IPSI Case Study Summary Sheet

Basic Information

Title of case study	
Myanmar: Mangrove Forests in the Ayeyarwady Delta	
Submitting IPSI member organization(s)	
United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)	
Other contributing organization(s) *(IPSI members and/or non-members)*	
Japan Wildlife Research Center (JWRC)	
Author(s) and affiliation(s)	
Japan Wildlife Research Center (JWRC); Kaoru Ichikawa (UNU-IAS), ed.	

Format of case study *(manuscript or audiovisual)*	Manuscript	Language	English

Keywords	
Mangroves, forestry, restoration, disaster risk reduction	

Date of submission *(or update, if this is an update of an existing case study)*	March 2012
Web link *(of the case study or lead organization if available for more information)*	http://collections.unu.edu/eserv/UNU:5448/SEPL_in_Asia_report_2nd_Printing.web.pdf

Geographical Information

Country *(where site(s) or activities described in the case study are located – can be multiple, or even "global")*	
Myanmar	
Location(s) *(within the country or countries – leave blank if specific location(s) cannot be identified)*	
Ayeyarwady Delta	
Longitude/latitude or Google Maps link *(if location is identified)*	
https://www.google.co.jp/maps/@16.5721014,94.9198076,9.08z?hl=en	
Ecosystem(s)	

Forest	x	Grassland		Agricultural		In-land water	x	Coastal	x
Dryland		Mountain		Urban/peri-urban		Other (Please specify)			

Socioeconomic and environmental characteristics of the area
The mangrove forests extending over the delta area constitute the largest of their kind in Myanmar. The Ayeyarwady delta belongs to the tropical monsoon climate. Small farmers who have only narrow tracts of land and seasonal workers who have no land work under large-scale farmers as migratory laborers during the busy seasons, earning a wage of 400-500 kyat a day (about $0.40-0.50 based on the exchange rate of 2005).
Description of human-nature interactions in the area
Those who own land are engaged mainly in agriculture, and in particular, rice cultivation is flourishing. In addition to the direct value of the resources, mangrove forests provide many indirect benefits including erosion and flood control, mitigation of the effects of global warming, and functioning as a tree barrier to protect the shoreline from winds and tides.

Contents

Status *("ongoing" or "completed")*	Completed	Period *(MM/YY to MM/YY)*	03/2012

Rationale *(why activities or policies described, or information shared in the case study are needed)*
This study was commissioned to be included in the publication "Socio-ecological Production Landscapes in Asia".

Objectives *(goals of activities or policies described, or of producing the case study)*
This chapter provides an overview of the area and its mangrove forests.

Activities and/or practices employed
Literature review, field observation.

Results
Mangrove forests have been provided farmers with firewood, timber, medicinal herbs, and other forestry products, which are used for particular purposes. They have also served as the breeding area for fish and shellfish. Thus people in Ayeyarwady Delta have depended on the mangrove ecosystems for many things besides fuel and food.

Lessons learned *(factors in success or failure, challenges and opportunities)*
83% of the mangrove forests disappeared in 75 years. The destruction of mangrove forests in recent years is largely attributed to the construction of culture ponds for shrimp farming. The destruction of mangrove forests brought a large amount of sand onto the tidal flats and changed various habitats in the coastal area, resulting in adverse effects on biodiversity.

Key messages
Efforts have been to ensure the recovery of the mangrove forests through plantation projects at various levels. However, policies concerning the development of mangrove forests are under a chaotic situation. Land-use plans and policies concerning reserved forests are not unified and shrimp farms have been developed continuously.

Relationship to other IPSI activities *(if the case study is related to any other IPSI collaborative activities, case studies, etc.)*
This case study originally appeared in the publication "Socio-ecological Production Landscapes in Asia". *This Summary Sheet was produced by UNU-IAS alone.

Funding *(any relevant information about funding of activities or projects described in the case study)*
This study was commissioned by UNU-IAS.

Contributions to Global Agendas

CBD Aichi Biodiversity Targets (https://www.cbd.int/sp/targets/)

The table below shows based on the self-evaluation by author(s). ● *and* ■ *indicates the "direct" or "indirect" contributions to the CBD's Aichi Biodiversity Targets respectively to which the work described in this case study contributes to.*

Strategic Goal A				Strategic Goal B					
●				■	■	■			
1	2	3	4	5	6	7	8	9	10

Strategic Goal C			Strategic Goal D			Strategic Goal E			
■			■			■	■		
11	12	13	14	15	16	17	18	19	20

UN Sustainable Development Goals (SDGs) (https://sustainabledevelopment.un.org/sdgs)

The table below shows based on the self-evaluation by author(s). ● *and* ■ *indicates the "direct" or "indirect" contributions to the SDGs respectively to which the work described in this case study contributes to.*

■								■
1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

		■	■	■	■		
10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS