# 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 1080756 ctor : Nature Co Sub-Sector : Sustainable Use of Natural Resources 7 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP [Target Organizations] [Course Objective] Organization or NGOs of central/local government Draft plans to introduce and disseminate ecotourism as a tool for sustainable regional development involving local residents for areas, where the introduction of which is engaged in regional promotion by tourism through Natural environment and cultural ecotourism is expected, are formulated by the target organizations. resources Expected Module Outputs (1) To be able to understand and explain philosophy and measures related to [Target Group] ecotourism in the context of sustainable use of natural and cultural resources. Midlevel administrative officers or planner who (2)To be able to discuss plans to promote ecotourism in consideration of promotes ecotourism environmental conservation. (3) To be able to explain methods of establishing a network of locals and related Have more than two years experiences parties. (4)To be able to formulate the Interim Report on introduction method of ecotourism . Aug / 29 / 2010 ~ Oct / 14 / 2010 CONTENTS [Preliminary Phase in home country] Submission of Inception Report: Issue Analysis **IMPLEMENTING** PARTNER Kushiro International Wetland Centre at target area/protected area [Core Phase in Japan] JICA CENTER (1) Management and operation of national parks in Japan, ecotourism measures in JICA Obihiro Japan, general theory of ecotourism operation of facilities in natural parks and COOPERATION raising of public awareness. 2010~2012 **PERIOD** (2)Implementation of a model ecotourism program to secure the conservation of natural and cultural resources. (3)Implementation of ecotourism programs in cooperation with communities, and establishment of a database (a phenological (topographic) calendar). REMARKS (4)Discussion on formulation on draft plans to introduce and disseminate ecotourism http://www.kiwc.net/english/main.h [Finalization Phase in home country] and Submission of Final Report: Final drafts of introduction method of ecotourisum and WEBSITE dissemination plan within six months after returning home country Various Forest Conservation with Community Participation 地域住民の参加による多様な森林保全 1080919 PITD Trainers Sector : Nature Conservation Sector: Sustainable Use of Natural Resources 12 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP [Target Organizations] [Course Objective] Forest management organizations in public sector The methods of dissemination and teaching necessary to carry out forest conservation projects with community participation will be shared with related [Target Group] departments in the target organization. (1) Extension officer on forest conservation. (2) Current duties: have general knowledge about [Expected Module Outputs] forestry science and related basic knowledge about (1) To be able to explain techniques to generate effective results from various forest management, with more than 3 years of forest conservation with community participation. (2) To be able to practice approaches to ascertain the effectiveness of forest experience in related area. (3) In good health, both physically and mentally, resources and forests. (3) To be able to explain the roles of forests in biodiversity conservation. not be pregnant, as this program includes field (4) To be able to practice activities with knowledge and skills acquired in the area exercises. of forests and forestry. Aug / 22 / 2010 $\sim$ Nov / 13 / 2010CONTENTS [Preliminary Phase in home country] **IMPLEMENTING** Japan Overseas Forestry Consultant Association (JOFCA) Prepare the Inception report which includes organization chart and facing issues PARTNER and problems. JICA CENTER [Core Phase in Japan] IICA Obihiro Following lectures, practical exercises, observations and discussions are provided. COOPERATION (1) Current situation and challenges in Japan, local administration, Japan's 2010~2012 **PERIOD** cooperation, community based forest conservation, participatory approach. (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. REMARKS and (5)Interim report making, which includes practical action plan. WEBSITE [Finalization Phase in home country] Reporting in home country, authorize the Action plan and submit the Final report within 6 months.

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	17 17	ET 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 education.  •Have a sufficient command of speaking and writing English in order to undertake the course as a lot of time is allocated for discussion;		
CONTENTS	PROGRAM PERIOD	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 PERIOD	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	REMARKS		
participant's country. / 8) Presentation and discussion on action plan.	and WEBSITE		
[Finalization Phase in home country] Sharing action plan among participant's organization and making progress report of action plan by participant's organization.	77230112		

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 Trainers 1080987 Sector: Nature Conservation -Sector: Sustainable Use of Natural Resources 8 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
[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 Organization] Central / Local Governmental Organization, University, Institute which is involved with land use / natural resource management.  [Target Group] Researchers, administrative officers, technicians who is involve with the study / instruction of land use, natural resource management Those who has experience in this field more than 5 years. Tho who uses / has experience to use commercial GIS software Those who has basic skill to use PC.	
CONTENTS	PROGRAM PERIOD	Aug / 16 / 2010 ~ Sep / 25 / 2010
	IMPLEMENTING PARTNER	International Cooperation Center for Agricultural Education, Nagoya University
nstall 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 Glimate 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

PITD Trainers 1080048
Sector : Nature Conservation
Sub-Sector : Sustainable Use of Natural Resources

10 participants

English

### OBJECTIVE

### Objective:

Participants' organization shall make(finalize) the action plan of disseminating knowledge and skills in forest carbon accounting and climate change mitigation.

Expected Results 1:To identify and introduce problems in participant's country Expected Results 2:To be able to explain global warming and deforestation Expected Results 3:To 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 stock and budget measurements

Expected Results 5:To be able to make and share action plan to disseminate knowledge and skills acquired in this program among concerned people in the participant's belonging organization.

# TARGET ORGANIZATION / GROUP

Target Organization:

Research institution, government ministries and agencies involved with environment and forest management intending to develop their own staff training program addressing reduction of forest carbon emission

Target Group:

-Be researchers/technicians/policy makers woking in research institution or governmental agencies in charge of environment and forest management -more than 5 years of practical experience in the relevant field (Counterpart of JICA's projects will be prioritized)

### CONTENTS

- 1. Making Issue Analysis Sheet and Job Report, Practice for Issue Analysis
- 2. Lecture and Discussion in Japan on trends in climate change, deforestation, global warming and condition of world forests
- 3. Lecture and Discussion in Japan on forest ecology, physiology and carbon sequestration
- 4. Practice for reforestation, seedling cultivation and carbon budget measurement (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 participant's organization and submit the final version to JICA overseas office with recognition of director of the participant's organization.

PROGRAM PERIOD
IMPLEMENTING
PARTNER

Faculty of Agriculture, Ehime University

Jul / 5/2010 ~ Aug/

JICA CENTER | JICA Shikoku

COOPERATION PERIOD

2010~2012

REMARKS and

WEBSITE

The above training period include complementary phase in Indonesia (from July 30th to August 8th) after the training in Japan.

### Conservation and Sustainable Management of Mangrove Ecosystems マングロープ生態系の持続可能な管理と保全

Target Countries: Countries and regions where mangroves are distributed

PITD Trainers 1080015

Sector: Nature Conservation
Sub-Sector: Sustainable Use of Natural Resources

7 participants

English

### **OBJECTIVE**

To share the knowledge and techniques for conservation, rehabilitation and management of mangroves and integrated coastal ecosystems with the organizations engaged in this field.

engaged in this field.
(1)Understand the main roles and functions of mangrove ecosystems, and explain

accepted.

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

# TARGET ORGANIZATION / GROUP

[Target Organization]

Governmental organizations or NGOs involved in conservation, rehabilitation and management of mangroves and coastal ecosystems.

[Target Group]

(1) Current duties: be presently working in the field of conservation/rehabilitation of mangroves as a leader (or an expected leader).

(2) Have more than three (3) years of experience in the above mentioned field.

(3) Age: be between 25 and 40 years of age.

### CONTENTS

<Activity in Preliminary Phase in home country>

Formulation of Country report which describes the present situation of mangrove ecosystems in the participants' countries and roles of their organization.

<a href="#">Activity in Core Phase in Japan></a>

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 (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 <a href="#">Activity in Finalization Phase in home country</a>>

(5) Share and discuss, modify the action plan in respective organizations

PROGRAM May / 25 / 2010 ~ Aug / 14 / 2010

IMPLEMENTING PARTNER International Society for Mangrove Ecosystem

JICA CENTER JICA Okinawa

COOPERATION PERIOD 2010~2012

REMARKS and WEBSITE Environmental Education for Sustainable Development -Conservation of Coastal 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-

Target Countries: Tropical and subtropical countries with coastal lines

PITD Trainers 1080031 Sector: Nature Conservation

English

Sector : Nature Conservation
Sub-Sector : Sistemable Use of Natural Resources

OBJECTIVE TARGET ORGANIZATION / GROUP

[Course Objective]

aid organization.

To understand the importance of coastal ecocsystems and relationship between lives of local communities, and to share the knowledge and techniques to promote EE(Environmental Education) effectively for sustainable development of coastal ecosystems, with the organizations engaged in planning, promoting and implementing the EE.

[Expected Module Output] (1) Understand and explain roles, functions and importance of mangroves and integrated coastal ecosystems, ways of sustainable utilization and their linkages to the lives of local communities. (2) Understand and explain what is EE in comparison with other educational models. (3) Understand and demonstrate simple methods of monitoring coastal ecosystems; to be able to explain on the differences and issues of traditional and modern ecotourisms. (4) 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.

[Target Organization]

Governmental organizations, educational institutions and NGOs involved in environmental education

10 participants

[Target Group]

- (1) Be involved (currently or possibly in the near future) in planning or promoting environmental education.
- (2) Have more than two (2) years' practical experience in the above field.
- (3) Age: be between 24 and 35 years of age.

CONTENTS	PROGRAM PERIOD	Sep / 21/2010 ~ Nov / 6/2010
Activity in Preliminary Phase in home country> Formulating a Job Report describing the present situation of environmental education in the participants' countries, and participants' detailed work and roles of	IMPLEMENTING PARTNER	International Society for Mangrove Ecosystems
their organization.	JICA CENTER	JICA Okinawa
(Activity in Core Phase in Japan) (1) Coastal ecosystems (coral reef, sea grass bed), Reptile and malocology in coastal ecosystems, Fishes and environmental issues	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	REMARKS	
(4) How to write practical action plan, Methodologies for effective presentation, Writing an action plan	and WEBSITE	
(Activity in Finalization Phase in home country) (5) Share and discuss, modify the action plan in respective organizations		

Reinforcement of the Means of Implementation for "Sustainable Forest Management PITD Solution 1080968 (SFM)" Sector: Nature Conservation Sub-Sector: Nature Conservation Sub-Sector: Sustainable Use of Natural Resources 16 participants / English
OBJECTIVE TARGET ORGANIZATION / 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.

Central government staff responsible for policy planning and local government / organization staff in charge of project implementation.

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 Institute, Forestry Agency
Through study tour and lectures, participants grasp the visual image and idea for	JICA CENTER	JICA Tokyo(Economy&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	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 Cor rvation

Sub-Sector: Sustainable Use of Natural Resource

6 participants

English

### **OBJECTIVE**

[Objectives] The participant of a forest and watershed management office will propose an action plan for watershed conservation which involves various stakeholders in a certain area, and this office will study the action plan and the possibilities of the project based on the plan.

[Expected Results] (1)Participants examine applicability factor after comparing with policies and institutions of forest and watershed management between Japan and his/her country, as well as can explain the examination results. (2)Participants can explain roles of forest soil for water and soil conservation and its adverse effects when the forest soil is lost. (3)Participants can understand functions of forest and explain main technology to increase forest functions of water and soil conservation, as well as can propose applicable ideas for his/her countries. (4)Participants can explain role of watershed conservation project in forest area as a countermeasure for climate change and can explain effects to be expected from the project.

# TARGET ORGANIZATION / GROUP

[Target Organization]Public administrations in charge of forestry or forest management

[Target Group]

(1) To be engineers engaged in practical services in either administrative organizations or NGOs in charge of forest/forestry, and to be expected to play a leading role

(2) To have 5 to 10 years of working experinece in the field

(3) To be in good health, both physically and mentally to undergo the program (This program includes many field visits and field works.)

#### CONTENTS Aug / 22 / 2010 ~ Nov / 13 / 2010 [Preliminary Phase] Formulation of the Country Report **IMPLEMENTING** [Core Phase] Forest and forestry in Japan, Forest planning and watershed PARTNER Under Planning 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 forest conservation, Relation between forest and climate change Outline and framework of measures in forestry sector for climate change and [Finalization Phase] Discussion and examination of draft Action plans within the WEBSITE participants' departments/organizations (Discussion with related persons) and formulation of a report

# 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

Solution

1080843

Sector : Nature Conservation Sector: Sustainable Use of Natural Resources

10 participants

English

# Target Countries: Countries located in Tropical and Sub-tropical Area

# **OBJECTIVE**

[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.

- [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

Share and discuss, modify the action plan in respective organizations

# TARGET ORGANIZATION / GROUP

[Target Organizations]

Governmental / public organizations and NGOs engaged in planning and management of 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		
Activity in Preliminary Phase in home country> Formulating a job report describing the present situation of Eco-tourism in the participants' countries, and participants' detailed work and roles of their	IMPLEMENTING PARTNER	Non-Profit Organization Okinawa Environment Club		
organization.	JICA CENTER	JICA Okinawa		
(Activity in Core Phase in Japan>This program consists of lectures, field work.	COOPERATION PERIOD	2009~2011		
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 in Finalization Phase in home country)	REMARKS and WEBSITE	(1) Carrying out an PCM workshop (2) JICA-Net lecture by the ex-participants of this training course (3) JICA-Net lecture of JICA technical Cooperation Project		

Criteria & Indicators(C & I) and Forest Certification for Asia and Latin American 1084191 PRTD Leaders Sector · Nature Conservation Sub-Sector : Sustainable Use of Natural Resources ·中南米地域 C&I森林認証 12 participants English TARGET ORGANIZATION / GROUP **OBJECTIVE** [Program Objectives] The Action Plan (A/P) propose in Japan by participants for Administarative officials or researchers engaed development of C&I and forest certification system to enhance sustainable forest currently or soon to be engaged in C&I or forest management in the respective participants' countries is shared in the participnat' certification. 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 IICA. [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. CONTENTS May / 25 / 2010 2/2010 Jul Japan Overseas Forestry Association (JOFCA) [Preliminary phase in participants' home countries] **IMPLEMENTING** Preparation of Inception Report on the present situation and problems to be solbed **PARTNER** [Lecture] 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 COOPERATION timber, Certified forest products, MAR(Monitoring, Assessment and Reporting etc. 2010~2012 PERIOD [Site Visit and Presentation] 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 REMARKS

> and WEBSITE

back by participants.

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 1084062 Sector : Nature Conservation -Sector : Sustainable Use of Natural Resources
Target Countries: Central and South American Region		24 participants / Spanish
OBJECTIVE	TARG	ET 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 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 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 education.	
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	NPO Whole Earth Institute
[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	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 the 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 -Sector : Sustainable Use of Natural Resources 2 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP Target Organizations: Objectives: Senior Development Officials of Central and Local Participants identity problems regarding environmental protection and food production in thier countries and obtain capacity to plan and implement activities Government Agencies to promote sustainable and eco-friendly food production. Target Group: Expected Results 1:To identify current problems regarding environment protection -Researcher/Engineer of Govermental Agency related to Agricultural Development and food production -Experience: more than 3 years of field experience Expected Results 2:To acquire basic theories on agriculture, forestry and fisheries in the relevant field Expected Results 3:To acquire practical knowledge to deepen understanding of Expected Results 4:To acquire technology and skills to practice theories Expected Results 5:To systematize knowledge and skills acquired and make action Sep / 27 / 2010 ~ Sep / 23/2012 CONTENTS 1. To identify problems regarding food production concerning environmental **IMPLEMENTING** Graduate School of Integrated Arts and Science (Agriculture), Kochi University PARTNER protection and bio-diversity and make inception report. 2. To take lectures and practices in the concerned fields (Course Example: Subtropical Agriculture (Subtropical Agriculture and Horticulture, Education and JICA CENTER JICA Shikoku Research Center for Subtropical Field Science), Forest Science (Forest Resources COOPERATION Science, Forest Products Science), Aquaculture (Aquatic Bioscience, Deep 2008~2010 **PERIOD** Seawater Science), Environmental Engineering (Land Environmental Engineering, 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 REMARKS Participants who complete the of study 4. To take special experiments and exercise from planning and analysis of results on program will get master's degree at and WEBSITE the specific scientific fields of study the end of the program. 5. To make and present master's thesis and make action plans to be implemented in thier home countries.

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)		LONG-TERM Leaders 1081205 Sector: Nature Conservation Sector: Sustainable Use of Natural Resources 2 participants / English
OBJECTIVE	TARG	ET 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	Target Organization: Research institutions, government ministries and agencies involved in environment and forest management. Target Group: -Current Duties: be a researchers working in institutions, government ministry and agency related to environment and forest management -Experience: more than 5 years of field experience in the relevant field	
CONTENTS	PROGRAM PERIOD	Sep / 20 / 2010 ~ Sep / 24 / 2012 .
budget measurement of tropical forests through the research for master's degree.	IMPLEMENTING PARTNER	Faculty of Agriculture, Ehime University
1. (1)Review present status of and problems with forest management of their 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** 

[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.

## TARGET ORGANIZATION / GROUP

[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.

Be under 50 years of age in principle.

### CONTENTS

[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 principle, Japan's policy on wetland conservation, Japan's policy on biodiversity conservation (2) Local industry and the wise use of wetland and biodiversity, Ecotourism as an example of wise use of wetland and biodiversity, Submission of Progress Report within six months after returning home countries 2. Second year: 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

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
home country]Submission of the Final Report within six months.

May / 11 / 2010 ~ Jun / 30 / 2010 IMPLEMENTING PARTNER Kushiro International Wetland Centre JICA CENTER IICA Obihiro COOPERATION 2009~2011 PERIOD Participants should be nominated in the same organizations during 3 years since the program is Solution REMARKS Creation type and aims to achieve and the objective through 3 years. WEBSITE http://www.kiwc.net/english/main.h tml 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

PITD ector : Natura Con 1080126

Sector: Nature Conservation
Sub-Sector: Conservation of Biodiversity

Solution

6 participants

English

# **OBJECTIVE**

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

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

[Expected Module Outputs]

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 Trial Plan.

# TARGET ORGANIZATION / GROUP

[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)~(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)~(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 /

IMPLEMENTING
PARTNER
NPO EnVision Conservation Office

JICA CENTER JICA Obihiro

COOPERATION 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.

to make action plan and to prepare presentation.

Presentation and discussion of their action plans.

Solution PITD : Nature Conservation

through the guidance of utilizing

GIS.

1080789

#### Sub-Sector: Conservation of Biodiversity 9 participants English **OBJECTIVE** TARGET ORGANIZATION / GROUP [Objectives] [Target Organizations/group] Technical staffs of governmental and municipal offices for nature conservation or Governmental or municipal offices for nature biodiversity conservation can acquire knowledge of collection, analysis, and conservation or biodiversity conservation 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. CONTENTS Jun /15/2010 ~ Before the course To make a report of actual situation and current issues of **IMPLEMENTING** Ministry of Environmnet Japan Wildlife Research Center biodiversity conservation and information systems in their countries. PARTNER (During the course) Presentation and discussion of the reports mentioned above. JICA CENTER JICA Tokyo(Economy&Env.) Lectures of the Japanese policies related to national parks and nature COOPERATION conservation, and tours of national parks in Japan, Biodiversity Center of Japan, 2008~2010 PERIOD National Survey on Natural Environment and Monitoring site 1000 project in Japan, data collection on Biodiversity Information System in Japan, data collection on This course considers for acquiring Biodiversity Information System in Japan, remote-sensing, GIS, and GPS practical skills through the site-visit application, data dissemination to the general public in Japan, Web GIS application where biodiversity information for data dissemination. REMARKS system is being put to practical use - Practice of computer network, the Internet, and database, Web site design and and for the nature conservation and WEBSITE GIS operation, to build biodiversity information system,

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 Solution 1084210 Sector : Nature Conservation -Sector : Revegetation of Degraded Land
		12 participants / English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
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 spoker 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 /26/2010 ~ 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 Environmental Strategies Japanese Center for International Studies in Ecology (IGES-JISE)
Working evaluation.	JICA CENTER	JICA Yokohama
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	

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~	Sub-	PRTD Leaders Sector: Nature Conservation -Sector: Other Nature Conservation	1084063
Target Countries: Asian Region		9 participants 📝	English
OBJECTIVE	TARG	ET ORGANIZATION / GF	ROUP
[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	[Target Organizations] Central and local governmental organization which are responsible for forest policy administration [Target Group] 1) Current Duties: be an senior official/manager in central/local administrative organization which is responsible for forest management policy 2)Experience in the relevant field: have more than 15 years' experience in the field of forestry 3)Education Background: university graduates 4)Language: have a competent command of spoken and written English which is equal to TOEFL CBT 250 or more		
CONTENTS	PROGRAM PERIOD	Jul / 4/2010 ~ Jul	/ 24/2010
This course is consists of lectures, practice and site visit as follows;	IMPLEMENTING PARTNER	Graduate School of Interna Development, Nagoya Univ	
(1) Role of central and local government, and forestry cooporatives 'History, policy, law system, land system etc.	JICA CENTER	JICA Chubu	
(2) Decentralization on forest management policy and necessary policy and law	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		

		10 mm 10 mm 10 mm
Forest Conservation for countries around Congo Basin コンゴ盆地周辺国森林保全	Sub	PRTD Trainers 108430 Sector : Nature Conservation -Sector : Other Nature Conservation Issues
Target Countries: COMIFAC member		11 participants / Frenc
OBJECTIVE	TARG	ET 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	ministries that (2) To have mo forestry sector	ficer working in the organizations of are working with COMIFAC are than 10 years of experience in
CONTENTS	PROGRAM PERIOD	Nov / 23 / 2010 ~ Dec / 18 / 2010
[Preliminary Phase] Formulation of the Country Report	IMPLEMENTING PARTNER	Under Planning
[Core Phase] Please refer to the General Information (G.I.) for detail.	JICA CENTER	JICA Tokyo(Economy&Env.)
Finalization Phase	COOPERATION PERIOD	2009~2011
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 hree months after the end of the Core Phase		
ince months after the end of the Core i have	REMARKS and	
	WEBSITE	
_eadership Program for Development of Sustainable Society (Master's Degree:		LONG-TERM Leaders 108120
Sustainability Science) 寺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)		Sector : Nature Conservation Sector : Other Nature Conservation Issues
있는 경기에 가는 것도 되는 것을 하는 것이 하고 있는 것이 되는 것이 되었다. 그런 것이 되는 것을 하고 있다. 		1 participants 🗸 English
OBJECTIVE	TARG	ET ORGANIZATION / GROUP
Objective] To propose and have the approval of action plan for solving issues on regional levelopment/environmental management/pature conservation in respective	M. Marian, Phys. Lett. B 48, 126	zation] organization related to regional overconnental management and

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)	Program for Development of Sustainable Society (Master's Degree: LONG-TERM Leaders Sector: Nature Conservation (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) Sub-Sector: Other Nature Conservation Issu		
등 보면 경기 위에 되었다. 그는 그 경기는 보고 있는 것이 되는 것이 되었다. 그는 사람들이 되었다. 1987년 - 1987년		1 participants 🖊 English	
OBJECTIVE	TARG	ET ORGANIZATION / GROUP	
[Objective] 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.	COOPERATION PERIOD	2009~2011	
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	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.	