



# INTEGRATED MANAGEMENT OF LAGOON ACTIVITIES IMOLA PROJECT II

## PROGRESS REPORT (48-month)

Reporting period:  
March - August 2009

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Huế, Vietnam, November 2009



PEOPLE'S COMMITTEE OF THUA THIEN HUE PROVINCE





# PROJECT PROGRESS REPORT

## TRUST FUND PROGRAMME

**INSTRUCTIONS:** The reporting officer shall complete this 4-page report, and submit the original duly signed and two copies to the Funding Liaison Officer in the Field Programme Development Service, TCAP. The Technical Support Officer or task force members, as appropriate, shall receive a copy for comments to be sent directly to the Funding Liaison Unit, with copy to the reporting officer, within two weeks of receipt of the report.

**IMPORTANT:** In order to adhere to the schedule of submission of presenting progress reports to Donors the reporting officer should strictly comply with the following requirements, irrespective of the project starting date:

| Funding source  | Reporting periods                   | Progress reports due at FAO HQ |
|---|-------------------------------------|--------------------------------|
| - Belgium, Canada, USA  | May-October and November-April      | 30 November and 31 May         |
| - BADEA, Arab Gulf Programme, Denmark, Finland, Japan, Switzerland, Sweden, Libya and all other Donors not mentioned elsewhere. | January-June and July-December      | 31 July and 31 January         |
| - Australia, France, Italy, Netherlands, Norway, Unilateral Trust Funds (unless formally agreed otherwise).                     | March-August and September-February | 30 September and 31 March      |

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|---|--|---|---------------------------------------|---|
| Project symbol<br><b>GCP/VE/029/ITA</b>               | Title<br><b>Integrated Management of the lagoon activities</b> |   |                                       | Reporting period<br><b>March 2009-August 2009</b> |
| Operating Unit FAOR/BH/CPO/TO<br><b>FAOR, Vietnam</b> | Technical Unit<br><b>FIEP FAO HQ, Rome</b>                     | Starting date<br><b>5th August 2005</b> | NTE date<br><b>30th November 2010</b> | Total Project Budget<br><b>USD 2,726,990</b>      |

### A. PROGRESS AND OUTPUTS

*Recall briefly the immediate objectives and describe progress towards their achievement and in particular the outputs produced during the reporting period as outlined in plan of operation/work plan under all headings and sub-headings.*

**Overall summary.** The IMOLA Project goal states that the natural resources of the Tam Giang Cau Hai lagoon of Thua Thien Hue Province are managed sustainably and continue to provide sustainable livelihoods for the people who depend on them as their main source of income, employment and food security. The achievement of this goal implies that in the next three years (IMOLA II Phase), the Integrated Lagoon Management Plan is piloted by means of delegation of power in managing the natural resources to the emerging Fishery Associations. This immediate objective will be achieved through the implementation of three main components (outputs and sub-outputs), supported by a number of activities, all concurrent towards the implementation and consolidation of the plan, which the Provincial People's Committee of the Thua Thien Hue Province should consider to endorse and enact. These IMOLA II Phase project components (Outputs 5 through 7) are analytically listed in the revised project log frame (attached) and their state of implementation is briefly described herewith.

By September 30th 2009, at the deadline of the Year 4, the following main activities are ongoing.

**Capture fishery planning and management:** the project has been undertaking comprehensive zoning and planning of two important lagoon areas: the Cau Hai sub-basin and the Huong river delta including the communes of Huong Tra district and Quang Cong. The zoning has included among the options (to be consulted with stakeholder and Provincial authorities) the reduction in number of the fixed fishing gears, the mechanism of delegation of power to the Fishery Associations through issuance of fishing rights, the streamlining of traffic and transportation avenues (including removal of violations, the identification of protection areas (including jurisdiction by the competent Fishery Associations, management regulations and support mechanisms through introductions of fees) and protection measures (chuom). The zoning plan and its implementation plan of action is ready for consultation and discussion. A thematic workshop and consultation session is in preparation for mid-October 2009.

**Fishing capacity assessment of Central Vietnam:** This activity is designed to explore strategies and approaches to sustainably manage marine fisheries in Viet Nam: restriction to Central Vietnam provinces (Quang Nam to Quang Tri) under IMOLA contribution will serve as a pilot. The project will address the issue of fishing overcapacity and a conclusive conference planned in the spring 2010 will provide a national forum for national fisheries management and research institutions to discuss the present situation and future needs. By strengthening the management of fishing capacity will contribute to the National Plan of Action as well allowing for a regional exchange of experiences and lessons learned.

**Aquaculture planning and management:** the project has undertaken a comprehensive aquaculture survey in the Tam Giang-Cau Hai lagoon, covering the remaining 19 communes not included in the 2006 survey. Spatial data and related questionnaires are acquired and processing and statistics. Thematic map production is ongoing for delivery in the forthcoming months. Thematic maps include: specifications of aquaculture zones, preferred culture species,

profitability, types of hazards and mitigation strategies. Planning option for reducing pond acreage, improving hydraulics, habitats recreation in converted ponds, pollution-mitigation measures will be offered for consultation and discussion among others.

Experimental fish culture and polyculture: the project has completed a number of consultancy works on enhancement of production through fresh-water and brackish-water fish farming and bivalve farming and is ready for the implementation of pilots in selected communes of Cau Hai and Tam Giang. The following options have been investigated: i) hatching, nursing and farming of seabass, lumberjack, red snapper and grouper, grass carp, common carp, Tam Giang-Cau Hai Giang carp and Tilapia. Small-scale hatchery for some of these species are being designed and prepared for implementation in communes of Quang Cong and Hai Duong and Cau Hai (Loc Dien and Loc Tri). Enhancing of nursing facilities and expanding of pond acreage for fresh-water species in Loc Dien and Loc Tri is under study; feed production system in the same pilots is being designed for implementation in the forthcoming season. Flood-plain pen culture development is designed and ready for piloting in the flood season 2009.

Bivalve-culture experimentation in one shoal of Tu Hien inlet (1.1 hectares) is designed and budgeted and ready for implementation.

Environmental conservation: Planning option for the implementation of environment protection and conservation include identification, topographic demarcation, designation of management bodies (Fishery Associations), designing of management regulations and implementation of protection measures for spawning ground in the intertidal and shallow-subtidal flat of pocket beaches of Loch Binh, expandable to the shores of west Cau Hai; for sea-grass fields of Vinh Hien, for the relic mangrove swamps of Ru Cha (Huong Phong). These are in the advanced state of implementation. A general plan for conservation policy of Tam Giang-Cau Hai lagoon is under study including an assessment of ecological value for Tam Giang-Cau Hai ecosystems and habitats with evaluation of trends in the past 10-15 years. Implementation of habitat recreation in ongoing.

Information dissemination: The dissemination of IMOLA Project experiences and lessons learned, findings and potential for export to other similar settings of the country has been systematically tackled through newspaper articles, television clips and news reports, documentaries and participation to National and International conferences. Future participation to conferences as presenters will be on co-management (Da Nang, October 2009), ecosystem protection and environment conservations (Hai Phong, November 2009); fishing capacity (Nha Trang, 2010).

Enforcement of co-management: The IMOLA Project is providing assistance to 20 local Fisheries Associations (Fishery Associations), or around the half of Fishery Associations in the Province, in 7 communes as well as Provincial Fisheries Association towards the operationalization of lagoon co-management. To enable the "area-based" lagoon management under fishing rights to the Fishery Associations, the Project has been focusing on definition and demarcation of FA areas and the development of zoning plans, which lays the foundation for the fishing rights allocation to local Fishery Associations and the lagoon co-management activities in the future. The demarcation has been completed with the full agreement of local Fishery Associations and CPCs and with installation of boundary markers while draft zoning plans for each FA has been prepared. The Project is also working on the establishment of sea-grass conservation area in Vinh Hien, which is at the final stage of its development, as well as strengthening of financial capacity of local Fishery Associations to tackle the organizational and administrative impediments in implementing lagoon management activities.

Technology enhancement and capacity building: The GIS facility is constantly updated with new databases (aquaculture, fishery, conservation areas) and improved in the way of data management methodology and data entering. Staffs from the Sub-Department of Aquaculture are participating in data gathering and entering, as part of their capacity building process.

Study tours at all levels are being planned and implemented; at farmer level, demonstration pilots and experience sharing workshops/tour are being planned and carried out. The opportunity of exporting the GIS facility to districts and communes is under study and assessment of software access, friendliness, development of basic planning routines for beginners and data distribution practice are being evaluated, for implementation in early 2010.

### **Description of Outputs and Activities.**

The description of outputs and activities follows the structure of the IMOLA II Project Logframe (attached), which is an amended and integrated version of IMOLA I Project Logframe. Output 1-4, completed under the project first phase are omitted and any reference for them is made to the previous six-month reports. Outputs 5-7 and related activities are herewith described.

**Output 5** concerns the development of an Integrated Lagoon Management Plan, developed through a process of dialogue and participation with lagoon users and stakeholders and coordination promoted for its implementation. The reformulated activities in support of this output include: i) formulation of the ILMP (Activity 5.1), ii) preparation of a technical document and thematic maps (Activity 5.4) and iii) elaboration of zoning plans (Activities 5.5 and 5.6) are completed and revision is in progress; iv) finalization of the plan (Activity 5.2) and enactment (Activity 5.3) are pending, due 2010; v) the consultation process (Activity 5.8) and inter-institutional coordination (Activity 5.7) are ongoing.

The ILMP with annexed companion document and zoning plans is drafted and being discussed/revised. The provincial institutional coordination mechanism for integrated planning is being established and prerogatives of individual management bodies, being defined. A Provincial scientific/technical steering committee is established and representation is being enlarged to include additional stakeholders. Fishery and aquaculture stakeholder consultation mechanism is established and consultations are ongoing.

Activity 5.1 on the drafting of the Integrated Lagoon Management Plan through consultation process, involving key provincial level partners is completed. Consultations on specific key issues (reduction of fishing effort and aquaculture re-planning, conservation and protection, IUU ban, etc.) are ongoing at commune and district levels, with expansion of the policy dialogue at higher Governance levels (Province and Ministry).

Activity 5.2 concerning the preparation of a technical paper (including thematic maps) providing scientific support to the ILMP is completed and the document being further revised. The collection of thematic maps collection in support of the zoning is produced and available, and is continuously updated.

Activity 5.3 aimed at developing zoning plans for select communes, through identification of suitable areas for

aquaculture, capture fisheries, conservation, water navigation, and other purposes is ongoing. Demarcation (concrete poles) and zoning plan of areas under the jurisdiction of individual Fishery Associations is completed. Zoning plans are being completed and revised for selected communes and districts (Phu Loc), for specific sectors (e.g. capture fishery and conservation, navigation routes). Aquaculture re-planning is ongoing and being included in the zoning, including identification of suitable areas for bivalve farming (experimentally implemented in 2010). Criteria for definition of conservation areas are in place and identification of ecologically sensitive zones to be candidate for reclamation /conservation is completed. An overall assessment of ecological value of habitats and value loss through time is being implemented to assist in formulating conservation policies.

Activity 5.4 concerning the elaboration and adoption of a general zoning plan for the lagoon is ongoing: key issues are listed and discussed; Fishery Associations zoning plans are completed and demarcated; communal/district/sub-basin zoning plan are at an advanced stage of development; lagoon-wide zoning plans for specific sub-sectors (capture fishery, aquaculture, conservation) are ready to be drafted after information collection and data processing is completed. Background information for ecological zoning is in place and land use map updated to 2007 for cultivated, managed and semi-natural areas surrounding the water surface is produced. All elements for the overall zoning of the Provincial coastal zone of Thua Thien Hue are in place and the zone definition is underway. Liaison with the technical department in charge of coastal-area zoning (DONRE), in compliance with the Provincial Decision No. 158/2007/QD-TTg<sup>1</sup> is established and terms of the IMOLA contribution toward the Provincial zoning plan are developed. The elaboration of a general zoning plan for the lagoon is due August 2010.

Activity 5.5 concerning the support to inter-institutional coordination under the Thua Thien Hue PPC, involving key stakeholders for the lagoon and coastal management is an ongoing activity carried out in close coordination with the Project Management Board and Steering Committee. The activity is ongoing through networking with key provincial departments (DONRE, DARD, DOST, DTT, plus the sub-departments of Aquatic Resources Protection, of Aquaculture and of Forestry Protection), National Agencies involved in fishery (CEDMA of RIA1, RIMF, DACAFIREP, ICARD, IPSARD) and National and Provincial research institutions (local universities, IMER, RIA1 among others). MOUs defining roles and responsibilities of the participating partner agencies are drafted and formalized.

Networking also relates to projects operating in the Province (IUCN, GTZ, Luxembourg Project, etc.) to exchange data, information and lessons learned and international agencies involved in fishery and lagoon management worldwide (Federcoopesca, Rome Italy; Consorzio Venezia Nuova, Venice, Italy; Consorzio di Bonifica Delta Po Adige, Italy; International Consortium DeltaMed), for possible supporting actions in developing specific management strategies, innovative technical solutions, resource rehabilitation and fund raising through complementary projects (e.g. FAO DTC).

Activity 5.6 foresees that consultation sessions with Provincial technical departments, cooperation partner, district and commune authorities, stakeholders and specific focal groups, to achieve consensus on the identification of issues and priorities for the lagoon management and agree on ILMP implementation strategy and coordination details is facilitated. This second rounds of consultations is scheduled to begin in April 2010, after the ILMP (Activities 5.1 and 5.2) and related general zoning plans (Activity 5.3 and 5.4) have been finalized (March 2010, 4<sup>th</sup> TPR).

Activity 5.7 to redraft the ILMP based on the feedback received from district and commune consultations and recommendations from relevant stakeholders (Activity 5.6) is foreseen in the second year of the IMOLA II Phase (2010-2011).

Activity 5.8 to prepare the official enactment of ILMP by the PPC is foreseen in the second year of the IMOLA II Phase (2010-2011).

Activity 5.9 to develop proposals for follow-up activities, in support of the implementation of the ILMP has been undertaken through the formulation of a FAO decentralized cooperation project, in collaboration with the FAO HQ and the Veneto Region. A formulation mission of the Veneto Region and FAO Headquarter has been conducted in July 2009 to the Province and a visit to Veneto of a Provincial delegation with the same mandate has been completed in October 2009. The DCP has been formulated and proposal for funding in the forthcoming year 2010 has been placed.

**Output 6 of the IMOLA II Phase.** This output concerns the implementation of the ILMP promoted through experimentation of pilot schemes: it is subdivided in sub-outputs, based on specific areas of intervention. This output is newly introduced within the pre-existing logical framework structure and represents the main set of work-packages forming the core of the project second phase. Most of the activities are under preparation and therefore only an account of those that are currently ongoing is given.

**Sub-output 6.1** concerns fishery co-management to be operationalized in at least six communes through organizational support to fishery associations (FAs), institutional arrangements and implementation of relevant assessments. The Provincial Fishery Association is established and operative, thanks to the organizational provisions and technical assistance of the project. The PFA is functional to provide support to member Fishery Associations, that are recognized as management units by the GoV authorities and are being granted, at least for the pilot sub-basin of Cau Hai assisted by IMOLA, fishing rights for its members. Fishery Association possess an Executive Board, a Management Board and adopted management regulations to ensure efficient co-management and sustainable use of the resources. The impact of capture fishery, already reduced as a consequence of the first rearrangement plan of 2007, is being re-assessed after the second round of rearrangement in 2010.

Sub-output 6.1 is supported by nine specific activities, herewith listed and commented.

Activity 6.1.1 aims to promote and strengthen commune- and village-level fishery associations (FAs) through mobilization, administrative and organizational support, capacity building, and other technical support. The actual number of Fishery Associations receiving full support from the project is 20. New Fishery Associations are being added to the list upon their request (e.g. Phu Loc town), with new candidates volunteering for the project co-management scheme and seeking support (e.g. Huong Tra). In the past six months progress have been made in the operationalization of co-management. Preparatory study has been undertaken to investigate the issue of

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<sup>1</sup> Decision No. 158/2007/QD-TTg, October 9<sup>th</sup>, 2007, approving the program on general management of the coastline of the northern Central Vietnam and the Central Coastal area until 2010 and orientation to the year 2020

marginalized segments of the population not or underrepresented in the Fishery Associations, to aim to a target of 85% representation. Continued support was granted to organize community enhancement activities such as traditional festivals (boat racing, etc.), Fishery Associations congresses and meetings (plenary and at sub-group level) and to update the member list. Topics of the meetings relate to the development of resource management strategy and related regulations, Fishery Associations area demarcation (with officialized coordinates and concrete poles), development of zoning plan (demarcation of use) completed for nearly all the Cau Hai basin communes. Support has been granted to operationalize water surface patrolling teams to activate MSC functions for the Fishery Associations. Support is granted to Fishery Associations Executive Boards to ensure continuity in their functions.

Activity 6.1.2 to develop and implement Fishery Associations-level zoning plans, accompanied by lagoon resource management plan and strategies is ongoing. Integrated zoning plan (including capture fishery, mobile and fixed, aquaculture, conservation areas, navigation routes) has been completed for the whole basin of Cau Hai (Phu Loc District), Quang Cong (Huong Phong District) and is under discussion for the whole Huong Tra District, due end of 2009. Zoning plans are currently under discussion with the stakeholders and partly demarcated, based of the degree of consensus achieved between users groups (Fishery Associations) and the authorities (communal and district).

Activities 6.1.3 to establish co-management bodies with development of guidelines on co-management to enable Fishery Associations to take part in lagoon co-management is ongoing, due end of 2010. The official documents to establish co-management bodies are prepared and negotiated with the partner. Signature of the document in the IMOLA target communes (Cau Hai with priority) is due end of November 2009. The official establishment of co-management bodies will be instrumental for the allocation of fishing right in the communes of the Phu Loc district with priority. Guidelines on implementing co-management are under preparation, due end of 2009.

Activity 6.1.4 to encourage and assist the Provincial Fishery Association (PFA) to provide support to local Fishery Associations has been implemented through the deployment of financial resources, logistic assistance and personnel to the agency. The Provincial Fishery Association is established and operative and is daily involved in collaboration with the project in assisting local Fishery Associations and their members. A contractual agreement is signed with the PFA to assist local Fishery Associations in applying for fishing rights, whose allocation is expected February 2010 in the pilot district of Phu Loc.

Activity 6.1.5 to enable the allocation of fishing rights from districts to local Fishery Associations is ongoing and strides have been made to operationalize Fishery Associations Executive Board, through continued support including financial, finalization of resource management strategy and regulations, finalization of zoning plans for Fishery Associations and communes, with demarcation of specific uses (e.g. fixed-fishing gear use, mobile-gear use etc.), demarcation of Fishery Associations areas of competence (with installation of permanent concrete poles), operationalization of a water surface patrolling team, through financial support and existence in operation of a lagoon co-management body. Preparatory meetings with individual Fishery Associations and communes are completed and the policy dialogue is now at the level of District and Provincial People's Committees; the issue of fishing right is closely coordinated with the implementation of the Provincial plan of fixed-fishing gear rearrangement, which IMOLA is providing technical assistance to. The process is in its final stages, due February 2010 for the pilot district of Phu Loc. Guidelines to be applied for fishing-right allocation in districts other than Phu Loc are available and approved.

Activity 6.1.6 to identify, adopt and assist the implementation of measures to reduce fishing effort in the lagoon by local Fishery Associations has completed its preparatory phase and planning options are being implemented. These include: i) reduction in the number of fixed fishing gears deployed (stake traps); the actual percent of reduction (20%-38% or 50%) is being discussed with the Provincial authorities in view of the compensation scheme to adopted and related financial allocations; ii) reduction in the number of mobile fishing gears (chiefly *lu'*) to 30% the actual number. Discussion whether *lu'* should be banned as a destructive tool is ongoing; iii) demarcation of zones for specific fishing activity, to be adopted as part of the new zoning plan; iv) operationalization of MSC scheme from Fishery Associations supported by the project to limit IUU fishing; v) adoption in the zoning plan of exclusive zones where fishing is banned or limited (e.g. spawning grounds in Loch Binh, sea-grass area in Vinh Hien, etc.), under the control of competent Fishery Associations; vi) adoption of appropriate mesh size (14mm, 18mm) for newly established nets based on selectivity experiments results (the impact of capture on juveniles will be further reduced by integrating the supply of fingerling by promoting nursing techniques, as foreseen under Activity 6.2.1); vii) time restrictions (boat-hang policy) compatible with fish reproductive cycle. Limitation of access will be introduced by the delegation of power to resource management to the Fishery Associations. Complementary to the reduction of fixed fishing gears is the migration of fishers towards alternative income-generating activities, being explored under Activities 6.2.1 and 6.2.2. The implementation of these measures is 70% completed, due end of first quarter 2010.

Activity 6.1.7 to conduct a sociological study of boat-dwelling fishing households to identify their livelihood issues (in connection with public resettlement schemes, unregulated fishery activities, and representation in FAs) and to ensure their social inclusion is prepared. A first assessment on marginalized fisher's population, underrepresented or unrepresented in the current Fishery Associations structure is concluded. Further socio-economical investigation on the nomadic boat dwellers practicing mobile fishing and their livelihood opportunities after resettlement is being planned for the forthcoming spring, with involvement of FAO HQ and University of Rome La Sapienza.

Activity 6.1.8 to conduct a fishing capacity assessment, to understand the status of fishery resources in the lagoon and the sea, in and around the Thua Thien Hue Province (Quang Nam, Da Nang and Quang Tri) is completed as far as the first preliminary assessment is concerned (Thua Thien Hue Province): a comprehensive initial report is delivered, which includes an overview of the national and international context, an appraisal on marine fisheries in Vietnam and a justification for the need of managing fishing capacity at both Provincial and National levels. The current status of marine and lagoon fishery in Thua Tien Hue is also delineated, along with the evolution of production through time and recommendations for management.

Preparations have been made to extend the survey to the neighboring central provinces of Thua Thien Hue, to be conducted in the next reporting period: the survey will include a fishery monitoring exercise in two steps, Quang Nam-Da Nang and Thua Thien Hue Quang Tri.

Arrangements for the fishery monitoring exercise are made through networking with National fishery agencies and research institutions (IMER, Hai Phong; RIMF, Haiphong; DECAFIREP (Hanoi), ICARD, formerly FICnet, VIFEP, etc.) and preliminary contractual agreements are being finalized.

A National Conference on Strengthening Fishing Capacity of Vietnam is in preparation, to be implemented in April

2010: National fishery agencies are contracted and will participate in the organization; funds are raised through the FAO.

Activity 6.1.9 to conduct an assessment on appropriate mesh size for fishing nets, to reduce fishery pressure on juvenile fishes in the lagoon has been prepared under IMOLA I Phase ("selectivity-experiment"). An integration of the "selectivity experiment" and related surveys, with the purpose of i, taxonomically identify captured species; ii, consolidate and amend the results of the first selectivity experiment (2007); evaluate catch variations after the first fishing-gear rearrangement phase; iv, taxonomically identify the composition of "trash-fish" landings is foreseen in the forthcoming first quarter 2010.

**Sub-output 6.2** concerns the development of alternative/sustainable aquaculture ventures, promoted and experimented through models. All activities have completed their preparatory phase, with all feasibility-study outputs delivered. By these pilots, we aim to introduce integrated polyculture and backyard aquaculture to further support livelihoods to local lagoon-side households and to reduce lagoon pollution within the limits of national standards, in the vicinities of shrimp effluent treatment ponds

Sub-output 6.2 is supported by four specific activities, herewith listed and commented.

Activity 6.2.1 to experiment innovative fish integrated polyculture, to explore and propose farming alternatives to reduce organic pollution of lagoon waters and to identify more stable forms of aquaculture has completed its exploratory phase. A number of national and international consultancies have been conducted, focused on the enhancement of production of fresh-water and brackish-water fishes and related activities. The following options have been considered: i) hatching, nursing and farming of seabass, lumberjack, red snapper, grouper, grass carp, common carp, Tam Giang carp and Tilapia; ii, enhancing of nursing facilities and expanding of pond acreage for fresh-water species in Loc Dien and Loc Tri; iii, artisanal feed production system in the same pilot commune; iv) flood-plain pen culture development as a substitute to agriculture during flooding season; v) promotion of mullet for meat and roe. All activities are scheduled for implementation in the next reporting period.

Activity 6.2.2 to experiment bivalve culture in two lagoon inlet communes is prepared for implementation. The feasibility study, including the assessment of suitable farmable species (e.g. *Meretrix lyrata* also known as Ben Tre clams, *Meretrix meretrix*, riverine and/or pacific oysters, green mussels and *Tapes philippinarum*), the identification of farming grounds and of potential target beneficiaries in the communes of Vinh Hien and Loc Binh has been completed in the reporting period. Implementation is prepared for the forthcoming production season, in the next reporting period. Market opportunities, post-harvest processing and handling meeting international quality standards have been evaluated; the national market is targeted with priority.

Activity 6.2.3 to conduct a feasibility study on technological improvement of shrimp ponds, to reduce effluent pollutant load is prepared for implementation in the next reporting period (Quang Cong Cao Trieu system, Quang Dien District).

Activity 6.2.4 to establish an experimental backyard fresh-water fish hatchery and feed production under the management of Fishery Associations is under preparation. The implementation includes feasibility study, capacity building, technical and financial assistance from the project. A consultant has been identified and contracted: the feasibility study is expected to be completed in the next reporting period. Budget allocation for the implementation is being evaluated.

**Sub-output 6.3** concerns the lagoon environmental monitoring, including experimentation of environmental protection measures and rehabilitation interventions in selected lagoon areas. All supporting activities have undergone their preparatory phase and feasibility studies are ready to be launched, to be completed within the next reporting period. By implementing the three sub-output activities, we expect i, to identify areas for re-naturalization and have re-naturalization interventions endorsed by the recipient commune; ii, to understand the lagoon hydrology and develop a feasibility study for improved circulation and enhanced water exchange; iii, to develop a Provincial environmental monitoring scheme, set it up and have it routinely operating.

Activity 6.3.1 to re-naturalize endangered habitats (natural wetland forests of shallow subtidal flats) is prepared for implementation in the next reporting period.

A comprehensive overview of all endangered habitats, an assessment of their ecological value and justification for protection is prepared for the implementation in the forthcoming reporting period, contracted to IMER, Hai Phong, to be submitted to the Province through Sub-DECAFIREP, for consideration. A total of ... sites have been identified for protection based on IMOLA and previous studies.

A feasibility study for rehabilitation of a tract of relic mangrove swamp in the Huong river delta (Huong Phong Commune) is prepared for implementation in the forthcoming semester, under contract with the Sub-Department of Forestry of the Provincial DARD (finalized).

Activity 6.3.2 to conduct a feasibility study on restoration of lagoon tidally driven circulation, through the reactivation and stabilization of the Tu Hien inlet and related hydrological studies is under preparation, for implementation in the next reporting period. Negotiations with the potential contractor (Te.Ma, Faenza, Italy) for the hydrological, bathymetric and geodetic survey are ongoing, for a tentative implementation in November 2009.

Activity 6.3.3 to assist in the implementation of lagoon environmental monitoring program (through development of data-collection protocol, capacity building on data collection and handling methods, and assistance to data collection and management) is prepared for implementation in the forthcoming reporting period. Arrangements with CEDMA, the Provincial Sub-Department of Aquaculture and the Department of Environment and Natural Resources are made and contractual agreements, prepared.

**Sub-output 6.4** concerns the building and management of the geo-database and building technical capacity in utilizing spatial tools for integrated lagoon management and planning, possibly introducing the tool down to the District level

Sub-output 6.4 is supported by four specific activities

Activity 6.4.1 to enhance GIS/GPS capabilities at the provincial, district, and commune levels through provision of a training workshops and on-the-job training through the participation to project activities and provision of technical

assistance to GIS/GPS operators at different levels is planned for implementation in the forthcoming reporting period.

Activity 6.4.2 to develop an aquaculture geo-database for the entire lagoon to support and facilitate aquaculture planning at different levels is completed. The comprehensive mapping and censusing of all aquaculture facilities (ponds, cages, pens) is completed and data from questionnaires, entered into the geo-database, ready for processing, in the forthcoming reporting period. Processed information and thematic aquaculture maps will contribute to the lagoon aquaculture master plan due by DARD end 2009.

Activity 6.4.3 to develop an capture fishery geo-database for selected communes, to support and facilitate capture fishery planning at different levels is completed for the basin of Cau Hai (Phu Loc District) and Tam Giang (Huong Tra and partly Quang Dien Districts), for approximately 70% of the total lagoon water surface. The survey includes all fixed fishing gears (stake traps, bottom nets and lift nets) and complements the aquaculture geo-database prepared under Activity 6.4.2. This survey has served as a baseline for preparing fishery-planning options for the above-mentioned Districts, with prospect of extension to the remaining lagoon districts of Phong Dien and Phu Vang upon request of the Province in the forthcoming year. The capture-fishery geo-database will contribute to the rearrangement of fishing gears established by decision ... of the Thua Thien Hue Province

Activity 6.4.4 to develop a GIS-based flood vulnerability maps for the lagoon communes (with indications of flood prone areas, resilience times, drainage infrastructures and flood preventions facilities) is prepared; agency identified and planned for implementation in the next reporting period.

**OUTPUT 7 of the IMOLA II Phase.** This output concerns the dissemination of information and project experience nationally and internationally, on the ILMP and its implementation constraints. Through the promotional activities supporting the output, the IMOLA Project will target National level, MARD and MPI primarily. All IMOLA outputs will be made available through the project website, including manuals, documents and maps. By strengthening the network of collaboration, Provincial institutions will contribute to the Provincial (IMOLA) database and IMOLA models (co-management, environmental monitoring, alternative/innovative culture methods, etc.) will be promoted for implementation in other Provinces.

Activity 7.1 to maintain and update the project website (with access to project profiles, activity summaries, project reports, maps, photos, relevant public regulations, links, and contact information) is ongoing through regular updates and upload of project materials. Moreover, during the reporting period the top page was restyled, with a "news and orientation" section and a video (e-library/video) section. The total number of unique users in the reporting period is 1521, whilst the page views in the same time interval totals 2402.

Activity 7.2 to disseminate the results and outcomes of IMOLA activities, through production and distribution of information booklets, guidelines, leaflets, and other communicable materials is delayed. No printing occurred in the reporting period. ILMP informative materials is designed but not yet scheduled for printing and distribution. Video clips are regularly produced by local television for broadcasting, viewable in the appropriate section of the website.

Activity 7.3 to strengthen the network and collaboration with other institutions and projects, to exchange information/data, experiences, and techniques/technologies is ongoing. Significant strides were made on recent initiatives in preparation with the Consorzio Venezia Nuova, Venice, Italy, the Consorzio di Bonifica Delta Po Adige, Italy and the International Consortium DeltaMed for possible supporting actions on management strategies, innovative technical solutions and resource rehabilitation. A DCP project is formulated and submitted for financing to Donors. Networking with National fishery institutions is established, to promote activities in the sector of mutual interest: MOUs are signed with IMER (Hai Phong), RIMF (Hai Phong), MARD/DECAFIREP (Hanoi), ICARD (formerly FICnet). In the Province, MOUs/LOAs are prepared for signature with the Departments of Forestry Protection and of Science and Technology. Coordinated activities are maintained with FSPSII Programme, with specific reference to the SUDA and SCAFI components, until termination, with NAV (Nordic Assistance to Vietnam). The institutional network established during IMOLA I Phase is maintained.

Activity 7.4 to organize at least two national workshops to discuss issues related to ILMP and its implementation is ongoing according to schedule. No workshop/conferences were organized in the reporting period, but preparations were made for the International Conference on Managing Fishing Capacity (April 2010).

Activity 7.5 concerns the participation to, and presentations at national and international conferences, to disseminate project experiences and findings. No activities have been conducted on this matter during the reporting period.

Activity 7.6 to prepare and distribute a series of guidance documents that summarize key processes and procedures for the co-management of lagoon activities and lessons learned for integrated lagoon management is scheduled for implementation in the second year of the project II Phase.

| <b>1. List National and International professional staff assigned to the project during the reporting period</b>  |   |                                 |   |
|---|---|---------------------------------|---|
| NATIONAL  |   | INTERNATIONAL                   |   |
| Names   | Functions   | Names                           | Functions   |
| Nguyen Thi Thu Huong<br>Pham Thi Lien Hoa   | Project Administrator<br>Project Assistant/Interpreter  | Massimo Sarti<br>Baku Takahashi | Chief Technical Advisor<br>Associate Professional Officer |
| Le Xuan Hoang   | Interpreter (NRU)/IT  | Ulrich Schmidt                  | International Consultant for Fishing Capacity Assessment  |
| Ho Bich Huong Giang   | Interpreter (SEU)   | Michel Marconi                  | International Consultant for Fishing Capacity Assessment  |
| Khong Vo Quynh Chau<br>Van Viet Vu<br>Nguyen Minh Tri<br>Huynh Minh<br>Nguyen Thi Be<br>Bui Duc Be  | Administrative Assistant<br>Project Driver<br>Project Driver<br>Boat pilot<br>Co -pilot<br>Technical staff for SEU Unit - Fishery Association |                                 |   |
| Vo Thi Nhu Suong  | Technical staff for SEU Unit - Fishery Association  |                                 |   |
| Nguyen Van Ty   | Technical staff for SEU Unit - Fishery Association  |                                 |   |
| Pham Thi Kim Phung  | Technical staff for Natural Resource Unit   |                                 |   |
| Dang Nguyen Duy Ngoc  | Technical staff for Natural Resource Unit   |                                 |   |
| Le Van Mien   | National Consultant on local knowledge on factors determining fishing capacity of the TT-Hue province   |                                 |   |
| Do Cong Thung   | National Consultant in data collection to assess the status of marine and inland fishery of TT-Hue province                                   |                                 |   |
| Nguyen Xuan Hien  | National consultant for institutional networking, assistance in stakeholder consultation  |                                 |   |
| Nguyen Luong Hien   | National Consultant on fishing right allocation   |                                 |   |
| Hoang Viet Thang  | National Consultant on policy expert cum communication officer  |                                 |   |
| Le Cong Tuan  | National Consultant on aquatic environment and resources  |                                 |   |
| <b>2. Equipment received during the reporting period</b>  |   |                                 |   |
| <ul style="list-style-type: none"> <li>• ADSL-WIFI modem (1 unit)</li> <li>• External portable HDD 250GB (1 unit)</li> <li>• Balance for fish weight measurement (1 unit)</li> <li>• Electric balance for fish weight measurement (1 unit)</li> <li>• Motorbike helmets (2 units)</li> <li>• Electric hot water pot (1 unit)</li> <li>• Digital camera Fuji (1 unit)</li> </ul> |   |                                 |   |
| <b>3. Training activities during the reporting period, viz: fellowships, study tours, field days, local workshops, etc. (Please list how many trainees were involved in each activity)</b>  |   |                                 |   |
| <b>Aquaculture technique related:</b>   |   |                                 |   |
| Title   | Date  | Trainees                        |   |
| Training workshop on polyculture technique of giant tiger prawn and rabbitfishes for Vinh Tri Fisheries Association (FA) in Hai Duong Commune   | 20 Mar 2009   | 38 persons                      |   |
| Training workshop on polyculture technique of giant tiger prawn and rabbitfishes for Thuong Tay FA in Hai Duong Commune   | 20 Mar 2009   | 40 persons                      |   |
| Experience sharing workshop on the pilot aquaculture model "polyculture of giant tiger prawn and mullet in high-tide ponds" in Huong Phong Commune  | 19 Apr 2009   | 37 persons                      |   |
| Training workshop on freshwater fish nursing for Loc Tri Aquaculture FA in Loc Tri Commune  | 21 Apr 2009   | 18 persons                      |   |

|   |             |            |
|---|-------------|------------|
| On-site freshwater fish nursery pond preparation extension for Loc Tri Aquaculture FA in Loc Tri Commune                                    | 28 Apr 2009 | 7 persons  |
| On-site freshwater fish nursery fry stocking extension for Loc Tri Aquaculture FA in Loc Tri Commune  | 03 May 2009 | 5 persons  |
| On-site freshwater fish nursery fry stocking extension for Loc Tri Aquaculture FA in Loc Tri Commune  | 13 May 2009 | 12 persons |
| Training workshop on freshwater fish nursing for Thach Son FA in Loc Dien Commune   | 12 Jun 2009 | 30 persons |
| On-site training workshop on freshwater fish nursing (harvesting and handling of fingerlings) for Loc Tri Aquaculture FA in Loc Tri Commune | 15 Jun 2009 | 17 persons |
| On-site freshwater fish nursery fry stocking extension for Thach Son Aquaculture FA in Loc Dien Commune                                     | 03 Jul 2009 | 8 persons  |

**Aquaculture survey related:**

| Title  | Date           | Trainees   |
|--|----------------|------------|
| Workshop on questionnaire preparation and interview for aquaculture survey for Provincial Sub-Department of Aquaculture and local government officials | 08 Apr 2009    | 30 persons |
| Workshop on data input and management for aquaculture survey for Provincial Sub-Department of Aquaculture  | 21-22 Jul 2009 | 18 persons |

**Fisheries co-management related:**

| Title  | Date        | Trainees    |
|--|-------------|-------------|
| Training workshop on <i>chuom</i> development and management for Loc Binh 1 & 2 FAs in Loc Binh Commune  | 05 Mar 2009 | 34 persons  |
| On-site <i>chuom</i> installation extension for Loc Binh 1 FA in Loc Binh Commune                        | 12 Mar 2009 | 5 persons   |
| Congress of Thach Son FA in Loc Dien Commune   | 19 Mar 2009 | 89 persons  |
| Congress of High-Tide FA in Quang Cong Commune   | 05 Apr 2009 | 94 persons  |
| First mobilization workshop (charter) for Phu Loc Town FA in Phu Loc Town                                | 09 Apr 2009 | 50 persons  |
| Workshop on lagoon zoning plan for Loc Binh Commune  | 15 Apr 2009 | 12 persons  |
| Earth Day lagoon clean-up event in Vinh Hien Commune   | 22 Apr 2009 | 160 persons |
| Congress of Loc Binh 3 FA in Loc Binh Commune  | 23 Apr 2009 | 47 persons  |
| Second mobilization workshop (sub-groups) for Phu Loc Town FA in Phu Loc Town                            | 10 May 2009 | 61 persons  |
| First internal GPS mapping training for IMOLA technical staff  | 22 May 2009 | 9 persons   |
| Workshop on <i>chuom</i> harvesting result and adaptive management                                       | 18 Jun 2009 | 15 persons  |
| On-site <i>chuom</i> harvest extension for Loc Binh 1 & 2 FAs in Loc Binh Commune                        | 29 May 2009 | 10 persons  |
| Workshop on aquaculture co-management in Quang Cong Commune  | 29 May 2009 | 51 persons  |
| Second workshop on lagoon zoning plan for Loc Binh Commune   | 17 Jun 2009 | 15 persons  |
| On-site <i>chuom</i> harvest extension for Loc Binh 1 FA in Loc Binh Commune                             | 18 Jun 2009 | 6 persons   |
| Workshop on the development of lagoon resource management regulation for Phu Loc Town FA in Phu Loc Town | 24 Jun 2009 | 59 persons  |
| Large meeting of Le Thai Tien FA in Loc Tri Commune  | 22 Jul 2009 | 75 persons  |
| Third workshop on lagoon zoning plan (fixed fishing gear rearrangement) for Loc Binh Commune             | 23 Jul 2009 | 107 persons |
| Congress of Phu Loc Town FA in Phu Loc Town  | 28 Jul 2009 | 170 persons |
| Workshop on FA financial capacity enhancement (Province-wide workshop)                                   | 06 Aug 2009 | 70 persons  |
| Large meeting of Dong Hai FA in Loc Tri Commune  | 23 Aug 2009 | 76 persons  |
| Traditional boat racing of Mieu Nha FA in Loc Dien Commune   | 27 Aug 2009 | 60 persons  |
| Traditional boat racing of Dong Hai FA in Loc Tri Commune  | 29 Aug 2009 | 34 persons  |
| Traditional boat racing of Loc Binh I, II, III in Loc Binh Commune                                       | 2 Sep 2009  | 163 persons |
| Bi Annual meeting of Thuong Tay FA in Hai Duong Commune  | 29 Aug 2009 | 62 persons  |

### C. PROBLEMS ENCOUNTERED AND ACTIONS TAKEN OR REQUESTED TO RESOLVE THEM, Page 3

At the time of this progress report, the Project has completed its 51<sup>th</sup> month of uninterrupted activity. The project is currently operating without major difficulties, even in the lack of the National Project Manager, thanks to the well trained and work-devoted team: however, the recruitment of this unit might be foreseeable in the near future. At present, no major shortcomings are expected and operationalization of the project II Phase is developing with agreement among involved parties.

### D. WORK PLAN AND EXPECTED OUTPUTS FOR THE NEXT REPORTING PERIOD

The description of the work-plan and outputs of this section refers to the ninth semester of operations (months 49<sup>th</sup>-54<sup>th</sup>). Among the highlights, the ninth semester will include the delivery of a suite of planning options for i) capture fishery, ii) aquaculture and iii) proposals for habitat conservation, consulted, partly implemented, ready to be incorporated into the Integrated Lagoon Management Plan. Fishing rights will be issued to Fishery Associations of selected Phu Loc communes, thus kicking-off the process of co-management in a significant part of the Tam Giang-Cau Hai lagoon.

Concerning Output 5, the Integrated Lagoon Management Plan (Activity 5.1), the technical paper, including thematic maps (Activity 5.2) and zoning plans for select communes (Activity 5.3) will be finalized during the next reporting period, after having received feedbacks from consultation sessions and stakeholder's meetings. The general zoning plan for the lagoon (Activity 5.4) will be finalized through the incorporation of the local zoning plans (developed for specific Districts and specific ecosystems) for capture fishery, aquaculture and conservation of endangered habitats. Contribution will be made to the sectoral master plans (e.g. aquaculture and capture fishery) in the process of being developed by the Province. The participatory method of zoning and ILMP drafting is in place and consultations will continue in the forthcoming reporting period (Activity 5.6). Inter-institutional coordination under the Thua Thien Hue PPC, involving key stakeholders for the lagoon and coastal management is an ongoing activity, instrumental to the consultation process.

Concerning Output 6, all activities in support of the four Sub-outputs will be continued.

For the delivery of Sub-output 6.1, fishery co-management will be enacted thanks to two pivotal interventions of the GoV on the matter: the delegation of power to Fishery Associations through fishing rights and the recognition of the co-management body. Other activities will include: i) promotion of policy dialogue on fishing rights (one Provincial workshop), ii) strengthening of Fishery Associations in one additional commune the Huong Tra District, iii) implementation of the second phase of fishing-gear rearrangement through Fishery Associations, with a drastic reduction of access to the resource (30-40%); iv) administrative demarcations, v) technical interventions to minimize the impact of capture on juveniles (implementation of backyard hatcheries and nurseries); adoption of the 14mm mesh size for selected communes/Fishery Associations in Cau Hai.

The sociological study of boat-dwelling fishing households (Activity 6.1.7) will be continued and the fishing capacity assessment in the central provinces of Vietnam (Activity 6.1.8) will be concluded.

For the delivery of Sub-output 6.2 (alternative/sustainable aquaculture ventures), activities for the next reporting period will include among others: i) implementation of bivalve culture in two communes of the Phu Loc District, ii) development of several alternative models of fish integrated polyculture, with specific attention to the marketability of the newly introduced species and development of a value chain, iii) technologic improvement of shrimp venture in high-tide pond systems of two communes (canal reconditioning, feasibility study of hydrology improvements, water-supply and discharge control, etc.) and iv) feasibility study for the establishment of a backyard nursing facility for fingerling production.

For the delivery of Sub-output 6.3, (lagoon environmental monitoring, conservation and rehabilitation), activities for the next reporting period will include among others: i) hydrological study of the lagoon, with specific reference to the southern inlet and prospects of reactivation, ii) vivification of oxygen deficient lagoon tracts (feasibility study), iii) feasibility study for the re-naturalization of relic mangrove forest in Ru Cha, iv) preparation for experimental lagoon monitoring scheme (in collaboration with CEDMA, Sub-Department of Aquaculture and DONRE of Thua Thien Hue).

For the delivery of Sub-output 6.4, (building and management of the geo-database), activities for the next reporting period will include among others: i) establishment of a District GIS facility and related capacity building, ii) finalization of an integral aquaculture geo-database, iii) finalization of an integral fishery and Fishery Associations geo-database and iv) finalization of a lagoon flood vulnerability map based on remote sensing analysis of imagery from the past twenty years.

Concerning Output 7, some activities are continuously ongoing and will be maintained into effect, in the next reporting period: i) website maintenance and update, ii) networking with other institutions and projects and iii) production of informative materials. No activities are foreseen in the next reporting period, as far as the organization of national workshops (Activity 7.4), presentations at international conferences (Activity 7.5) and production of guidelines for co-management (Activity 7.6) are concerned.

A graphic chart displaying the details of activity implementation and their timeframe, including routine operations and milestones is attached as Annex 2 to this report.

Please list all reports and documents, other than progress reports, but including consultant's reports, finalized by the project during the reporting period only and indicate for each of them whether or not:

- it is recommended for inclusion in FAO's computerized documentation system as it contains data/information suitable for future use: **Recommended/Not recommended**
- it has been restricted by the Government as it contains confidential information: **Restricted/Not restricted**
- it has been distributed, giving date if applicable. If not already done so, please send 4 copies to the Director of the Operating Division/Service concerned: **Distributed/Not distributed**

- Final report on the aquaculture pilot project "Polyculture of red tilapia, Nile tilapia, and mullet in a pond in Dien Hai" by Hoang Van Minh Chau, Fisheries Extension Center, October 2008 (**Recommended, Not restricted, Not distributed**)
- Final report on the aquaculture pilot project "Tilapia culture in net enclosure in low-tide shrimp ponds in Quang Ngan and Quang Cong" by Dang Nguyen Duy Ngoc, Fisheries Extension Center, August 2008 (**Recommended, Not restricted, Not distributed**)
- Final report on the aquaculture pilot project "Polyculture of grouper and oyster in cages in Hai Duong" by Nguyen Ngoc Phuoc, Hue University of Agriculture and Forestry, April 2009 (**Recommended, Not restricted, Not distributed**)
- Final report on the aquaculture pilot project "Polyculture of giant tiger prawn and mullet in high-tide ponds in Loc Binh" by Nguyen Ngoc Phuoc, Hue University of Agriculture and Forestry, May 2009 (**Recommended, Not restricted, Not distributed**)
- Final report on the aquaculture pilot project "Polyculture of tiger prawn, white-spotted rabbitfish, mullet, crab, and red algae in an earthen pond in Huong Phong" by Nguyen Thi Xuan Hong, Hue University of Agriculture and Forestry, March 2009 (**Not recommended, Not restricted, Not distributed**)
- Proceedings of the workshop on FA financial capacity enhancement (Hue City, 6 August 2009) by IMOLA Project, August 2009 (**Recommended, Not restricted, Not distributed**).
- Preliminary review and interpretation of environmental monitoring data for Tam Giang-Cau Hai Lagoon for Year 2006 by IMOLA Project (Ver.4), February 2009 (**Recommended, Not restricted, Not distributed**).
- Draft report on fishing capacity assessment of Thua Thien Hue Province by Ulrich W. Schmidt and Michele Marconi, June 2009 (**Not recommended, Not restricted, Not distributed**)

|                                       |                                |
|---------------------------------------|--------------------------------|
| Reporting Officer                     |                                |
| Name : <b>Massimo Sarti</b>           | Date, ... <b>November 2009</b> |
| Title: <b>Chief Technical Adviser</b> | Signature:                     |

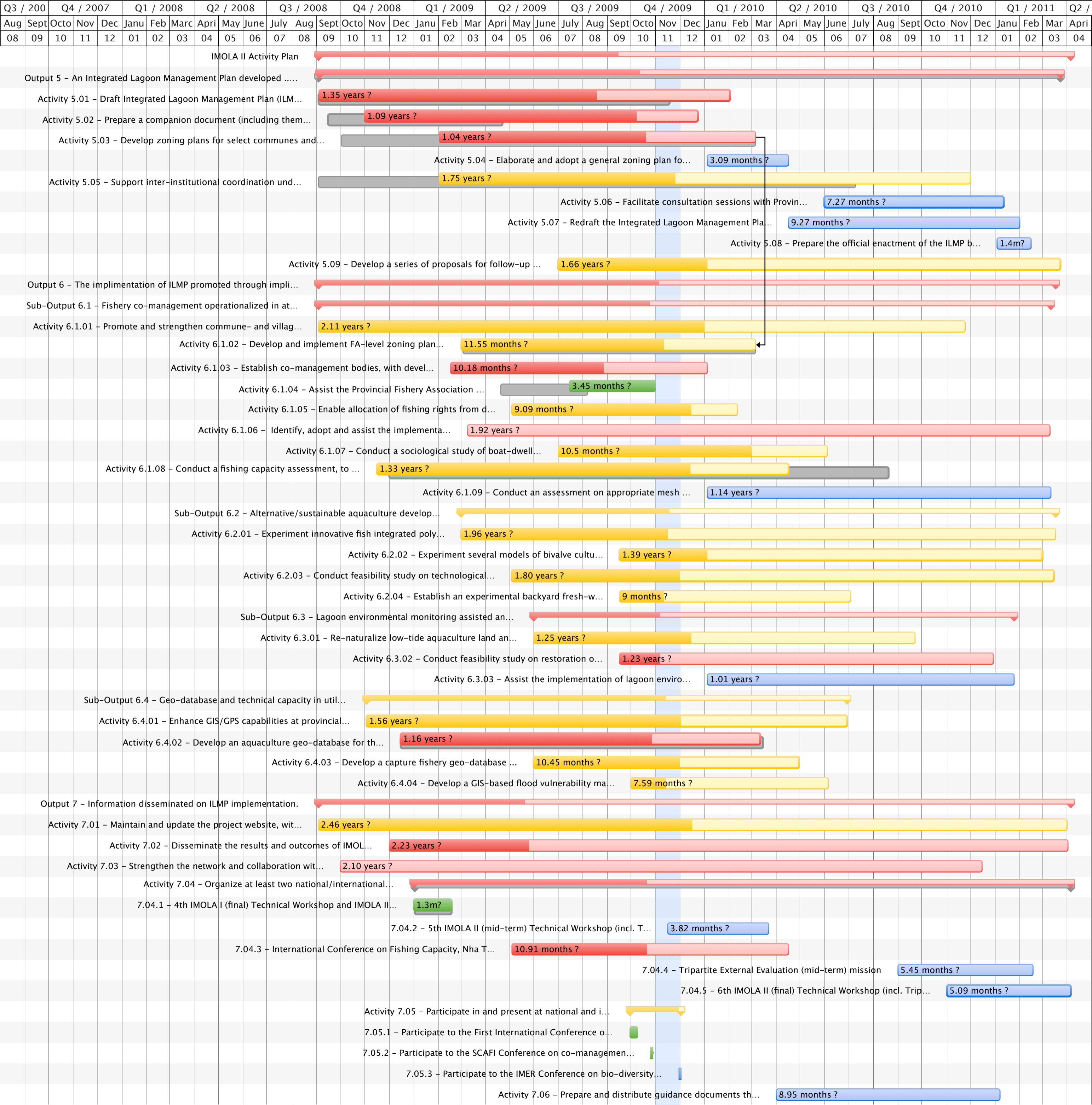
## F. LIST OF ANNEXES

- Annex 1 - Revised log-frame Ver. 7.0 (March 31<sup>th</sup> 2009). This version of the log-frame is an update from Ver. 6, after feedbacks received from the LTO, from the participants to the 4<sup>th</sup> IMOLA Technical Workshop and the Tripartite Review Mission delegates.
- Annex 2 - Activity plan for the IMOLA II Phases (Dec. 2008-Dec. 2010)
- Annex 3 - Project status report as per February 28<sup>th</sup> 2009 (three months from the beginning of the IMOLA II Phase

## IMOLA PROJECT PHASE II - DRAFT LOGICAL FRAMEWORK (Version 7.6, 13 June 2009)

| OUTPUTS AND ACTIVITIES  | OBJECTIVELY VERIFIABLE INDICATORS   | MEANS OF VERIFICATION   | ASSUMPTIONS  |
|---|---|---|--|
| <p><b>Goal:</b><br/>The natural resources of the Tam Giang Cau Hai lagoon of Thua Thien Hue Province are managed sustainably and continue to provide sustainable livelihoods for the people who depend on them as their main source of income, employment and food security.</p>  | <ul style="list-style-type: none"> <li>Ratio of poverty households is generally decreased in the lagoon communes as compared to that of 2005</li> <li>Organic water pollution level is generally decreased in the lagoon as compared to that of 2006</li> <li>Pressure from capture fishery is generally decreased in the lagoon in terms of inputs and outputs as compared to that of 2007</li> <li>Application of polyculture techniques in prawn culture in the lagoon increased at least 30% as compared to that of 2006</li> <li>More than 100 ha of conservation or protected areas are demarcated in the lagoon as compared to that of 2005</li> <li>At least 10% increase in fingerling production capacity for aquaculture in the Province as compared to that of 2005</li> </ul>  | <ul style="list-style-type: none"> <li>Provincial, district, and commune statistics (published and unpublished)</li> <li>IMOLA environmental survey data</li> <li>IMOLA geodatabase on conservation areas</li> </ul>  | <ul style="list-style-type: none"> <li>All relevant government departments release the necessary data to compile indicators</li> <li>No significant disaster such as storm and flooding hit the Province during the project implementation</li> </ul>  |
| <p><b>Project Purpose:</b><br/>The Integrated Lagoon Management Plan is piloted in its implementation and consolidated, by means of delegation of power in managing the natural resources to the emerging Fishery Associations.</p>   | <ul style="list-style-type: none"> <li>A final ILMP is produced and adopted through a series of consultation and provides a set of feasible recommendations for sustainable use of lagoon resources</li> <li>A geodatabase to support policy and decision making as well as monitoring in lagoon resource management is prepared and transferred to the relevant government department</li> <li>Feasibility and environmental and social-economic impacts of at least 10 actions towards ILMP are tested and evaluated in the areas of capture fishery, aquaculture, and conservation</li> <li>Lessons for lagoon co-management involving local FAs and authorities drawn and shared within the Thua Thien Hue Province and with other provinces</li> </ul>   | <ul style="list-style-type: none"> <li>A final ILMP document</li> <li>Announcement of the Province</li> <li>IMOLA geodatabase</li> <li>Data transfer record such as an official letter</li> <li>F/S study reports and impact studies on ILMP implementation options</li> <li>A lessons learned report on lagoon co-management</li> <li>Workshop records for experience sharing</li> </ul>   | <ul style="list-style-type: none"> <li>PPC is willing to adopt ILMP by the end of 2010</li> <li>The relevant departments is well coordinated by the project counterpart</li> <li>All consultancies fulfill their assigned tasks</li> </ul>   |
| <p><b>OUTPUT 5:</b> An Integrated Lagoon Management Plan (ILMP) developed through a process of dialogue and participation of relevant stakeholders, and coordination promoted for its implementation</p>  | <ul style="list-style-type: none"> <li>A draft ILMP (including a strategy framework and a range of practical actions to be implemented over a period of five years in relation to institutional arrangements and policies, fishery management, sustainable aquaculture development, conservation and key support functions such as monitoring, research, enforcement etc.) is produced and available</li> <li>Draft ILMP companion documents including thematic maps are produced and available</li> <li>Lagoon zoning plans are produced and available both at entire lagoon scale as well as select district and commune levels</li> <li>A provincial institutional coordination mechanism for integrated lagoon planning and management established and operated</li> <li>A provincial scientific/technical advisory mechanism established and operated for horizontal coordination</li> <li>Lagoon stakeholder consultation mechanism established and operated at commune and/or district levels for vertical coordination</li> <li>A final ILMP is produced through a series of consultation</li> <li>A final ILMP is officially adopted by the PPC</li> <li>At least 5 proposals are prepared in support of the ILMP implementation</li> </ul>  | <ul style="list-style-type: none"> <li>Draft and final ILMP documents</li> <li>Draft and final ILMP companion documents</li> <li>Lagoon zoning plans</li> <li>Minutes of stakeholder's consultations, coordination meetings, and scientific/technical meetings</li> <li>Provincial decision or document confirming the adoption of ILMP</li> <li>Proposals for ILMP implementation</li> </ul>   | <ul style="list-style-type: none"> <li>Relevant government authorities provide available data and necessary input for ILMP development</li> <li>Forum for stakeholder consultation, coordination, technical meetings are endorsed and supported by the relevant authorities</li> <li>PPC is willing to adopt ILMP by the end of 2010</li> </ul>  |
| <p>Activity 5.01 - Draft ILMP through consultation process, involving key provincial level partners.</p> <p>Activity 5.02 - Prepare a companion document (including thematic maps) that provide technical and scientific reviews on the state of the lagoon and an analysis of key issues in support of the ILMP.</p> <p>Activity 5.03 - Develop zoning plans for selected communes and districts, through identification of suitable areas/zones for aquaculture, capture fisheries, conservation, water navigation and other purposes.</p> <p>Activity 5.04 - Elaborate and adopt a general zoning plan for the entire lagoon.</p> <p>Activity 5.05 - Support inter-institutional coordination under the Thua Thien Hue PPC, involving key stakeholders for the lagoon and coastal management.</p> <p>Activity 5.06 - Facilitate a series of consultation sessions with Provincial technical departments and cooperation partners to discuss and agree on ILMP implementation strategy and coordination details.</p> <p>Activity 5.07 - Re-draft ILMP based on the feedback received from district and commune consultations and recommendations from relevant stakeholders.</p> <p>Activity 5.08 - Prepare the official enactment of ILMP by the PPC.</p> <p>Activity 5.09 - Develop a series of proposals for follow-up activities in support of the implementation of the ILMP</p> |   |   |  |
| <p><b>OUTPUT 6: The implementation of ILMP promoted through development of pilot schemes under key focus areas.</b></p>   | <p>See under each sub-output</p>  |   |  |
| <p><b>SUB-OUTPUT 6.1 Fishery co-management operationalized in at least six communes through organizational support to Fishery Associations, institutional arrangements and implementation of relevant assessments.</b></p>  | <ul style="list-style-type: none"> <li>All project supported FAs in target communes have charter, Executive Board, member list, official approval for establishment from PFA</li> <li>All project supported FAs in target communes have representation rate of more than 80%</li> <li>All project supported FAs in target communes have lagoon resource management regulation and plan coupled with FA zoning plan to ensure efficient co-management and sustainable use of the resources</li> <li>70% of project-supported Fishery Associations are granted with fishing rights by DPC</li> <li>Co-management bodies/mechanisms are established involving CPCs and FAs</li> <li>70% of project-supported Fishery Associations adopt and implement significant activities to reduce fishing pressure on the lagoon</li> <li>Fishing pressure reduced through fixed fishing gear rearrangement in Phu Loc and Huong Tra</li> <li>Provincial Fishery Association is operative to provide support to member Fishery Associations</li> <li>Potential for alternative livelihoods for local fisherfolk are identified and reported to the Provincial Government</li> <li>Appropriate mesh size for each fishing gear is identified based on the scientific and experimental studies and suggested to the Provincial Government for the revision of fishery related decision and regulations</li> </ul> | <ul style="list-style-type: none"> <li>FA documentation including charter, list of EB members, FA member list, establishment approval letter from PFA</li> <li>FA regulations including lagoon management regulation and plan, and zoning plan</li> <li>Official letters of DPC on fishing rights allocation</li> <li>Record of establishment (e.g., letters, agreement, etc.) of co-management body/mechanism</li> <li>Record of FA decisions, plans, and activities for reducing fishing pressure on the lagoon</li> <li>PFA activity report</li> <li>LOA with PFA</li> <li>Consultant report on sampan people</li> <li>Consultant report on fishing capacity assessment</li> <li>Assessment and evaluation report on appropriate mesh size for fishing gears</li> <li>Communication letters to CPCs, DPCs, Provincial DARD, and PPC</li> </ul> | <ul style="list-style-type: none"> <li>Political support to the FAs and co-management processes from authorities as well as communist parties</li> <li>DPC is willing to issue fishing rights to local FAs by the end of 2010</li> <li>Phu Loc and Huong Tra Districts officially request IMOLA to undertake fishing gear rearrangement in respective districts</li> <li>Commune and district boundaries are clear and agreed among CPCs and DPCs</li> </ul> |
| <p>Activity 6.1.01 - Promote and strengthen commune- and village-level Fishery Associations through mobilization, administrative and organizational support, capacity building, and other technical support.</p> <p>Activity 6.1.02 - Develop and implement Fishery-Associations-level zoning plans, accompanied by lagoon-resource management plans and strategies.</p> <p>Activity 6.1.03 - Establish co-management bodies with development of guidelines on co-management to enable FAs to take part in lagoon co-management.</p> <p>Activity 6.1.04 - Encourage and assist the Provincial Fishery Association (PFA) to provide assistance to local FAs</p>  |   |   |  |

|   |  |  |
|---|--|--|
| Activity 6.1.05 - Enable allocation of fishing rights from districts to local FAs, through clarification of the concept, organization of policy workshops, development of allocation guidelines and provide technical assistance to the allocation preparation processes.   |  |  |
| Activity 6.1.06 - Identify, adopt and assist the implementation of measures to reduce fishing pressures in the lagoon, by local Fishery Associations, commune and district authorities including fixed fishing gear rearrangement.  |  |  |
| Activity 6.1.07 - Conduct a sociological study of boat-dwelling fishing households to identify their livelihood issues (in connection with public resettlement schemes, unregulated fishery activities and representation in FAs) and to ensure their social inclusion.   |  |  |
| Activity 6.1.08 - Conduct a fishing capacity assessment, to understand the status of fishery resources in the lagoon and the sea in and around the Province, in an effort to identify the areas of alternative livelihoods within the fishery sector in the central region.   |  |  |
| Activity 6.1.09 - Conduct an assessment on appropriate mesh size for fishing nets, to reduce fishery pressure on juvenile fish in the lagoon.   |  |  |
| <b>SUB-OUTPUT 6.2 Alternative/sustainable aquaculture development promoted and experimented.</b>  | <ul style="list-style-type: none"> <li>• At least 10 polyculture models are piloted with local FAs and completed with publication of final evaluation report on environmental impacts and economic efficiencies</li> <li>• At least 300 FA members are provided with the knowledge and experience of the Project's polyculture pilot models through experience sharing workshops</li> <li>• One provincial workshop is organized to share and disseminate the polyculture pilot experience of the Project</li> <li>• At least one bivalve culture model each in Loc Binh and Vinh Hien is under operation, providing net profit to the FAs</li> <li>• At least one FA is producing fish fingerlings in a financially sustainable way for its members</li> </ul>  | <ul style="list-style-type: none"> <li>• Polyculture pilot final reports</li> <li>• Record of experience sharing workshops</li> <li>• Provincial workshop record on aquaculture pilot</li> <li>• Bivalve experimental model final reports</li> <li>• Fingerling production pilot reports</li> </ul>  |
| Activity 6.2.01 - Experiment innovative fish integrated polyculture pilot models, to explore and propose possible alternatives to reduce organic pollution of lagoon waters and to identify more stable forms of aquaculture.   |  |  |
| Activity 6.2.02 - Experiment several models of bivalve culture in two lagoon inlet communes, to explore more sustainable forms of aquaculture.  |  |  |
| Activity 6.2.03 - Conduct feasibility study on technological improvement of shrimp ponds, with the aim of reducing effluent pollutant load.   |  |  |
| Activity 6.2.04 - Establish an experimental backyard fish-fingerling production under a Fishery Association, through feasibility study, capacity building, technical and financial assistance.  |  |  |
| <b>SUB-OUTPUT 6.3 Lagoon environmental monitoring assisted and environment protection and improvement in particular lagoon areas promoted and piloted.</b>  | <ul style="list-style-type: none"> <li>• Areas for re-naturalization identified and re-naturalization interventions endorsed by the recipient communes</li> <li>• Hydrology of the lagoon understood and feasibility study for improved circulation and enhanced water exchange implemented</li> <li>• Provincial environmental monitoring scheme developed and endorsed by the Province, set up and routinely operating.</li> </ul>   | <ul style="list-style-type: none"> <li>• Proposal on lagoon renaturalization</li> <li>• Endorsement letter on lagoon renaturalization proposal from communes</li> <li>• Final report on lagoon hydrology and FIS report on water circulation enhancement in the lagoon</li> <li>• Final design of lagoon environmental monitoring scheme for the province</li> <li>• Endorsement letter from the Province on lagoon environmental monitoring scheme</li> <li>• Environmental monitoring record and database</li> </ul> |
| Activity 6.3.01 - Re-naturalize low-tide aquaculture land, to restore intertidal habitats and nursery areas in one target commune.  |  |  |
| Activity 6.3.02 - Conduct feasibility study on restoration of lagoon tidally-driven circulation, through the reactivation and stabilization of the Tu Hien inlet.   |  |  |
| Activity 6.3.03 - Assist the implementation of lagoon environmental monitoring through development of data-collection protocol, capacity building on data collection and handling methods, and assistance to actual data collection as well as spatial-data management, in collaboration with CE/DMA and Provincial institutions. |  |  |
| <b>SUB OUTPUT 6.4 Geo-database and technical capacity in utilizing spatial tools for integrated lagoon management and planning developed.</b>   | <ul style="list-style-type: none"> <li>• At least 10 officials each at the provincial and district level are capable of handling GIS</li> <li>• At least 30 officials are capable of handling GPS for field survey</li> <li>• Comprehensive aquaculture geo-database for an entire lagoon available to DARD and PPC and used for aquaculture planning</li> <li>• Capture fishery geo-database at least for 7 communes available to DARD and PPC and used for capture fishery planning</li> <li>• Flood vulnerability maps for the lagoon communes available with set of recommendations for disaster mitigation</li> </ul>   | <ul style="list-style-type: none"> <li>• Record of GIS training</li> <li>• Record of GPS training</li> <li>• Final aquaculture geo-database</li> <li>• Final capture fishery geo-database</li> <li>• Database handover record</li> <li>• Aquaculture and capture fishery master and other plans</li> <li>• Final flood vulnerability study report</li> </ul>   |
| Activity 6.4.01 - Enhance GIS/GPS capabilities at provincial, district and commune levels, through provision of on-the-job training, participation to project activities and provision of technical assistance to GIS/GPS operators at different levels.  |  |  |
| Activity 6.4.02 - Develop an aquaculture geo-database for the entire lagoon to support and facilitate aquaculture planning at different levels.   |  |  |
| Activity 6.4.03 - Develop a capture fishery geo-database for select communes, to support and facilitate capture-fishery planning at different levels.   |  |  |
| Activity 6.4.04 - Develop a GIS-based flood vulnerability maps for the lagoonal communes, with indications of flood prone areas, resilience times, and a set of recommendation for disaster mitigation.   |  |  |
| <b>OUTPUT 7: Information disseminated and project experience shared nationally and internationally on the ILMP and its implementation.</b>  | <ul style="list-style-type: none"> <li>• Project website maintained, providing access to project profiles, activity summaries, project reports, maps, photos, relevant public regulations, links and contact information</li> <li>• IMOLA outputs and outcomes widely disseminated through distribution of at least 10 different kinds of paper-based or electric materials</li> <li>• Mutual action or collaboration undertaken with at least 10 other organizations or projects based on MOUs</li> <li>• National level agencies including MARD and MPI recognize the contribution and outputs of IMOLA through at least two national workshops on ILMP and its implementation organized with more than 50 participants each</li> <li>• IMOLA disseminate its experiences in at least 10 national and international conferences and meetings</li> <li>• IMOLA models (co-management, environmental monitoring, alternative/innovative culture methods, etc.) shared with other provinces through guidance documents</li> </ul> | <ul style="list-style-type: none"> <li>• Project website and its access record</li> <li>• IMOLA publications including reports and manuals</li> <li>• MOUs with partner agencies and projects</li> <li>• National workshop records</li> <li>• Mission reports and conference programs</li> </ul>   |
| Activity 7.01 - Maintain and update the project website, with access to project profiles, activity summaries, project reports, maps, photos, relevant public regulations, links and contact information.  |  |  |
| Activity 7.02 - Disseminate the results and outcomes of IMOLA activities through production and distribution of information booklets, guidelines, leaflets and other communicable materials.  |  |  |
| Activity 7.03 - Strengthen the network and collaboration with other institutions and projects, to exchange information/data, experiences and techniques/technologies.   |  |  |
| Activity 7.04 - Organize at least two national/international workshops to discuss issues related to ILMP and its implementation.  |  |  |
| Activity 7.05 - Participate in and present at national and international conferences, to disseminate project experiences and findings.  |  |  |
| Activity 7.06 - Prepare and distribute a series of guidance documents that summarize key processes and procedures for the co-management of lagoon activities and lessons learned for integrated lagoon management.  |  |  |



**Budget Status Report (based on figures as per Project Status Report from Data Warehouse October 19th, 2009)**

Project Symbol: GCP/VIE/029/ITA  
 Project Name: Integrated Management of Lagoon Activities in Thua Thien Hue Province, Vietnam  
 Project ID: TFIT110005179  
 Operating Unit: FAVIE  
 Budget Holder: Andrew Speedy, FAOR

| ACCOUNTS | DESCRIPTION                | PRIOR YEARS<br>EXPENDITURES<br>DW, Oct. 19th, 2009 | CURRENT YEAR<br>EXPENDITURES<br>DW, Oct. 19th, 2009 | TOTAL<br>EXPENDITURES<br>DW, Oct. 19th, 2009 | 2009<br>Budget<br>BR E, Nov. 10th, 2008 | 2010<br>Budget<br>BR E, Nov. 10th, 2008 | Totals           |
|----------|----------------------------|--|---|--|---|---|------------------|
| 5011     | Salaries Professional      | 530,067  | 145,600   | 675,667                                      | 10,400                                  | 207,312                                 | 893,379          |
| 5012     | Salaries General Service   | 60,363   | 13,156  | 73,519                                       | 44                                      | 12,287                                  | 85,850           |
| 5013     | Consultants                | 159,373  | 50,312  | 209,685                                      | -10,512                                 | 28,867                                  | 228,040          |
| 5014     | Contracts                  | 155,653  | 1,998   | 157,651                                      | 18,002                                  | 50,123                                  | 225,776          |
| 5020     | Locally Contracted Labour  | 121,557  | 45,224  | 166,781                                      | -8,579                                  | 26,809                                  | 185,011          |
| 5021     | Travel                     | 149,500  | 43,750  | 193,250                                      | -23,750                                 | 11,460                                  | 180,960          |
| 5023     | Training                   | 100,518  | 16,410  | 116,928                                      | 13,590                                  | 12,833                                  | 143,351          |
| 5024     | Expendable Equipment       | 63,178   | 9,294   | 72,472                                       | -1,294                                  | 5,254                                   | 76,432           |
| 5025     | Non Expendable Equipment   | 133,077  | 1,100   | 134,177                                      | 18,900                                  | 8,777                                   | 161,854          |
| 5026     | Hospitality                | 1,083  | 75  | 1,158  | 125                                     | 751                                     | 2,034            |
| 5027     | Technical Support Services | 44,230   | 4,300   | 48,530                                       | 30,700                                  | 23,000                                  | 102,230          |
| 5028     | General Operating Expenses | 99,690   | 22,414  | 122,104                                      | -6,414                                  | 8,632                                   | 124,322          |
| 5040     | General Overhead Expenses  | 1,612  | 0   | 1,612  | 0                                       | 2,415                                   | 4,027            |
|          | Chargeback                 | 0  | 0   | 0  | 0                                       | 0                                       | 0                |
|          | Chargeout                  | 0  | 0   | 0  | 0                                       | 0                                       | 0                |
|          |                            |  |   | 0  |   |   | 0                |
|          | <b>SUB-TOTAL</b>           | <b>1,619,901</b>                                   | <b>353,633</b>                                      | <b>1,973,534</b>                             | <b>41,212</b>                           | <b>398,520</b>                          | <b>2,413,266</b> |
| 5029     | Support Costs (13%)        | 210,591  | 37,515  | 248,106                                      | 13,815                                  | 51,804                                  | 313,725          |
|          | <b>TOTAL</b>               | <b>1,830,492</b>                                   | <b>391,148</b>                                      | <b>2,221,640</b>                             | <b>55,027</b>                           | <b>450,324</b>                          | <b>2,726,991</b> |