic Landfill Site will be disseminated. [Outcome] 1. Be able to explain about various methods of waste disposal around the world. 2. Be able to explain about methodologies for designing of semi aerobic landfill. 3. Be able to explain about maintenance management of semi aerobic landfill. 4. Be able to explain about environmental management in semi aerobic landfill. 5. Be able to formulate an action plan for improvement of landfill sites.	of managemen site [Target Gro 1. Staffs in maintenan site 2. Occupatio than 5 ye	organizations in charge at of the final disposal up) a charge of management and acce of the final disposal mal experience of more ears in the area 50 years old
Contents	Course Period	$2016/10/10 \sim 2016/11/1$
<pre>[Preliminary Phase] Preparation of a report on overview and challenges of landfill sites. [Core Phase in Japan (lecture, practice and/or field study)] 1. Waste disposal in Fukuoka City, Examples from foreign countries to introduce semi aerobic landfill 2. Site selection, Theories on semi aerobic landfill, Construction of the new</pre>	Implementing Partner	Fkuoka Environment Foundation
disposal site, Improvement of existing disposal site	Department	Global Environment
B. Entrance management, Operations for dumping and soil-covering, Leachate treatment A. Composition analysis of solid waste and leachate, Quality control of discharged	in Charge	Department
water, Inspection of underground water and generated gas, Application to CDM (Clean Development Mechanism). Action plan formulation and discussions	JICA Center	JICA Kyushu
Finalization Phase	Cooperation	2015~2017
Formulation and submission of reports to present progress of Action Plan	Period	
. Follow-up seminars, according to the progress		Duration: 2016/10/10-2016/11/12
	Remarks and Website	

1684813 Improvement of Solid Waste Management Technologies (Basic, Technique) 廃棄物管理技術(基本、技術編) Continuing 12 participants Target Countries : Continental countries and island countries with urban population over 100,000 Course No. : J1604085 Sector : Environmental Management/Urban Solid Wastes Sub-Sector : Language : English Outline It aims at providing integrated training for solid waste management: planning, collection, intermediate treatment, final disposal, and recycling by learning mainly from Osaka City. It is designed suitable for practitioners (engineer, technician, local/central government officer) in solid waste management to acquire necessary knowledge and skills towards better solid waste management in their country. Objective/Outcome Target Organization / Group [Objective] More practical and effective solid waste management plan is proposed and [Target Organization] Local Government, National Government discussed in related organizations in targeted countries based on the Action Plan designed by participant(s) in this training program. which supports local government, and/or private sector(s) in the field of urban solid waste management. Outcome 1. Through the introduction of common issues on solid waste problems among participating countries, each participant recognizes, exchanges, and discusses how [Target Group] 1. Local/National Government Officers, to tackle with solid waste problems. technicians, engineers having more Participants gain an overall view of mechanism and initiatives in waste management 2 learning from cases in Osaka City. than 3 years experience in the 3. Participants learn about 1) collection and transportation, 2) intermediate field of solid waste management treatment such as incineration, crushing, sorting and recycling, and 3) final 2. Language: disposal 4. Regarding hazardous waste (including medical waste), participants learn the theory Good ability of spoken and written of their generation and the methodology of proper treatment. English. 5. Participants learn how to encourage citizens, who must be main actors, to take part in waste management activities. Participants analyze prioritized problem to be solved and develop an Action Plan for practical and feasible action to mitigate the waste problems. Through a series of workshops, they will share and implement the Action Plan in their country. Contents Course Period  $2016/05/09 \sim 2016/07/02$ Global Environment Centre 1. Solid waste management for sustainable society, integrated solid waste management, Foundation (GEC) waste amount & composition survey Implementing Partner 2. Waste management administration in Japan, Master Plan for household waste management in Osaka City, collection & transportation in Osaka or other cities in Kansai region, environmental education, industrial waste treatment, research Department Global Environment institute Department in Charge 3. Time & Motion Study, waste collection, transfer facilities and operation JICA Kansai (Ⅱ) 3R Policy (waste reduction, reuse and recycling) actions in Osaka or other cities JICA Center in Kansai region, composting & recycling, intermediate treatment facilities (incineration plant) Cooperation  $2014 \sim 2016$ 4. Selection and planning of final disposal site, improvement, operation and Period maintenance of final disposal site, sanitary landfill technology (Fukuoka Method) 5. Outline of hazardous waste disposal, medical waste disposal, industrial waste disposal, countermeasures against illegal Dumping Remarks and 6. Public-Private cooperation, efforts towards recycling and education by business Website sectors 7. Job Report presentation, Action Plan preparation, Project Cycle Management workshop

ganization	14 ns are facing,	1684814 Continuing participants
ganization		participants
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Topport	Organization /	Group
		Group
ntral/Loca ganization cycling cou aff of tar re than 3 is field. iversity give a good ealthy in be ntally.	<pre>1 ministries of s in charge of Companies below mpanies associa up) get organization years of experi- raduate or equi- command of Eng- oth physically</pre>	solid waste ng to ation ons with ience in ivalent. lish. and
ourse Period	$2016/08/17 \sim$	2016/10/01
		, ,
nplementing Partner		
Department	Global Environ	ment
in Charge	Department	
ICA Center	JICA Okinawa	
operation	2015~2017	
Period		
Remarks and Website		
	Garget Org htral/Loca ganization hagement. cycling co Garget Gro aff of tar re than 3 is field. iversity g ye a good althy in b htally. t be servi urse Period plementing Partner epartment .n Charge CA Center operation Period Remarks and	iversity graduate or equiver a good command of Eng althy in both physically ntally. t be serving in military. urse Period 2016/08/17 ~ urse Period 2016/08/17 ~ Under Planning plementing Partner epartment Global Environ Department IICA Okinawa CA Center operation 2015~2017 Period Remarks and

<sup>"</sup>Collection, Analysis and Dissemination of Data regarding Solid Waste Management" 廃棄物に関するデータの収集・分析と情報の発信 1684833 New 12 participants Target Countries : ASEAN members and Pacific region Course No. : J1604207 Sector : Environmental Management/Urban Solid Wastes Sub-Sector : Language : English Outline Solid waste management (SWM) data is very important for the officers in charge of SWM to understand the situation, to set the target, to enhance resident's understanding and cooperation. But, there are few good practics. This training course is designed for the SWM officers to study collection, methodology and analysis of SWM data such as waste generation, collection, recycling, disposal and composition. Objective/Outcome Target Organization / Group [Objective] [Target Organization] The central or local government in A waste annual report and a draft master plan of solid waste management which make good use of the data are formulated. charge of solid waste management in ASEAN and Pasific region countries [Outcome] 1. Able to explain how Japan utilized waste data for waste management in the past [Target Group] 2. Able to explain kinds of basic waste data, collection method and evaluation 3. Able to explain how waste data is utilized for present analysis, future planning 1. It is advisable that one central and citizens and one local gov. officers participate at the same time. 2. 45 years old or less 4. Able to explain how waste data is utilized through the site visit of waste management facilities 5. Able to explain the methods of waste annual report making and future planning such 3. Having more than 3 years of SWM as a draft master plan of solid waste management experience. 4. It is better if the officers regarding collection, processing and calculation of SWM. Contents Course Period  $2017/01/25 \sim 2017/02/18$ [Preliminary Activity] Japan Environmental Sanitation Center Making report of current situations of solid waste data in country Implementing Partner [Training in Japan] 1. Lecture: History of waste management, waste statistics, public sanitation, waste data, detailed waste data topic, collection of waste data, data calculation and Department Global Environment analysis, waste management project evaluation in Japan, evaluation method, waste management planning method, case study of data collection and analysis in JICA Department in Charge projects JICA Yokohama Observation: Waste transfer station, treatment/recycling/disposal facility JICA Center 3. Exercise: Data collection and calculation of waste collection and transportation, transfer station and landfill site, drawing chart and figure 4. Discussion and formulating Action Plan: Share experiences among the participants Cooperation  $2016 \sim 2018$ about data collection and get a solution for improvement. Compile waste annual Period report and make draft master plan of solid waste management Remarks and Website

Continuing 15 participants

Target Countries : can nominate suitable participant for 3yrs continuously Course No. :J1604062

Sector : Environmental Management/Global Warming

Sub-Sector :

Language :English

Outline

It focuses on policy making such as international framework and Japan's policy on Adaptation to Climate Change in 1st year, while it focuses on sectoral Adaptation approaches such as forecast of Climate Change, Impact Assessment on Climate Change, Sectoral vulnerability assessment (ex. agriculture, disaster prevention) in 2nd-3rd years.

Objective/Outcome	Target Organization / Group
【Objective】 The system to formulate or revise measures and policies about Adaptation to Climate Change will be strengthened in participant's organization.	[Target Organization] a national governmental office which is in charge of policy making of adaptation to Climate Change
<ul> <li>[Outputs]</li> <li>1. To understand the international framework and trends on adaptation to Climate Change.</li> <li>2. To understand impact assessment, vulnerability assessment and forecast on Climate Change</li> <li>3. To understand Japan's policy, Japanese measures, technology and cases on adaptation to Climate Change.</li> <li>4. To formulate an Action Plan for solving the problems on Adaptation to Climate Change in participant's respective organizations.</li> </ul>	[Target Group] 1. An officer in charge of planning and implementation of adaptation to Climate Change in national governmental office. (Preferably be an officer in national focal point of UNFCCC, who is in charge of coordination of adaptation issues in respective countries, or an officer in charge of policy making on adaptation to Climate Change)
<ul><li>5. To share and review the Action Plan(draft of measures and policies about Adaptation to CC) across the participant's respective organization.</li></ul>	2. Have more than 3 years of experience in the relevant field.
Contents	Course Period $2016/09/25 \sim 2016/10/22$
<pre>[Preliminary Phase] To make Inception Report [Core Phase in Japan] Presentation and discussion on Inception Report 1. ~3. Lectures, discussion, practical exercises and site visits</pre>	Implementing Partner
1. 3. Lectures, discussion, placercal exercises and site visits Overview of UNFCCC and place of adaptation, International framework of adaptation to Climate Change(hereinafter, "CC"), Trend of international discussion on adaptation to CC Process of formulation and implementation of measures on adaptation, Observation and forecast of CC, Impact Assessment on CC, Sectoral vulnerability assessment, Japan's policy on Adaptation to CC	Department in Charge         Global Environment Department           JICA Center         JICA Tsukuba(Training)
<ul> <li>JICA's cooperation towards developing countries on Adaptation to CC, Japanese measures, technology and cases on Adaptation to CC, Good practices of developing countries on Adaptation to CC, PCM (Project Cycle Management) workshop</li> <li>Making Action Plan to solve the problems on Adaptation to CC in respective countries</li> </ul>	Cooperation 2014~2016 Period
<pre>[Finalization Phase] 5. To make and submit Final Report and discuss draft of measures and policies about Adaptation to CC in related organization</pre>	and Website

1684781 Industrial Pollution Control Management 産業環境対策 Continuing 12 participants Target Countries : Course No. : J1604271 Sector : Environmental Management/Environmental Administration Sub-Sector : Language : English Outline In many countries, environmental pollution has been a growing concern. Kitakyushu City, one of Japan's industrial areas, has been implementing environmental measures to overcome the pollution it went through in the past and now is known as one of Japan's most eco-friendly regions. This program aims to share its knowledge and experience with other countries and to develop human resources in the field. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Departments of the government / A department concerning industrial pollution control can formulate improvement measures for environmental pollution issues. municipal offices in charge of industrial environmental management [Outcome] 1. Be able to explain air pollution control administration and pollution control [Target Group] technique, and propose a solution for the issue. 1. administrative officers in charge 2. Be able to explain water pollution control administration and pollution control of industrial environmental technique, and propose a solution for the issue. management in the central/ local 3. Be able to explain waste disposal administration and recycling technique, and government propose a solution for the issue 2. more than 5 years of occupational 4. Be able to explain environment improvement technique, and propose a practical experience in the field action plan for the department to which participants belong. 3. be a university graduate, majoring in engineering, or the equivalent Contents Course Period  $|2017/01/24 \sim 2017/04/22$ Participants will learn following contents through lectures, site visits, discussions Kitakyushu International Techno-cooperative and presentations. Implementing Assosiation (KITA) Partner 1. Air pollution Control: Administration, Dust collection, Exhaust gas treatment, Environmental measures of city gas industry, Environmental pollution control measures of chemical industry etc. 2. Water pollution Control: Administration, Sewage treatment plant, Environmental Department Global Environment Department facility engineering, Water quality monitoring, Treatment technology of industrial in Charge wastewater and sewage, Construction, Operation and maintenance of Johkaso system JICA Kyushu for treatment of domestic waste water etc. JICA Center 3. Solid Waste Disposal: Incineration of municipal solid waste, Industrial waste administration, Waste recycling business (Eco-town), Inland reclamation disposal, Compost etc. Cooperation  $2014 \sim 2016$ 4. Environment Improve Technique: EIA, Environmental education, Role for governments, Period Environmental regulation in Japan, Cleaner Production, Formulation & Presentation of Job Report & Action Plan etc. Remarks and Website

ASEAN Chemical Management ASEAN化学物質管理 1684782 Continuing 20 participants Target Countries : ASEAN member states Course No. : J1604148 Sector : Environmental Management/Environmental Administration Sub-Sector : Language : English Outline 1. Understanding demands in the international community and learning major countries' responses in the field of chemical management Learning current status of chemical management in the ASEAN region. 3. Discussing an action plan to improve each country's chemical management for trade facilitation and development of chemical industry Objective/Outcome Target Organization / Group [Objective] [Target Organization] Government authorities and related organization To understand the international trend and current status in the ASEAN region of chemical regulatory/management system with an aim to improving domestic management which are responsible for planning system, to facilitating healthy trade and to developing chemical industry. It is national chemical management policy, expected to be followed by an organizational discussion to reflect it after this and related associations in chemical industry which contribute to the training. planning and implementation of national chemical management. Outcome [Target Group] • Expected Job Title/ 1. (Prior activities) Analyzing and making a presentation of current situation of Administrative officials ,staffs ,or chemical management. 2. Learning basic knowledge on chemical management and being able to explain current experts who are in charge of planning status of own country's chemical management. and executing chemical management 3. Identifying issues and problems/challenges in domestic chemical management system system of industrial use in national to trade facilitation and development of chemical industry with making comparison government. Those who have equivalent of chemical management between own country and other ASEAN countries. responsibility in related organization 4. Identifying required actions for industrial/private sectors in each country in a and industry associations. globalized environment. Being able to explain expected actions based on the • Expected Job Experience in chemical knowledge obtained from lectures as well as site visits. management for one year or longer. 5. (Follow-up activities) Reviewing the proposed solutions in each country. • Must be in good health, both physically and mentally. Contents Course Period  $|2016/12/11 \sim 2016/12/23$ Under Planning 1. Current status of chemical management in own country Outline of chemical management system. Implementing International trend/discussion/actions on chemical management 4. Chemical management system in Japan and it's implementation. Partner (e.g.: Chemical Substances Control Law(CSCL), PRTR, GLP) 5. Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Department Global Environment 6. Risk Assessment 7. Responsible-care activities in industrial sectors in Japan Department in Charge 8. Article management promotion by circulating chemical components information JICA through supply-chain Tokyo(Industry&Public) JICA Center 9. Site visits (study lab. and private companies) 10. Considering/ discussing an action plan to improve chemical management in ASEAN region Cooperation  $2014 \sim 2016$ Period Ministry of Economy, Trade and Industry, Chemical Management Web site: Remarks http://www.meti.go.jp/engl ish/policy/safety\_security and /chemical\_management/ Website

Capacity Building for Ratification of the Minamata Convention on Mercury			1684783
水銀に関する水俣条約批准に向けた能力強化			Continuing
		10	participants
Target Countries : Countries which try to ratify Minamata Convention on Mercury			
Course No. : J1604035 Sector : Environmental Management/Environmental Administration			
Sub-Sector :			
Language : English			
Outline			
This program aims at improving participants' understanding and capacity on procedures ratification of Minamata Convention on Mercury. The program provides lectures and ins Minamata Disease in Japan and Japan's experience on the preparation, and identify key ratification of the Convention.	pections to s	share the lesso	ns from
Objective/Outcome	Target	Organization / 0	Group
The activities for the ratification of Minamata Convention on Mercury are promoted in	Target Org	anization]	-
the participants' countries.		in charge of 1 Convention on N	
<ol> <li>Understand the background and details of the Convention and could be able to explain the key points of the convention.</li> <li>Understand procedural steps toward ratification of the Convention and could be able to explain necessary works for the participants' country.</li> <li>Could be able to discuss challenges and possible solutions for participants' country to ratify the Convention, based on the understanding of the historical background and countermeasures for mercury pollution in Japan.</li> </ol>	【Target Gro Administrati in charge of	oup】 ve or engineer: legislative pution of Minama	ing officers reparation
Contents This program consists of following lectures and inspections.	Course Period	2016/11/20 ~ Soshisha, The	
<ol> <li>Lessons learnt from Minamata Disease in Japan</li> <li>Summary of environmental management in Japan</li> <li>Countermeasures for mercury pollution in Japan</li> <li>Details of Minamata Convention on Mercury (Detail exploration of the Convention text)</li> </ol>	Implementing Partner	Conton for Min	
<ol> <li>Japan's situation of preparatory for ratification of the Convention</li> <li>Discussion on the administrative activities of participants</li> </ol>	Department in Charge	Global Environ Department	ment
	JICA Center	JICA Kyushu	
	Cooperation Period	2014~2016	
	Remarks and Website		

1684785 Conservation and Management of Water Environment in Islands 島嶼水環境の保全と管理 Continuing 12 participants Target Countries : Island Countries or Countries with islands Course No. : J1604347 Sector : Environmental Management/Environmental Administration Sub-Sector : Language : English Outline This course is for central/local government or NGO officers to gain necessary knowledge and skills on conservation and management of water environment, which is the basis of nature, culture and industries etc., through case studies in typical 7 islands in Okinawa. Concretely, this course will provide how to cope with the management of land areas, as an axis to water environment management. Objective/Outcome Target Organization / Group [Objective] [Target Organization] Central/local government or public Participants acquire knowledge and techniques for conservation and management of water environment. organizations in charge of water environment conservation, or NGOs Outcome 1. Current situation and issues on the water environment reservation are sorted tackling with water environment out. conservation 2. Participants become able to sort out issues on establishing structure or [Target Group] management of water environment reservation planning/activities. 1. Have more than 3 years of 3. Participants become able to plan approaches programs for water environment experience in this field. 2. University graduate or conservation in their regions/countries. 4. Action plan is drafted. equivalent. 5. What participants gained in Japan is shared to the organization. 3. Have a good command of English in speaking, listening and writing. 4. Healthy in both physically and mentally . 5. Not be served in military. Contents Course Period  $2017/01/11 \sim 2017/03/17$ Under Planning Collecting relevant information, preparing country report (Discussion) Country Report presentation Implementing (Lectures) Ecosystems and nature conservation in island countries, Outline and Partner management of water resources, conservation of coral reefs and mangroves etc. 3 (Practice)Field survey in mangroves, seashores etc. (Lecture)Legal system for water environment, Measures to conserve water quality, Regulations for preventing red-clay erosion, Solid Waste Management, Department Global Environment Environmental assessment, Environmental education and public awareness, Rolls of Department in Charge the stake holders, Human resources development etc. JICA Okinawa (Practice) Various research method, Environmental workshop etc. JICA Center (Practice) PCM method, Case study on typical islands in Okinawa 7 (Discussion) Action Plan presentation Cooperation  $2015 \sim 2017$ Period Remarks and Website

Environmental Impact Assessment in ODA Projects (EIA as a Tool for Sustainable Development) ODAにおける環境影響評価(持続可能な開発のための環境アセスメント研修)			1684786 Continuing
		21	participants
Target Countries :			
Course No. : J1604284 Sector : Environmental Management/Environmental Administration			
Sub-Sector :			
Language :English			
Outline			
Conduct training course dealing with the system and the case study of Environmental In environmental considerations required in ODA projects.	npact Assessn	nent (EIA) in J	apan and
Objective/Outcome	Target	Organization /	Group
[Objective]	Target Org	0	51.0 <b>u</b> b
<ol> <li>Enhance the capacity of those from environmental divisions to examine/review EIA reports and their competence to improve the system.</li> <li>Improve the skills and performance of those from development divisions in conducting EIA in a more effective way, and gain capacity and means for environmental protection.</li> </ol>	Implementing authorities projects (OD require EIA	bodies and re of large-scale A projects etc. in national/ le or other releva	development .) which ocal
[Outcome] 1. Explain the purpose and concept of EIA (Best pursuit beyond regulatory approaches etc.)	【Target Gro 1. Technical	oup】 administrativ	e officers
<ol> <li>Explain the characteristics and situation of the EIA systems in their own countries</li> <li>Explain the outline of Japanese ODA and guidelines for environmental consideration by international aid agency such as JICA</li> <li>Explain the EIA reviews (review system, important points) in Japan</li> <li>Explain the basic ideas of survey/ forecast/ evaluation, as well as measures for protecting the environment</li> <li>Explain the process and communication methods required for EIA</li> <li>Create the plan to conduct EIA based on specific development projects</li> </ol>	knowledge of workin 2. under 45 universit	e of EIA have be and more than ag experience in years of age. I y graduate, or it background in	three years n EIA Be have
8. Propose the improvement of the EIA systems in their own countries			
Contents	Course Period	$2016/05/01 \sim$	2016/05/28
<ol> <li>Lecture on the purpose and concept of EIA and the EIA system in Japan</li> <li>Discussion based on the knowledge acquired by (1), to understand the characteristics and situation of the EIA systems in their own countries, compared with those in Japan or in other countries</li> <li>Lecture on the outline of Japanese ODA and guidelines for environmental consideration by international aid agency such as JICA</li> </ol>	Implementing Partner	IDEA Consultan Inc. (Joint ven	
<ol> <li>Lecture on the EIA reviews (review system, important points) in Japan, including case studies of national government and local governments</li> <li>Lecture and field work on the basic ideas of survey/ forecast/ evaluation, as well</li> </ol>	in Charge	Global Environ Department	
as measures for protecting the environment 6. Lecture on the process and communication methods required for EIA	JICA Center	JICA Tokyo (Eco	nomy&Env.)
7. Exercise on Creation of the plan to conduct EIA based on specific development projects, including the discussion on the improvement of the plan and points of the review		2014~2016	
8. Discussion on the improvement of the EIA systems in their own countries	Period		
	Remarks and Website		

Workshop on Administration of Environmental and Social Consideration Process for Implementation of ODA Loan Project 円借款事業における環境社会配慮実務	<sup>-</sup> a Japanese		1684820 Continuing
Terret Countries		20	participants
Target Countries : Course No. : J1604291			
Sector :Environmental Management/Other Environmental Management Issues			
Sub-Sector :			
Language :English			
Outline			
All of the JICA ODA loan projects have to comply with the "JICA Guidelines for Enviror This course provides two weeks intensive and effective training with lectures, exercis charge of environmental and social consideration (ESC) in Japanese ODA loan projects.			
Objective/Outcome	Target	Organization /	Group
[Objective]	[Target Org		
projects acquire appropriate skills on environmental and social consideration.	counterpa projects	rts of Japanes	e ODA loan
<ul><li>[Outcome]</li><li>1. Participants are expected to contribute to the improvement of EIA and resettlement system in respective countries.</li></ul>		ions which man the country	age the ESC
2. To be able to understand and explain necessity of implementing the appropriate environmental and social consideration, the practical procedure and technical points in planning and implementing the ODA loan projects in comply with the JICA Guidelines for ESC.	and socia implement	up] in charge of en l consideration ing organization ODA loan project	n in ons of
<ol> <li>To be able to understand the problems on EIA and resettlement system in respective countries and to propose a plan for improvement.</li> </ol>	have been	who have the end involved in in settlement	
Contents	Course Period	$2017/03/30 \sim$	2017/04/14
1. This course provides two weeks intensive and effective training with lectures, exercises and site visits for the officers in charge of environmental and social consideration (ESC) in Japanese ODA loan projects.	Implementing Partner	IDEA Consultan Inc. (Joint ven	ts,
<ol> <li>JICA experts and officers in charge in JICA Head Quarters will be directly involved to make the curriculum and provide lectures.</li> </ol>	Department	Global Environ	mont
3. The main components of the lectures are "explanation of the JICA guidelines for	in Charge	Department	lillent
ESC", "explanation of EIA reports for category A project" and "explanation of Resettlement Action Plan" which contribute to well understanding of participants toward JICA guidelines for ESC.	JICA Center	JICA Tokyo(Eco	nomy&Env.)
4. This course have received more than 20 members every year from 2011 to 2013, which implies the high demand toward this course. The importance of this training	Cooperation Period	2014~2016	
becomes higher and higher along with the publication of new JICA Guidelines for ESC.			
	Remarks and		
	and Website		

Management of Sewage Asset Utilizing Asset Management System with Consideration on Disaster R Management	lisk	1684832 Nev
災害リスク管理に配慮したアセットマネジメントシステムを活用した下水道資産管理		
Target Countries: Requring asset management with consideration on disaster risk management		10 participant
Course No. : J1604350		
Sector : Environmental Management/Other Environmental Management Issues		
Sub-Sector:Water Resources/Disaster Management/Other Water Resources/Disaster Management Issues Language:Spanish		
Outline		
To realize appropriate management of sewage asset in Latin American countries where s at certain level, acquire the knowledge and skills of asset management with considera through the participation of this course.		
Objective/Outcome	Target	Organization / Group
[Objective]	Target Org	
Acquire knowledge and skills suitable to the participants' countires in order to plan and implement disaster prevention measures of sewage facilities as well as operation and management of them, and share them in the participants' countries [Outcome] L. Understand activities of disaster prevention of sewage facilities and asset management in Japan, and be able to explain them comparing with the actual situation of the participants' countries 2. Understand significance and importance of sewage for conservation of water and living environment, and be able to explain effective measures of the conservation in the participants' countries	municipaliti charge of pl operation of {Target Groc <job title=""> facilities i governments, entities <ex< td=""><td>es, public entities in anning, management and sewage facilities</td></ex<></job>	es, public entities in anning, management and sewage facilities
3. Prepare an action plan to improve sewage services of the participants' countries based on the knowledge acquired in the course		
	Course Period	$2016/10/01 \sim 2016/11/3$
based on the knowledge acquired in the course Contents	Course Period	2016/10/01 ∼ 2016/11/3 Under Planning
based on the knowledge acquired in the course	Course Period Implementing Partner	
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities	Implementing Partner	Under Planning
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) . Acquire basic knowledge (general information of sewage, sewage system in Japan and	Implementing Partner Department	
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) Acquire basic knowledge (general information of sewage, sewage system in Japan and Gendai)	Implementing Partner Department	Under Planning Global Environment Department
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) 1. Acquire basic knowledge (general information of sewage, sewage system in Japan and Sendai) 2. Measures against earthquakes and tsunami for sewage facilities 3. Operation and maintenance of sewage facilities (sewage network facilities,	Implementing Partner Department in Charge	Under Planning Global Environment Department
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) 1. Acquire basic knowledge (general information of sewage, sewage system in Japan and Sendai) 2. Measures against earthquakes and tsunami for sewage facilities 3. Operation and maintenance of sewage facilities (sewage network facilities, treatment facilities, sewage cadaster)	Implementing Partner Department in Charge JICA Center Cooperation	Under Planning Global Environment Department JICA Tohoku
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster	Implementing Partner Department in Charge JICA Center Cooperation Period	Under Planning Global Environment Department JICA Tohoku
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) 1. Acquire basic knowledge (general information of sewage, sewage system in Japan and Sendai) 2. Measures against earthquakes and tsunami for sewage facilities 3. Operation and maintenance of sewage facilities (sewage network facilities, treatment facilities, sewage cadaster) 4. Regulation of sewerage quality and sewer from users 5. Asset management workshop	Implementing Partner Department in Charge JICA Center Cooperation	Under Planning Global Environment Department JICA Tohoku
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) 1. Acquire basic knowledge (general information of sewage, sewage system in Japan and Sendai) 2. Measures against earthquakes and tsunami for sewage facilities 3. Operation and maintenance of sewage facilities (sewage network facilities, treatment facilities, sewage cadaster) 4. Regulation of sewerage quality and sewer from users 5. Asset management workshop 6. Site visit to areas in process of reconstruction from disaster	Implementing Partner Department in Charge JICA Center Cooperation Period Remarks	Under Planning Global Environment Department JICA Tohoku
Contents (Prior activities) Prepare a country report, identifying actual situation and challanges of disaster prevention of sewage and service of the partipants' countries and entities (Activities in Japan) 1. Acquire basic knowledge (general information of sewage, sewage system in Japan and Sendai) 2. Measures against earthquakes and tsunami for sewage facilities 3. Operation and maintenance of sewage facilities (sewage network facilities, treatment facilities, sewage cadaster) 4. Regulation of sewerage quality and sewer from users 5. Asset management workshop	Implementing Partner Department in Charge JICA Center Cooperation Period Remarks and	Under Planning Global Environment Department JICA Tohoku