



Member's report on activities related to ICRI

Reporting period October 2013 – September 2014

1. Updates on your activities.

Project 1

Cornerstone(s) implemented through the project	Check all that apply: <input type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building <input checked="" type="checkbox"/> Science & Monitoring <input checked="" type="checkbox"/> Periodic Assessment (Review)
Project Title	Assessment of present status of overall biodiversity of marine ecosystems in Vietnam for sustainable development
Location	Entire Vietnam
Dates	2011 - 2014
Main Organizer(s)	Ministry of Agriculture and Rural development
Main Stakeholder(s)	Fisheries Directorate, Research Institute of Fisheries, Institute of Oceanography, Institute of Marine Resources and Environment
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	<p>There have been a number of projects regarding science and management of marine biodiversity in recent years. However, there had been no review at the national level for policy development. The project aims to assess the status of coral reefs and other important ecosystems to improve management efficiency based on the provision the scientific basis for the planning and making of sustainable management plans</p> <p>The activities include:</p> <ul style="list-style-type: none"> - Overview of survey activities on marine ecosystems in Vietnam - Research and evaluation of overall biodiversity and using status of important ecosystems (coral reefs, sea grass, mangrove..) according to secondary data in Vietnam - Assessment of overall status of marine ecosystems in Vietnam
Outcome (Expected outcome)	<p>Overall information on distribution and species richness of mangroves, seagrass beds, and coral reefs in the known coastal and offshore areas.</p> <p>Data and reports on status in using the ecosystem resources for development, including fisheries exploitation, tourist development, ...</p> <p>Analysis on the obstacles and challenges in the survey, including overlap in survey of biodiversity, lacks of collaboration among research institution, weak sharing data and information, and limited translation into management practices.</p>
Lessons learned	<p>Need of strategy for ecosystem monitoring to ensure records of changes</p> <p>Required mobilization of participations of communities and stakeholders in collecting information</p> <p>The data should be collected over a period of time and continuous with</p>

	a standardised methodology
Related websites (English preferred)	

Project 2

Cornerstone(s) implemented through the project	Check all that apply: <input checked="" type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building <input type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)
Project Title	Demonstration of sustainable management of coral reef resources in the coastal waters of Ninh Hai District, Ninh Thuan province, Vietnam
Location	Ninh Thuan province, south Vietnam
Dates	2011-2014
Main Organizer(s)	Institute of Oceanography
Main Stakeholder(s)	Nui Chua National Park, Ninh Thuan Department of Science & Technology & Provincial Fisheries Protection Division
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	<p>The project has been developed and implemented under the framework of the UNEP/GEF project entitled Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. It aims to demonstrate a set of stress reduction measures effective at a regionally significant coral reef habitat in Ninh Hai, Vietnam.</p> <p>The overall goal of the Ninh Hai Coral Reef Project is to reduce environmental stress on trans-boundary water body of the South China Sea and Gulf of Thailand, through the further elaboration of the draft Strategic Action Programme and the implementation of a network of demonstration activities at sites of regional and global significance. The objective of the project is to demonstrate integrated management of regionally significant coral reef and seagrass habitats connected to the South China Sea for the prevention of future ecosystem degradation and sustainable utilization of coastal resources at the site. The project aims to establish a marine protected area (MPA) for the effective management of more than 2000 ha of coral reef, including a total 40 ha of seagrass, at Ninh Hai through the establishment of a cross-sectorial and participatory management scheme, integrated management plan (IMP), and demarcation.</p>
Outcome (including expected outcome)	<p>Outcome 1: Management Capacity of the site is improved through cross-sectorial and participatory approaches</p> <p>Outcome 2: Pressure on coral reef ecosystems derived from unsustainable livelihood of local people is reduced</p> <p>Outcome 3: Knowledge and skill for the management of coral reef habitats are increased.</p>
Lessons learned	<p>The project has considered remarkably scientific understanding for management purpose. In order to develop integrated management plan for the entire district, the project conducted comprehensive assessments using standard methodology on bio-physical conditions related to conservation values such as coral reefs and seagrass distribution, species richness, coral cover, fish and benthic density, endangered species.</p> <p>The socio-economic assessments were also carried out to understand resource uses, including target resources, fishing operation, caught production, revenues from fishing, tourist development, potentials for</p>

	<p>livelihood alternatives and improvement.</p> <p>At four sites selected for management at locality, the surveys focussed on local habitats and target living resources, testing restoration of degraded species and coral rehabilitation.</p> <p>Database containing all outputs of past and on-going activities has developed for long term use and monitoring.</p> <p>Workshop for raising awareness of policy makers and managers need to shorten (max 2days) and held at the place where participants live in order to secure the full participations of trainees. Modification of conventional presentations into applying experiential learning cycle style should be engaged for strengthening impacts on trainees.</p>
Related websites (English preferred)	www.vnio.org.vn

Project 3

Cornerstone(s) implemented through the project	<p>Check all that apply:</p> <p><input type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building</p> <p><input checked="" type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)</p>
Project Title	Application of techniques for hard coral restoration in the target marine protected areas
Location	Cu Lao Cham and Nha Trang Bay marine protected areas
Dates	6/2011 - 12/2013
Main Organizer(s)	Institute of Oceanography
Main Stakeholder(s)	Management board of MPAs Cu Lao Cham & Nha Trang Bay; local community at Cu Lao Cham and tourist company at Nha Trang
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	<p>It is necessary to apply hard coral recovery solutions in two MPAs in order to restore degraded reefs and to conserve biodiversity and reef resources. It is paid attention how to sustain the artificial recovery results and promote natural restoration. This can only be achieved when there is a mechanism for adaptive management of MPAs based on ecological processes and participation of related stakeholders</p> <p>The success of the project improved management practices of the Cu Lao Cham and Nha Trang Bay MPAs, restoring degraded reefs, contribute to maintenance high biodiversity and create ecological tourism sites in MPAs.</p>
Outcome (Expected outcome)	<p>Developed model for hard coral restoration in the area about 8.000m² in Cu Lao Cham and Nha Trang Bay MPAs.</p> <p>38 staffs of the Cu Lao Cham & Nha Trang Bay MPAs, Nui Chua National Park and others trained on skills of hard coral transplantation</p> <p>Formulated management mechanism for sustainable recovery and maintenance for conservation purpose and rational using in Cu Lao Cham and Nha Trang Bay marine protected areas</p> <p>Prepared the guide book for hard coral recovery in MPAs</p>
Lessons learned	<p>Approach of "learning by doing" were applied successfully, providing capacity for MPAs its further activities</p> <p>Post project management mechanism is the basis for the expansion of</p>

	the scale restoration and management of rational use after the end of the project. Private sectors can be mobilised to participate in and maintenance of restoration activities
Related websites (English preferred)	

Project 4

Cornerstone(s) implemented through the project	Check all that apply: <input type="checkbox"/> Integrated Management <input checked="" type="checkbox"/> Capacity Building <input type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)
Project Title	Enhance the Capacity for Species Identification and Genetic Analysis on Marine Organisms in the Coral Reef Ecosystems in the Western Pacific (WESTPAC-DRMREEF)
Location	Vietnam
Dates	2014
Main Organizer(s)	Institute of Oceanography
Main Stakeholder(s)	Scientists
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	To conduct a scientifically credible conservation process, it is important to establish and provide baseline information, such as information on the extent of the current biodiversity and its dynamics. Therefore, the IOC Sub-Commission for the Western Pacific (WESTPAC) initiated the project with objectives to build the regional and national capacity for species identification with the introduction of genetic method “DNA Barcoding”, and eventually make an inventory of the marine organisms living in the Coral Triangle and neighboring coral reefs as precisely as possible alongside other traditional taxonomic tools and alternative forms of molecular systematic.
Outcome (Expected outcome)	Integration of national data on marine organisms of Vietnam in English-based database on marine organisms of the region according to the database schema; Provision of the database accessibility or the data in the Excel file to the WESTPAC DRMREEF portal so that it can service the data to the WESTPAC countries in a composite manner; Capacity building for taxonomists through collection, storage and management of specimen at the national levels with the number of organisms deposited in the database no less than 200
Lessons learned	
Related websites (English preferred)	iocwestpac.org

Project 5

Cornerstone(s) implemented through the project	Check all that apply: <input checked="" type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building <input type="checkbox"/> Science & Monitoring <input checked="" type="checkbox"/> Periodic Assessment (Review)
Project Title	Protecting Marine Ecosystems in MFF Countries Using the Green Fins Approach
Location	Nha Trang city, Vietnam
Dates	2013-3014
Main Organizer(s)	Institute of Oceanography
Main Stakeholder(s)	Khanh Hoa Provincial Association of Marine Science & Technology,
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	Green Fins is an innovative conservation initiative designed around threats to coral reef biodiversity. Its target is to reduce the impact of direct stresses to reefs to enhance their resilience to other more widespread threats, as well as raising the awareness of the audience to these threats. Green Fins was initiated by UNEP and COBSEA and has been developed and implemented through collaboration with The Reef-World Foundation as the regional technical partner. The project will be directly executed in two MFF countries where Green Fins has not been introduced, Maldives and Viet Nam, and will support inter-linkages and exchange with countries where activities are on-going. The project will be implemented in three phases: Phase 1 – Assessment; Phase 2 – Consultation and Capacity Building; and Phase 3 – Implementation. In each of these phases, a number of activities will have to be implemented in the two MFF participating countries.
Outcome (Expected outcome)	Enhanced understanding of the diving industry and current relevant environmental policies in MFF countries where the Green Fins approach has not yet been introduced; Functional National Teams established and trained on the Green Fins approach in each target country; Specific activities implemented in Vietnam and the Maldives aimed at the protection and wise management of coral reefs through the promotion of the Green Fins approach with relevant partners and stakeholders; and Method for integrating Green Fins approach into environmental laws and regulations governing tourism industries and natural resource management outlined.
Lessons learned	
Related websites (English preferred)	www.reef-world.org

2. Contribution to the ICRI Plan of Action and GM.**a. Engaging other sectors**

The involvement of local communities has been conducted successfully in two projects.

Firstly, local communities participate in development and management at 4 small scale areas namely “Fisheries resource restoration and management” or “Coral reef restoration and management”. At each site, a joint agreement was signed among related stakeholders at the locality to implement the management plan. Under the agreement, volunteer groups with participation of local fishermen and farmers conducted different activities, including regulation

enforcement, restoration of corals or/and living resource, livelihood alternatives, communication...

Secondly, it is appreciated that staff of Cu Lao Cham MPA and local fishermen have implemented series of activities in coral reef transplantation following training by scientists. Recently, they can do coral reef restoration themselves with funding mobilised from different sources.

In addition, there are some remarkable successes in mobilising participations of private sector in coral reef restoration and management in Khanh Hoa province. A number of tourist companies such as Vinpearl, Long Phu have developed and initially conducted restoration and management of coral reefs for tourist purpose with advisory supports of scientists.

b. Reef zoning for multiple use

Location where a zoning plan has been implemented	Nha Trang bay MPA
Year when the zoning plan was implemented	2003
Is the zoning plan accepted by the local community?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the zoning plan cause conflicts among stakeholders?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the zoning plan resolve conflicts among stakeholders?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has there been effective enforcement for stakeholders to follow the zoning plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Overall, how would you rate the success of the zoning plan?	<input type="checkbox"/> Very successful <input type="checkbox"/> Somewhat successful <input checked="" type="checkbox"/> Not so successful <input type="checkbox"/> Unsuccessful

Location where a zoning plan has been implemented	Cu Laso Cham MPA
Year when the zoning plan was implemented	2006
Is the zoning plan accepted by the local community?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the zoning plan cause conflicts among stakeholders?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the zoning plan resolve conflicts among stakeholders?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has there been effective enforcement for stakeholders to follow the zoning plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Overall, how would you rate the success of the zoning plan?	<input type="checkbox"/> Very successful <input checked="" type="checkbox"/> Somewhat successful <input type="checkbox"/> Not so successful <input type="checkbox"/> Unsuccessful

Location where a zoning plan has been implemented	Nui Chua National Park
Year when the zoning plan was implemented	2010
Is the zoning plan accepted by the local community?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the zoning plan cause conflicts among stakeholders?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the zoning plan resolve conflicts among stakeholders?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has there been effective enforcement for stakeholders to follow the zoning plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Overall, how would you rate the success of the zoning plan?	<input type="checkbox"/> Very successful <input checked="" type="checkbox"/> Somewhat successful <input type="checkbox"/> Not so successful <input type="checkbox"/> Unsuccessful

MPA zoning in Vietnam are mainly based on biodiversity, community similarity, resource uses but less consideration on fisheries recruitment.

Tourism has developed quickly at some coastal areas so pressure to coral reefs has been increased.

3. **Publications.** (including only publications by staff of the Institute of Oceanography, VAST)

Title (incl. author and date)	Website URL if available	Type of publication
Ninh Hai waters (south Vietnam): a hotspot of reef corals in the western South China Sea. RAFFLES BULLETIN OF ZOOLOGY 62 : (2014) 513–520 (Si Tuan Vo, Lyndon DeVantier, Hua Thai Tuyen & Phan Kim Hoang)		Paper in int. journal
Ecosystem related resources in Phu Quoc Marine Protected Area and issues on sustainable use. Proceeding of the Forum on Marine Brand Name entitled “MPA with Sustainable Development based on Marine and Islands Resources and Environment”. Publishing House of Science & Technology. 2013: 32-53 (Vo Si Tuan, in Vietnamese)		Paper in conference proceeding
Status and trends in coastal habitats of the South China Sea. Ocean & Coastal Management. 85: 2013: 153-163 (Si Tuan Vo, John C. Pernetta & Christopher J. Paterson)		Paper in int. journal
Lessons learned in coastal habitat and land-based pollution management in the South China Sea. Ocean & Coastal Management. 85: 2013: 229-242 (Si Tuan Vo. John C. Pernetta & Christopher J. Paterson)		Paper in int. journal
Resource of coral reef fishes in the coastal waters of Phu Yen Province. Journal of Marine Science & Technology. 2013: 31-40 (Nguyen Van Long)		Nat. journal
Coral reef molluscs in Cu Lao Cham island. Journal of Marine Science & Technology. 2013: 116-124		Nat. journal
A review of the diversity of sponges (Porifera) in Vietnam. The Proceedings of the 2 nd international workshop on marine bioresources of Vietnam, Hanoi-Vietnam, 5-6 June 2013: 109-115 (Thai Minh Quang)		Paper in conference proceeding
Species composition of Nudibranchia on coral reefs in the central coastal waters. Proceeding of int. conference “Bien Dong 2012”. 2013: 169-178 (Hua Thai Tuyen, in Vietnamese)		Paper in conference proceeding
Assessment of resource of lobster juvenile in the coastal waters of Vietnam. Proceeding of int. conference “Bien Dong 2012”. 2013: 378-386 (Nguyen Van Long et al., in Vietnamese)		Paper in conference proceeding

4. **General Information.**

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