# 13. Nature Conservation

Eco-tourism for Sustainable Use of Natural and Cultural Resources 自然・文化資源の持続可能な利用(エコツーリズム)	PITD Trainers 1080  Sector: Nature Conservation  Sub-Sector: Sustainable Use of Natural Resources			1080756
		7 participants	s /	English
OBJECTIVE	TARG	ET ORGANIZA	TION / GRC	UP
Course Objective Draft plans to introduce and disseminate ecotourism as a tool for sustainable regional development involving local residents for areas, where the introduction of ecotourism is expected, are formulated by the target organizations.  [Expected Module Outputs]  (1)To be able to understand and explain philosophy and measures related to ecotourism in the context of sustainable use of natural and cultural resources.  (2)To be able to discuss plans to promote ecotourism in consideration of environmental conservation.  (3)To be able to explain methods of establishing a network of locals and related parties.  (4)To be able to formulate the Interim Report on introduction method of ecotourism.	【Target Organ Organization o which is engage tourism throug resources 【Target Group Midlevel admin promotes ecote Have more tha	r NGOs of cened in regional ph Natural envir	oromotion by conment and cs or planne	y I cultural
CONTENTS	PROGRAM PERIOD	Aug / 29 / 201	0 ~ Oct /	/ 14/2010
[Preliminary Phase in home country] Submission of Inception Report: Issue Analysis at target area/protected area [Core Phase in Japan]	IMPLEMENTING PARTNER	Kushiro Intern	ational Wetla	and Centre
(1)Management and operation of national parks in Japan, ecotourism measures in	JICA CENTER	JICA Obihiro		
Japan, general theory of ecotourism operation of facilities in natural parks and raising of public awareness.  (2)Implementation of a model ecotourism program to secure the conservation of	COOPERATION PERIOD	2010~2012		
natural and cultural resources. (3)Implementation of ecotourism programs in cooperation with communities, and establishment of a database (a phenological (topographic) calendar). (4)Discussion on formulation on draft plans to introduce and disseminate ecotourism [Finalization Phase in home country] Submission of Final Report: Final drafts of introduction method of ecotourisum and dissemination plan within six months after returning home country	REMARKS and WEBSITE	http://www.ki tml	wc.net/eng	lish/main.h

Various Forest Conservation with Community Participation 地域住民の参加による多様な森林保全	Sub	PITD Ti Sector : Nature Conserva -Sector : Sustainable Use		1080919
		12 participants	/	English
OBJECTIVE	TARG	ET ORGANIZATION	ON / GRO	UP
[Course Objective] The methods of dissemination and teaching necessary to carry out forest conservation projects with community participation will be shared with related departments in the target organization.  [Expected Module Outputs] (1) To be able to explain techniques to generate effective results from various forest conservation with community participation. (2) To be able to practice approaches to ascertain the effectiveness of forest resources and forests. (3) To be able to explain the roles of forests in biodiversity conservation. (4) To be able to practice activities with knowledge and skills acquired in the area of forests and forestry.	Target Group (1) Extension of (2) Current du forestry science forest managen experience in r (3) In good hea	ment organization  I  officer on forest cties: have generate and related basement, with more the	onservation on servation of the land and a land and and and and and and and and and	on. ge about dge about rs of entally,
CONTENTS	PROGRAM PERIOD	Aug / 22 / 2010	~ Nov /	/ 13 / 2010
[Preliminary Phase in home country] Prepare the Inception report which includes organization chart and facing issues and problems.	IMPLEMENTING PARTNER	PLEMENTING Japan Overseas Forestry Const		nsultant
[Core Phase in Japan]	JICA CENTER	JICA Obihiro		
Following lectures, practical exercises, observations and discussions are provided. (1)Current situation and challenges in Japan, local administration, Japan's cooperation, community based forest conservation, participatory approach.	cooperation $2010\sim2012$			
(2)Forest resources understanding, forest establishment, sustainable use of forest resources. (3)Ecology and biodiversity of forests. (4)Dissemination systems and methods in Japan, the PCM method. (5)Interim report making, which includes practical action plan. [Finalization Phase in home country] Reporting in home country, authorize the Action plan and submit the Final report within 6 months.	REMARKS and WEBSITE			

Environmental Education through Nature Experience 自然体験を通した環境教育	PITD Trainers 1080759 Sector: Nature Conservation Sub-Sector: Sustainable Use of Natural Resources		
	11 participants / English		
OBJECTIVE	TARGET ORGANIZATION / GROUP		
[Course Objective] Environmental education programs to raise awareness for environmental conservation are implemented by participants in their respective countries.  [Expected Module Outputs] (1) Be able to explain current situation and its problems of natural environment of their country and importance of environmental education as measures for environmental conservation (2) Be able to implement environmental hands—on education methods, which center around nature experience (3) Dissemination of appropriate environmental education program systematically in each country	【TARGET ORGANIZATIONS/GROUP】  Nature Conservation Organization, Education Institution, or NPOs/NGOs which engage in environmental education.  Central or local government officers or the member of NGOs/NPOs who are closely involved in planning and management of environmental education and expected to be in charge of such duties.  Have over 3 years of experience in environmental		
CONTENTS	PROGRAM   Oct / 18 / 2010 ~ Nov / 27 / 2010		
[Preliminary Phase in home country] Participants make a report on current situation and its problems of natural environment of their country and participant's occupation.	IMPLEMENTING PARTNER Whole Earth Institute		
[Core hase in Japan]	JICA CENTER JICA Chubu		
1) Review on current situation and its problems of natural environment of their country through presentation and discussion on the report. / 2) Comprehensive understanding of environmental education. / 3) Understanding of environmental	COOPERATION 2008~2010		
education framework in Japan. / 4) Understanding of roles of nature school. / 5) Practice environmental education programs using local resources. / 6) Practice environmental education methods, which center around nature experience. / 7) Make action plan for implementing and disseminating environmental education in participant's country. / 8) Presentation and discussion on action plan. [Finalization Phase in home country] Sharing action plan among participant's organization and making progress report of action plan by participant's organization.	REMARKS and WEBSITE		

Information Management Technology for Land Use and Natural Resources Analysis 土地利用と自然資源分析の情報管理技術	Sub-	PITD Sector : Nature Conse -Sector : Sustainable	Use of Natural Re	
		8 participants	s /	English
OBJECTIVE	TARG	ET ORGANIZA	TION / GRO	UP
[Objective] Trainees will become to be able to utilize open-source and free GIS (FOSS-GIS) software, GRASS, in their work and the technology will be shared in their institutions. [Expected Outputs] 1. Present status of land use and natural resources of his/her country will be clarified and the subject for case study in Japan will be decided. 2. Basic theory and techniques of FOSS-GIS and remote sensing will be acquired by using GRASS. 3. Global positioning figures by GPS will be displayed on the map and analysed by GRASS, then, techniques for data sharing through internet will be acquired by using Mapserver technology. 4. GIS-applied studies in Japan will be taught and trainees will work on their own projects as a case study to share the results among trainees. Action Plan is formulated 5. Action Plan is implemented and the acquired technologies will be shared.	[Target Organizati Central / Local Ge Institute which is ir management.  [Target Group] Researchers, admi with the study / in management Those who has exp who uses / has exp Those who has base	overnmental Organyolved with land unistrative officers, struction of land unperience in this field perience to use con	use / natural retechnicians whate, natural res	no is involved source
CONTENTS	PROGRAM PERIOD	Aug / 16 / 201	0 ~ Sep /	/ 25 / 2010
[Preliminary Phase] Formulation of Country & Job Report [Core Phase] Lecture, Practice, Observation, and Discussion on the following subjects.  1. Lecture: Basic theory and techniques of FOSS-GIS technology and Remote Sensing / Practice:	IMPLEMENTING PARTNER	International C Agricultural Ed University		
Install and use of GRASS, analysis of satellite data and graphic display by GRASS	JICA CENTER	JICA Chubu		
2. Lecture: Basic theory and use of GPS and techiniques of Mapserver / Practice: Use fo GPS and analysis by GRASS. Obtaining data set and data sharing through internet / Study: Good practices regarding to land use and natural resources management of Japan / Practice: Case study by each	COOPERATION PERIOD	2010~2012		
trainee and data sharing of the results among trainees 3. Others: Preparation of action plan [Finalization Phase] Organizational Approval of Action Plan, Submission of Progress Report.	REMARKS and WEBSITE			

#### Capacity Development of Carbon Budget Measurement of Tropical Forests to React **PITD Trainers** 1080048 Climate Change 気候変動対策に向けた熱帯林炭素量の計測技術のキャパシティ向上 Nature Conservation Sub-Sector: Sustainable Use of Natural Resources 10 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP Objective: Target Organization: Participants' organization shall make(finalize) the action plan of disseminating Research institution, government ministries and knowledge and skills in forest carbon accounting and climate change mitigation. agencies involved with environment and forest management intending to develop their own staff Expected Results 1:To identify and introduce problems in participant's country training program addressing reduction of forest Expected Results 2:To be able to explain global warming and deforestation carbon emission Expected Results 3:To be able to explain concepts and concerns regarding forest Target Group: -Be researchers/technicians/policy makers woking ecology, physiology and forest carbon budget Expected Results 4:To be able to practice reforestation, seedling cultivation and in research institution or governmental agencies in carbon stock and budget measurements charge of environment and forest management Expected Results 5:To be able to make and share action plan to disseminate -more than 5 years of practical experience in the knowledge and skills acquired in this program among concerned people in the relevant field (Counterpart of JICA's projects will participant's belonging organization. be prioritized) **CONTENTS** Jul / 5/2010 $\sim$ Aug / 8/2010 1. Making Issue Analysis Sheet and Job Report, Practice for Issue Analysis **IMPLEMENTING** Faculty of Agriculture, Ehime University 2. Lecture and Discussion in Japan on trends in climate change, deforestation, PARTNER global warming and condition of world forests 3. Lecture and Discussion in Japan on forest ecology, physiology and carbon JICA CENTER IICA Shikoku sequestration COOPERATION 4. Practice for reforestation, seedling cultivation and carbon budget measurement 2010~2012 **PERIOD** (Basic Training in Japan and Practical Training in Indonesia) 5. Make and present action plan to disseminate knowledge and techniques acquired in the program (in Japan and Indonesia), Revise and finalize action plan in the

The above training period include

complementary phase in Indonesia

the training in Japan.

(from July 30th to August 8th) after

REMARKS

and

WEBSITE

participant's organization and submit the final version to JICA overseas office with

recognition of director of the participant's organization.

Conservation and Sustainable Management of Mangrove Ecosystems マングローブ生態系の持続可能な管理と保全	Sub-	PITD T Sector: Nature Conserv -Sector: Sustainable Us		1080015
Target Countries: Countries and regions where mangroves are distributed	7 participants / Engl			English
OBJECTIVE	TARG	ET ORGANIZAT	ION / GRC	)UP
To share the knowledge and techniques for conservation, rehabilitation and management of mangroves and integrated coastal ecosystems with the organizations engaged in this field.  (1)Understand the main roles and functions of mangrove ecosystems, and explain the importance of conservation, effective ways of monitoring and utilization of mangrove resources including ecotourism.(2)Acquire the basics knowledge of plant taxonomy, forest ecology, nursery/plantation techniques, and to be able to apply them when collecting seedling/propagures, raising and managing nurseries.(3)Understand the integrated relation of mangrove ecosystems and their neighboring sea-grass bed and coral reefs ecoststems; and to be able to explain the need of conservation of integrated coastal ecosystems as a whole.(4)Acquire basic technique of making promotional or educational materials, presentation skills and to formulate an action plan on how to share the knowledge and the techniques.(5)To report the action plan formulated in Japan at respective organizations, and will be accepted.	conservation, r mangroves and [Target Group] (1)Current duti of conservation leader (or an ex- (2)Have more t the above ment (3)Age: be betw	organizations or ehabilitation and coastal ecosyste es: be presently /rehabilitation of epected leader). han three (3) ye	I managemems.  working if mangrovers ars of exp	n the field yes as a erience in
CONTENTS	PROGRAM PERIOD	May / 25 / 2010	~ Aug	/ 14/2010
	IMPLEMENTING PARTNER	International Soc Ecosystem	ciety for Ma	angrove
<a href="#"> <activity core="" in="" japan="" phase=""> </activity></a>	JICA CENTER	JICA Okinawa		
This program consists of lectures, field work, observation tours, and discussion.  (1)Importance of mangrove forest as a coastal ecosystem, Introduction to mangrove ecology, Method of phytosociology, Remote sensing, Environmental education	COOPERATION PERIOD	2010~2012		
(2)Mangrove reforestation and regional development, Identification of mangrove plants, Mangrove in Miyako-island, Mangrove reforestation cases in the world (3)Introduction to the coral reef ecology, Shallow water fisheries resource management, Ecosystem in tropical seagrass bed (4)Developing presentation skills and materials, Photography techniques, Formulation and presentation of action plans and project proposals (Activity in Finalization Phase in home country) (5)Share and discuss, modify the action plan in respective organizations	REMARKS and WEBSITE			

### Environmental Education for Sustainable Development -Conservation of Coastal Trainers 1080031 Ecosystems for Lives of Local Communities-持続可能な開発のための環境教育-沿岸生態系と住民生活の保全-Sector : Nature Conservation Sub-Sector: Sustainable Use of Natural Resources Target Countries: Tropical and subtropical countries with coastal lines 10 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP [Course Objective] Target Organization To understand the importance of coastal ecocsystems and relationship between Governmental organizations, educational lives of local communities, and to share the knowledge and techniques to promote institutions and NGOs involved in environmental EE(Environmental Education) effectively for sustainable development of coastal education ecosystems, with the organizations engaged in planning, promoting and [Target Group] implementing the EE. [Expected Module Output] (1) Understand and explain roles, functions and (1) Be involved (currently or possibly in the near importance of mangroves and integrated coastal ecosystems, ways of sustainable future) in planning or promoting environmental utilization and their linkages to the lives of local communities. (2) Understand and education. explain what is EE in comparison with other educational models. (3) Understand (2) Have more than two (2) years' practical and demonstrate simple methods of monitoring coastal ecosystems; to be able to experience in the above field. explain on the differences and issues of traditional and modern ecotourisms. (4) (3) Age: be between 24 and 35 years of age. Formulate an action plan on how to share the knowledge and the techniques of EE for sustainable development. (5) Report the action plan formulated in Japan at respective organizations, and the report will be accepted in the organizations. **CONTENTS** Sep $/21/2010 \sim Nov / 6/2010$ <a href="#">Activity in Preliminary Phase in home country></a>

Formulating a Job Report describing the present situation of environmental education in the participants' countries, and participants' detailed work and roles of	PARTNER	International Society for Mangrove Ecosystems
their organization.	JICA CENTER	JICA Okinawa
<activity core="" in="" japan="" phase=""> <ol> <li>Coastal ecosystems (coral reef, sea grass bed), Reptile and malocology in coastal ecosystems, Fishes and environmental issues</li> </ol></activity>	COOPERATION PERIOD	2010~2012
(2) Outline of EE, Introduction of community-based project and the lessons, Pollution Disease and regional revitalization in Minamata, Regional revitalization (3) Ecotourism in Japan, Research and monitoring method of phytosociology, Ecotourism as a tool of EE and community development (4) How to write practical action plan, Methodologies for effective presentation, Writing an action plan (Activity in Finalization Phase in home country) (5) Share and discuss, modify the action plan in respective organizations	REMARKS and WEBSITE	

Reinforcement of the Means of Implementation for "Sustainable Forest Managemen (SFM)" 持続可能な森林経営のための実施手段の強化		PITD S Sector : Nature Conserv Sector : Sustainable Us	
		16 participants	/ English
OBJECTIVE	TARG	ET ORGANIZATI	ON / GROUP
Participants start working with his/her organization to create a consensus among the concerned parties for formulation of the suitable and feasible program for each country on SFM.  Participants will be able to explain the global efforts, framework, criteria and indicators on SFM, and be able to describe domestic issues to promote SFM. Participants will be able to draw up concrete measures for SFM in their conutries. Participants will be able to draw up action plan to implement the concrete measures taking into account cooperation with relevant organization such as international organization and NGO.  Participants will be able to make up the feasible proposal according to the action plan.  Participants will be able to make sufficient materials to implement action plan by his/her organization.	planning and lo	ment staff respor cal governmnet , oject implementa	organization staff
CONTENTS	PROGRAM PERIOD	under planning	
On the basis of knowledge acquisition on the global efforts, framework on SFM, participants see the picture of their own progress on SFM. Participants can also enrich their understanding through the discussion among them.	IMPLEMENTING PARTNER	Forest Training I Agency	Institute, Forestry
Through study tour and lectures, participants grasp the visual image and idea for	JICA CENTER	JICA Tokyo(Eco	nomy&Env.)
enhancement SFM with criteria and indicators in their countries. These will help drawing up concrete measures for SFM in their countries.  Through lectures and study tour, participants get more understanding of actual	COOPERATION PERIOD	2010~2012	
schemes adopted by international aid agency, NGO and private company. Utilizing the acquaintance, participants draw up feasible action plan.  Through a case study method, participants make up feasible proposal to his/her organization. Several drills and discussions support enhancement of feasibility efficiently.  Through lectures and case study method, participants prepare supportive materials to have the action plan be feasible. These materials also can be utilize for dissemination to the relevant parties such as rural people, NGO and international aid organization.	REMARKS and WEBSITE		

#### Forest and Watershed Conservation with Participatory Approach 参加型アプローチによる森林・流域保全 **PITD** Solution 1080970 Nature Conservation Sub-Sector: Sustainable Use of Natural Resources 6 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP Objectives The participant of a forest and watershed management office will Target Organization Public administrations in propose an action plan for watershed conservation which involves various charge of forestry or forest management stakeholders in a certain area, and this office will study the action plan and the possibilities of the project based on the plan. [Target Group] [Expected Results] (1)Participants examine applicability factor after comparing with (1) To be engineers engaged in practical services in policies and institutions of forest and watershed management between Japan and either administrative organizations or NGOs in his/her country, as well as can explain the examination results. (2)Participants can charge of forest/forestry, and to be expected to explain roles of forest soil for water and soil conservation and its adverse effects play a leading role when the forest soil is lost. (3)Participants can understand functions of forest and (2) To have 5 to 10 years of working experinece in explain main technology to increase forest functions of water and soil conservation. the field as well as can propose applicable ideas for his/her countries. (4)Participants can (3) To be in good health, both physically and explain role of watershed conservation project in forest area as a countermeasure mentally to undergo the program (This program for climate change and can explain effects to be expected from the project. includes many field visits and field works.) **CONTENTS** Aug / $22 / 2010 \sim Nov / 13 / 2010$ [Preliminary Phase] Formulation of the Country Report **IMPLEMENTING** [Core Phase] Forest and forestry in Japan, Forest planning and watershed Under Planning **PARTNER** management in Japan, Comparison and examination of policies and institutions between Japan and his/her countries, International cooperation in forestry sector JICA CENTER JICA Tokyo(Economy&Env.) in Japan, Formation, nature and conservation function of forest soil, Forest soil in COOPERATION Japan and world, Forest soil profile study, Soil types on different topography and 2010~2012 **PERIOD** different geology, Vegetation and soil Forest structure and its function, Land use type and water quality/hydrology Forest improvement for water and soil conservation function, Outline of erosion control project and erosion control works, Outline of usage of IT technology for

REMARKS

and

WEBSITE

forest conservation, Relation between forest and climate change

formulation of a report

Outline and framework of measures in forestry sector for climate change

[Finalization Phase] Discussion and examination of draft Action plans within the

participants' departments/organizations (Discussion with related persons) and

Planning and Management of Eco-tourism in Tropical and Subtropical Area 熱帯・亜熱帯地域におけるエコツーリズム企画・運営		PITD Solution Sector : Nature Conservation -Sector : Sustainable Use of Natural Re	1080843 esources
Target Countries: Countries located in Tropical and Sub-tropical Area		10 participants /	English
OBJECTIVE	TARG	ET ORGANIZATION / GRO	DUP
[Course Objective] The issues on planning and managing the eco-tourism in tropical and/or sub-tropical area which participating organization are facing will be directed, and the practical measures to the issues will be formulated.	[Target Organizations] Governmental / public organizations and NGOs engaged in planning and management of eco-tourism		
[Expected Module Output] (1) To solve the issues on organizations promoting eco-tourism. (2) To solve the issues on eco-tourism resources and a method of its management. (3) To be able to formulate an eco-tourism program effectively using local resources. (4) To be able to formulate a human resource development program which develops a capacity of local people who support an eco-tourism. (5) To be able to formulate an institutional action plan which aims for solving a issue in an eco-tourism.	[Target Groups] 1) Current duties: a) be presently engaged in eco-tourism planning and management at a governmental or public organization taking charge of tourism development, or b) be presently engaged in eco-tourism planning and management at an NGO in collaboration with governmental organizations taking charge of nature conservation. 2) Have more than three (3) years of experience in the above mentioned field.		
CONTENTS	PROGRAM PERIOD	Apr / 6/2010 ~ Jul	/ 3/2010
	IMPLEMENTING PARTNER	Non-Profit Organization Ol Environment Club	kinawa
organization.	JICA CENTER	JICA Okinawa	
<ul> <li>Activity in Core Phase in Japan&gt;This program consists of lectures, field work, observation tours and discussion.</li> <li>(1) Basic idea of an eco-tourism, Environmental education, Eco-tourism for local</li> </ul>	(1) Carrying out an PC! (2) JICA-Net lecture by		
area, Tourism development for area development, Administration and legislation.  (2) Concept of an eco-tourism resources, Local resources development, Method of an eco-tourism resources research and monitoring. (3) Eco-tour program which utilized local natural resources, Interpretation, Formulation/presentation of eco-tour program. (4) Enlightenmental activities in local region, Training program for eco-tour guide, Formulation/presentation of human resource development program. (5) PCM method, Formulation/presentation of an action plan <activity country="" finalization="" home="" in="" phase=""> Share and discuss, modify the action plan in respective organizations</activity>			the aining ICA

Criteria & Indicators(C & I) and Forest Certification for Asia and Latin American Countries アジア・中南米地域 C&I森林認証	PRTD Leaders 10841 Sector: Nature Conservation Sub-Sector: Sustainable Use of Natural Resources		
		12 participants	/ English
OBJECTIVE	TARG	ET ORGANIZATION	N/GROUP
[Program Objectives] The Action Plan (A/P) propose in Japan by participants for development of C&I and forest certification system to enhance sustainable forest management in the respective participants' countries is shared in the participant' belonging organizations. Within three months after the completion of the program in Japan, each participant's belonging organization reports the progress of A/P to JICA.  [Expected Modules Output] (1) To define present condition and issues of sustainable forest management in participants' respective countries. (2) To obtain basic knowledge and latest information on global trend of C&I and forest certification. (3) To develop a better understanding of good practices pilot in Japan. (4)) To acquire practical knowledge on planning, implementatrion and monitoring of C&I and forest certification in participants' respective countries. (5) To draft A/P based on the acquired knowledge and experience in the training.		e officials or researd on to be engaged in	Q
CONTENTS	PROGRAM PERIOD	May / 25 / 2010 ~	Jul / 2/2010
[Preliminary phase in participants' home countries] Preparation of Inception Report on the present situation and problems to be solbed [Lecture]	IMPLEMENTING PARTNER	Japan Overseas For (JOFCA)	restry Association
World trend on Forest Management, Outline of C&I and Forest Management, ITTO	JICA CENTER	JICA Sapporo	
Process, Montriol Process, Forest certification system, laveling system, Certified timber, Certified forest products, MAR(Monitoring, Assessment and Reporting etc. [Site Visit and Presentation]	COOPERATION PERIOD	2010~2012	
Case study of forest management with forest certification system in Japan, Presentation of Country report and Action Plan  [Finalization Phase in a participant's home country] Participating organizations produce final outputs by making use of results brought back by participants.	REMARKS and WEBSITE		

Environmental Education for Sustainable Development in Central and South Americ 中南米地域 持続的開発のための環境教育		PRTD Trainers 108406 Sector : Nature Conservation -Sector : Sustainable Use of Natural Resources
Target Countries: Central and South American Region		24 participants / Spanish
Course Objective Environmental education programs to raise awareness for environmental conservation are implemented by participants in their respective countries.  [Expected Module Outputs] (1) Be able to explain current situation and its problems of natural environment of their country and importance of environmental hands—on education as measures for environmental conservation (2) Be able to implement environmental education methods, which center around nature experience (3) Dissemination of appropriate environmental education program systematically in each country	TARGET ORGANISHED TO THE CONSTRUCTION OF THE C	GET ORGANIZATION / GROUP GANIZATIONS/GROUP Trvation organization, education NPOs/NGOs which engage in education. cal government officers or the Os/NPOs who are closely involved is management of environmental expected to be in charge of such years of experience in environmental
CONTENTS	PROGRAM PERIOD	Aug / 23 / 2010 ~ Oct / 2 / 2010
[Preliminary Phase in home country] Participants make a report on current situation and its problems of natural environment of their country	IMPLEMENTING PARTNER	
[Core Phase in Japan]	JICA CENTER	JICA Chubu
Review on current situation and its problems of natural environment of their country through presentation and discussion on the report / Comprehensive understanding of environmental education / Environmental education in Japan /	COOPERATION PERIOD	2008~2010
Understanding of roles of nature school / Practice of environmental education programs using local resources / Practice of environmental education methods, which center around nature experience / Making action plan for implementing and disseminating environmental education in participant's country / Presentation and discussion on action plan [Finalization Phase]  Sharing action plan among participant's organization and making progress report of action plan by participant's organization.	REMARKS and WEBSITE	This course will be offered twice for JFY 2010. Course (A) will be held from Aug. 23 to Oct. 2, 2010 for th South American countries. Course (B) will be held from Feb. 21 to Apr 2, 2011 for the Central America countries.

Sustainable and Eco-friendly Food Production 環境保全型持続的食料生産(長期)	LONG-TERM Leaders 1081130 Sector: Nature Conservation Sub-Sector: Sustainable Use of Natural Resources
	2 participants / English
OBJECTIVE	TARGET ORGANIZATION / GROUP
Objectives: Participants idenfity problems regarding environmental protection and food production in thier countries and obtain capacity to plan and implement activities to promote sustainable and eco-friendly food production.  Expected Results 1:To identify current problems regarding environment protection and food production  Expected Results 2:To acquire basic theories on agriculture, forestry and fisheries studies  Expected Results 3:To acquire practical knowledge to deepen understanding of theories  Expected Results 4:To acquire technology and skills to practice theories  Expected Results 5:To systematize knowledge and skills acquired and make action plans	Target Organizations: Senior Development Officials of Central and Local Government Agencies  Target Group: -Researcher/Engineer of Governmental Agency related to Agricultural Development -Experience: more than 3 years of field experience in the relevant field
CONTENTS	PROGRAM   Sep / 27 / 2010
1.To identify problems regarding food production concerning environmental protection and bio-diversity and make inception report.  2.To take lectures and practices in the concerned fields (Course Example:	IMPLEMENTING PARTNER Graduate School of Integrated Arts and Science (Agriculture), Kochi University
Subtropical Agriculture (Subtropical Agriculture and Horticulture, Education and	JICA CENTER JICA Shikoku
Research Center for Subtropical Field Science), Forest Science (Forest Resources Science, Forest Products Science), Aquaculture (Aquatic Bioscience, Deep Seawater Science), Environmental Engineering (Land Environmental Engineering,	COOPERATION PERIOD 2008~2010
Maritime Environmental Engineering), Bioresources Science (Agro-Environmental Chemistry, Applied Biochemistry, Genetic Resources Science)) 3.To participate in seminars and academic meetings on the specific scientific fields of study 4.To take special experiments and exercise from planning and analysis of results on the specific scientific fields of study 5.To make and present master's thesis and make action plans to be implemented in thier home countries.	REMARKS and program will get master's degree at the end of the program.

Improvement of Capacity for Tropical Forest Management to react Climate Change (Master's Degree: Forestry) 気候変動対応に向けた熱帯林管理技術のキャパシティ向上(長期)	Sub-	LONG-TERM Leaders 1081205 Sector: Nature Conservation -Sector: Sustainable Use of Natural Resources
		2 participants / English
OBJECTIVE	TARG	SET ORGANIZATION / GROUP
Objective: To improve participants' capacity in tropical reforestation and forest carbon budget measurement.  Expected Results 1:To identify problems and draft research plan Expected Results 2:To be able to explain global warming and deforestation Expected Results 3:o be able to explain concepts and concerns regarding forest ecology, physiology and forest carbon budget Expected Results 4:To be able to practice reforestation, seedling cultivation and carbon budget measurements Expected Results 5:To write M.Sc.(Master of Science) thesis	agencies involv management. Target Group: -Current Dutie institutions, go related to envir	extitions, government ministries and wed in environment and forest es: be a researchers working in externment ministry and agency ronment and forest management more than 5 years of field experience
CONTENTS	PROGRAM PERIOD	Sep / 20 / 2010 ∼ Sep / 24 / 2012
This program is designed to help develop capacities of reforestation and carbon budget measurement of tropical forests through the research for master's degree.  1. (1)Review present status of and problems with forest management of their	IMPLEMENTING PARTNER	Faculty of Agriculture, Ehime University
respective country, and make research proposal (2)Make an inception report on	JICA CENTER	JICA Shikoku
current situation and problems in respective research field 2.Lectures on and read trends in climate change and deforestation and write up reports on global warming and condition of world forests	COOPERATION PERIOD	2009~2011
3.Lectures on and read forest ecology, physiology and carbon sequestration of tropical forests and write up reports of their learning 4.(1. in Japan)Acquire techniques for reforestation, seedling cultivation and carbon budget measurement by practices (2. in Indonesia)Acquire real—world techniques for actually practicing reforestation, seedling cultivation and forest carbon budget measurement 5.Conduct reforestation, seedling cultivation and/or forest carbon budget measurement research, and write M.Sc. thesis.	REMARKS and WEBSITE	Participants who complete the program will get master's degree at the end of the program.

### Conservation and Wise Use of Wetland in the Context of Implementing Ramsar Convention and CBD ラムサール条約・生物多様性条約に係わる湿地の保全と利用

PITD Solution
Sector : Nature Conservation
Sub-Sector : Conservation of Biodiversity

5 participants

English

1080865

## OBJECTIVE TARGET ORGANIZATION / GROUP

[Project Objective] The project aims to enable midlevel government officials or experts engaged in wetland and biodiversity conservation administration on a central or regional level to execute Activities Plan concerning wise use with the participation of local residents in consideration of the conservation of wetland environments and biodiversity. [Expected Module Outputs] 1. First—year: (1)To explain the philosophy and information on the Ramsar Convention and the CBD and the measures for implementing them. (2)To be analyzed each country's situation concerning the measures for and challenges against the conservation and wise use of Ramsar sites and biodiversity. 2. Second—year: (3)To make a realistic plan for implementation by understanding the proper management and surveying techniques for monitoring wetland environment and biodiversity 3. Third—year: (4) To make a realistic plan for implementation by understanding the need for citizen participation, awareness raising and environmental education. (5)To formulate the Activities Plan for promoting conservation and wise use of wetland and biodiversity.

CONTENTS

【Target Organizations】 Central or local governments which have jurisdiction over wetland management

### [Target Group]

<Position>Midlevel officials or experts who engaged in the conservation of wetland environmental biodiversity

Experience > have more than two years in the relevant field.

<Other>Have sufficient physical strength to engage in field activities.

 $M_{\rm av} / 11 / 2010 \sim J_{\rm up} / 30 / 2010$ 

Be under 50 years of age in principle.

CONTENTS	PERIOD	May / 11 / 2010 1 Juli / 30 / 2010
[Preliminary Phase in home country] Submission of Report: Issue Analysis [Core Phase in Japan] Following lectures, practical exercises, observations and discussions are provided. 1.First year: (1) Ramsar Convention and the wise—use	IMPLEMENTING PARTNER	Kushiro International Wetland Centre
	JICA CENTER	JICA Obihiro
tourism as an example of wise use of wetland and biodiversity, Submission of Progress Report within six months after returning home countries 2.Second year:	COOPERATION PERIOD	2009~2011
Addition to the above (1) and (2), (3)Monitoring method of wetland, Conservation and management of wildlife, Implementation and restoration of wetland, Management of aliens species, Submission of Progress Report within six months after returning home countries 3. Third-year: Addition to the above (1), (2) and (3), (4)Awareness-raising program for the local community, Wetland and biodiversitey conservation by citizen participation (5) Development of Activities Plan [Finalization Phase in Person Country Submission of the Final Person within six months.]	REMARKS and WEBSITE	Participants should be nominated in the same organizations during 3 years since the program is Solution Creation type and aims to achieve the objective through 3 years. http://www.kiwc.net/english/main.html FY 2010 is the second year of the Program.

### Wildlife Issue Solutions for Biodiversity Conservation 生物多様性保全のための野生動物問題解決手法

home country Submission of the Final Report within six months.

PITD Solution
Sector : Nature Conservation

1080126

Sub-Sector : Nature conservation
Sub-Sector : Conservation of Biodiversity

TARGET ORGANIZATION / GROUP

6 participants / English

# OBJECTIVE

# [Project Objective] Core organizations in target areas involved in wildlife management planning will formulate trial plans that include preventive and

measures to eliminate friction between wildlife and humans, such as damage in agriculture and forestry, infection and injury.

Expected Module Outputs

problem-solving

1. First-year program: (1) To be able to explain the outline of wildlife problems at home, in Japan and in other countries, (2) To be able to explain the present state surveys and information gathering methods for understanding of wildlife problems, (3) To be able to formulate basic data for the solution by analysis of wildlife issues 2. Second-year program: In addition to the Output (1) to (3), (4) To be able to formulate the Trial Plan after consideration of solutions to wildlife problems based on the knowledge, basic data and problem analysis obtained from the Outputs (1) to (3), 3. Third-year program: In addition to the Output (1) to (4), (5) To analyze problems of the Trial Plan problems and finalize the Trail Plan.

## 【Target Organizations】

Public organizations or NGOs involved in the conservation of the natural environment, forests and agriculture.

### 【Target Group】

Position > Officers who are responsible for wildlife management planning

<Experience > Have more than 3 years of practical experience in the relevant field <Age > Under 45 years

### **CONTENTS**

[Preliminary Phase in home country] Submission of Report: Present issues of wild-life [Core Phase in Japan] Following lectures, practical exercises, observations and discussions are provided. 1. First year: (1) Wildlife problems; Background, countermeasures, management systems, and relevant laws (2) Sociological investigation and analysis method designed to identify causes and the present situation (3) Management and operation of databases for survey data and information, Collection and dissemination of information by the Internet, Preparation, display and analysis methods for information by GIS 2. Second year: Addition to Outputs (1) $\sim$ (3), (4) Acquisition of techniques to share information with local residents by websites, pamphlets, explanatory sessions, Methods of citizen participation workshops, Formulation of the Trial Plan, Activities Report after returning home: Sharing of Trial Plan and consideration of issues in their organizations 3. Third year: Addition to Outputs(1) $\sim$ (4), (5) Discussion and formulation of the Trial Plan [Finalization Phase in home country] Submission of Final Report within 3 months after returning home country

# PROGRAM PERIOD Sep / 26 / 2010 ~ Dec / 4 / 2010 IMPLEMENTING PARTNER NPO EnVision Conservation Office

# JICA CENTER JICA Obihiro COOPERATION

PERIOD 2009~2011

## REMARKS and WEBSITE

Participants should be nominated in the same organizations during 3 years since the program is Solution Creation type and aims to achieve the objective through 3 years.

FY 2010 is the second year of the Program.

Biodiversity Information System 生物多様性情報システム	PITD Solution 108078: Sector : Nature Conservation Sub-Sector : Conservation of Biodiversity			1080789
		9 participants	/	English
OBJECTIVE	TARGET ORGANIZATION / GROUP			JP
Technical staffs of governmental and municipal offices for nature conservation or biodiversity conservation can acquire knowledge of collection, analysis, and dissemination of biodiversity information, and can have the ability to build and manage their own information system for biodiversity conservation of theircountries.  [Outputs]  (1) To understand the nature conservation policies in Japan, and to designate the actual situation and the current issues in their countries.  (2) To explain the basic techniques of biodiversity data collection, and to acquire basic operation of the information systems.  (3) To explain the necessary GIS techniques for data management and dissemination, and to acquire basic operation of GIS.  (4) To explain biodiversity information dissemination(e.g. Web site design) through the Internet, and to acquire basic operation of related softwares.	Governmental conservation of	izations/group) or municipal offi r biodiversity co	ces for natu	re
CONTENTS	PROGRAM PERIOD	Jun / 15 / 2010	$\sim$ Aug/	7/2010
<before course="" the="">To make a report of actual situation and current issues of biodiversity conservation and information systems in their countries. <during course="" the=""></during></before>	IMPLEMENTING PARTNER	Ministry of Envir Japan Wildlife Re	onmnet search Cente	er
- Presentation and discussion of the reports mentioned above.	JICA CENTER	R JICA Tokyo(Economy&En		
<ul> <li>Lectures of the Japanese policies related to national parks and nature conservation, and tours of national parks in Japan, Biodiversity Center of Japan, National Survey on Natural Environment and Monitoring site 1000 project in Japan, data collection on Biodiversity Information System in Japan, data collection on Biodiversity Information System in Japan, remote-sensing, GIS, and GPS application, data dissemination to the general public in Japan, Web GIS application for data dissemination.</li> <li>Practice of computer network, the Internet, and database, Web site design and GIS operation, to build biodiversity information system, to make action plan and to prepare presentation.</li> <li>Presentation and discussion of their action plans.</li> </ul>	COOPERATION PERIOD	2008~2010		
	REMARKS and WEBSITE	This course corpractical skills where biodivers system is being for the nature of through the gui GIS.	through the sity informat put to prac conservation	site-visit ion tical use and

Rehabilitation of degraded lands in Asia and Africa アジア・アフリカ地域における荒廃地植生回復	Sub-	PRTD Sector : Nature Consi -Sector : Revegetation		1084210
		12 participants	s /	English
OBJECTIVE	TARGET ORGANIZATION / GROUP			UP
To improve participants' skills of planning and promoting their land rehabilitation activities taking into accounts the unique environmental and socio-economic conditions of resepctive local areas  To explain pressing matters regarding land degradation in participants' respective countries and to elaborate on their responsibilities for land rehabilitation  To master the fundamental techniques for rehabilitation of degraded lants and to be able to explain their significance and methods.  To evaluate the feasibility of applying acquirements (i. e. techniques) to participants' activities and to identify how they could be applied to Draft Action Plans.  To find out the possible solutions to land degradation through making Draft Action Plans and to explain them 5W2H.  After the training in Japan, in respective countries, to discusse the vegetation rehabilitation plans for the organizations where participants come from, based on the participnats' personal action plans.	1) Current Duties: be senior technical staff or researchers engaged in land rehabilitation planning and implementation at a local government level, especially at a community 2) Experience in this field: more than 5 years 3) Be university graduates or possess equivalent technical qualifications in this field 4) Language: have a competent command of spoken and written English which is equal to TOEFL CBT 250 or more 5) Health: must be in good health, both physically and mentally, to undergo the course 6) Must not be serving any form of military service. 7) Age: be under 45 years			
CONTENTS	PROGRAM PERIOD	Oct / 26 / 201	0 ~ Dec /	18/2010
To make Job Report Presentation and to participate in the discussions.  Lectures and exercises on vegetation classification and vegetation mapping based on vegetation ecology, Observation of the Environment Protection Forests,	IMPLEMENTING PARTNER	Institute for Global Japanese Center fo Ecology (IGES–JIS	or International St	trategies tudies in
Working evaluation.	JICA CENTER	JICA Yokoham	ıa	
Observation of the rehabilitation sites in Japan (incl. lecture and exercise), Discussion: Workshop towards practical activities for land rehabilitation, Discussion and exchange information with former training participants using JICA NET (TV Conference)	COOPERATION PERIOD	2010~2012		
Room Exercise: Making Draft Action Plans Presentation and Discussion on Draft Action Plans To make and submit the Final Reports.	REMARKS and WEBSITE			

### Education Through Nature Experience Focused on Waterside 水辺を中心とする自然体験を通した環境教育 **PITD** Trainers 1080087 Nature Conservation Sub-Sector: Other Nature Conservation Issues 6 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP [Objectives] Target Organizations Environmental Education Program will be formulated and disseminated by the ·National or Local Government or comparable organization organization. [Outputs] •NGOs, Schools 0) Job Reports on present condition and issues of environmental education in their [Target Group] 1) be an administrative officer, NGO staffs, school countries and their own line of business in their organization will be formulated. 1) Participants will understand the current situation of environmental education teachers or comparable qualifications in charge of through nature experience. dissemination of environmental education 2) Participants will learn the methods of environmental education and its usefulness. 2) have more than 3 years experience in the field of 3) By the end of the core phase in Japan, participants will make draft Environmental environmental education Education Program to disseminate environmental education through nature be a graduate of university experience utilizing knowledge and skills acquired in Japan. 4) between the ages of 25 and 40 years 4) Draft Environmental Education Program will be shared in the participating organization. **CONTENTS** Aug / $9/2010 \sim Sep / 25/2010$ (Preparatory Phase in participants' home countries) **IMPLEMENTING** (Private organization)KANKYO Lakers, Formulation of Job Report **PARTNER** (Phase in Japan) •Current situation and future prospects of environmental education in Japan JICA CENTER IICA Osaka ·Understand the function of facilities for environmental education through nature COOPERATION experiences 2008~2010 **PERIOD** • Practice & Experience Environmental Education Programs using local resources ·Various Theory and Practices • Formulation and presentation of draft Action Plan, Discussion of Action plans (Finalization Phase in participants' home countries) ·Sharing and discussing of draft action plan in the participating organization REMARKS •Finalizing draft Action Plan and submitting Final report including description of and WEBSITE progress of Action Plan implementation to respective JICA Regional Offices

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Forest Management Policy in Asia -Sustainable Forest Management with Collaboration between Local Government and Community-アジア地域 森林管理政策~地方行政と住民との協働による持続的森林管理~	PRTD Leaders 108406 Sector: Nature Conservation Sub-Sector: Other Nature Conservation Issues			1084063
Target Countries: Asian Region		9 participants	/	English
OBJECTIVE	TARGET ORGANIZATION / GROUP			JP
[Objective] Capacity of government officials for framing forest management policy based on collaborative approach with community is enhanced through understanding of role of local government for forest management [Expected Outputs] 1. To be able to explain forest management administration and system in Japan 2. To be able to explain forest management administration of local government such as policy, law, management system and organizational structure in accordance with situation of other participating countries 3. To be able to explain ollaborative forest management with other actors such as community and private enterprises in accordance with local government administration. 4.Participants are to consider and prepare an idea on sustainable forest management with collaboration of local government and community.	are responsible [Target Group. 1) Current Dut central/local ar responsible for 2)Experience in 15 years' exper 3)Education Ba 4)Language: ha and written Eng 250 or more	cal governmental for forest policy	administra official/ma anization w ent policy ld: have mo l of forestry rsity gradua command o	unager in which is ore than y ates of spoken
CONTENTS	PROGRAM PERIOD	Jul / 4/2010	$\sim$ Jul /	24/2010
his course is consists of lectures, practice and site visit as follows;  1) •Role of central and local government, and forestry cooporatives	IMPLEMENTING PARTNER	Graduate School o Development, Nag	of Internation goya Univers	nal sity
·History, policy, law system, land system etc.	JICA CENTER	JICA Chubu		
(2) •Decentralization on forest management policy and necessary policy and law system to implement decentralized forest management •Sharing experience of participating countries by report presentation and discussion	COOPERATION PERIOD	2008~2010		
based on the presentation (3) •Role of local government for community-participatory forest management •Public awareness activities such as environmental education and volunteer activities •Sustainable natural resources management for poverty reduction (4) •Preparation and presentation of action plan •Project Cycle Management (PCM) and Participatory Rural Appraisal (PRA)method	REMARKS and WEBSITE			

Forest Conservation for countries around Congo Basin コンゴ盆地周辺国森林保全	PRTD Trainers 108430 Sector : Nature Conservation Sub-Sector : Other Nature Conservation Issues		
Target Countries: COMIFAC member	11 participants / French		
OBJECTIVE	TARGET ORGANIZATION / GROUP		
[Objective] To examine the concrete methods for the improvement of information management on forest resources will be promoted  [Expected Results] (1) To Recapitulate the problems on the improvement of information management on forest resources in each country (2) To Consider the method to apply for the forest conservation/management in countries in Congo basin by utilizing the Japanese techniques on GIS and remote sensing (3) To share the Action Plans formulated during the Core Phase in COMIFAC members	(Target Organization) Organizations or Ministries working with COMIFAC (Taget Group) (1) To be an officer working in the organizations or ministries that are working with COMIFAC (2) To have more than 10 years of experience in forestry sector (3) To have sufficient command of French etc.		
CONTENTS	PROGRAM   Nov / 23 / 2010 ~ Dec / 18 / 2010		
[Preliminary Phase] Formulation of the Country Report  [Core Phase] Please refer to the General Information (G.I.) for detail.  [Finalization Phase] Submission of the draft Action Plan to the respective organizations and COMIFAC Submission of the finalized Action Plan to the people concerned in Japan within three months after the end of the Core Phase	IMPLEMENTING PARTNER Under Planning		
	JICA CENTER JICA Tokyo(Economy&Env.)		
	COOPERATION PERIOD 2009~2011		
	REMARKS and WEBSITE		

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Leadership Program for Development of Sustainable Society (Master's Degree: Sustainability Science) 持続可能な社会の構築をめざしたリーダー育成(サステナビリティ学)(長期)	LONG-TERM Leaders 1081204 Sector: Nature Conservation Sub-Sector: Other Nature Conservation Issues		
	1 participants / English		
OBJECTIVE	TARGET ORGANIZATION / GROUP		
To propose and have the approval of action plan for solving issues on regional development/environmental management/nature conservation in respective countries through acquisition of knowledge of viewing the social systems and taking various elements of sustainability.  [Expected Results] 1. Obtaining basic knowledge, concepts and skills on natural and social science, which consist core componet of sustainability science 2. Obtaining individual knowledge and methods required for sustainable society, for example regional development, environmental management and conservation of natural environment 3. Writing master's thesis based on above knowledge and skills. 4. Making action plan based on knowledge and skills of development added to those mentioned above	[Target Organization] Governmental organization related to regional development, environmental management and nature conservation (eg. Ministry of Environment) [Target Group] 1) Current Duties: be officers or researchers of central / local governments in the field of issues on regional development / environmental management / nature conservation. 2) Educational Background: must hold a degree from an accredited institution comparable to the bachelor degree offered at the University of Tokyo. 3) Age: be between the ages of twenty-five (25) and thirty-five (35) years		
CONTENTS	PROGRAM PERIOD	Sep / 26 / 2010 ∼ Oct / 6 / 2012	
To promote solving issues on regional development through skill acquisition for proposing new systems of sustainable society.  1. environmental ethics, Ethics on Science and Engineering, Recycling Society,	IMPLEMENTING PARTNER	Graduate School of Frontier Sciences, the University of Tokyo	
Reproduction process in ecosystem, sustainable system in industry, Sustainable	JICA CENTER	JICA Tsukuba(Training)	
energy society, climate system, world population, food and water  2. environmental economics, Environmental Business, Natural Environmental Studies, Urban Sustainability in Relation to Water Sector, etc  3. Bio-environmental Studies II, Marine Resource and Environment, Mineral Resources Development and Environment Protection, Socio-environmental Systems, Residential Environment, etc  4. to conduct specific research relating to sustainability through individual meeting with a supervisor, presentation at research group, presentation at the end of every semester, submission of master's thesis, and defense.  5. to make Action Plan with the concept of Project Cycle Management and its presentation	COOPERATION PERIOD	2009~2011	
	REMARKS and WEBSITE	Participants of this training program will obtain a Master's degree of Sustainability Science by the University of Tokyo with fulfilling certain conditions.	