



INTEGRATED MANAGEMENT OF LAGOON ACTIVITIES IMOLA PROJECT

PROJECT PROGRESS REPORT (ANNUAL)

REPORTING PERIOD:
MARCH 2006 THROUGH AUGUST 2006

Hue, 15 October 2006



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
<ul style="list-style-type: none"> Belgium, Canada, USA BADEA, Arab Gulf Programme, Denmark, Finland, Japan, Switzerland, Sweden, Libya and all other Donors not mentioned elsewhere Australia, France, Italy, Netherlands, Norway, Unilateral Trust Funds (unless formally agreed otherwise). 	May-October and November-April January-June and July-December	30 November and 31 May 31 July and 31 January
	March-August and September-February	30 September and 31 March

Project symbol GCP/VIE/029/ITA	Title Integrated Management of Lagoon Activities			Reporting period March 2006-August 2006
Operating Unit FAOR/BH/CPO/TO FAOR, Vietnam	Technical Unit FIPP FAO HQ, Rome	Starting date 5th August 2005	NTE date 5th August 2008	Total Project Budget USD 1,494,000

A. PROGRESS AND OUTPUTS,**PAGE 1**

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.

The immediate objective of the IMOLA Project is to develop and implement an integrated lagoon management plan, built through stakeholder consensus, which balances the sustainable use of the lagoon resources with the livelihoods and needs of the resource users. This objective will be achieved through the implementation of six main components (outputs), supported by a number of activities, all concurrent towards the building-up of lagoon master plan, which the Provincial People's Committee of the Thua Thien Hue Province should endorse and prepare to implement. These project components (Outputs 1 through 6) are analytically listed in the revised project log frame, according to which the report is compiled (Annex 1). The implementation of these components will envision, for each main activity, the identification of a task force and a reference institution and consultant/s providing assistance and technical support. The activities in the first 1,5 years will aim to achieve a full understanding of the natural system and structure of the human community, setting up pilot subprojects and training sessions to build capacity and increase awareness of the local population on IMOLA scopes and functions. By the end of the year 2, an integrated management plan will be drafted and negotiated among stakeholders, through a consultative process of consensus building. During year 3, preparation for endorsement by the Provincial People's Committee and its implementation are foreseen.

Output 1 foresees that the biological and physical issues that are affecting the Tam Giang Cau Hai lagoon are described and understood. Activities 1.1 through 1.9 are expected to be carried out during the first year and half of the project, with preliminary conclusions attained during the first year, ready to be presented and discussed at the Tripartite Meeting. All activities except 1.4 and 1.7 are ongoing. Some of these will imply a longer process of data acquisition, monitoring and interpretation which will probably continue longer than the project lifespan. The outputs will delineate the actual state of the lagoon environment and habitat, its carrying capacity to support extensive fish culture and capture, the hydrology of the water body and its efficiency in flushing pollutants out of the lagoon system, on the sizing of fish stock and capacity of the natural and human environment to cope with emergencies. A set of scientific and methodological tools will be deployed and made available for government technical departments.

Activity 1.1 – The assessment of the impact of yearly floods on the livelihoods of the lagoon people and natural environment is ongoing and will produce its first outputs at the end of year 1, according to the schedule included in the pertinent LOA. The consultant Fausto Marincioni from the Polytechnic University of Marche (UPM) visited the project for preliminary assessments and actions; Dr Phong Tran (Hue University/University of Kyoto) and Prof Le Van An (Center for Agricultural Forestry Research and Development (CARD) of the Hue University of Agriculture and Forestry) are the recruited consultants to coordinate the activity and assist the HUAF in executing the LOA.

The Tam Giang Cau Hai lagoon is affected by high frequency (1-5 years cycle) natural disasters, particularly storms and floods. These inhibit the social stabilization and economic growth of the lagoon areas. In order to mitigate the negative impact of recurrent natural disasters, many initiatives have been undertaken by the central government, provincial authorities, international organizations and NGOs. However, the results of those projects are generally incomplete, as there is a lack of detailed understanding of how disaster impact and how they affect in the short term the

activities of the lagoon resource users. Moreover, the socio-economic information, vital to determine the vulnerability of the different disaster-prone areas, is usually completely missing. The IMOLA project is implementing five interconnected activities (Activity 1.1, 1.8, 1.9, 2.5 and 3.9). Field work started in August 2006 and information reports on losses and damages caused by natural disasters on the livelihood and natural environment are being collected in four communes (Quang Phuoc, Hai Duong, Phu An, and Vinh Hien), through focused group discussions (16 FGD) and household questionnaire surveys (400 HH), after collection of secondary socio-economic and disaster-impact data. Reports on i) assessment of flood damages and statistical reconstructions of flood frequency and ii) climate change impact, traditional knowledge and disaster-coping mechanism at local scale will be produced by the end of Year 1.5.

Activity 1.2 – The environmental and hydro-biological surveys are being carried out jointly by the Institute of Marine Environment and Resources (Hai Phong) and the University of Science (Hué), through the execution of two LOAs aimed to assess the physico-chemical conditions of the lagoon, the state of its hydro-biological resources, its trophic state, its habitat inventory and conditions and the pollutant distribution. The activity is ongoing, coordinated by the Natural Resources Unit of the IMOLA Project. The Institute of Marine Environment and Resources (Hai Phong) has conducted three of the four scheduled environmental and hydro-biological surveys, and the fourth winter survey is scheduled for November 2006. Three survey reports were delivered, together with the Interim Report. The Hue University, college of Sciences has completed all chemical analyses and delivered its reports. IMER will make available to the IMOLA Project its databases of biological and ecological information on Tam Giang-Cau Hai lagoon, resulting from MOFA/MOST collaborative research (years 2003-2005). Two senior assistants are supported, on site, by the University Polytechnic of Marche, assisting the Natural Resources Unit team in coordinating and carrying out the activities. A comprehensive collection of hydro-biological data is available, types and distribution of pollutants present in the lagoon will be described through chemical species distribution maps and data collected from Activity 1.2 will contribute to build-up a comprehensive hydro-biological model of the Tam Giang-Cau Hai lagoon by the end of year 1.5 (March 2007).

Activity 1.3 – The fishery and aquaculture survey/inventory by DOFI (with GIS support) to determine fishery resources, gears used, current exploitation levels in lagoon fishery development, current status of aquaculture, opportunities and constraints for aquaculture development in the lagoon is ongoing, through the services provided by the Aquatic Resources Protection Sub-department (ARPS) of the Thua Thien Hue Province. The national consultant from the University of Fishery, Nha Trang, and the technical staff from the Department of Fishery (DOFI) and Aquatic Resources Protection Sub-department are recruited in support of the LOA with ARPS: these are two GIS IT experts, full-time, two fishery technologists and one fishery biologist, also full-time. PRA and socio-economic field surveys reports were used to design the survey. As inferred from the work-plan developed for this activity (see LOA), an assessment of present status of aquaculture activities, an inventory of fishing gears and aquaculture plants divided by typology (extensive, intensive, semi-intensive) and by products, a multi-temporal analysis carried out through the development of thematic maps related to the fishery sector and statistical information from past and current situation, including physical and chemical parameters, biodiversity indicators, fishing technology data is being developed and completed by the end of year 1.5 (March 2007). The results of census will be handed to responsible authority. A socio-economic assessment of revenue disparity for different typology of aquaculture plants is being carried out, along with a cost and benefit analysis for different types of aquaculture plants. Business plans will be developed for pilot plants. Preliminary results will be available by October 2006 and a comprehensive, up-to date information on aquaculture practice will be available through organized database and survey reports by the end of year 1.5.

Activity 1.5 – This activity foresees the development of a GIS-based database and mapping system for bio-physical data generated by the project and its partners: in particular, geophysical and sediment-type thematic mapping using GIS-based mapping tools, multi-temporal analysis of lagoon environment for short-term variation and vulnerability assessment, using remotely sensed images. These outputs will be made accessible to stakeholders. Preparation for this activity was supported by the University Polytechnic of Marche through a junior scientist deployed on site, who preliminarily operated as consultant for the CGT of the University of Siena. At present, the institutional contract with the Center for Geotechnologies is signed and two full-time consultants are on duty at the project station for the execution of the LOA; the procurement of two workstation is completed and the equipments, installed and operative. The GIS software is installed and the purchase of remotely sensed imagery from SPOT Imagery is under completion. The University of Siena, Center for Geotechnologies is the reference institution for geotechnologies of the Government of Italy and for a number of Provincial Authorities that make use of database services and thematic mapping for their territorial planning purposes. The application of remote-sensing analysis is of important for the IMOLA Project to monitor the vast lagoon area and remotely track environmental changes and to optimize the management of the natural resources. The services of the Center for Geotechnologies will assist in the development of a zoning plan of the lagoon and vicinities (Activity 2.1).

Activity 1.6 - Linkage of the IMOLA database to LAPROCOF. Two consultants from the Center for Geotechnologies of the University of Siena are working at the project duty station, together with two personnel units supported by the University Polytechnic of Marche, to study the format of the Provincial GIS-based database, at present developed by IMOLA. The setup of this prototype will serve as a pilot experiment to feedback into the GIS-Provincial Hue Project, already established and funded to DOST, whenever it will come into effect. The group of experts has established the metadata structure, prerequisite to build the database. The metadata sets that are identified and available to complement the IMOLA datasets into the GIS-based provincial database are those produced by the Region Nord-Pas de Calais (being released by the University of Hue College of Science) and the IMER Hai Phong dataset from MOFA/MOST Cooperative Projects. The VNICZM and LAPROCOF datasets have been requested for inclusion, to the Provincial agencies in charge. A system to protect the intellectual ownership of information is being developed.

Activity 1.8 -Maps of flooding vulnerability developed and available. This activity concerns on the development of planning and emergency tools and methodologies to collect vulnerability-index parameters, spatialize these parameters and enter them into a GIS-based database for the production of cartographic materials through automated procedures. The flood-risk analysis and processing of flood-risk-index parameters to be translated into a flood risk index map and vulnerability map is underway and these products will be made available to the project in December 2006 and January 2007 (for a comprehensive overview of disaster-management-related issues (Activities 1.1, 1.8, 1.9, 2.5 and 3.9) and delivery schedule, see technical annex to LOA). These cartographic products will be used to locate vulnerable areas for urban settlements and economic activities. At the end of year 1.5 (February 2007) vulnerability maps of coastal floodplain area will be available and disseminated.

Activity 1.9 -Preparation of scenario studies for flooding events and appropriate responses. Through this specific activity, ongoing under the current LOA with Centre for Agricultural Forestry Research and Development (CARD) of HUAF, preventive measures to mitigate flood hazard will be defined and flood-disaster scenarios will be developed according to local morphology and land use. By December 2007, database related to hydro-meteorology of the lagoon and Thua Thien Hue coast will be available, along with a report on flood impact scenarios. By the end of year 1.5 (March 2006) present emergency-response strategies will be evaluated and reports will be made available. Flood emergency response plan will be prepared and made

available for enforcement. For a comprehensive overview of disaster-management-related issues (Activities 1.1, 1.8, 1.9, 2.5 and 3.9), see technical annex to related LOA with CARD of HUAF.

Output 2 foresees that policy and regulatory aspects of aquatic resources use are identified and addressed to support integrated management. Activities 2.1 and 2.6 are not started, as they are logically consequent and operationally depending upon activities being completed under Output 1. Activities 2.2 through 2.5 and 2.7 are ongoing, consultants in charge of making a preliminary assessment of the issues are identified, recruited or being recruited and are completing their task.

Activity 2.2 – The identification of required policies, institutional requirements and other activities to assist in improving livelihoods (including the possible settlement of the sampan people) by education, training, credit and infrastructure improvements, is ongoing. A preliminary investigation on policy and on legal and institutional matters is completed completion and a final report is produced. The policy and institutional analysis and the study methodology is ongoing.

Activity 2.3 – An assessment and recommendations of legal aspects of lagoon aquaculture and fishery management, in order to possibly adjust the Thua Thien Hue provincial fishery regulations to include aquaculture has been completed and an interim report has been produced. A FAO UN volunteer legal expert assisted the project early September 2005, February-March 2006 and July-October 2006, in collaboration with a FAO LEGN technical support on his first mission to Hue; he preliminarily investigated the state of the national and provincial legislation concerning the fishery sector and institutional responsibilities in the formulation of additional provincial laws specifically designed for the lagoon locale. The study aimed to evaluate the present-day legislative perimeter within which fishery activities are performed and to provide an inventory of national laws and provincial regulations along with their areas of competence. The study is completed and a follow-up activity aimed to legally and institutionally support the establishment of communal fishery associations is underway during September 2006. This study is preparatory to the discussion on models of fishery and aquaculture co-management in the lagoon through Fishery Association, focusing on stakeholder' s participation at all relevant levels. Awareness raising activity of lagoon dependent population about the fisheries law and its related regulations is ongoing in two communes and will be extended to 7 communes by the end of November 2006, continuing. Current regulations on fishery management will be adjusted to include aquaculture and improved through the assistance of MOFI and FAO LEGN consultant. Promotional material is produced and disseminated. Training of DOFI staff on law enforcement methods and approaches and related evaluation reports are foreseen in the coming months of October and November and evaluation sessions of awareness-raising campaign will be performed at the end of the process, in the next six month.

Activity 2.4 – The institutional analysis of roles and responsibilities of Provincial and lagoon-based institutions as they relate to management of lagoon activities is ongoing. The necessary steps to formalize a Provincial Advisory Committee have been undertaken and a consultant is being recruited from the Provincial People's Committee to develop a mandate for this committee. Representatives of all major provincial departments will participate in this advisory board who will meet regularly once a month. Project task forces will operate in established pilot communes (7 units), with diverse functions ranging from institutional assistance to Fishery Associations, implementation of project-related activities, development and dissemination of extension material. An operative base is being established in each of the 7 pilot communes, and the institutional analysis of roles and function of such a structure is evaluated at Commune and District level by a national consultant (TOR developed). Routine reports of taskforces will be available as project outputs when they will come into effect.

Activity 2.5 – The development of strategies to reduce vulnerability to flooding in aquaculture/fisheries and other activities on the lagoon is planned and staffed, under a LOA with the Centre for Agricultural Forestry Research and Development (CARD) of the Hue University of Agriculture and Forestry. However, the specific activity has not been started yet as logically consequent to the completion of related activities 1.1, 1.8 and 1.9. Results are foreseen at the end of 2006.

Activity 2.7 – The identification of credit, savings and insurance needs and organizational needs to develop a training course for the establishment of cooperatives, associations or solidarity groups is completed. A credit, savings and insurance scheme targeted on poorest sampan people is tentatively developed and ready to be discussed with the international consultant from FAO Technical Support scheduled to operate on site at the end of October 2006. With the assistance of the international consultant, the IMOLA project is preparing to operate in collaboration with local banks, communal and district Women Unions and insurance providers to assist poorest communities in accessing rural credit and facilitate the diversification of their livelihoods during the process of resettlement. A detailed study on training, financial services and organizational needs of the stakeholders was developed in twelve communes of the lagoon, through training-need assessment and training-need identification workshops. Training-need reports with clear recommendations are prepared and available. The process of designing, formalizing and strengthening of seven communal fishery associations begun in July 2007 and is ongoing: a pilot workshop aimed to raise awareness of the communities on the necessity of such instruments, to build-up a vision for communal fishery association and develop their mandate has been conducted by a FIPI TSS consultant in July 2006. A mission of a FAO LEGN consultant to build an institutional framework for Provincial and communal FA is ongoing. Support training will be delivered in the seven pilot communes of the lagoon selected by IMOLA and the remaining 8 peripheral communes that will participate in the pilots. The participation of women in the activities was about 30%. The setup and functioning of communal Fishery Association will lead to improved marketing facilities and possibilities for fish-farmers and fisher-folk.

Output 3 foresees that capacity is built at provincial institutions (DOFI, DOSTE, DONRE, DPI, DOLISA, DARD), to generate and manage information related to decision making process in the integrated management of Thua Thien Hue Lagoon. Activities 3.1 through 3.3 are completed, with all products being delivered by April 2006. Activities 3.4 through 3.7, 3.10 and 3.12 have not started. Activities 3.8, 3.9 and 3.11 are underway.

Activity 3.1 – Adequately equipped lagoon research laboratory at DOFI, alternatively at University Consortium (UNICON) partners. Laboratories are implemented but the process of acquisition is still ongoing. An assessment of necessary instrumentation and location where this had to be installed was conducted: caution was paid in the choice of equipments and their location, in order to optimize the use of financial resources. The chemical laboratory at the University of Science (Hué) is upgraded, to satisfy the needs of the IMOLA project and the laboratory at the Aquatic Resources Protection Centre of DOFI is equipped for environmental monitoring and fish-health analysis. The laboratory boat for DOFI is built and ready to be delivered. A second laboratory boat has been offered to the IMOLA Project by the Hue University of Science at no cost, in exchange for improvement of their laboratories. The GIS and remote-sensing workstations are functioning, with all software and peripherals installed. Remote-sensing imagery from SPOT is selected and acquired, being used for fishery and aquaculture mapping, land-use map and multi-temporal analysis. GPS devices have been procured for the use of technical staff involved in the surveys. The laboratories are equipped and ready to use; local staff of DOFI and ARPS is being trained on how to use the laboratory.

Activity 3.2 - DOFI staff is trained and is now competent in carrying out PRA, SLA activities and questionnaire surveys. Since December 2005, the IMOLA Project has

been preparing the activity of socio-economic baseline survey, with both a scientific and training purpose. The PRA and SLA Methodology training and the Questionnaire Survey training have been conducted with success by NACA, on a group of 36 technical staff and is now completed. During the PRAs, each field operating unit was supported by a coach: NACA employed four staff from the University of Hue (three lecturers and one socio-economist from the Centre for Social Studies and Humanities) and a socio-economist from the Research Institute for Aquaculture 1 (RIA-1). Involvement of coaches was deemed necessary to increase the effectiveness of the training and to ensure the quality of the collected data. During the week that followed the PRA, the core members of each field operating unit (DOFI staff) wrote a draft PRA report, supported by professional staff in order to ensure effectiveness of training and provide the necessary support in how to aggregate, analyse and write-up the collected information. Questionnaire-survey training was provided during a five-day training course. The training included: i) review of five PRAs (PRA process, content and lesson learned, two days); ii, QS training (one and a half day); iii) pre-testing of draft questionnaire in Quan Phuoc commune (half a day); iv, discussion and update of draft questionnaire (one day). Virtually all attended the training course and maintained their commitment until the end of operations, with full satisfaction of the trainers and the IMOLA Project. After the training, each field-operating unit could complete its process of primary-data acquisition and writing of the reports, now finalized. Appropriate training course material for PRA and SLA are prepared, course plan and curricula are available for replication. Questionnaires on level of satisfaction have been filled by participants and statistically processed and evaluation of PRA activities has been performed by NACA-trained personnel

Activity 3.3 - Training materials and methodology papers for PRA and Sustainable Livelihood Analysis are prepared and available. The training materials for the activities described under the preceding chapter are among the outputs foreseen by the NACA contract. These consist of manuals and visual presentations, which are finalized and published under the aegis of IMOLA and NACA jointly. They will be available in downloadable format in the project website www.imolahue.org. The CTA examined the material presented during the training courses and understand that the products are of high quality and clarity. NACA consultant redesigned the explanatory tools used and classroom manuals for the specific purpose of the IMOLA Project. Training and study material, manuals and other training documentation is deposited in the IMOLA office, published and distributed to local agencies.

Activity 3.8 - DOLISA and/or Women's Union trained and mobilized to assist identified groups in accessing rural credit (or other revolving fund type schemes – according to assessment). Credit scheme is developed and training underway.

Activity 3.9 – The training course for flood impact preparedness, specific to impacts on lagoon resource users is planned under a LOA with the Centre for Agricultural Forestry Research and Development (CARD) of the Hue University of Agriculture and Forestry. However, the specific activity has not been started yet as logically consequent to the completion of related activities 1.1, 1.8 and 1.9 and 2.5. Results are expected in January 2007.

Activity 3.11 -Support inter-institutional coordination under the Thua Thien Hue PPC, through encouraging the establishment of a Provincial Advisory Committee for lagoon and coastal management (with possible collaboration from ICZM project). A Provincial Advisory board is being established. The national consultant is identified and recruited, to assist in the preparation of the institutional TOR, rules and regulations for the board, expected tasks and results.

Activity 3.12 – An international study tour for Government officials, to coastal lagoons of Northern Italy is planned and ready to be undertaken, once participants are selected by Provincial authorities and National Project Director.

Output 4 aims at improving the understanding of the socio-economic and livelihood issues of lagoon resource users. Activities 4.1 and 4.2 are completed, with all outputs delivered. Activity 4.4 is underway. Activities 4.3 and 4.5-4.12 are not started.

Activity 4.1 -PRA activity is completed: survey was carried out in 6 communes, to establish issues, priorities, constraints, needs for management of fisheries and aquaculture, as well as specific opportunities for organization and training to improve or diversify livelihoods (out of fishery sector). Since December 2005, the IMOLA Project has been preparing the activity; the socio-economic survey and PRAs with local communities (fishers, aquaculture producers, agriculture farmers) were performed to obtain a broad general overview of the livelihood status of the lagoon communities, evaluate the economic and financial status of households (including savings, investment and borrowing, risk management, habits and practices), resource use, conflicts, problems and constraints and current management practices among fishing groups, farmers union, women's unions, etc. The Network of Aquaculture Centres in Asia and the Pacific (NACA) was hired to provide technical assistance in conducting the PRA. Socio-economic information and statistic secondary data were gathered through the application of PRA and SLA methodologies to five selected communities of the Tam Giang-Cau Hai lagoon, from DPCs and CPCs meetings prior to PRA, semi-structured interviews with key informants in the field and comments from the IMOLA APO and NACA consultants. Besides PRA, a general survey within all of the 33 lagoon community has been undertaken to obtain further information on commune basic statistics and gather secondary data, with the purpose of offering, as a basis for the integrated lagoon plan, the most complete background of the actual lagoon characteristics from socio-economic standpoint. The results are being compiled in their definitive form and final reports being produced. The overview of socio-economic situation in tentatively selected target areas is completed and PRA and SLA reports produced. LOA with NACA has been successfully implemented thanks to contacts established with RIA1 and Hue University of Agriculture and Forestry working groups.

Activity 4.2 aiming to provide an overview of the socio-economic situation in target areas, based on PRA activities and other surveys or collection of secondary information is completed. The compilation of a socio-economic baseline study was part of a complex process of secondary data acquisition, PRA and SLA training and activity, questionnaire survey design and implementation, statistical data processing and reporting, all done under an institutional contract with NACA. The details of the NACA operational plan have been reported under the preceding chapter 4.1. In order for the Questionnaire Survey to be significant, it had to take place in at least 10 communes rather than the five, plus one PRA communes. Since more than 10 communes were identified on the basis of criteria that were agreed upon by the Project Management Unit, it was decided that in addition to the PRA communes four others had to be included. The baseline study reports are completed and a comprehensive understanding of the actual socio-economic state of the lagoon is achieved.

Activity 4.4 aims at developing a training educational program, based on training-need assessments for lagoon people, including landless households and SMEs, in at least ten communes, for approximately 20,000 people. Subject areas need to be identified through PRA assessment and disaggregated for women and specific needs groups. The training-need assessment has been developed and tested during the First Workshop on Training Needs Identification, held in Dien Hai commune and Hue (DOFI) during 16-23 January 2006. A report has been produced on this workshop, pointing out the training needs of a rural lagoon community in a remote commune of the Phong Dien district. The first training-need assessment report is available online at www.imolahue.org. A second Training Needs Assessment survey was held in eleven other communes, out of those initially selected for PRA and SLA. Training needs assessment report and participation lists of training-need assessment sessions are available. Based on the evaluation of the PRA and SLA analysis and results of the First Workshop on Training Needs Identification, the national consultant leaders of the

Training Unit of IMOLA, together with the TCDC consultant, designed a first batch of training modules, in the process of being implemented from October 2006 through May 2007. IMOLA will apply a Trickle Down System approach which, through Result Demonstration Farmers (RDF) and Fellow Farmers (FF), with the assistance of DOFI and Fishery Extension Centre personnel, will provide training to approximately 6350 farmers. The first batch of training program will be implemented in at least 12 communes. Training materials and training technology adoption and evaluation reports are being prepared and available to trainees.

Output 5 concerns the development of an integrated lagoon management plan developed through a process of dialogue and participation with lagoon users and stakeholders. All activities related to the delivery of this output pertain to the second half of the project lifespan and therefore none of these has started yet.

Output 6 concerns issues related to coordination and liaison with other organizations, to build awareness of the integrated management plan and IMOLA activities. Activities 6.1, 6.2 and 6.4 have been initiated and in the process of being implemented. Activities 6.3 and 6.4-6.6 have not been completed.

Activity 6.1 concerning the establishment of a project website with access to all project reports, training materials, management plans, lesson learned of project and links to other relevant sites is completed. The project website is now established, in both Vietnamese and English language and updated on a monthly basis; it contains all produced reports, documents, manuals and training material in downloadable format. A web-cartography section with accessible thematic maps produced by the projects, as automated output of the GIS-based database is being established once the GIS-based database will be finalized. The web-cartography facility will allow the release of technical cartographic material and information to agencies that make specific request for planning and monitoring purposes. The database developed by the Centre for Geotechnologies for IMOLA will use the project website as a platform to allow controlled dissemination of information; the web-cartography facility will be hinged to the website and will be supported by this platform. The IMOLA Project is finalizing a MOU with the responsible agency of the provincial GIS Thua Thien Hue Project to release the IMOLA database to the provincial agency, once established and ensure assistance for updates, training and maintenance after the termination of IMOLA, as a follow-up of the IMOLA-related activities.

Activity 6.2 - Establishment of a network of local institutions (including universities) and projects (like IUCN, ICZM, etc.) to exchange data, information and lessons learned. Contacts have been established with nearly all Provincial institution, past and ongoing projects, international organizations and local universities. One tripartite agreement has been formalized between the University of Hue (College of Science and College of Agriculture and Forestry) and the University Polytechnic of Marche of Italy for future collaboration and financial participation of University Polytechnic of Marche to IMOLA. In force of this agreement the University Polytechnic of Marche has allocated funds for personnel to be deployed to the project.

Activity 6.4 relates to the Organization of 2 (4) workshops at national level, where all interested parties could discuss management issues of lagoon systems and issues such as conflict management in relation to aquatic resources. The IMOLA Project kick-off workshop was organized in September 2005, to prepare for IMOLA implementation (see website for related documentation at www.imolahue.org). The second and third international IMOLA workshops will be organized at the completion of the first and second year of activity of the project, in October 2006 and October 2007. The fourth and final workshop will be organized at the end of the project to promote the IMOLA achievements, to present the Lagoon Management Plan and prepare for follow-up. Moreover, the IMOLA Project participated in the organization of the National Workshop on Thua Thien Hue Lagoon (December 2005), in collaboration with DOST.

B. INPUTS,**PAGE 2****1. List National and International professional staff assigned to the project during the reporting period**

NATIONAL		INTERNATIONAL	
Names	Functions	Names	Functions
Hoang Ngoc Viet Nguyen Q. Vinh Binh	National Project Director Vice National Project Director	Massimo Sarti	Chief Technical Adviser
Nguyen Phuoc Lai Le Xuan Hoang	Project Assistant Interpreter cum IT system manager	Arie Pieter Van Duijn	Associate Professional Officer
Vinh Xuan Phuong Ho B. Huong Giang Le Phuoc Quang Le Thi Thanh Binh	Interpreter Interpreter Project Secretary Accountant and Office Administrator	Davide Fezzardi	Socio-economist for baseline survey and PRASLA analysis
Hoang T.Thu Thuy Nguyen Minh Tri Vuong Dinh Hoa Do Cong Thung	Office Assistant Driver Driver Consultant biologist IMER, for biodiversity, fish stock and ecosystem assessment	Gulham Kibria	Consultant for training and preparation of extension training material
Le Van Mien	Consultant biologist, Univ. of Science Hue, for fish taxonomy and collection and organization of hydro-biologic secondary data	Sunil Siriwardena	Aquaculture economist and legal expert for developing fisherfolk and aquaculturists association
Do Nam	Consultant physicist DOST, for GIS base maps and database	Stefano Albisinni	Legal expert for legal and institutional framework
Nguyen Quang Linh	Consultant biologist Hue University of Agriculture and Forestry, for training programme development and leader of the Training Unit	Renato Agbayani	Consultant in business planning
Vo Thi Tuyet Hong	Consultant aquaculture engineer of Dept. of Fisheries, co-leader of the Training Unit and training course planning	Anniken Skonhoft	FAO LEGN legal expert
Le Van An	Consultant human geographer of Hue University of Agriculture and Forestry, for disaster management and flood impact mitigation		
Tran Phong	Consultant human geographer University of Kyoto, for disaster management and flood preparedness		
Nguyen Phong Hai	Consultant, MSc Fisheries Sciences		
Nguyen Hoai Son	Technical staff, BSc in Environment Science		
Cao Quoc Cuong	Technical staff, MSc Fisheries Engineer		
Thuy Chau To	Technical staff, MSc Analytical Chemistry		
Tran Hai Bang	Technical Staff, BSc in		

NATIONAL		INTERNATIONAL	
Names	Functions	Names	Functions
Nguyen Van Hue	Organic Chemistry		
Nguyen Phi Nam	Technical staff, MSc in Biological Science		
Hoang Trung Thong	Technical staff, Msc in Aquaculture		
Nguyen Quang Tuan	Technical staff, Fishery Engineer		
Nguyen Van Bon	Technical staff, GIS specialist		
Nguyen Sanh Minh	Technical staff, Fishery Engineer		
Vo Giang	Technical staff, Fishery Engineer		

2. Equipment received during the reporting period

- Notebook IBM Thinkpad T42: K1A
- Desktop Computer IBM Thinkcentre A50(P/N:PA7) Black (5 pieces)
- Printer HP Laser 1160(USB+Parallel) (2 pieces)
- Printer Canon color Laser LBP 5200 USB
- Scanner HP Sacanjet 4070c
- PC Projector, EIKI LC-XB26
- Projector Screen 3 leg
- Photocopier machine RICOH FT 5632
- Steel Stand for Photocopy machine
- Mobilephone NOKIA (5 pieces)
- Airconditioner Carrier-12,000BTU (2 pieces)
- Motor.Yamaha Jupiter -Green (75B1-0606)
- Motor.Yamaha Jupiter -Green (75B1-0599)
- Motor.Yamaha Jupiter -Silve-Grey (75B1-0618)
- Motor.Haesun Venus 125- Silver-Pink (75B1-0619)
- Motor.Haesun Venus 125- Silver-Pink (75B1-0609)
- Fax machine: Sharp FO-P600
- Router ADSL
- Telephone Vitico 455
- TOYOTA COROLLA XLI -Silver
- Desk telephone Panasonic
- Notebook IBM T43-4AA
- IBM Thinkcenter A51,8123-LAN (3 pieces)
- UPS Santak 500 (9 pieces)
- Motor. Supper Dream, Dark-Brown 75B1-0610
- Motor. Supper Dream, Dark-Brown 75B1-0602
- Motor. Supper Dream, Dark-Brown 75B1-0604
- Motor. Supper Dream, Dark-Brown 75B1-0601
- Motor. Supper Dream, Dark-Brown 75B1-0607
- Air-condition Funiki 1,5N-2M (SC12) (6 pieces)
- MITSUBISHI PAJERO - SILVER Model: V76WLNDFL

- Safe (Taiyo-Thai lan)
- Desktop Computer HHC INTEL Pentium IV 2.8Ghz, Monitor 17", LCD Samsung (2 pieces)
- Printer HP Laser 1320
- Centrifuges (Laboratory equipment)
- Air Conditioner Funiki 1,5N-2M (SC12)
- Electric generator HONDA 2kw2
- Refrigerator SANYO 50 Litres
- GPS eTrex Vista Cx (2 pieces)
- Desktop Workstations Wiscom INTEL Pentium IV 3.0Ghz, Monitor 1", LCD (2 pieces)
- Plotter HP A0
- Scanner Epson 1000XL
- Binding machine

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)

- Training course on "Participatory Rural Appraisal (PRA) and Sustainable Livelihoods Analysis (SLA)", IMOLA Office, Hue, 16-24 February, 2006. Jointly held by NACA, IMOLA and DOFI, for 45 participants
- Field training course on "Participatory Rural Appraisal (PRA) and Sustainable Livelihoods Analysis (SLA)", Tam Giang Cau Hai lagoon communes, 27 February-3 March, 2006. Jointly held by NACA, IMOLA and DOFI, for 45 participants
- Training course on "Socio-economic survey using a structured questionnaire (Questionnaire Survey Analysis)", IMOLA Office, Hue, 14-17 March, 2006. Jointly held by NACA, IMOLA and DOFI, for 35 participants
- Field training course on "Socio-economic survey using a structured questionnaire (Questionnaire Survey Analysis)", Tam Giang Cau Hai lagoon communes, 20-28 March, 2006. Jointly held by NACA, IMOLA and DOFI, for 35 participants
- Training course in "Questionnaire survey data analysis" 30-31 March, 2006. Jointly held by NACA, IMOLA and DOFI, for 19 participants
- Training course on "Formation of Fishery Associations", 29-30 June 2006. Jointly held by Dr Sunil N. Siriwardena, IMOLA, DOFI and Provincial Fishery Association, for 23 participants.
- Training course in "A comprehensive pilot training on business planning and management for the project, aqua-farmers and fisherfolk", 24-25 July 2006. Jointly held by Dr Renato Agbayani, and IMOLA, for 64 participants.
- Comprehensive participatory training at provincial level on livelihood development of lagoon communities through aquaculture and capture fisheries, 21-23 July, 2006. Jointly held by IMOLA, DOFI and Hue University of Agriculture and Forestry, for 54 participants
- Comprehensive participatory training at district level on livelihood development of lagoon communities through aquaculture and capture fisheries, 25 July-2 August, 2006 (three

sessions). Jointly held by IMOLA, DOFI and Hue University of Agriculture and Forestry, for 119 participants

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

At the time of this revision, the Project completed its 11th month of activity. By revising the log-frame and making an evaluation of the current state of the completed and ongoing activities, the project still appears to be slightly delayed. Considering the logistic difficulties at start-up, delays in the recruiting the new NPM (after dismissal of the first one) this seems to be not a worrying sign. Activities have been sped up considerably in the second half of the first year, as most LOAs with partner institutions became operational and fair weather allowed no time loss or impediments. At present, offices are fully equipped, with an additional room the former laboratory, for consultants and occasional visitors. However, after implementing the GIS and remote sensing workstation and recruitment of the technical staff, the even the additional room is insufficient, hence the need to access a new facilities. One of the possible solutions is to obtain the use of an unused building in the premises of the Aquatic Resources Protection Sub-department and this is actually under evaluation weather or not is technically and financially feasible. The staffing is complete and operative and the formal recruitment is still ongoing. The NPM post is still vacant but the selection of the applicants is scheduled soon. The operative task forces (Natural Resources Unit and Training Unit) are staffed and functioning, to carry on activities of their competence foreseen by the log-frame. The Human Resources Unit is designed and staffing is ongoing.

Budgetary issues. The project budget is an issue of major concern as the original program of activities summarized in the actual log-frame appears rather ambitious if compared against the actual project budget. The possibility of scaling down some of the activities that appear too demanding, to better accommodate budgetary restrictions, has not been considered yet, but it might be wise to bring the issue to the attention of the Tripartite Meeting and the Donor. Indeed, from the time of first formulation of the project, most prices have increased of an average 35% (from crude estimate), so that for some of the major procurement and operations, the dedicated financial resources are scant. Our reformulation of the project budget per activity/sector displays these budgetary shortcomings, with the results that some activities cannot be carried out satisfactorily without a major financial reallocation. For these reasons, the action of the undersigned CTA will aim to carefully consider expenditures and whenever possible, realize savings that will allow to fulfilling at best the actual program.

Actually, training activities for the lagoon communities (some 20,000 people are expected to be trained under the aegis of IMOLA) have insufficient budgetary allocation as the Training Budget Line only foresees grants for technical staff, study/exposure tours and specific training session for limited number of government officers (GIS, mapping, etc.). Indeed, for some specific activities (*e.g.* aquaculture) there is the need of comprehensive training and the CTA considered how to achieve a most effective impact on community capacity building without massively depriving the project training budget: one possible solution would be to reduce actual number of trainees to half of the foreseen figure (a total number of approximately 12.000, in three different sessions), applying a trickle-down methodology that makes use in cascade of extension workers, result demonstration farmers (RDF) and fellow farmers (FF), at the same time allocating more funds for this important activity at the next budget revision. Performing a more intensive training for a smaller number of farmers might prove to be a better strategy than spreading information to thin over a vast component of the lagoon population.

Furthermore, there is a startling inconsistency between the declared immediate objective of the IMOLA Project, to develop and implement an integrated lagoon management plan and the resources dedicated to the development of indispensable technical planning tools (GIS facility, environmental and fishery monitoring, *etc.*), that require a more massive investment in newer technologies and higher-level education. The CTA will formulate a proposal to submit to the Donor, in order to refinance those activities that appear insufficiently funded but yet instrumental to achieve the goal.

Recommendation. At present, the line of conduct of the CTA aims to: i) realize some savings, wherever possible, by using additional resources from partner institutions, ii) reallocate some financial resources to budget lines that are underestimated, iii) scale-down some of the activities that appears too ambitious to carry out (*e.g.* 20.000 trainees). By this way, the foreseen program could be carried out rather satisfactorily, however with some reductions. A need for further investment in capacity building and modernization of Government structure yet remains. The CTA will prepare a proposal to seek for major reinvestment in newer technologies and higher education from the Donor, which FAO is going to endorse and put forward at the TPR, as a necessity to complete the foreseen program without revisions and full appreciation of the counterpart.

Personnel issues. The IMOLA Project, once evaluated the type and number of activities ongoing or foreseen, is definitely understaffed. At present, despite all attempts made by FAO to make this personnel unit available, the second APO position foreseen by the project document is still unassigned and the lack of this technical staff is perceived as a difficulty. In support of the IMOLA, the partner University Polytechnic of Marche (UPM), recognizing that the project meets its institutional scopes as promotes an intense educational program, assigned two full-time budgets for four years/man for trained personnel, equivalent to UDS 120,000. These two personnel units are temporarily operating as UN volunteers, since October 2005 and January 2006 respectively, but will soon need institutional recognition to fully operate for IMOLA. Moreover, the request of the second APO is maintained, as the project is only in its first year of activity and the TPR is the institutional place where further request of this post will be formalized. *Recommendation.* FAO and the Donor should endorse the requests of the CTA to partner institutions to continue to offer support in kind. It would be also advisable to seek further investment from the Donor country to provide an additional APO for the project to fill the vacant post. In order to create favourable conditions for the IMOLA Project to operate and offer continued technical support to the beneficiary, the setup of additional laboratory from partner universities would be advisable. A proposal will be presented and formalized at the TPR.

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

The third semester of the IMOLA Project represents the conclusive phase for all environmental, fishery and natural resources activities foreseen under Output 1.

At the time of the TPR, interim results are expected for Activity 1.1, with preparation for completion at the end of Year 1.5. At the end of Year 1.5, definitive results for related Activities 1.8 and 1.9 are expected. By the end of Year 1.5, related training course on flood impact preparedness (Activity 3.9), related campaign to increase awareness and preparedness for natural disasters (Activity 4.10) and development of strategies to reduce vulnerability to flooding (Activity 2.5) will be delivered. This set of activities has been already budgeted under a comprehensive LOA with CARD (Centre for Agriculture, Forestry Research and Rural Development (Hue University of Agriculture and Forestry)).

Activities 1.2 and 1.3 will complete 50% of the foreseen surveys at the time of the First TPR, preparing for definitive results by the end of Year 1.5.

Activity 1.4 concerns instrument deployment and preparation for routine monitoring program and data management by one of the DOFI sub-departments (Aquatic Resources Protection Sub-department). Activity 3.1 also concerns laboratory equipment and their management at Aquatic Resources Protection Sub-department (DOFI). Both activities will be completed, with laboratories implemented and operational by the end of Year 1.5.

Activities 1.5, 1.6 and 1.7 related to the establishment of a GIS-based database and related thematic cartography will complete their preliminary output during the third semester of the project before the TPR, with conclusions by the end of Year 1.5. Interim results will be presented at the TPR.

Activities 2.2, 2.3, 2.4 and 4.3 (legal aspects and institutional analysis, respectively) will be brought to completion during the third semester of the project. Ten Fishery Association will be established and running and their operative base set up on site before the end of the year 2006. A preparatory study has been completed. A Provincial Advisory Board will be established and will be functioning by the end of Year 1.5.

Activity 2.7 (credit and savings). A credit and saving scheme is prepared, a training course on strategies how to access rural credit and related issues will be carried out during the third semester of the projects, with credit intervention to support the poorest farmers communities, established.

Activity 3.1 will be completed by the end of Year 1.5, with all laboratory equipment procured and operational at the Aquatic Resources Protection Sub-department. A refurbishing of the premises to host the equipments is in preparation.

Activities 3.2-3.9 are part of a comprehensive training package that will be carried out during the whole Year 2 of the project. The first batch of training courses will be delivered from October 2006 through May 2007.

Activity 3.11. A provincial Advisory Board to support inter-agency coordination will be established and functioning by the end of Year 1.5 with all preparatory actions (Rules and regulations, MOUs with represented agencies etc.) finalized at the TPR.

Activity 3.12. One international study tour to Italy will be conducted during the third semester of the project.

Activity 4.4 is related to the delivery of a general training program. The first batch of this comprehensive training programme will be delivered from October 2006 through July 2007. The other set of activities 4.5, 4.6 and 4.7 and 3.8 related to the delivery of specific training courses (improved marketing, increased added value of fishery products and access to rural credit, respectively) will begin as early as October 2006; other are being designed and planned to be delivered from November-December 2006 onward. Activity 2.7 related to the identification of credit, savings and insurance needs and organizational needs of associations and solidarity groups is planned to be developed between October and November 2006, with the visit on site of an international TSS consultant, with final outputs foreseen at the end of year 1.5

Activity 4.8 on the preparation and production of extension material is ongoing and products will be delivered for distribution in the third semester (before the TPR). Final outputs are foreseen at the end of Year 1.5.

Activity 4.11 aimed at promoting awareness among lagoon dependent population of the fisheries law and its related regulations is being addressed and material produced in the third semester (before the TPR).

Activity 6.1 is completed as far as the establishment of a standard project website. During the third semester, a web-cartography facility will be established and completed by the end of Year 1.5, with a prototype delivered at the TPR.

Activity 6.2 networking is ongoing and MOUs with some of the key provincial institutions, established. More agreements will be finalized and ratified during the third semester. Support to the establishment of a Provincial Advisory Committee for the Lagoon will be provided by IMOLA in fulfilment of Activity 3.11, by the end of Year 1.5.

Activity 6.3 concerning the production of information booklets and brochures is in preparation, with part of the material being finalized by the end of Year 1.5 (the production of information material is an ongoing activity throughout the duration of the project).

Activity 6.4 concerning the organization of national workshop will be 50% completed by the end of Year 1 (1st Kickoff workshop September 2005, 2nd Workshop November 2006).

E. REPORTS,

PAGE 4

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**

- 1st Kickoff Workshop Proceeding. R.O. Massimo Sarti CTA IMOLA Project (**Recommended, Not restricted, Not distributed**)
- Back-to-office report of the first technical backstopping service by the LTO Raymon Van Anrooy (FIPP) to IMOLA Project, Hue September 20-29th, 2005 (**Not recommended, Not restricted, Not distributed**)
- First interim report of the 1st Training Package PRA and SLA, Hue 16-24 February, 2006. NACA (**Not recommended, Not restricted, Not distributed**)
- Socio-economic survey using a structured questionnaire. NACA (**Recommended, Not restricted, Not distributed**)
- Manual on sustainable livelihoods analysis and participatory rural appraisal - Concepts and applications. IMOLA Consultant Team. NACA (**Recommended, Not restricted, Not distributed**)
- Second interim report on PRA-SLA survey. NACA (**Not recommended, Not restricted, Not distributed**)
- Third interim report on "Socio-economic survey using a structured questionnaire". NACA (**Not recommended, Not restricted, Not distributed**)
- Report of the 1st Training Need Identification Workshop, Dien Hai, 19-21 January 2006. R.O. Raymon Van Anrooy, LTO IMOLA Project, FIPP, FAO Headquarter, Rome (**Not recommended, Not restricted, Not distributed**)
- Back-to-office report of the first technical backstopping mission on monitoring and evaluation of the Integrated Management of Lagoon Activities (IMOLA) project, by the consultant Prof. Fausto Marincioni

- (University Polytechnic of Marche) to IMOLA Project, Hue February 6-10th, 2006 (**Not recommended, Not restricted, Not distributed**)
- Back-to-office report of the first technical backstopping mission on monitoring and evaluation of the Integrated Management of Lagoon Activities (IMOLA) project by the LTO Simon Funge-Smith (RAPI) to IMOLA Project, Hue February 6-10th, 2006 (**Not recommended, Not restricted, Not distributed**)
 - Back-to-office report of the second technical backstopping service by the LTO Raymon Van Anrooy (FIPP) to IMOLA Project, Hue January 16-26th, 2006 (**Not recommended, Not restricted, Not distributed**)
 - National and provincial laws, regulations and plans that have influence on resource management of the lagoon system in Thua Thien Hue Province. R.O. Stefano Albisinni, UN Volunteer (in collaboration with Anniken Skonhoft, LEGN, FAO Headquarter, Rome) (**Not recommended, Not restricted, Not distributed**)
 - First Mission Report on designing training programme for IMOLA Project, R.O. Gulham Kibria, TCDC Consultant (Aquaculture and Fisheries extension) (**Not recommended, Not restricted, Not distributed**)
 - Report of the 2nd Training Need Assessment Report, Thua Thien Hue, May 2006. IMOLA Project (**Not recommended, Not restricted, Not distributed**)
 - Report on the organization of fisheries associations, Dr Sunil N. Siriwardena, FIPI Consultant (**Recommended, Not restricted Not distributed**)
 - The first survey report on Tam Giang - Cau Hai lagoon, Dr Do Cong Thung (**Not recommended, Not restricted Not distributed**)
 - Analysis data sheets of the first survey on Tam Giang - Cau Hai lagoon, Dr Do Cong Thung (Not recommended, **Not restricted Not distributed**)
 - The second survey report on Tam Giang - Cau Hai lagoon, Dr Do Cong Thung (**Not recommended, Not restricted Not distributed**)
 - The third survey report on Tam Giang - Cau Hai lagoon, Dr Do Cong Thung (**Not recommended, Not restricted Not distributed**)

Reporting Officer

Massimo Sarti

15 October 2006

Chief Technical Adviser

Signature

F. LIST OF ANNEXES

- Annex 1 – Revised Logframe (29 September 2006)

ACTIVITIES IN SUPPORT OF THE OUTPUTS	QQT OBJECTIVELY VERIFIABLE INDICATORS
OUTPUT 1: The biological and physical issues that are affecting the Thua Thien Hue lagoon are described and understood	
Activity 1.1- Detailed assessment study of the impacts of yearly floods on the livelihoods of the lagoon people and natural environment	<ul style="list-style-type: none"> • Assessment reports of flood damages • Statistical reconstruction reports of flood frequency • Definition of the cycle of return of major flood events
Activity 1.2 – Environment and hydro-biological survey completed by IMER-UOS (physico-chemical condition, hydro-biological resources assessment, trophic state, habitat inventory and conditions, pollutant distribution).	<ul style="list-style-type: none"> • Collections of hydro-biological data • Definition of typology an distribution of pollutants present in the lagoon • Comprehensive hydro-biological model of the Tam Giang-Cau Hai lagoon
Activity 1.3 – Fishery and aquaculture survey/inventory by DOFI (with GIS support) to determine fishery resources, gears used, current exploitation levels in lagoon fishery development, current status of aquaculture, opportunities and constraints for aquaculture development in the lagoon.	<ul style="list-style-type: none"> • Assessment of present status of aquaculture activities • Fishing gears and aquaculture plants divided by typology (extensive, intensive, semi-intensive) and by products • Multi-temporal analysis thematic maps related to fishery sector developed • Statistical information from past and current situation, including physical and chemical parameters, biodiversity indicators, fishing technology data • Result of census handed to responsible authority • Assessment of revenue disparity for different typology of aquaculture plants • Business plans developed for pilot plants (study of applicability and effects of plans) • Cost and benefit analysis for different types

	<ul style="list-style-type: none"> • of aquaculture plants • Aquaculture assessment criteria formulated • Comprehensive and up-to date information available on aquaculture practice • Organized database • Survey report
Activity 1.4 - Established hydro-biological resources monitoring system (remote monitoring)	<ul style="list-style-type: none"> • Equipment purchased • Deployment of sensors (two portable hydro-meteorological stations) • Periodical data survey and analysis • At least 4 people from DOFI/UNICON trained in maintenance and operating of the stations • Geodetic network for differential GPS positioning • Reports of stations • Training materials • Attendance list of trainees • Established IMOLA hydro-biological database
Activity 1.5 - Development of a GIS based database and mapping system for bio-physical data generated by the project and its partners.(Geophysical and sediment type thematic mapping using GIS-based mapping tools. Multi-temporal analysis of lagoon environment for short-term variation and vulnerability assessment, using remotely sensed images. This is made accessible to stakeholders	<ul style="list-style-type: none"> • Format adjustment of available data • Development of data layers and shape files • Established IMOLA GIS database for biophysical data and made it operational • Physical/environmental parameters acquired • Participatory research programme established • Thematic maps developed • Survey report available • Local participants in research trained
Activity 1.6 - Linkage of above IMOLA database to LAPROCOF database.	<ul style="list-style-type: none"> • Development of IMOLA database and made it operational • Construction of relational database to interface LAPROCOF to IMOLA • Linkage between the two databases,

	realized
Activity 1.7 - Thematic maps of lagoon area used per activity/sector developed using remote-sensing analysis and available	<ul style="list-style-type: none"> • Definition of types of activities present in lagoon and cartographic rendering • Distribution of activities throughout the lagoon in cartographic form • Sets of thematic maps available
Activity 1.8 - Maps of flooding vulnerability developed and available	<ul style="list-style-type: none"> • Flood risk analysis defined and rendered as thematic map • Defined location of vulnerable areas for urban settlements and economic activities • Vulnerability maps of coastal floodplain area available and disseminated
Activity 1.9 - Preparation of scenario studies for flooding events and appropriate responses	<ul style="list-style-type: none"> • Defined preventive measures to flood hazard • Evaluation of present emergency response strategies and reports made available • Developed flood disaster scenarios according to local morphology and land use • Flood emergency response plan prepared and made available for enforcement
OUTPUT 2: Policy and regulatory aspects of aquatic resources use identified and addressed to support integrated management	
Activity 2.1 - Draft zoning plan of lagoon areas through identification of suitable areas/zones for aquaculture, capture fisheries, (eco)-tourism and special areas/zones for conservation (e.g. nursery/breeding areas etc)	<ul style="list-style-type: none"> • Understanding of criteria used to determine zones and assessment reports and explanatory notes. • Information gathered on implications related to zoning • Awareness raised among authorities and population about the significance of using zones. • Report on implications of zoning on land and water use. • Plan for Zoning. • Attendance lists of meetings/workshops on

	<ul style="list-style-type: none"> participatory planning. • Model for zoning water surface areas and surrounding land. • Report on zoning water surface areas and surrounding land • Awareness raising materials.
Activity 2.2 - Identification of required policies, institutional requirements and other activities to assist in improving livelihoods (including the possible settlement of the sampan people), by e.g. education, training, credit and infrastructure improvements	<ul style="list-style-type: none"> • Policy and institutional analysis. • Survey methodology. • Analysis report
Activity 2.3 - Assessment and recommendation of legal aspects of lagoon aquaculture and fishery management. Adjust Thua Thien Hue provincial fishery regulations to include aquaculture	<ul style="list-style-type: none"> • Awareness of lagoon dependent population about the fisheries law and its related regulations has increased with 50%. • At least 8 DOFI staff are competent in law enforcement methods and approaches. • Adjusted regulations approved by DOFI and PPC, with support of MOFI. • Report and evaluation of training sessions. • Evaluation report of awareness raising campaign.
Activity 2.4 - Institutional analysis of roles and responsibilities of Provincial and lagoon-based institutions as they relate to management of lagoon activities [this will contribute to ICZM project when it becomes operational]	<ul style="list-style-type: none"> • A Provincial Advisory Committee established. • At least 5 project initiated task forces are established and functioning, dealing with a range of issues • TOR of Provincial Advisory Committee. • Minutes of Provincial Advisory Committee meetings. • Reports of taskforces.
Activity 2.5 - Development of strategies to reduce vulnerability to flooding in aquaculture/fisheries and other activities on the lagoon.	<ul style="list-style-type: none"> • Increased awareness and preparedness for natural disasters that might affect the lagoon system • At least 8 people trained to be trainers in disaster preparedness issues

	<ul style="list-style-type: none"> • Study report • Training material • Awareness raising materials • Attendance lists of training course on disaster preparedness
<p>Activity 2.6 - Preparation of a monitoring, surveillance and control plans (including recommendations for rules and regulations, as well as local fishery management organization plans) in support of the implementation of the Integrated Lagoon Management Plan (DOFI supported by IMOLA)</p>	<ul style="list-style-type: none"> • Provincial DOFI, DARD and DOSTE and related institutions demonstrate their coordinated capacity of implementing the Integrated Lagoon Management Plan. • Monitoring, surveillance and control of Integrated Lagoon Management Plan originated rules and regulations is prepared by the various institutions, departments and communes. • Information flow from village level to provincial level and vice-versa is efficient and in full operation. • Information materials (e.g. newsletters) and radio programs about the lagoon management, with speakers from various departments, institutions and villages/commune. • Schedules and reports of monitoring surveillance and control related activities. • Departmental reports relating to the lagoon management activities. • Act of Constitution and minutes of Provincial Advisory Committee for Lagoon and Coastal Management Issues meetings. • Evaluations of the training received by the departmental and institutional staff. • Signed contracts between project and institutions on support activities.

<p>Activity 2.7 - Identification of credit, savings and insurance needs and organizational needs to develop a training course for the establishment of cooperatives, associations or solidarity groups.</p>	<ul style="list-style-type: none"> • Detailed study on training, financial services and organizational needs of the stakeholders. • Training of target beneficiaries and other stakeholders executed. • At least 10 fisherfolks and fishfarmers organizations formalized/legalized with support/training of the project. • At least 40% participation of women in training supplied under project. • Better equipment and technologies used by fish farmers and fisherfolk. • Improved marketing facilities and possibilities for fishfarmers and fisherfolk. • Needs-assessment methodology developed. • At least 5 selected communes surveyed. • Needs-assessment report, with clear recommendations.
<p>OUTPUT 3: Capacity building of Provincial institutions (DOFI, DOSTE, DONRE, DPI, DOLISA, DARD) to generate and manage information relating to decision making the integrated management of Thu Thien Lagoon.</p>	
<p>Activity 3.1 - Adequately equipped lagoon research laboratory at DOFI, alternatively at University Consortium (UNICON) partners</p>	<ul style="list-style-type: none"> • Assessment of necessary instrumentation and location where to establish laboratory • Training of local staff to use laboratory • Laboratory equipped and ready for use • Local staffed ready to use laboratory
<p>Activity 3.2 - DOFI staff trained and competent in carrying out PRA, SLA activities and questionnaire surveys</p>	<ul style="list-style-type: none"> • Preparation of appropriate training course material for PRA and SLA • Course plan and curricula available for replication • Questionnaires on level of satisfaction filled by participants and statistically processed • Evaluation of PRA activities performed by

	trained personnel
Activity 3.3 - Training materials and methodology for PRA and Sustainable Livelihood Analysis prepared and available	<ul style="list-style-type: none"> • Training and study material for course attendees, prepared and distributed • Manuals and other material used for training, deposited to IMOLA office, published and distributed to local agencies
Activity 3.4 - DOFI staff trained and able to provide advice on improved aquaculture and fisheries techniques	<ul style="list-style-type: none"> • Preparation of appropriate training courses to enhance fishing and aquaculture activities • Course plan and curricula available for replication • Questionnaires on level of satisfaction filled by participants and statistically processed • Evaluation of training effects in the field (e.g. changes of fishing techniques)
Activity 3.5 - DOFI capable of providing technical support to communes for implementation of pilot co- and/or community-based management schemes in selected communes	<ul style="list-style-type: none"> • Communes willing to participate in pilot management scheme. • Capacity built in at least 10 communes on various management options • Resource management indicators developed. • Approval of DPCs of developed pilot management scheme(s). • MOUs with at least 10 communes on participating in pilots. • Two pilot management plans prepared. • Letters indicating approval of pilot management scheme(s) by DPCs
Activity 3.6 - DOFI and DPC staff will be trained in conflict management (approximately 30 persons)	<ul style="list-style-type: none"> • Training needs assessment of DOFI and DPCs staff of selected districts. • International and national study tours of key officials • At least 30 DOFI and DPC staff will be trained in conflict management. • Training-need assessment reports.

	<ul style="list-style-type: none"> • Study tour reports and evaluations. • Training materials and evaluation report.
Activity 3.7 - DOFI staff are competent in law enforcement methods and approaches (approximately 8 persons)	<ul style="list-style-type: none"> • Training needs assessment of DOFI and DPCs staff of selected districts • Training courses delivered • Training materials and evaluation reports, available
Activity 3.8 - DOLISA and/or Women's Union trained and mobilized to assist identified groups in accessing rural credit (or other revolving fund type schemes – according to assessment)	<ul style="list-style-type: none"> • Training needs assessment of staff of DOLISA and/or Women's Union • Training courses delivered • Training materials and evaluation reports available
Activity 3.9 - Training course developed for flood impact preparedness, specific to impacts on lagoon resource users	<ul style="list-style-type: none"> • Preparation of appropriate courses to enhance flood prevention and management • Course plan and curricula available for replication • Questionnaires on level of satisfaction filled by participants and statistically processed • Evaluation of training effects on the emergency management process (e.g. changes in the emergency plan)
Activity 3.10 - Orientation and training of (senior) provincial government officials in integrated planning of lagoon resources	<ul style="list-style-type: none"> • Attendance list of personnel to training course or workshops • Reports of orientation sessions • Evaluation reports of training sessions
Activity 3.11 - Support inter-institutional coordination under the Thua Thien Hue PPC, through encouraging the establishment of a Provincial Advisory Committee for lagoon and coastal management (with possible collaboration from ICZM project)	<ul style="list-style-type: none"> • Provincial Advisory Committee for lagoon and coastal management established • Institutional TOR developed • Meeting reports available • MOUs signed among participating institutions
Activity 3.12 - International and national study ('exposure') tours of key officials (clear TOR to be developed)	<ul style="list-style-type: none"> • Study tour report and evaluation. • National study tour to pilot projects

	elsewhere organized.
OUTPUT 4: Improved understanding and demonstrated action responding to the socio-economic and livelihood issues of lagoon resources users	
Activity 4.1 - PRA activity carried out in at least 10 communes, to establish issues, priorities, constraints, needs for management of fisheries and aquaculture, as well as specific opportunities for organization and training to improve or diversify livelihoods (out of fishery sector)	<ul style="list-style-type: none"> • Overview of socio-economic situation in tentatively selected target areas. • Contract with field working groups from RIA1 and DOFI. • LOA with NACA consultant. • PRA and SLA reports
Activity 4.2 - Overview of socio-economic situation in target areas based on PRA activities and other surveys or collection of secondary information	<ul style="list-style-type: none"> • Baseline study reports • Comprehensive assessment of the actual socio-economic state of the lagoon
Activity 4.3 - Facilitate the establishment and support of pilot co- and/or community-based management schemes in 10 communes. At least 10 fisher-folks and fish-farmers organisations formalised and legalised with support and training of the project	<ul style="list-style-type: none"> • Communes willing to participate in pilot management scheme. • Capacity is built in at least 10 communes on various management options • Resource management indicators developed. • Approval of DPCs of developed pilot management scheme(s). • MOUs with at least 10 communes participating in pilots. • Two pilot management plans. • Letters indicating approval of pilot management scheme(s) by DPCs
Activity 4.4 - Training educational programs developed, based on training-needs assessments for lagoon people, including landless households and SME's (10 communes, approximately 20,000 people. Subject areas need to be identified through PRA assessment and disaggregated for women and specific needs groups	<ul style="list-style-type: none"> • Training program developed and implemented in at least 10 communes. • At least 20.000 lagoon-dependent people will participate in training sessions. • Adoption of technologies and practices learned is at least 40%. • Training needs assessment report. • Participation lists of training courses. • Training materials prepared and available.

	<ul style="list-style-type: none"> • Training technology adoption and evaluation reports.
Activity 4.5 - Training provided at commune level in improved marketing facilities and possibilities for fishfarmers and fisherfolk	<ul style="list-style-type: none"> • At least 500 women participated in training courses on fishery products marketing and processing. • Appropriate technologies for marketing and processing are promoted. • Value-addition of fishery products from province will have increased by 10% within 2 years. • Training materials prepared and available. • Workshop reports and attendance lists of training courses available. • Annual statistical reports of fishery output of the province
Activity 4.6 - Training provided in increasing added-value of fishery and aquaculture products, including marketing and processing, with special emphasis on the role of women.	<ul style="list-style-type: none"> • At least 500 women will have participated in training courses on fishery products added-value. • Appropriate technologies for marketing and processing are promoted. • Value-addition of fishery products from province will have increased by 10% within 2 years. • Training materials available. • Workshop reports and attendance lists of training courses available • Annual statistical reports of fishery output of province available
Activity 4.7 - Training provided and mobilization of groups promoted to access rural credit	<ul style="list-style-type: none"> • Training courses delivered • Training materials prepared and available • Rural credit schemes developed
Activity 4.8 - Development of promotion and extension material on the importance of the lagoon and its resources	<ul style="list-style-type: none"> • Publicity materials to disseminate available and distributed

<p>Activity 4.9 - Awareness campaign at national, provincial and communal level of the state of the lagoon system resources</p>	<ul style="list-style-type: none"> • Media campaigns prepared and broadcasted • Awareness on state of lagoon resources has increased with 50%. • Media campaign has been developed. • At least 100 messages on lagoon resources management broadcasted on provincial and national radio and tv. • At least 500 participants in International Coastal Clean-up campaign. • Media campaign program developed. • Awareness raising materials for distribution at schools prepared and disseminated. • List of participants to the annual International Coastal Clean-up campaign.
<p>Activity 4.10 - Targeted campaign to increase awareness and preparedness for natural disasters that might affect the lagoon system and its users</p>	<ul style="list-style-type: none"> • Publicity materials to disseminate on strategies to defend from natural disasters • Media campaigns prepared and broadcasted
<p>Activity 4.11 - Promote awareness among lagoon dependent population of the fisheries law and its related regulations</p>	<ul style="list-style-type: none"> • Understanding of fishery law has increased in communes. • Management committees have been established. • Destructive fishing practices have decreased with 90%. • Stocks of main commercial fish species have increased significantly. • Reports of training courses and training evaluation on management prepared and available. • Statutes, rules and regulations of management committees have been understood and actions taken • Minutes of meetings of management committees.

	<ul style="list-style-type: none"> • Survey reports on fishing practices and stocks.
Activity 4.12 - Local exchange visits or study tours to pilot projects between communes for key fishermen group representatives and commune officials	<ul style="list-style-type: none"> • Study tour report prepared and available • Recommendations and lessons learned reports available • Better Management Practices as derived from study/exposure tours understood and adopted
OUTPUT 5: An integrated lagoon management plan developed through a process of dialogue and participation with lagoon users and stakeholders	
Activity 5.1 - Consultations with district and commune stakeholders to participate in identification of issues and priorities for lagoon management (5 districts, with appropriate representation of the 33 communes and specific stakeholder groups. Selected follow up consultations at commune level or with specific focal groups)	<ul style="list-style-type: none"> • Demonstrated ability of all stakeholders and target beneficiaries to participate in the production of the integrated management plan and implementation strategy. • Required strategies for sustainable lagoon management identified and agreed upon. • 80% of the Thua Thien Hue people are aware of the present situation of the lagoon environment. • Draft Integrated Management Plan produced. • Promotion/extension material on the importance of the lagoon and its resources prepared and available. • Minutes of village and commune level meetings on the draft management plan and its implementation strategy.
Activity 5.2 - Identify priority issues based on PRA and consultations as recommendations for new management policies for improving people's livelihoods and reducing risks for poor people dependent on the lagoon resources	<ul style="list-style-type: none"> • Reports on established priorities are produced, understood and disseminated • Recommendations for management policies produced and disseminated • Assessment reports for the development of alternative livelihood in the Tam Giang-Cau

	<p>Hai lagoon produced and disseminated</p> <ul style="list-style-type: none"> • Assessment reports for natural resources conservation in the Tam Giang-Cau Hai lagoon produced and disseminated
Activity 5.3 - Provincial level consultation for developing recommendations and identifying issues for inclusion in the draft integrated management plan	<ul style="list-style-type: none"> • Reports of consultation meetings produced • Guidelines for the drafting of the Integrated Lagoon Management Plan produced and disseminated • MOUs among involved institution in the drafting of the Integrated Lagoon Management Plan established.
Activity 5.4 - Integrated Management Plan drafted through consultation process (consultation process implies involvement of key provincial level partners and will be based on PRA and district/commune consultation sessions)	<ul style="list-style-type: none"> • At least 10 meetings/workshops at commune and provincial level are organized to discuss the contents and structure of the implementation strategy. • Meeting/workshop reports are produced. • Draft Implementation Strategy prepared. • Presentations on implementation strategy delivered.
Activity 5.5 - Consensus developed on strategies for sustainable lagoon management through follow-up consultations at district and commune level	<ul style="list-style-type: none"> • Reports of consultation meetings
Activity 5.6 - Lessons from pilot schemes incorporated into the draft plan	<ul style="list-style-type: none"> • Analysis of implementation and lessons learned of pilot management schemes in selected communes, available. • Lessons learned reports, available. • Reports and attendance lists of participatory workshops and meetings prepared.
Activity 5.7 - Draft implementation strategy developed (including the roles and responsibilities of Provincial DOFI, DARD and DOST and related institutions coordinated capacity of implementing the Integrated Lagoon Management Plan)	<ul style="list-style-type: none"> • Implementation strategy report, prepared • MOUs between governmental agencies for mutual supports and cooperation in the development of the Integrated Lagoon Management Plan agreed and signed
Activity 5.8 - Preparation for the official enactment by the PPC of the draft Integrated	<ul style="list-style-type: none"> • Implementation strategy is drafted and used

<p>Lagoon Management Plan</p>	<p>to implement the Integrated Lagoon Management Plan in a few pilot sites (for testing purposes).</p> <ul style="list-style-type: none"> • Integrated Lagoon Management Plan ready to be signed by the PPC of Thua Thien Hue province (and the Minister of Fisheries of Viet Nam). • Draft Implementation Strategy report, produced. • Reports on training, financial services and organizational need assessments produced and available. • Evaluation reports of training courses, produced. • Materials for promotion and extension of Management Plan and Implementation Strategy produced and published. • Provincial reports on the increased lagoon fish production, prepared and disseminated. • Construction of at least 4 small infrastructural works like: wharfs, fish-receiving centers, boat and motor reparation centers • At least 80% of lagoon-dependent population is aware of the Integrated Lagoon Management Plan and its contents • Meeting reports are available. • Media campaign program, launched • Report of the workshop where the approved plan will be presented, prepared and disseminated
<p>Activity 5.9 - Elaboration of proposals for follow-up activities in Lagoon Management, including the preparation of a project document for the implementation phase</p>	<ul style="list-style-type: none"> • At least 2 project proposals for follow-up activities, developed. • Letters of interest from potential donors

	acquired.
OUTPUT 6: Coordination and liaison with other organizations to build awareness of the integrated management plan and IMOLA activities	
Activity 6.1 - Establishment of a project website with access to all project reports, training materials, management plans, lessons learned of project and links to other relevant sites	<ul style="list-style-type: none"> • A frequently (monthly) updated project website with all relevant material produced by the project, set up and launched • Website address advertised at major search engines • Web-cartography facility nested in the website, for use of IMOLA-produced cartographic material by partner government agencies • Number of visitors of website, counted.
Activity 6.2 - Establishment of a network of local institutions (including universities) and projects (like IUCN, ICZM, etc.) to exchange data, information and lessons learned	<ul style="list-style-type: none"> • A functioning network established, of which at least 5 local partners are active members. • Reports of jointly organized workshops and training sessions of the network. • MOUs with other projects agreed and signed, on exchange and use of data and information collected. • Network TOR designed.
Activity 6.3 - Information booklets and guidelines produced and disseminated	<ul style="list-style-type: none"> • Informative materials, published • Distribution list of information material available
Activity 6.4 – Organization of 2 (4) workshops at national level where all interested parties could discuss management issues of lagoon systems and issues such as conflict management in relation to aquatic resources	<ul style="list-style-type: none"> • Awareness raised of project and its activities in Hue and at national level • Contacts with other players at provincial level established • Lists of attendants available • Workshop reports available
Activity 6.5 - Dissemination of the findings and results of the project on a national and international basis	<ul style="list-style-type: none"> • Other coastal areas or provinces in Viet Nam show intentions to use the experiences of the project and use the Integrated Lagoon

	<p>Management Plan as a base for improvement of their management practices.</p> <ul style="list-style-type: none"> • Project follow-up activities supported by donors. • Workshops organized, information booklets and guidelines produced and disseminated. • Proceedings of workshops, produced and disseminated. • Information booklets about the project and the Lagoon Integrated Management Plan, produced and disseminated. • Guidelines on integrated Integrated Lagoon Management Plan under the CCRF, produced. • Proposals for follow-up activities and investment opportunities, drafted. • Signed contracts and agreements for follow-up activities. • Reports of visits of Provincial Advisory Committee and/or project staff to other Coastal/Lagoon Management projects in South East Asia.
<p>Activity 6.6 - Development of technical guidelines on integrated lagoon management under the Code of Conduct for Responsible Fisheries for international dissemination</p>	<ul style="list-style-type: none"> • Information collected and analyzed from experiences world-wide on integrated lagoon management. • Technical guidelines, drafted
<p>Indicative monitoring and evaluation system.</p>	
<ul style="list-style-type: none"> • Project monitoring and evaluation methodology established. • This is based on indicators that emerge from PRA activities and semi-structured interviews with stakeholders. A limited list of quantitative and qualitative indicators will be developed. • Overall monitoring and evaluation of the project performance towards achievement of 	<ul style="list-style-type: none"> • At least 30 comprehensive socio-economic, training and hydro-biological indicators determined for monitoring of project achievements • Monitoring and evaluation methodology,

<p>the outputs of the project will be based on QQT indicators that are presented in the top section of this logframe. Progress of these towards the achievement of the immediate objective of the project will also be reported.</p> <ul style="list-style-type: none"> • At activity level, the indicators of activity completion have been developed and will be reported in the regular reports from the project 	<p>established</p> <ul style="list-style-type: none"> • Monitoring and Evaluation reports, produced.
<p>Reporting schedules and critical milestones</p>	
<ul style="list-style-type: none"> • Effective start date of project: 5th August 2005 (entry on duty of CTA to project) • 28th February 2006: Inception report and six-month progress report (submit to donor March 2006) • Early September 2006: Annual report (including next year work plan) submitted prior to TPR (submit to donor September 2006) • End February 2007: Six-month progress report due • September 2007: Annual report and TPR • End October 2007: Project evaluation mission and report • End February 2008: Terminal report (submitted no more than six months before end of project), including proposal for follow-up phase • End July 2008: tentative project closure <ul style="list-style-type: none"> • All consultancy missions are accompanied by a consultants report. • All LOA are subject to the reporting requirements contained within the LOA. 	