



Workshop output

Table 20. Output for Workshop 1: Core problems and their corresponding causes and effects

CORE PROBLEMS				
	Core Problem 1: Mismanagement	Core Problem 2: Siltation and sedimentation	Core Problem 3: Mangrove Areas not legally delineated	Core Problem 4: Weak coordination
CAUSES	Socio-economic	Management plan Root causes: 1. No community strategy plan 2. Weak IEC 3. Weak M&E	Poor planning	Too much budget
	Knowledge	Agriculture Root causes: 1. Waste 2. Low IEC	Key players cannot be identified	Weak harmonization of programs between NGAs and LGUs
	Institutional Weakness	Economic Development Root causes: 1. High population 2. Reclamation 3. Relocation (housing)	Identification of who has the legal mandate to protect or rehabilitate	
EFFECTS	<ul style="list-style-type: none"> - Land use conversion - Employment/income reduction - User conflict - Attitude towards mangrove resources - CC Impact - Loss in supply of marine products - Exposure to natural hazards - Aesthetic/loss of value - Beach erosion - Biodiversity loss - Siltation 	<ul style="list-style-type: none"> - Low ecosystem services - Low survival rate (suffocation) - Pollution - Oceanography sub-effects: <ol style="list-style-type: none"> 1. Effect on circulation of water 2. Bathymetry 	<ul style="list-style-type: none"> - Waste of budget, time, resources - Duplication of activities - Poor planning - Poor partnership 	<ul style="list-style-type: none"> - Sense of ownership - Waste of money, effort and time - Duplication - Poor partnership and governance

Two workshops were carried out during the two-day State of the Mangrove Summit for Southern Luzon. The workshops aimed to achieve the summit objective of coming up with a plan of action to enhance mangrove management.

The first workshop focused on issue identification and analysis using a problem tree. The main objective was to synthesize and analyze the issues surrounding the mangrove management of Southern Luzon. The participants were divided into three groups. Group 1 included the provinces of Mindoro Oriental and Palawan, representatives from the Institute of Social Order, Conservation International-Philippines, and graduate students from the Ateneo de Manila University. Group 2 consisted of representatives from Cavite, Batangas,

Forest Management Bureau (FMB), and graduate students from the Ateneo de Manila University. Lastly, Group 3 was made up of representatives from Marinduque, Romblon, and the University of the Philippines–Marine Science Institute (UP-MSI). Three guide questions were posted to assist the participants. The guide questions are as follows:

1. As mangrove managers, what are the three most pressing problems in the management of mangroves?
2. What are the root causes and effects related to these pressing problems?
3. How are these problems, causes and effects interrelated or interlinked? Please show these through a problem tree.

	Core Problem 5: Poor implementation of mangrove management programs	Core Problem 6: Declining Mangrove Forest Cover	Core Problem 7: Lack of baseline data on mangrove cover
	Lack of community participation	Mangrove Cutting Root cause: Weak enforcement of environmental laws	Poor inter-agency coordination
	Lack of technical personnel Root causes: 1. Poor eco management zoning 2. Lack of science-based approaches in planning and implementation	Fishpond conversion Root cause: Weak enforcement of environmental laws	Institutional crisis
		Charcoal making Root cause: Weak enforcement of environmental laws	Weak dissemination on the use of standard tool on monitoring and reporting
		Land conversion into settlements Root cause: Weak enforcement of environmental laws	Low priority in establishing a mangrove data management
	<ul style="list-style-type: none"> - Lack of sense of ownership - Sustainability of projects - Low compliance to policy 	<ul style="list-style-type: none"> - Low source of fingerlings - low income of fisherfolks and low fish catch - Siltation of other ecosystems (corals, seagrass beds) - High vulnerability to hazards (e.g. coastal erosion, sea level rise, storm surge) - Poor water quality 	<ul style="list-style-type: none"> - Double reporting - Continuity of program - Inaccurate/ skewed data - Duplication of efforts and initiatives (manpower, resources) - Confusion among stakeholders

Table 20 provides a summary of the problem tree. Seven core problems were identified by the participants, namely: (1) mismanagement; (2) siltation and sedimentation; (3) mangrove areas not legally delineated; (4) weak institutional coordination; (5) poor implementation of mangrove management programs; (6) declining mangrove forest cover; and (7) lack of baseline data on mangrove forest cover. Various causes were identified for these

core problems, which ranges from lack of knowledge on mangrove management to poor policy implementation due to weak institutions. The identified effects likewise varied from socio-economic consequences on those directly relying on mangrove resources to low survival of mangroves and consequently, low ecosystem services derived from this resource.

Workshop 2, on the other hand, focused on suggesting solutions for the identified problems from Workshop 1. The participants were grouped into their provinces and were requested to create a project plan. To come up with a plan, the participants started by choosing two core problems identified from Workshop 1, looking at its respective root causes and creating solutions that could address these root causes. These solutions served as the basis for the project plans, which were further detailed by enumerating the needed personnel, materials/

equipment, funding sources and the corresponding timeline for accomplishing it.

Table 21 shows the suggested solutions for the identified problems and its corresponding root causes. Some of the solutions include employing appropriate management interventions; enhancing scientific research to aid mangrove management; harmonizing efforts, policies, programs, and activities related to mangrove management; and community empowerment and awareness.

Table 21. Output for Workshop 2: Project Plan

Problem	Root Cause	Solution
Mismanagement	Institutional weakness	Harmonize programs, projects, activities: - Create multi-sectoral technical working group - Involvement in policy-making - Define roles and functions of each agency involved to avoid overlapping of functions
	Knowledge	Provision of adequate proper education, IEC trainings, capacity building to communities and stakeholders: - Adaption of research output - Provide technical assistance to coastal communities and other stakeholders
Siltation and sedimentation	Economic/Coastal Development	- Science-based data - Mangrove management plan - Policy for the allowed, restricted and prohibited use
	Lack of Management Plan	Development of mangrove management plan or inclusion to ICM plan of the LGU including its business plan
Weak coordination between NGA and LGU	Weak harmonization of programs between NGAs and LGUs	Integration of local and national projects
	Too much funding due to many different sources	Propose an inter-agency/multi-sectoral organization to do proper planning and proper allocation of funds
Poor implementation of mangrove management programs	Lack of community participation	Increase community awareness through IEC
	Poor eco-management zoning	Conduct scientific studies to support zoning
Declining mangrove forest cover	Weak enforcement of environmental laws	Community empowerment/ creation of community based monitoring system
Lack of baseline data	Inter-agency coordination	Harmonization of all mangrove initiatives including gathering and collection of data
	Low priority in establishing mangrove database management	Centralized data banking