



Global Environment Facility

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June 04, 2009

Dear Council Member,

I am writing to notify you that we have today posted on the GEF's website at www.TheGEF.org, a medium-sized project proposal from UNDP entitled ***Regional (Indonesia, Philippines, Vietnam): CTI West Pacific-East Asia Oceanic Fisheries Management Project - under the Coral Triangle Initiative under the Regional: CTI The Coral Triangle Initiative (PROGRAM)***, to be funded under the GEF Trust Fund.

This project aims to strengthen national capacities and international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the West Pacific Ocean and East Asia (Indonesia, Philippines and Vietnam).

The project proposal is being posted for your review. We would welcome any comments you may wish to provide by June 17, 2009, in accordance with the new procedures approved by the Council. You may send your comments to gcoordination@TheGEF.org.

If you do not have access to the Web, you may request the local field office of the World Bank or UNDP to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

A small, stylized handwritten mark or signature element.

A handwritten signature in cursive script that reads "Monique Barbut".

Monique Barbut
Chief Executive Officer and Chairperson

Copy: Country Operational Focal Point, GEF Agencies, STAP, Trustee



REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-sized Project

THE GEF TRUST FUND

Submission Date: 17 March 2009

Re-submission Date:

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID:

GEF AGENCY PROJECT ID: 4084

COUNTRY(IES): Indonesia, Philippines, Vietnam

PROJECT TITLE: West Pacific East Asia Oceanic Fisheries Management Project

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S): UNOPS/WCPFC

GEF FOCAL AREA(S): International Waters

GEF-4 STRATEGIC PROGRAM(S): SP 1: restoring and sustaining coastal and marine fish stocks and associated biological diversity

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: Asia Coral Triangle

Expected Calendar	
Milestones	Dates
Work Program (for FSP)	n/a
GEF Agency Approval	Apr 2009
Implementation Start	May 2009
Mid-term Review (if planned)	n/a
Implementation Completion	May 2012

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective: To strengthen national capacities and international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia (Indonesia, Philippines and Vietnam)

Project Components	Invest., TA, or STA**	Expected Outcomes	Expected Outputs	GEF Financing*		Co-financing*+		Total (\$)
				(\$)	%	(\$)	%	
1. Monitoring, data enhancement and fishery assessment	TA	1.1. Improved knowledge of oceanic fish stocks and related ecosystems, through better, quality and more complete data for the Pacific Ocean Warm Pool Large Marine Ecosystem (POWPLME) that harbours approx. 50% of world tuna stocks	1.1.1. Implementation of integrated fishery monitoring programmes for target and non-target species in the three participating countries	587,000	25	1,743,716	75	2,330,716
	STA							
	TA	1.2. Uncertainty in stock assessment reduced by improved parameter estimation	1.2.1. Improved data for stock assessment from Indonesia, Philippines and Vietnam filling critical data gaps for the sustainable management of the POWPLME					
STA	1.3 National capacities in oceanic fishery monitoring and assessment strengthened in Indonesia, Philippines and Vietnam	1.3.1. Training of national fishery monitoring and stock assessment staff in Indonesia, Philippines and Vietnam, through a series of targeted workshops	1.3.2. Three national fisheries status reports					

			annually					
2. Policy, institutional strengthening and fishery management	TA	2.1. Participant countries contributing to management of shared migratory fish stocks	2.1.1. Review of policy and institutional arrangements for oceanic fisheries management	240,000	12	1,723,715	88	1,963,715
		2.2 National laws, policies and institutions strengthened to implement applicable global and regional instruments	2.2.1. Strategy to support national reform in the fishery sector, to engender enhanced compliance with existing legal instruments					
		2.3 Key stakeholders participating on the project, including Government Depts, and fishing industry	2.3.1. Implementation of the WCPF Convention and related instruments					
		2.4 National capacities in oceanic fisheries management strengthened	2.4.1 Knowledge management system for dissemination of Project-related information, lessons and best practice					
	STA		2.4.2 Formulation of two national Tuna Management Plans and revision of another					
5. Project management				98,000	33	200,000	67	298,000
Total Project Costs				925,000		3,667,431		4,592,431

* List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component.

** TA = Technical Assistance; STA = Scientific & technical analysis. + Arbitrary division of co-financing between components

B. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	<i>Project Preparation</i>	<i>Project</i>	<i>Agency Fee</i>	<i>Total at CEO Endorsement</i>	<i>For the record: Total at PIF</i>
GEF	75,000*	925,000	100,000	1,100,000	1,100,000
Co-financing	42,500	3,667,431		3,709,931	2,242,000
Total	117,500	4,592,431	100,000	4,809,931	3,342,000

* The status of implementation and use of fund for the project preparation grant is detailed in Annex D.

C. SOURCES OF CONFIRMED CO-FINANCING, including co-financing for project preparation for both the PDFs and PPG. (expand the table line items as necessary)

<i>Name of co-financier (source)</i>	<i>Classification</i>	<i>Type</i>	<i>Amount (\$)</i>	<i>%</i>
AusAID	Bilateral agency	Grant	300,000	8.2
WCPFC	Intergovernmental Org'n	Grant	200,000	5.5
NOAA/NMFS	Bilateral agency	Grant	50,000	1.4
Japan Trust Fund	Bilateral agency	Grant	30,000	0.8

FFA	Intergovernmental Org'n	In kind	669,431	18.3
ACIAR	Nat'l Gov't	In kind	25,000	0.7
WCPFC	Intergovernmental Org'n	In kind	140,000	3.8
SPC-OPF	Intergovernmental Org'n	In kind	628,000	17.1
WWF/NOAA	NGO/Bilateral agency	In kind	150,000	4.1
DANIDA	Bilateral agency	In kind	25,000	0.7
Philippines	Nat'l Gov't	In kind	610,000	16.6
Indonesia	Nat'l Gov't	In kind	470,000	12.8
Vietnam	Nat'l Gov't	In kind	370,000	10.0
Total Co-financing			3,667,431	100%

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY(IES) OR COUNTRY(IES)

<i>GEF Agency</i>	<i>Focal Area</i>	<i>Country Name/ Global</i>	<i>(in \$)</i>			
			<i>Project Preparation</i>	<i>Project</i>	<i>Agency Fee</i>	<i>Total</i>
UNDP	IW	Regional	75,000	925,000	100,000	1,100,000
Total GEF Resources			75,000	925,000	100,000	1,100,000

* No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

E. PROJECT MANAGEMENT BUDGET/COST

<i>Cost Items</i>	<i>Total Estimated person weeks</i>	<i>GEF (\$)</i>	<i>Other sources (\$)</i>	<i>Project total (\$)</i>
<i>International consultants*</i>	28	28,000	52,000	80,000
<i>Office facilities, equipment, vehicles and communications**</i>			50,000	50,000
<i>Personnel,</i>		10,000	70,000	80,000
<i>Travel, meetings**</i>		60,000	28,000	88,000
Total	28	98,000	200,000	298,000

* Provide detailed information regarding the consultants in Annex C.

** Provide detailed information and justification for these line items.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

<i>Component</i>	<i>Estimated person weeks</i>	<i>GEF(\$)</i>	<i>Other sources (\$)</i>	<i>Project total (\$)</i>
<i>International consultants*</i>	66	143,000	85,000	228,000
Total	66	143,000	85,000	228,000

* Provide detailed information regarding the consultants in Annex C.

G. DESCRIBE THE BUDGETED M&E PLAN:

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by designated staff of the EA (UNOPS, with the assistance of WCPFC) with support from UNDP/GEF. The Logical Framework Matrix provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built.

Monitoring and Reporting

The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Workshop following a collective fine-tuning of indicators, means of verification, and the full definition of M&E responsibilities of the UNDP, WCPFC and national counterpart agencies and staff.

TABLE 1: INDICATIVE MONITORING AND EVALUATION WORK PLAN AND CORRESPONDING BUDGET

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
Inception Workshop	WCPFC UNDP CO/UNOPS UNDP GEF	33,000 USD (included in project component 7)	Within first two months of project start up (May 09)
Inception Report	Designated WCPFC staff with feedback from countries and UNOPS UNDP/GEF	None	Immediately following IW (June 09)
APR/PIR, IW Results Template, IW GEF-4 RBM Tracker	Designated WCPFC staff in consultation with UNOPS UNDP CO UNDP-GEF Others as identified	None	Annually
Project Steering Committee (PSC) Meetings / TPR meetings	Designated WCPFC staff PSC members as designated UNDP/GEF UNDP CO	To be linked to other project events/meetings therefore costs covered in other budget lines	Following Project IW (August 09) and subsequently at least once a year
Final External Evaluation	UNOPS UNDP/GEF External Consultants (i.e. evaluation team)	32,000 USD	At the end of project implementation
Final Project Meeting	WCPFC UNDP GEF UNOPS	33,000 USD (included in project component 5)	3 months before the end of the project (February 2012)
Final project reports (technical & financial)	Designated WCPFC staff UNOPS UNDP GEF Others as identified	None	6 months following the end of the project (November 2012)
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$ 98,000	

Learning and Knowledge Sharing

Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. This will be undertaken primarily through IW:LEARN and its processes (experience notes, International Waters Conferences, thematic communities of practice, Thematic and geographic workshops). In addition:

- The project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics.
- The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned.
- The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identify and analyzing lessons learned is an on- going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. To this end an appropriate percentage of project resources has been allocated for these activities.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE THE PROJECT RATIONALE AND THE EXPECTED MEASURABLE GLOBAL ENVIRONMENTAL BENEFITS:

Eastern Indonesia, Philippines and Vietnam form the western boundary of the Pacific Ocean warm pool large marine ecosystem, a globally significant maritime region which supports biodiversity that is among the highest in the world. Oceanic fish stocks which migrate throughout this region support commercial and small-scale fisheries providing livelihoods, food security and economic development opportunities. This is demonstrated by the harvest of shared tuna and tuna-like species, which, in 2006 alone, was 2.2 million tonnes. 26% of this, 700,000mt, is estimated to have been taken by Philippine, eastern Indonesian and Vietnamese fishers.

The sustainability of harvests of these shared resources is threatened by poor information, over-exploitation resulting from incomplete and inadequate collaborative arrangements for conservation and management, both nationally and regionally, and illegal, unreported and unregulated (IUU) fishing. With GEF support the Project will target sustainability threats to shared oceanic fish stocks that are currently partially managed under the auspices of the Convention for the Conservation and Management of Highly Migratory Fish Stocks of the Western and Central Pacific Ocean which provides the institutional framework for international collaboration for conservation and management of oceanic highly migratory fish stocks in this region.

Indonesia and the Philippines participated in the negotiations to develop the Convention during the 1990s and Philippines has since ratified it. Whilst Vietnam has not yet engaged in the Commission's work, the Philippines and Indonesia will require considerable support in order to fully participate. The Project intends to build the capacity of Philippines, Indonesia and Vietnam to fully participate in the work of the Commission through improved scientific information supporting an ecosystems approach to management of shared target and non-target oceanic stocks and strengthened monitoring, regulation and control nationally and regionally. This will in turn strengthen WCPFC as the appropriate regional fisheries management organization (RFMO) responsible for the conservation and management of highly migratory fish stocks in this oceanic region

Global environmental benefits from the Project will be achieved by strengthened international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia. In addition, as a nationally-driven initiative of Philippines, Indonesia and Vietnam, an improved contribution to sustainable development will be achieved through enhanced information for decision-making in respect of necessary national economic, financial, regulatory and institutional reform and full participation in an existing regional fisheries management arrangement.

The project's Approach

The project will directly address the two main barriers to sustainable fisheries management involving highly migratory species, with a particular focus on the western Pacific warm pool ecosystem: the inadequate scientific knowledge about oceanic ecosystems and their relationship with fisheries resources, and the incomplete participation in the recently established governance framework for oceanic tuna resources in the region, the Western and Central Pacific Commission (WCPFC). The proposed project will also make significant contributions to raising awareness of decision-makers, the fishing industry and the general public on sustainable oceanic fisheries management and marine biodiversity, and augment current efforts to develop robust conservation and management measures for oceanic resources and marine biodiversity in coastal and oceanic waters for the area, under the CTI Plan of Action.

The project objective is to apply an ecosystem-based approach to fisheries management for biologically globally significant and commercially important oceanic fisheries, with a long-term aim to improving conservation and management of the oceanic tunas and associated species. The two main outcomes pursued are:

- (1) Scientific understanding and capacity for monitoring, assessment and analysis of oceanic tuna fisheries and their ecosystem significantly improved, and national capacity strengthened
- (2) Enhanced governance framework for the conservation and management of oceanic tuna resources, such that the participating countries can contribute fully to the arrangements for shared management of migratory fish stocks.

The project will also promote learning, awareness raising and knowledge sharing relative to these outcomes.

Improving scientific understanding and capacity for monitoring, assessment and analysis of oceanic tuna fisheries and the associated ecosystem

The proposed project will address key gaps in scientific knowledge and monitoring of fisheries which are currently detracting from reliable stock assessment leading to effective management of oceanic tunas in the western and Central Pacific, based on the precautionary and ecosystem approaches. The tuna fisheries of Indonesia and to a lesser extent Philippines, are recognized as being incompletely documented, whereas the Vietnam tuna fisheries suffer from an almost complete lack of scientific data.

Activities to be undertaken will include:

- Reliable estimation of the industrial and artisanal catch of tunas and associated species, by gear type, in multi-gear fisheries with numerous landing points
- Size and species composition of the target species catch, in an area with spawning activity of global significance
- Characterization of by-catch in all fisheries, as well as incidental catches of mammals, reptiles and birds.
- Estimation of critical biological parameters for incorporation in stock assessment models, such as movement, growth and natural and fishing mortality
- Contribution of reliable national catch, effort and other fishery data to regional databases

Catch sampling programmes will need to be designed and established, although to some extent, these will build on initial activities undertaken during the Indonesian-Philippines Data Collection Project which has enabled some pilot activity to be undertaken (Indonesia), and existing sampling programmes enhanced (Philippines). In addition, data collection, analytical and database management skills will need to be nurtured.

Experience and skills from the closely affiliated Pacific Islands Oceanic Fisheries Management Project will guide and in some cases directly augment the outcomes of the Project. PEOFMP scientific personnel will likely be important resource persons for the WPEA OFM. The EA components of the ongoing SPC Pacific Tuna Tagging Project (activities in Philippines, Indonesia and contiguous areas) will provide critical data for national-level assessments.

In the medium term of the project, a commitment to the collection of operational level data (logsheets) will be made, and observer programmes, to collect ecosystem-level data, will be gradually developed. The observer programmes will draw on the experience of existing NGO observer programmes in all three countries.

From this range of new data collection activities will flow regular reporting at national level, valuable contributions to regional fishery databases and greatly enhanced capacity at national level. WCPFC staff will contribute experience and coordination to areas such as administration and coordination of sampling programmes, and observer programme development and implementation.

As the three countries involved are at different stages in the development of monitoring and assessment activity, there exists an opportunity for knowledge transfer, and for learning from the experiences of other countries. The project will provide opportunities for this to occur and synergies to be developed.

Enhanced governance frameworks for the conservation and management of oceanic tunas

Although the WCPF Convention, the first regional instrument put in place since the adoption of UN Fish Stocks Agreement, provides the governance framework for the conservation and management of oceanic tuna resources in the region, national institutional arrangements, policy settings and legal instruments are currently not necessarily able to deliver effective participation in the new regime. An important initial activity under the project will be to review existing institutional arrangements in all three countries, as well as current laws and policies, as they relate to full compliance with, and effective participation in, the requirements and activities of the Commission. This may involve development of a full institutional and legal gap analysis, and a comprehensive list of possible options for the improvement and strengthening of the legal and institutional framework to achieve sustainable fisheries and biodiversity conservation. Efforts will be made to encourage implementation of necessary changes without challenge to national priorities and sovereignty

Philippines, as one of the founding members of the Commission, has made some progress in this area but is not fully compliant. Indonesia is now a member of two other RFMOs (IOTC and CCSBT) and is likely to become a full member

(CCM) of the Commission during 2009, so is beginning to align existing structures with RFMO requirements. Vietnam, on the other hand, is at a very early stage of any possible accession to the WCPFC and enjoys informal observer status only. In all cases, there is much to do before the countries are fully compliant with WCPFC requirements.

Improvements in capacity and information flow will enable regular reporting on fisheries issues, flag state responsibilities, port state requirements, surveillance activities etc as required by the Commission, to be implemented. National Tuna Coordinators will be appointed in Indonesia and Vietnam (one has been in place in Philippines for several years), with the responsibility of managing project activities at national level, serving as information gathering points and coordinating all reporting requirements to the Commission. The Project will also encourage and initially directly support the development of tuna industry associations in Indonesia and Vietnam, to ensure the full participation of key stakeholders in Project activities.

The Project will also encourage the development (or revision, in the case of the Philippines) of National Tuna Management Plans, compatible with regional arrangements and drawing on information and experience gained during the project. Technical assistance will be provided with the formulation of these plans, which will also inform all aspects national harvest policy and provide another opportunity for capacity building. These plans, in time, will also identify conservation and management options based on a precautionary and ecosystem approach. By strengthening national oceanic fisheries management capacity, this activity will facilitate increasingly valuable national contributions to regional management of shared migratory stocks.

Learning, awareness raising and knowledge sharing.

The proposed project would contribute greatly to regional knowledge of tuna fisheries and their associated ecosystems and extend the reach and effectiveness of regional management initiatives. More specifically, the project will:

- Widely publicize project findings and results to raise awareness on importance of oceanic fisheries management and highlight new information. Industry associations and national coordinators will be important conduits for information dissemination.
- As part of the project's international communications campaign, contribute to IW:LEARN activities, such as production of at least one International Waters Experience Note, participation in the biennial International Waters Conference(s) to showcase the project achievements and exchange knowledge, and project information to be made available through an IW:LEARN website. Approximately 2% of project budget allocated by GEF, or USD 20,000, will be earmarked for the IW:LEARN related activities.
- Coordinate with other related initiatives in the region, to ensure results and learning of the project are shared as widely as possible and benefit from the experience of others. As noted, the exchange of information and experience amongst the three participating countries, via study tours and workshops, is expected to pay an important part in the Project.

Expected global environmental benefits

The Project will target sustainability threats to shared oceanic fish stocks that are currently partially managed under the auspices of the Convention for the Conservation and Management of Highly Migratory Fish Stocks of the Western and Central Pacific Ocean which provides the institutional framework for international collaboration for conservation and management of oceanic highly migratory fish stocks in this region.

The Project will strengthen WCPFC as the appropriate regional fisheries management organization (RFMO) responsible for the conservation and management of highly migratory fish stocks in this oceanic region by building the capacity of Philippines, Indonesia and Vietnam to fully participate in the work of the Commission through improved scientific information supporting an ecosystems approach to management of shared target and non-target oceanic stocks and strengthened monitoring, regulation and control nationally and regionally.

Global environmental benefits from the Project will be achieved by strengthened international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia. In addition, as a nationally-driven initiative of Philippines, Indonesia and Vietnam, an improved

contribution to sustainable development will be achieved through enhanced information for decision-making in respect of necessary national economic, financial, regulatory and institutional reform and full participation in an existing regional fisheries management arrangement.

The proposed project will include all players in a comprehensive management framework for a fishery of global significance, the East Asian oceanic tuna fishery.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

Both components of the Project directly address priorities and plans for research, conservation and management of fisheries in Indonesia as supported by the National Commission on Fish Stock Research, established by Government Law No. 31/2004, and which provides advice on the status of fisheries resources to the Minister of Marine Affairs and Fisheries, the Coordinating Forum on Fisheries Resource Management and Utilization, coordinated by the Directorate General of Capture Fisheries and the Ministry's Control and Monitoring of Marine and Fisheries Resources Program. The Project in Philippines will draw on the 1997 National Biodiversity Strategic Action Plan, including the 2005 Philippine Report of the Biodiversity Indicators for National Use; the proposed Sustainable Archipelagic Framework, drafted in 2004 and the National Tuna Management Plan which describes policy for management of highly migratory fish stocks. The policy environment for the Project in Vietnam will be framed by the provisions of the 2003 Fisheries Bill and the Strategy for Offshore Fishing.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH [GEF STRATEGIES](#) AND STRATEGIC PROGRAMS:

The Project is consistent with the first objective of the IW focal area to foster international, multi-state cooperation on priority transboundary water concerns through more comprehensive, ecosystem-based approaches to management and its Strategic Program 1 on Restoring and Sustaining Coastal and Marine Fish Stocks and Associated Biological Diversity, which targets SE Asian Seas as one of the global hotspots.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The Project will be coordinated with the UNDP-GEF Pacific Islands Oceanic Fisheries Management Project. The vehicle for cooperation will be the WCPFC. Other GEF/CTI initiatives in the region are focussed on priority concerns relating to coastal ecosystems including coral reefs and threatened species. None currently focus specifically on highly migratory fish stocks, ocean governance or support for international cooperation for the conservation and management of shared highly migratory fish stocks as provided for in UNCLOS and the UN Fish Stocks Agreement. Activities will also be coordinated with other Coral Triangle projects such as the Sulu-Celebes/Sulawesi Sea project currently under preparation, and will endeavour to interact with relevant PEMSEA, COBSEA and SEAFDEC initiatives.

E. DESCRIBE THE [INCREMENTAL REASONING](#) OF THE PROJECT:

The existing scenario: the Philippines and Indonesia will continue basic fishery sampling efforts, compile occasional fishery profiles, undertake some biological research and publish occasional data summaries. Vietnam will be unable to develop coordinated monitoring programmes. Limited operational catch and effort data will be available for target stocks but information for non-target stocks (such as turtles, sharks, billfish, marine mammals, and associated species) will be minimal, and so consideration of an ecosystem approach to fisheries management will be challenged. Information will be inadequate to support robust stock assessments, which for highly migratory fish stocks, requires international collaboration and reliable data form throughout the range of the stock. Philippines, Indonesia and Vietnam do not participate fully in the newly established WCPFC. Compliance, monitoring and regulation will continue to be relatively poorly coordinated with the result that IUU fishing activities increase. Key stocks will be threatened by over-exploitation and fishery monitoring and management efforts will continue as *ad hoc* national initiatives with limited regional coordination or resource sharing. In the longer term, food security, livelihoods and the contribution of the fisheries sector to the sustainable development of national economies will be threatened.

Alternatively, with support through the Project, Vietnam will be engaged in the WCPFC as a cooperating non -member while it works through domestic procedures associated with the ratification of international fisheries instruments including the UN Fish Stocks Agreement and the WCPF Convention. Together with Indonesia, which will have ratified

the WCPF Convention, and the Philippines, the three countries will participate in the work of the WCPFC. Fleets fishing beyond national jurisdiction will be regulated and authorized, fishery monitoring and data acquisition programmes will be routinely collecting operational catch and effort information, landings at major ports and processing facilities will be monitored and information systems established to make the data collected available for regional and national stock assessments. Conservation and management measures will be based on improved scientific information and advice leading to more robust management of target highly migratory fish stocks and non-target, associated or dependent species taken incidentally.

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

Financial sustainability represents the major risk - particularly given that the size of the intervention, spread across three countries, and the scale of the issues to be addressed nationally and regionally. While the WCPFC has been operational for two years it faces many challenges which have potential to undermine its efforts in relation to sustainable use, conservation and management of WCPO shared migratory fish stocks. These include securing complete and accurate data that will reduce uncertainty in stock assessments, establishing effective compliance across diverse and essentially unregulated fleets and increased threats posed by IUU fishing as coastal fish stocks in east Asia come under increasing pressure from over-fishing and environmental degradation. In Indonesia, Vietnam and Philippines there are also limits to the absorptive capacity of institutions within the timeframe of the project. There are largely undocumented potential risks for target and non-target fish stocks and the impact of climate variability on the sustainability of current levels of fishing effort if changing environmental conditions adversely impact biological process such as recruitment and vulnerability to fishing.

G. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

The detailed baseline studies carried out in each of the three countries (Indonesia, Philippines and Vietnam) provide a base case of no intervention with dramatically increased threats of over exploitation and consequences for sustainable livelihoods and economic development (see Optional Annexes I-III). The project proposes interventions, both at the individual country level and across countries, which will positively impact conservation and management for shared migratory stocks as a cost-effective international cooperation alternative.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. PROJECT IMPLEMENTATION ARRANGEMENT:

The project will be executed by UNOPS in cooperation with the Western and Central Pacific Fisheries Commission and its Secretariat. The project will be coordinated by a part-time (20%) Project Coordinator (PC) working alongside WCPFC staff, including the Science Manager, a Financial and Administrative Officer. The WCPFC will be responsible for the day-to-day operations of the project implementation, whilst the PC will have in key role in overall coordination and reporting, and answerable to the Project Steering Committee (PSC).

Project Steering Committee (PSC)

A Project Steering Committee (PSC) will guide the cooperating agency (WCPFC) and the PC throughout the project implementation as the highest decision making body for the project. The PSC will be comprised of representatives of the following organisations, and will follow the ToR already in place for the current IPDCP.

- UNDP-GEF
- UNOPS
- WCPFC
- SPC Oceanic Fisheries Programme (contracted science and data provider for the WCPFC)
- SEAFDEC
- FAO
- AusAID

- WWF
- CTI

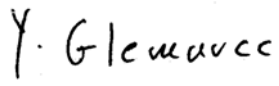
The PSC will meet once per year, on the margins of the WCPFC Scientific Committee, to take advantage of the presence of various PSC members. The project will be periodically reviewed in order to establish the extent to which activities set out to achieve project objectives are proceeding, so that adjustments can be made if needed. PSC will play a key role in providing strategic guidance and oversight of the project. The terms of reference for the Project Steering Committee include:

- Providing strategic guidance and oversight;
- Reviewing and approving annual work plans;
- Reviewing and approving budgets;
- Reviewing overall progress;
- Approving substantive revisions if necessary to help ensure project objectives are attained; and
- Helping to ensure that the project continues to be complementary to other initiatives.
- Helping to ensure the high-level coordination among policy makers and industry, necessary for the governance reform that the project aims to achieve.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

There is no significant deviation of the project design from the original PIF.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.	
 Yannick Glemaareac UNDP-GEF Executive Coordinator	Anna Tengberg Regional Technical Advisor
Date: 17 March 2009	Tel. and Email: +66 22882730 Anna.Tengberg@undp.org

SECTION II : PROJECT RESULTS FRAMEWORK

Project Strategy		Objectively verifiable indicators				
Goal		To improve conservation and management of highly migratory fish stocks in the West Pacific-East Asia region				
Objectives of the Project		To strengthen national capacities and international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia (Indonesia, Philippines and Vietnam).				
Outcomes	Outputs	Indicators	Baseline	Target	Sources of verification	Risks
Outcome 1: 1. Improved knowledge of oceanic fish stocks and related ecosystems	1.1 Implementation of integrated fishery monitoring programmes for target and non-target species in Philippines	1.1.1 Expanded port sampling coverage of tunas and associated species	Currently fishery monitoring programmes in Philippines provide incomplete coverage of landings	Effective port sampling programmes established at three new landing points in Philippines	Database acquisitions, quarterly data summaries, annual national reports	Manpower availability and level of training available
		1.1.2 Procedures for the processing of catch data and raising procedures in place	Uncertainty in catch estimates arising from current data processing and raising procedures	Guidelines for revised procedures and their adoption	Review of outcomes of revised procedures, audit of inputs to regional databases	Unwillingness to adopt revised procedures
		1.1.3 Enhanced operational level data collection (logsheets)	Logsheets coverage of industrial fleets poor, and non-existent for artisanal fleets	High level of logsheet coverage (60%) of large purse seine vessels initially, then smaller purse seine and ring net vessels	Regular data summaries from logsheets	Lack of cooperation from industry
		1.1.4 Development of strategic plan for observer programme	No regular observer coverage by fishery agencies, and few data on catches of non-target species for EBFM	Observer programme established on selected fleets in 2010	Observer reports incorporated in observer database, annual reports, data summaries and EBFM	Lack of trained observers; poor industry cooperation

1.2 Implementation of integrated fishery monitoring programmes for target and non-target species in Indonesia	1.2.1 Audit of existing pilot port sampling at two sites, in agreed format	Little or no port sampling; pilot sampling schemes initiated on trial basis yet to be evaluated	Audit completed and plan for extended coverage developed	Pilot port sampling, moving to substantive port sampling schemes if successful	Pilot schemes prove unsuccessful
	1.2.2 Expanded port sampling coverage of tunas and associated species	Pilot scheme currently underway at two selected landing sites, but no other catch sampling in eastern Indonesia	Effective port sampling programmes established at three selected landing points in Indonesia	Database acquisitions, quarterly data summaries, annual national reports; Regular annual audit	Manpower availability and level of training
	1.2.3 Capacity building in responsible agencies for processing and assimilation of catch data for tuna and assoc. species	Current capacity inadequate for data processing and interpretation	Training in database development and data analysis provided and applied	Training workshops held; data summaries developed; improved data inputs to regional stock assessments; annual reports prepared	Suitably motivated staff unavailable
	1.2.4 Pilot operational-level data collection, with progression to expanded data collection	Logsheet coverage of all fleets non-existent	Logsheets developed and distributed to selected vessels/gear	Regular data summaries, coverage estimates and quality checks	Lack of cooperation from industry
	1.2.5 Strategic plan for observer programme developed and implemented	No observer coverage by fisheries agencies at present	Plan discussed and accepted, with implementation planned for 2011	Observer reports incorporated in observer database Annual summary observer reports	Lack of cooperation from industry
	1.3 1 Implementation of integrated fishery monitoring programmes for target and non-target species in Vietnam	1.3.1. Port sampling and data collection initiated in three provinces	No coordinated data collection by fisheries agencies, national and provincial	Sampling forms and sampling strategy developed; audit procedures developed	Regular data summaries and data quality checks (audit)
	1.3.2 Enhanced capacity in monitoring and data collection and analysis	Current capacity rudimentary	Training workshops in port sampling, database development and maintenance, and basic data analysis; format for data summaries adopted	Workshop evaluation; database holdings listed; regular data summaries provided	Suitable staff not available for training and implementation

		1.3.3 12 Pilot operational-level data collection, with progression to expanded data collection	Logsheets coverage of all fleets non-existent	Logsheets developed and distributed to selected vessels/gear	Regular data summaries, coverage estimates and quality checks	Lack of cooperation from industry
		1.3.4 Study tour of port sampling programmes in Philippines	No prior experience of port sampling programmes in Vietnam, but well developed in Phils	Experience of similar programmes with similar vessels and species catch gained	Technical report prepared, including lessons learned	n/a
Outcome 2: Reduced uncertainty in stock assessments	2.1 Improved data for stock assessment	2.1.1 Data quality control training	Experience and skills currently lacking in most cases	Training workshop held, regular audit	Regular preparation of data summaries; databases well maintained	
		2.1.2 Collaborative tuna tagging activity in-country (Philippines, Indonesia)	Information lacking on many basic tuna population parameters eg movement, natural mortality, growth, exploitation rate	National counterparts on tagging vessels; effective coordination of publicity and tag recovery	Involvement in, and delivery of, tag-based national tuna fishery assessment and tuna management plan	Poor publicity and lack of coordination of tag recovery efforts; lack of cooperation by fisheries in returning tags with complete information
		2.1.3 National data coordination (where currently absent)	No/little data or tuna research coordination in Vietnam and Indonesia at national level	Funding for National Tuna Coordinator post (Vietnam, Indonesia) provided	Annual reports for WCPFC as primary output	Suitable person not available
Outcome 3: National capacities in oceanic fishery monitoring and assessment strengthened	3.1 Training of national fishery monitoring and stock assessment staff	3.1.1 Data analysis and stock assessment training	Current capacity not well developed for oceanic fisheries	Stock assessment workshops (at least two per country); one studentship per country for post-graduate study	Uptake of capacity reflected in national representation in WCPFC Scientific Committee; annual fishery status report	
		3.1.2 Database and analytical training	Current capacity not well developed for oceanic fisheries	Training workshops (three participants per country); annual database audit	Database acquisitions used in stock assessments; quarterly data summaries; audit of inputs to regional databases	

		3.1.3 Preparation of national fishery status reports	Only Philippines currently prepares such reports	Assistance with development of reporting template	Regular submission of reports to WCPFC	
Outcome 4: Participant countries contributing to management of shared migratory stocks	4.1 Review of policy and institutional arrangements for oceanic fisheries management	4.1.1 Review of policy and legal arrangements for WCPFC-related matters;	Indonesia and Vietnam not well prepared; Philippines still needs some revision	Legal and policy training workshops held (at least four participants /country)	Workshop proceedings; review of current arrangements tabled	
		4.1.2 Review of institutional arrangements	Indonesia and Vietnam not well prepared	Institutional review undertaken;	Review outcomes of review; implementation plan for institutional strengthening	
	4.2 Strategy to support national reform	4.2.1 Identify reform necessary to existing arrangements	Countries not well placed to be fully effective in WCPFC	Implementation of proposed initiatives derived from previous reviews		
Outcome 5: National laws, policies and institutions strengthened. To implement applicable global and regional instruments	5.1 Implementation of the WCPF Convention and related instruments	5.1.1 Prepare checklist of compliance shortfalls	Convention requirements not fully adopted by countries	Address checklist of compliance issues; action to become fully compliant	Implementation of necessary actions; more effective participation in WCPFC	
Outcome 6: Key stakeholders participating in the project	6.1 Knowledge management system for dissemination of Project-related information, lessons and best practice	6.1.1 Establish appropriate KLM in all countries	Currently no system in place for systematic dissemination of relevant information	Development and establishment of KLM system	Regular information dissemination to stakeholders	
	6.2 Establish Tuna Associations (Vietnam, Indonesia) to fully involve industry	6.2.1 National body coordinating provincial and national work	No coordination amongst key producing provinces or management areas	Effective national initiatives and reporting procedures established	Association articles, annual; meeting and activities reports	
Outcome 7: National capacities in oceanic fisheries management strengthened	7.1 Development of National Tuna Management Plans (Indonesia, Vietnam) or revision of existing plans (Philippines)	7.1.1 Assistance provided to develop NTMPs in two countries and revise in the third	No TMP in place (Indonesia, Vietnam) or TMP needs revision (Philippines)	Develop template for NTMP for each country; convene workshop to develop NTMP compatible with WCPFC CMMs	NTMP prepared, launched and integrated in national policy	

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT

<i>Position Titles</i>	<i>\$/ person week</i>	<i>Est. person weeks</i>	<i>Tasks to be performed</i>
Project Management			
<i>International</i>	(28,000)		
Project Coordinator (interim)	3,000	7	<ul style="list-style-type: none"> - Overall coordination of project activities - Organisation of Project Inception workshop - Liaison with PSC - Liaison with national coordinators - Drafting of IR, project work plan etc. - Project reporting - Coordination of M& E activities - Development of ToR, contracting consultants
Independent Auditor	2,000	2	Financial auditing of project
Independent Evaluator	2,000	1.5	Terminal evaluation of the project
<p>Travel Costs: An inception meeting and final project meeting (to assure integration of project results within effective participation in WCPFC activity) will be supported with GEF and WCPFC funds in the 1st and final year respectively (two meetings with 20 participants). The Project Steering Committee (PSC) will be established at the Inception Meeting. The PSC will then meet in the frame of other project meetings. Due to high costs associated with travelling from Micronesia, where the WCPFC is located, to the participating countries, the total costs for these meetings amounts to \$60,000.</p>			
Technical Assistance			
<i>International</i>	(143,000)		
Port sampling trainer(s)	2,000	16	<ul style="list-style-type: none"> - Develop sampling protocols and forms - Identify and train enumerators (workshops) - Conduct annual sampling audits (I,P)
Stock assessment advisor	2,000	12	<ul style="list-style-type: none"> - Organizing and running tuna stock assessment training workshops - Assist with the production of national fishery status report templates - Inputs to preparation of National Tuna Management Plans
Database analyst	2,000	16	<ul style="list-style-type: none"> - Provide training in data collection, collection and database management (data workshops) - Data quality control - Develop operational data forms and protocol
Legal Advisor	3,000	6	<ul style="list-style-type: none"> - Review legal and policy arrangements - Workshop to determine options for improvement of legal and governance frameworks (with Inst Specialist) - Recommendations for improvement of legal frameworks
Institutional specialist	2,500	6	<ul style="list-style-type: none"> - Review of institutional arrangements - Recommendations for improvement of governance frameworks
Media & communications coordinator	2,000	6	<ul style="list-style-type: none"> - Develop knowledge management system for the project in 3 countries - Training in writing of reports, media articles, liaison with relevant media
Management Plan consultant	2,500	4	<ul style="list-style-type: none"> - Development of management plan template - Assist with plan development

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

The outcomes identified for the PPG phase to establish the project design and implementation mechanisms, then draft a medium-sized project proposal were achieved through the following activities:

- Detailed baseline studies by National Resource Specialists
- Extensive stakeholder consultation in each country to determine needs
- Identification, and securing, of co-financing and scientific partners
- Collaboration for identification of local scientists and institutions to benefit from capacity building and research findings of the projects
- Identification of relevant stakeholders and partners, and consultation with main partners
- Finalization of the project document and the request for CEO approval
- Sensitization of key (government) partners of the proposed MSP (its objectives and expected outcomes) at an Inception Workshop tentatively planned for May 2009

B. DESCRIBE IF ANY FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION.

None.

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF Amount (\$)</i>				<i>Co-financing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To-date</i>	<i>Amount Committed**</i>	<i>Uncommitted Amount *</i>	
MSP- National Consultants	Completed	25,000		25,000	0	10,000
MSP – Int’l Consultants	Completed	27,200		27,200	0	20,000
MSP – Travel	Completed	16,000		16,000	0	6,000
Miscellaneous	Completed	6,800		6,800	0	6,500
Project implementation					0	
Total		75,000		75,000	0	42,500

* Uncommitted amount should be returned to the GEF Trust Fund.

** To be completed

**West Pacific East Asia Oceanic Fisheries Management (WPEA OFM)
Project**

COUNTRY REPORT

S.R. VIETNAM

ACRONYMS

ALMRV	Assessment of Living Marine Resources in Viet Nam (DANIDA)
CIS	Centre for Informatics and Statistics (MARD)
DANIDA	Danish International Development Agency
DARD	Department of Agriculture and Rural Development at provincial level
DECAFIREP	Department of Capture Fisheries and Resources Protection, MARD
DOFI	Department of Fisheries at provincial level
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
FI Cen	Fisheries Informatics Centre, MOFI
FSPS	Fisheries Sector Program Support (DANIDA)
GEF	Global Environment Fund
GSO	General Statistics Office
IUU Fishing	Illegal, Unreported and Unregulated Fishing
LOSC	Law of the Sea Convention
MARD	Ministry of Agriculture and Rural Development
MOFI	Ministry of Fisheries
NADAREP	National Directorate of Fisheries Resources Exploitation and Protection, MOFI
NAFIQAD	National Fisheries-Agriculture-Forestry Quality Assurance Department (MARD)
NAFIQAVED	National Fisheries Quality Assurance and Veterinary Department (MOFI)
NORAD	Norwegian Aid
RIMF	Research Institute for Marine Fisheries (MARD)
SEAFDEC	South East Asian Fisheries Development Center
STOFA	Strengthening of the Fisheries Administration (DANIDA)
Sub-DECAFIREP	Sub-Department of Capture Fisheries and Resources Protection (DARD)
TAC	Total Allowable Catch
UNFSA	United Nations Fish Stocks Agreement
VASEP	Vietnam Association of Seafood Exporters and Producers
VINAFIS	Vietnam Fisheries Society
WCPFC	Western and Central Pacific Fisheries Commission

INTRODUCTION

Viet Nam together with Eastern Indonesia and Philippines form the western boundary of the Pacific Ocean warm pool large marine ecosystem, a globally significant maritime region which supports biodiversity that is among the highest in the world. Oceanic fish stocks which migrate throughout this region support commercial and small-scale fisheries providing livelihoods, food security and economic development opportunities. The sustainability of harvests of these shared resources is threatened by poor information, over-exploitation resulting from incomplete and inadequate collaborative arrangements for conservation and management, both nationally and regionally, and IUU fishing.

Shared oceanic fish stocks of the western Pacific Ocean are currently partially managed under the auspices of the Convention for the Conservation and Management of Highly Migratory Fish Stocks of the Western and Central Pacific Ocean. This relatively new organisation provides the institutional framework for international collaboration for conservation and management of oceanic highly migratory fish stocks in this region. Indonesia and the Philippines participated in the negotiations to develop the Convention during the 1990s and Philippines has since ratified it. Viet Nam has not yet engaged in the Commission's work and the Philippines and Indonesia require considerable support in order to fully participate.

The WPEA OFM Project will strengthen WCPFC as the appropriate regional fisheries management organization (RFMO) responsible for the conservation and management of highly migratory fish stocks in this oceanic region by building the capacity of Philippines, Indonesia and Vietnam to fully participate in the work of the Commission through improved scientific information supporting an ecosystems approach to management of shared target and non-target oceanic stocks and strengthened monitoring, regulation and control nationally and regionally.

Global environmental benefits from the Project will be achieved by strengthened international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia. In addition, as a nationally-driven initiative of Philippines, Indonesia and Vietnam, an improved contribution to sustainable development will be achieved through enhanced information for decision-making in respect of necessary national economic, financial, regulatory and institutional reform and full participation in an existing regional fisheries management arrangement.

For the country selected, the Project will strengthen national capacities and international cooperation on priority transboundary concerns related to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and east Asia including Indonesia, the Philippines and Viet Nam.

This PPG document of Viet Nam was prepared by Mr. Duong Long Tri, the appointed National Resource Specialist (NR for Viet Nam, to review and analyse all relevant issues at national level in Viet Nam, in support of the development of a Project Document for submission, through the WCPFC, to the UNDP and the GEF to fund a Medium Sized Project, titled the West Pacific East Asia Oceanic Fisheries Management Project, to be implemented in Indonesia, Philippines and Viet Nam.

1. GENERAL BACKGROUND

1.1. Geographical location, natural conditions of Viet Nam

a. Geography

Vietnam has a narrow S-shaped strip of land stretching along the eastern coast of Indochina peninsula. It lies on the huge Asian continent and faces the immense Pacific Ocean. It ranges from 23°23' to 08°02' North latitude and from 102°08' to 109°28' East longitude. Its length as bird flies is 1,650 km from the northernmost point to the southernmost. At the widest point, the country stretches 600 km from west to east, and at its narrowest point, only 50 kilometers.

Viet Nam mainland borderline is 3,730 km. It shares 1,150 km border line with the Peoples' Republic of China to the North, 1,650 km with Lao Peoples' Democratic Republic, and 930 km with the Kingdom of Cambodia to the West.

The East Sea and the Gulf of Thailand surround it on the East, the South and the Southeast. Therefore, its near-neighbors include the Republic of the Philippines, the Republic of Indonesia, and the Republic of the Singapore, the Republic of Brunei and the Malaysian Federation.

b. Natural conditions

The entire territory of Viet Nam consists of the mainland area of 329,297 km² and an immense sea area of 1 million km² (Land Census - 2002).

Located in the tropical area, Viet Nam is therefore affected strongly by Asian monsoons, mainly by North-Eastern and South-Eastern monsoons. The annual rainfall is from 1,500 - 2,000 mm. The humidity is usually more or less 85%.

Mountains, sometimes extending into the sea or even intermingling with the sea surround most of the country's territory. The mountains, which are not very high but quite steep, run from the Northwest and Southeast and divide the national topography into various regions with different characteristics. The North topography is fan-shaped, of which the West, North and East are enclosed by mountains while the South is sea and the middle is coastal plain. The Center of the country is long and narrow, where mountains, plains and seashores are intermingled. The South topography is less complicated with low hills and mountains. In general, the area of coastal plains is not very large.

The country's coastline stretches for more than 3,260 km and there is an estuary every 30 km of the seashore, which is regulated by a highly complicated tidal regime.

Besides the rivers that flow directly into the sea, some rivers run through such big lagoons as Tam Giang, Cau Hai, Lang Co, O Loan, and Thi Nai.

In the territory of Viet Nam, there are up to 2,860 small and big rivers, with rapid current, thus causing erosion. The country has curving seashore, which forms small peninsulas when projecting into the sea and bays or big ports when turning on mainland.

Viet Nam has many natural lakes such as West Lake (typical for the delta lakes); Bien Ho, Ba Be lake, Lak Lake (typical for the mountainous lakes) with stable water level and closed autotrophic cycle. The area of natural lakes in Viet Nam is estimated to be about 20,000 ha.

Viet Nam has a number of medium and small-sized reservoirs (the exact number is still unknown). Some big reservoirs include Thac Ba, Hoa Binh (in the North), Dau Tieng, Tri An,

Thac Mo, Song Hinh (in the South). The area of reservoirs in Viet Nam is over 180,000 ha. However, due to the need of irrigation, hydroelectric power and flood control, more reservoirs are being built.

c. Population and labourers

Viet Nam has a population of about 83.89 million people (GSO, April 2006), of which 42.67 million were females comprising 50.86% of total population, 41.22 million were males (49.14%). The population growth rate fell sharply from 1.92% in 1990 to 1.32% in 2002, but then bounced back to 1.47% in 2003.

Viet Nam is a country that has a young population with the number of people of working age making up 50%. The rate of literacy is very high, up to 91% of the population aged 10 years and above. The acquirement of Vietnamese people is rather quick and flexible; as a result, they can promptly absorb advanced experience of new technique and technology as well as easily adapt to new tasks in short training time.

d. Administrative structure

Viet Nam administrative system is structured in 4 levels : Central, Provincial, District and Communal level. After many episodes of separating and integrating the administrative units, before 1st August 2008, Viet Nam had 64 administrative units at provincial level (59 provinces and 5 cities under direct authority of the Centre, e.g. Hanoi, Hai Phong, Da Nang, Ho Chi Minh city and Can Tho), 659 district administrative units (including 534 rural districts, 42 urban districts, 61 towns and 22 cities under province) and 10,732 communal administrative units (including 9,000 communes, 1,137 precincts and 595 rural towns).

1.2. Potentiality of marine resources

Viet Nam's coastline is 3,260 km with 112 estuaries. Every land area of 100 km² there is 1 km coastline on average or about every 30 km coastline there is one estuary. Among 64 provinces/cities, there are 28 coastal provinces with their population of over 43.3 million, occupying 51.5 % of total population of the whole country (GSO, 2006). The EEZ of Viet Nam is over 1 million km², which triples the mainland area. In the sea area of Viet Nam, there are over 3,000 islands, of which many islands are inhabited, such as the islands of Van Don, Cat Ba, Phu Quy, Con Dao and Phu Quoc. There are also many bays and straits which could be not only favourable fishing grounds but also good places for development of marine culture and building of logistical bases for fisheries. These natural conditions are favourable for developing marine economics in general and fisheries in particular.

Viet Nam sea area is situated in the sphere of Western and Central Pacific. Its fisheries resources are abundant and diversified and they are considered as one of the productive fishing grounds in the international sea zones. Among marine fish stocks, there are over 2,000 fish species, of which species with high economic value number about 130 fish species, 225 shrimp species, 663 seaweed species and other valuable species such as abalone, pearl oyster, granular ark shell and red coral. According to research in marine resources done by RIMF, marine fish stock in Viet Nam's sea area were estimated at about 3.5 to 4 million tonnes with TAC of 1.8 – 2.0 million tonnes per year.

Historically, Viet Nam's people have had a strong attachment to the sea. Fisheries with long traditions have involved not only inhabitants living in the coastal area but also with people living in inland area where there are many rivers, channels, natural and man-made reservoirs, system of ponds and low fields favourable for freshwater aquaculture. It could be said that, natural characteristics of marine resources, abundant in forms of waterface in both the sea and

inland provide good conditions to develop fisheries in various sectors such as marine capture, aquaculture, seafood processing, fisheries trade, fisheries logistics and services.

With the advantage of these natural conditions, the fisheries sector, initially considered to be secondary to agriculture, has now become an important sector in the national economy, which achieved highest growth in the whole sectors of agriculture, forestry and fisheries (11% in 2007). Viet Nam's fisheries are now ranked highly in the world community of fisheries.

In terms of marine capture fishery management, the Viet Nam sea area is divided into 5 major zones as follows :

- Gulf of Tonkin : located in the North of Viet Nam, its boundary to the East is a line which was defined in the Agreement of Delimitation of the Tonkin Gulf between Viet Nam and China. Its boundary to the South is a latitude line of 17°00'N.

- Central sea zone : rather long and narrow, bounded by latitudes 11°30'N and 17°00'N, and to the East by longitude 110°00'E.

- Seazone of the South-Eastern area : bounded by latitudes 6°00'N and 11°30'N, and by longitudes 105°00'E and 110°00'E.

- Seazone of the South-Western area : is bounded by latitudes of 6°30'N and 10°30'N, and by longitudes of 103°00'E - 105°00'E.

- East Sea : the offshore sea area of Viet Nam - its boundary to the East is longitude 110°00'N.

1.3. The role of the fisheries sector in the national economics

With the natural conditions favourable for development of marine economic sectors in general, and fisheries particular, fisheries have, for a long time, been an important livelihood for a great part of Viet Nam's inhabitants. Fisheries products, in many case, are staple food items in the diet of Viet Nam people

However, until recent decades, fisheries have just considered in the same position as other sectors in Viet Nam. After implementing the policy "Doi Moi" in the direction of integration in the world economics, with the advantage of producing products for export, fisheries sector became an important sector in the contry's economy. Since the late 1990s, Viet Nam's fisheries have showed strong development.

The rapid development of the fisheries in all fields of marine capture, aquaculture and processing for export have made important contribution to a growth of the national economy, ensured the national food security, contributed to the restructure of production, and created livelihood for millions of people not only in the coastal area but also in the mountainous area. In order to develop the sector in the direction of sustainability and integration, in recent years, fisheries sector have developed based on the target program, for which there is a policy on development of offshore fishing and stability of proper marine capture in coastal area.

Due to the reform of management mechanisms, restructure of all the fields of fisheries and release of socio-economic policies, fisheries sector has transfered into commodity production, improved economic effectiveness, created millions of job, and contributed to poverty elimination. Fishers and farmers are encouraged to build new fishing boats to go fishing in offshore sea areas, and in the development of aquaculture in order to produce fisheries production with good quality for processing and export. Viet Nam's fisheries products have met international requirement of quality and food safety in the world markets. Achievements of Viet Nam's fisheries during the period of 2000 - 2007 are shown in Table 1.

Table 1. Statistics of Viet Nam's fisheries in the period of 2000 - 2007

Year	Total fisheries production (million ton)	Marine and inland catch (million ton)	Aquaculture production (million ton)	Export value (USD billion)
2000	2.00	1.28	0.72	1.48
2001	2.23	1.35	0.88	1.78
2002	2.41	1.43	0.98	2.01
2003	2.54	1.43	1.11	2.20
2004	3.07	1.92	1.15	2.40
2005	3.43	1.99	1.44	2.74
2006	3.69	2.00	1.69	3.36
2007	4.15	2.05	2.10	3.76
Up to Oct. 2008	3.81	1.75	2.06	3.83

Source : Annual report of former MOFI and MARD (new)

Viet Nam' fisheries have now achieved a high position in the world community of fisheries. According to FAO Statistics in 2006, Viet Nam ranked 13th in capture production, third in animal aquaculture and 8th in export value.

2. CURRENT SITUATION OF MARINE FISHERIES

2.1. Overview of marine capture

Originating from traditional fishing with small artisanal boats operating mainly in near-shore areas, marine capture fisheries in Viet Nam developed rapidly. The number of fishing boats equipped with engines with higher capacity is increasing, enabling fishing in offshore areas. Fishing efficiency and the quality of marine catch have improved considerably. The policy on development of offshore fishing and stability of proper marine capture in coastal areas encouraged fishers in investment in building of new boats with larger engines to fish in the open sea. The number of fishing boats with engine of over 90 hp increased. If there were about 1,000 boats in 1990, this figure was over 14,000 boats in 2007. Marine catch from offshore fishing occupied about 40 % of total marine catch. Additional fishing ports have started effective operations. A system of fisheries logistics and services in coastal provinces are improved. Many forms of cooperation between fishermen have been established in order to set up fisheries services at sea and to assist each other in fishing and at risk.

a. Fishing boats

From 1990 to 2007, a number of fishing boats increased rapidly. By the end of 2007, total number of fishing boats in the whole country was about 95,000 with around 5.8 million hp, of which there were over 83,000 actual fishing boats, and about 12,200 boats for fisheries services and patrol at sea. Total capacity increased averagely by 18.3 % per year during the last decade. The average engine capacity per boat was over 60 hp. Viet Nam's marine fishing is however still small scale. The number of fishing boats having engine capacity of under 90 hp occupied 84% of the total in the whole country and operating mainly in coastal areas. Almost all fishing boats of wood construction with short life-span. Fishing facilities and equipment

installed in the boats are low technology, resulting in low fishing efficiency and issues of working safety at sea.

A spontaneous increase in a number of fishing boats last time resulted in intensification of fishing efforts while fishing grounds were not expanded. These caused serious reduction in coastal resources, low fishing efficiency and unstable income of fishermen. Although marine catch and proportion of the catch from offshore fishing have been increasing, the quality and value of the catch were still low. Trash fishes comprised a high proportion of hauls, especially for fish trawl, shrimp trawl, pushing net, etc.

Table 2. A number of fishing boats with engine of over 20 hp classified by group of capacity

Engine capacity	No of boats	Rate (%)
20 – < 50 hp	25,130	47.16
50 - < 90 hp	12,569	23.59
90 – 800 hp	15,588	29.25
Total	53,287	100.00

Source : NADAREP (2008)

b. Structure of marine capture

Marine capture used to be a traditional occupation for the people living in coastal areas. Therefore, methods of fishing are diversified and mainly small scale. At present, there are over 40 methods of fishing used by fishers those are put into 5 groups : trawl, gillnet, purse seine, hook and line or longline and fixed net. Among these, trawl occupies highest rate - over 30 % of total fishing boats those use this method. This figure for trawl fishing boats in offshore areas is even higher at about 51 %. The trawl has low selectivity which destroys seabed and marine environment. It also consumes the most fuel in comparison to the other.

During last 10 years, fishermen applied improved fishing gears such as tuna longline and squid falling net using light sources. Consequently, a structure of marine capture have been changed and the quality of the catch has been improved for domestic consumption and export. However, many fishers still use fishing boats with small engine capacity to fish in the coastal areas. Nets with small mesh size and affecting the resources are used by fishers. A structure of fishing boats classified by gear types is showed in table 3.

Table 3. Fishing boats by gear types

Area	Gear type (No of boats)							
	Trawl	Gillnet	Purse seine	Squid falling net	Hook and line	Squid jigging	Tuna longline	Other
Gulf of Tonkin	4,076	2,228	1,018	1,074	3,289	-	-	1,616
Central	5,550	2,467	3,080	-	-	3,059	1,153	6,091
South Eastern	5,964	1,366	710	-	1,388	-	49	2,863
South Western	3,679	928	221	-	282	-	-	291
Whole country	19,269	6,989	5,029	1,074	4,959	3,059	1,902	10,861
% by number	36.26	13.15	9.46	2.02	9.33	5.75	3.57	20.43

Source : NADAREP (2008)

c. Employment in marine capture fisheries

Together with an increase in a number of fishing boats, in recent years, the labour force working directly in marine capture showed a continuous rise from about 270,000 people in 1990 to around 700,000 people in 2007. An average increase per year is over 23,000 people. The number of labourers working part-time in the area of fisheries services, fuel supply, transportation, etc is on the increase (this statistical figure is not available). Although fishers are seamanlike and have a good experience in working at sea, the majority of fishers have a low level of education. Thus it is difficult for them to acquire new technology, especially techniques of offshore fishing. It makes a great impact on change in professional structure in this field.

d. Fisheries logistics and services

In the last years, the Government increased capital expenditure and took advantage of financial support from the international donors to invest in fisheries infrastructure such as fishing ports, fisheries logistics and services. Some fishing ports however did not meet requirement of providing services for offshore fishing and transportation of the catch

- Fishing ports, landing sites and anchored places

Up to the end of 2007, there were 91 fishing ports and landing sites supported by new investment, of which 66 new fishing ports with total wharf length of 6,048 m came into operation. However, some fishing ports and landing sites have been not well operated, particularly services in supply of fuel, ice water and other necessities for marine capture.

Secure harbours have also attracted investment in order to ensure safety at work for fishermen and reduce the loss caused by the natural calamity. Up to now 16 harbours are in operation those are enough space for 11,850 fishing boats anchored. Among these there are 16 places at regional level and 9 ones at provincial level, located in 11 coastal provinces. At present, there are more 44 harbours under construction.

- Fish markets are normally linked closely with fishing ports and landing sites, but they are not always integrated. Most fish markets are not well-managed. Fishers always faced with difficulty in selling their catch because they depend on middle-men. It is fishermen who work hard at sea to catch the fishes, yet they are often put at the greatest disadvantage compared to other occupations.

- Other fisheries logistics and services

There are now about 700 boat-building units with capable of bulding 4,000 new boats and repairing 8,000 boats per year. In addition, there are many local small units. However, almost these boat-building units are small scale and mainly build small wooden boats based on traditional designs. Viet Nam lack modern boat-building factories for serving offshore fishing.

Other service units such as units for making net, producing ice water and cold storages meet initially the demand of the marine capture sector, but they still operate in a small scale.

- Seafood processing :

During last 10 years, seafood processing industry showed strong development in both quantity and quality. Many of seafood processing factories, especially processing factories for export, have applied a new system of management which conforms to international standards of hygiene and food safety. Viet Nam's fisheries products have maintained their prestige at the

world markets of many developed countries such as EU, the USA, Japan and Korea. In 2007, Viet Nam's fisheries products were present in over 150 countries and territories. Export value in 2007 reached over US\$ 3.7 billion and this figure will exceed US\$ 4 billion in 2008.

The rapid development of processing industry has created good conditions to promote consumption of raw material from marine capture and aquaculture. It also make good contribution to stabilizing the income of fishers and farmers living in the coastal areas.

2.2. Situation of Oceanic Tuna fisheries

a. History

Oceanic tuna fisheries, mainly tuna longline in Viet Nam, started to develop in early in the 1990s with technology transfer in catching oceanic tuna done by fishing companies such as Ha Long Fisheries Cooperation, Bien Dong Marine Fisheries Cooperation and Viet Tan Co. Ltd and by some fishermen who used to go on catch flying fish by gillnet in the Central.

After the policy on development of offshore fishing and stability of proper marine capture in coastal area launched in 1997, many fishers improved their boats or built new boat with higher engine power to operate in offshore area. They also tried to acquire experience in tuna fishing and applied new techniques in order to develop their fishing. Therefore, tuna longlines showed a rapid growth in both scale of production and techniques of fishing. This fishery developed well in the central region, especially in three provinces of Binh Dinh, Phu Yen and Khanh Hoa. Because of lack of statistical data, the annual catch of tuna was not well documented, but it was estimated at over 10,000 tonnes p.a. Target species of oceanic tuna fisheries are yellow fin tuna, bigeye tuna and skipjack tuna. The catches from oceanic tuna fisheries are of high quality which can supply established export demand. Thus, oceanic tuna fisheries are considered the main way to develop offshore fishing in the future.

Tuna longline is now the dominant gear in oceanic tuna fisheries in Viet Nam. Apart from this, purse seine and gillnet have been used by fishers but mainly to catch small tuna species such as frigate tuna, bullet tuna, etc.

b. Fishing ground, resources and fishing season

Target species of tuna longline are oceanic tuna (e.g. yellowfin tuna, bigeye tuna). Sometimes in the catch of tuna longline swordfish, small shark and a few other species were found. Research into tuna stock in Viet Nam's sea area showed that it was estimated about 44,853 tonnes with TAC of around 17,000 tonnes (Dao Manh Son, 2004).

Oceanic tunas are highly migratory species which live or move seasonally around the islands, and in the deep seawater. In Viet Nam's sea waters, oceanic tuna species concentrated mainly in the sea areas of the central provinces of Binh Dinh, Phu Yen, Khanh Hoa and open sea fishing ground of Ba Ria – Vung Tau province. Fishing season is year-round and is divided into two seasons. The main fishing season (local name is North season) starts in November and finishes in March of the following year. Oceanic tuna species are then found in the East Sea, North East of the Paracel Islands and North of Spratly Archipelago where they are located at a distance of about 60 to 100 miles from the shore. The fishing ground is bound by latitudes 6°N to 14°N and longitude 109.3°E – 114°E. The South season starts in April to October. During this season, tuna species are to be found in the central area and the sea water of the Spratly Archipelago.

c. Fishing boats, gear type and fishing techniques

- **Fishing boats** : Up to now, in Viet Nam only longline is used to catch oceanic tuna. The others such as purse seine, gillnet, hook and line have not generally been used for fishing these species.

In early 2008, there are 2,005 tuna longline boats, of which 1,902 boats have engine power of over 20 hp. A number of fishing boats with over 90 hp engine power was 889, occupying 44.34 % of total longliners (Table 4). Three provinces in the central area dominated a number of tuna longliners. Binh Dinh had 704 boats. Phu Yen had 410 boats. This figure in Khanh Hoa was 420 boats, of which there were 104 boats with engine power of over 90hp (Nguyen Van Dau, Report at the Stakeholder Consultation in Nha Trang, 9/2008)

A number of longline boats equipped with modern fishing facilities was relatively few, with around 45 boats belonging to the fishing companies. These boats were made of steel or composite material with a length of from 22 – 27 m, equipped with engine power of 200 – 750 hp. They were equipped with navigation devices, on-board preservation storage and other fishing facilities such as line haulers and line shooters. This kind of longliners can fish in the open sea for a long time.

Fishermen's tuna longline boats were new one or re-built old ones to shift into catching oceanic tuna. The boats were made of wood with a length of from 13.5 – 18 m, equipped with engine power of from 33 – 300 hp. Almost boats were equipped with line haulers, compass, communication facilities, etc.

Table 4. Tuna longline boats by engine power category

Engine power	Central	South East	No of boats	Rate (%)
< 20 hp	103	-	103	5.14
20 – < 50 hp	190	104	294	14.66
50 - < 90 hp	648	71	719	35.86
90 – < 150 hp	671	29	700	34.91
150 - < 250 hp	66	40	106	5.29
250 - < 400 hp	35	21	56	2.79
Over 400 hp	1	26	27	1.35
Total	1,714	291	2,005	100.00

- Gear type :

The structure of the longline gear consists of a main line, branch lines, hooks, buoys and other devices. A size of longline depends on a size of longline boat and fishing facilities onboard.

For the large boats owned by companies, a length of longline is from 60 - 120 km corresponding to about 1,800 - 2,500 hooks. For the small boats owned by fishers or family, a length of longline is shorter, from 15 - 60 km corresponding to around 800 - 1,600 hooks. Distance between hooks is around 50 m. The branch line has a length of 25 - 40 m. A length of buoy line is 10 - 25 m. There are two type of buoy used in tuna longline. One is a spherical buoy with diameter of 200 - 360 mm and the other is cylindrical buoy with height of 310 - 360 mm and a diameter of 110 - 120 mm.

- Technique of fishing tuna :

It consists of gear preparation (gear, related facilities, baits), shooting the longline, soaking the hooks and hauling longline. Due to difference between various structures of longline and local ideas, there is some difference in fishing techniques between provinces.

For the large boats, fishing depth is often from 50 - 150 m, while small boats fish at a depth of 30 - 70 m. Fishing depth is adjusted by a length of buoy line or distance between two buoys. The large boats use a buoy line with a length of 17 - 25 m and distance between two buoys is 3 - 7 hooks. For small boats, a length of buoy line is 10 - 15 m and distance between two buoys is 1 - 3 hooks.

Baits used for fish tuna mainly is flying fish, small indian mackerel and oceanic squid. A large boat often uses frozen bait, while fishers use fresh bait caught by gillnet or bought from other who do squid jigging.

A trip length is around 20 - 30 days with 1 - 2 shots per day. Soaking time is 3 - 5 hrs. An average catch per trip is 1.3 - 1.5 tons, in some case the catch can reach 3 - 3.5 tons.

d. Post-harvest preservation and trading of tuna catch

- *Preservation* :

Oceanic tuna is mainly utilized as fresh food such as sashimi, or smoked and canned tuna. Therefore, preservation of tuna immediately after fishing is very important for the quality of the catch.

Almost tuna longline boats were modified. Holds onboard for preserving fish are small and not well-insulated to maintain proper temperature for preserving tuna caught and preserved mainly by crushed ice. For large boats of the fishing companies there is a frozen hold on board. Fishermen were trained in techniques of post-harvest preservation. So the quality of tuna caught by large boats is always much better than that of small boat which lacks sufficient facilities of preservation.

- *Tuna trading and export* :

Trading of tuna plays an important role in development of oceanic tuna fisheries. Recently, local authorities have paid attention to provide good conditions for processing factories to purchase tuna catch from fishers. The primary market of tuna is usually located right at fishing ports where the catch is landed such as fishing ports of Tam Quan (Binh Dinh province), Hon Ro and landing site of Cu Lao (Khanh Hoa). There are 7 units for purchasing tuna in Khanh Hoa province and 6 in Binh Dinh. Tuna species purchased are mainly yellowfin and bigeye tuna (*Reports on Stakeholders Consultation in Nha Trang, 25/10/2008*).

Tuna landed at ports or landing sites are purchased wholesale or retail depending on a size and the quality of fish. Purchase of tuna catch at fishing ports/landing sites can be in the following forms : 1/ Selling directly at sea to other purchasing boats owned by export businesses at Ho Chi Minh City, who will export to overseas markets; 2/ Selling to agents of processing units who will classify tuna catch by size or by quality for export fresh whole fish or for processing into other kind of products; 3/ Selling to middle-men, who provide capital or support production of fishing boats, according to a contract between them and fishermen, then middle-men will re-sell to tuna processing units; and 4/ Selling to any buyers who bargain at good prices (*Pham Ngoc Tuan, 2008*).

Together with development of processing industry, Viet Nam's processing establishments have taken the initiative in investment in upgrading production units, applied methods of managing quality of products in accordance with the international standards and expanded markets. Therefore, volume and export value are increasing, which include tuna products. By 2007, tuna and tuna products of Viet Nam were exported to over 70 major markets, mainly in USA, Japan, Germany, Italia, Spain and Netherlands. However, due to lack of modern facilities and technique of post-harvest preservation, the majority of tuna is exported

in the form of frozen whole fish with low prices. The value-added products of tuna occupy a low rate of total tuna exported. A summary of tuna export from Viet Nam during last years is shown in Table 5

Table 5. Export of tuna and tuna products of Viet Nam during the period 2000 – 2007

Year	Volume (ton)	Value (US\$ million)	Proportion of total exports for the year (%)	
			Volume	Value
2000	5,912	22,98	2.03	1.55
2001	14,476	58,59	3.86	3.30
2002	20,735	77,46	4.52	3.83
2003	17,362	47,72	3.60	2.17
2004	20,784	55,05	3.91	2.29
2005	30,208	82,24	4.76	3.00
2006	44,822	117,13	5.45	3.49
2007	52,584	150,36	5.58	4.00

Source : FICen (former MOFI) and CIS (MARD)

Up to now, detailed breakdown of tuna products of all kinds exported from Viet Nam is not available.

e. Inspection and quality control of tuna raw material and tuna product

At present, grading of tuna caught at fishing ports/landing sites is conducted mainly by businesses or their agents. They have technicians present at the places where tuna are landed, to appraise a quality of the catches. The usual method of quality control is mainly based on direct observation and experiences.

There are no official quality standards nor methods of quality appraisal for tuna caught. So, purchasers themselves set up quality standards according to the requirement of middle-men or customers or businessmen. These arbitrary requirements set up by purchasers result in unfair evaluation of products. Fishermen are put at the greatest disadvantage. In addition, as fishermen do not have resources to invest in process of post-harvest preservation, the quality of tuna catch landed at ports has been low and it has affected fishermen's income and export value.

Infrastructure for marine fisheries has been improved. However, conditions of hygiene, preservation during landing fish at the fishing ports or landing sites do not meet specific requirement for tuna production. The tuna catch is unloaded manually and fishes usually stay out in the sun before being moved to the waiting places at the port which do not meet the standard of freezing fish after landing yet.

Apart from initial evaluation of tuna quality by observation at ports and landing sites, factories have a program of quality control of tuna products to inspect development of histamine content during a whole process of receiving and processing tuna products at the factories. Before exporting to EU, all the consignments of tuna are sampled to inspect histamine content by a competent authority of NAFIQAVED (now is NAFIQAD) in according to the Decree 91/493/EEC, dated 22nd July 1991 issued by EC.

f. Management and fisheries services

At a national level, DECAFIREP (before 2008 its name was NADAREP under MOFI) under the Ministry of Agriculture and Rural development (MARD) is responsible for fisheries in the whole country. The Sub-DECAFIREPs of the coastal provinces are responsible for

advising the provincial authorities in management and development of marine fisheries at a local level.

In recent years, management of fishing boats, including tuna fishery, has improved. However, a system of organization and management of fishing activities is inadequate to keep a pace with the rapid development of tuna marine capture. For example, development planning of tuna fishing boats in term of quantity and quality have not been done yet. Research into tuna resources, prediction of fishing ground, fishing technology, production preservation techniques have not been carried out. The registration of fishing boats has its shortcomings. There are not logistics and services suitable for tuna longline fishing. At present, almost oceanic tuna catches are landed in landing sites or fishing ports of Binh Dinh, Phu Yen and Khanh Hoa provinces.

g. A trend of oceanic tuna fisheries

Result obtained from scientific researches carried out previously showed that the pelagic fish stock in offshore area of Viet Nam was about 1.7 million tons, of which the stock of oceanic fishes was about 510,000 tons (Dao Manh Son, 2004). Therefore, offshore fishing in general and oceanic tuna fisheries in particular have potential conditions to develop.

The recent development of tuna fishing fleets showed that tuna fisheries have made a good change in the life of the inhabitants living in the coastal areas such as fishermen in provinces of Binh Dinh, Phu Yen and Khanh Hoa. They also contributed to the increasing value of fisheries export and promise further development of this fishery in coming years.

Oceanic tuna fisheries will take an important role in development of offshore fishing in Viet Nam. Thus, they need to be paid appropriate attention to by the Government and local authorities in order to improve competence in managing tuna fishing activities in the way of sustainable development. In two coastal provinces of Binh Dinh and Khanh Hoa, provincial Tuna Fisheries Associations were established. At sector level, Viet Nam Tuna Fisheries Association will be established soon as well. These associations will represent fishermen working in tuna fisheries and will make significant contribution to development of this fishery. On the other, Viet Nam has been now preparing for accession to WCPFC convention. This will be a good opportunity for Viet Nam's tuna fisheries to integrate into regional fisheries, approach new fishing technology, exchange information related to tuna fisheries between the countries in the region, and develop marine fishing, together with protection of oceanic tuna resources.

2.3. Difficulties and challenges

a. For marine capture fisheries

Although having a strong development in the last 10 years described in section 2.1 above, marine fisheries have faced with difficulties and challenges as follows :

- Total marine catch is relatively stable with an minor annual increase (under 2 % per year), but fishing efficiency has reduced. The quality of the catch was not good and a proportion of fish production with low economic value in total catch was still high which has a negative on the livelihood and income of fishermen and other inhabitants in coastal areas.

- High pressure of fishing in coastal sea areas leads to serious reduction in fisheries resources. Apart from small boats fishing in nearshore area, a number of fishing boats with high engine powers have a tendency to go back to fishing in coastal sea area, especially bottom trawl fishery. The number of fishing boats fishing in offshore area have been on the decrease.

- The quality of tuna fishing boats is still low. Fishing equipment onboard such as communication devices, navigation units etc does not meet requirement of working safety at sea and when storm and other issues appear at sea it is not easy for them to get into communication with the mainland.

- The conflict between groups of gear type operating in fishing grounds occurs usually, for example, conflict between trawl and other gear types such as purse seine, gillnet and fixed nets, between fishing boats of provinces. Some fishing boats of over 90 hp fishing in the coastal areas caused reduction in fisheries resources and affected poor fishers who are not capable of investing money in building large boats for fishing in offshore seawaters.

- The number of fishing boats increases rapidly while fishing ground is not extended. It results in a high density of fishing in the coastal areas which has a bad impact on resources and fishing efficiency.

- The quality of labourers in marine fishing is low. Most fishermen have a low level of education and lack occupational training. They go to fish mainly based on their own experiences. Thus, there is a shortage of a labour force with good fishing skills to develop offshore fishing, especially tuna longline

- Fishing method and gear types, in some case, are harmful to the marine environment, particularly for coastal capture. Propaganda and dissemination of Viet Nam's laws related to marine capture and other international regulation have still been not effective. Fishermen have little knowledge of international regulations when fishing in offshore sea waters.

- Infrastructure of fisheries logistics and services such as fishing ports, landing sites and a communication system in the field of marine fishing have not satisfied the demands of offshore fishing development.

- The system of data collection is unsound and does not meet the requirements for managing fishing activities in order to develop marine fisheries in the direction of sustainability and international integration.

b. For oceanic tuna fisheries

It can be said that, in the recent years, oceanic tuna fisheries have developed rapidly and brought in good economic effectiveness. They have also opened the prospect of further development in the future. However, when looking at the results obtained from oceanic tuna fisheries, they showed that the development of tuna fisheries in the last years were not corresponding to the potential and available advantage of Viet Nam's sea areas. They also showed some shortcomings and challenge facing the management of oceanic tuna fisheries.

- Tuna fishing boats are mainly small, with those low engine capacity comprising about 55 % of total tuna longline boats. Fishing equipment and preservation methods used are poor. Small fishing boats have not good capability of withstanding strong waves. Correspondingly, it is hard for them to go on fishing during the North season of fishing (main fishing season) and to move to fishing grounds in deep sea waters. Fishing efficiency and the quality of tuna catch is still low.

- Fishermen have not been in training on techniques of fishing oceanic tuna and thus the method they applied in fishing tuna is still unadvanced. Prediction and provision of information on fishing ground is not paid much attention. Fishers care about increasing their catch but they do not take the quality of tuna catch much into consideration. Tunas caught are preserved on board mainly by using ice water that influences the quality of the catch such that they can not stay longer at sea for fishing.

- Trading of oceanic tunas is well-organized but unstable in term of prices and markets. Fishers are usually faced with difficulties in selling their catch at ports and landing sites. On the one hand, this is due to the small scale of tuna fishing supply of tuna caught, which depends much on the weather and the resources, and is this not stable. On the other hand, there is not any organization that represents fishers and protects their interests, therefore, fisher do not sell their production at a fair price, which will be decided by middle-men.

- In recent years, the rapid change in oceanic tuna capture means that the fishery has been paid proper attention by management agencies. It has resulted in a high density of boats operating in the same fishing ground. They fish even small fishes that has a negative impact on oceanic tuna resources.

- Viet Nam signed the Law of the Sea Convention (LOSC) in December 1982, and ratified it in July 1994. Viet Nam have put international regulations related to marine fishing in practice as well. However, up to now Viet Nam has been yet a member of WCPFC. In order to develop oceanic tuna fisheries and conform to regulations of international and regional organizations, it is necessary for Viet Nam to prepare for accession to this Commission. Apart from this, the capacity of the management agencies at all levels in the country need to be strengthened, aiming at sustainable development of oceanic tuna fisheries and protection of tuna resources in particular and fisheries resources in general.

3. OCEANIC TUNA FISHERIES MANAGEMENT

3.1. Objectives

Generally, management of marine fisheries in general, including oceanic tuna fisheries, is aimed steering development of marine capture fisheries in the direction of sustainability and international integration. These are promotion of offshore fishing, proper stability of inshore fishing, sustainable utilization of fisheries resources, development of marine fishing connecting closely with resources protection, an increase in jobs and incomes for coastal communities and good contribution to the national socio-economics.

Up to now, the Law of Fisheries was approved by the National Assembly of Viet Nam and came into effect in July 2004. Other related Decrees following the Law were promulgated including policy and regulations on marine capture fisheries, but there are specific regulation on management of oceanic tuna fisheries. However, research into stock assessment of oceanic tuna in Viet Nam sea waters were carried out by research institutions in order to define TAC and fishing ground for tuna fishing. In addition, fishing boats with engine power of over 90 hp, including tuna longline boats, not allowed to operate in coastal areas are brought under legal regulation in order to reduce a pressure of fishing on coastal fisheries resources.

3.2. Offshore fishies institutional arrangement

A system of administration of Viet Nam, including management of marine capture fisheries consists of two level of administration those are a ministry level (MOFI in former time and MARD currently) and a provicial level (Department of Fisheries in former time and Department of Agriculture and Rural Developmet – DARD currently).

a. At the national level (Ministry) : DECAFIREP under MARD currently (before 2008, it was NADAREP under former MOFI) is the agency responsible for management of marine capture fisheries, including oceanic tuna fisheries, for protection of fisheries resources and for management of fishing boats and other fishing activities. DECAFIREP's main missions are as follows :

- Responsible for management and development of marine capture fisheries including prediction of fishing ground, fisheries logistics and services, establishment of proper forms of

production at sea, proposal of policies on professional structure of fisheries and other solutions to improve fishing efficiency, development of offshore fishing and promotion of international co-operation with other countries in the region and international and regional organizations in the field of marine capture fisheries.

- Propose policies on protection and development of fisheries resources and improve effective measures of protecting marine resources and environment.

- Responsible for management of fishing boats, fishing ports and other fisheries services, proposal of policies on encouragement to invest money in fishing boats, fish markets accordant with a strategy of the sector and a program of offshore fishing.

- Propose programs and planning of scientific research, application of advanced technology in the field of marine capture fisheries.

- Establish and implement programs of international cooperations on marine fishing and protection of marine fisheries resources.

- Instruct and facilitate associations and NGOs taking part in the activities in the field of marine fisheries and fisheries resources protection.

- Instruct and inspect enforcement of the laws and implementation of policies in the scope of DECAFIREP's management according to the laws in force.

b. At provincial level (local) :

DARDs (before 2008, it was DOFI) under People's Committee of province is responsible for management of fisheries at the local.

Every coastal province has Sub-DECAFIREP under DARD that is responsible management of fishing activities at local level. All the Sub-DECAFIREPs of 28 coastal provinces belong to a management system of marine capture and fisheries resources protection and is under professional management of DECAFIREP.

c. Other relevant agencies

Apart from DECAFIREP that is the major agency managing marine fisheries, there are other relevant agencies under MARD responsible for missions related to management and development of marine fisheries as well. Those are :

- The Research Institute for Marine Fisheries (RIMF) responsible for carrying out surveys and stock assessment to provide information related to fishing ground prediction for fishing boats. RIMF also carries out research and application of new fishing technology, techniques of post-harvest preservation.

- The Viet Nam Institute of Fisheries Economics and Planning (VIFEP) is responsible for establishment of a strategy and a master plan of fisheries development in Viet Nam including development of marine capture fisheries.

- The National Agricultural and Fisheries Extension Centre (NAFEC) is responsible for implementation of fisheries extension activities such as technological transfer in marine capture, formation of models of production at sea, provision of trainings for fishermen. Apart from NAFEC, every province has a Fisheries Extension Centre under DARD responsible for similar tasks at local level.

- The Centre for Informatics and Statistics (CIS) is responsible for organizing a statistical system in the whole sector, conducting data collection to evaluate current situation of fisheries in the whole country including marine capture, providing information on market, prices and other related information, applying IT in management of fisheries activities.

- A Fisheries College and two vocational colleges responsible for training of human resources to meet a demand of management, research and production in fisheries area. Besides these, there is the University of Nha Trang (former name is University of Fisheries) under the Ministry of Education and Training specialized in training of higher education on marine capture and resource protection.

Apart from these agencies above, there are administration departments under MARD responsible for providing advices for the Minister in making policies and decisions related to marine fishing activities. Those are :

- + Department of Planning
- + Department of Finance
- + Department of Organization and Personnel
- + Department of Sciences, Technology and Environment
- + Department of International Cooperation
- + Department of Legislation
- + Ministry's Administration Office
- + Ministry's Inspection

All the agencies above operate by the annual budget provided by the Government in order to carry out their own missions to improve management effectiveness to meet a requirement of fisheries development.

- There are two professional associations :

+ The Viet Nam Fisheries Society (VINAFIS) consisting of Sub-VINAFIS at coastal provinces represents interests of all the fishers and farmers taking part in fisheries activities. VINAFIS is responsible for propaganda and mobilization of fishers to conform to the legal regulations in the field of fisheries, provision of services for its members such as trainings, technological transfers and information related to fisheries. It also represents its own members to make proposals to issue policies which promote development of fisheries including marine capture fisheries.

VINAFIS is now making preparation for establishment of the Viet Nam Tuna Fisheries Association. At present, there are two provincial Tuna Fisheries Associations established in provinces of Binh Dinh and Khanh Hoa those represent fishermen operating oceanic tuna fisheries at the local.

+ The Viet Nam Association for Seafood Exporters and Producers (VASEP) represents establishments operating in the field of fisheries processing and trading. It provides professional training for its own members and information related to the fisheries markets in the country and in the world. It also makes proposal policies on development of seafood processing and fisheries export.

The annual budget for both these associations come from contribution of their own members and from the activities of services done by them.

4. DONOR INVOLVEMENT

Up to now there has not been any support from the donors specific to oceanic tuna fisheries. However, some remarkable international supports related to marine fisheries have been implemented for the last time as follows :

- Fisheries Sector Program Support I (FSPS I) in the period of 2001 – 2005 funded by DANIDA included the Component of Strengthening of Fisheries Administration (STOFA I), of which there is activities related to marine fisheries.

- A project of Assessment of Marine Living Resources of Viet Nam (ALMRV) funded by DANIDA in two phases. During phase I (1997 – 2000), surveys of stock assessment of Viet Nam were implemented. In the second phase (2001 – 2005), a force of enumerators was set up in coastal provinces to collect statistical data on marine capture fisheries of Viet Nam and development of fisheries database. However, after the project, results obtained from this support have not maintained and updated.

- A Fisheries Law Project funded by NORAD supported establishment of the Law of Fisheries which was approved by the National Assembly of Viet Nam in late 2003 and came into force in July 2004. NORAD now continued to support this area in the second phase which was aimed at putting the Law into practice and will be finished in 2010.

- Fisheries Sector Program Support in the second phase (FSPS II) in the period of 2006 – 2010 funded by DANIDA has specific component of Strengthening of Capture Fisheries (SCAFI) aimed at improving capacity of management agencies at national and local level in order to define and enforce the policies on management of sustainable fisheries.

5. ISSUES IN OCEANIC TUNA FISHERIES MANAGEMENT

As presented in the section 2.3 above, oceanic tuna fisheries showed strong development in the recent years. But management of this fishery have not yet been paid sufficient attention. Some major issues on oceanic tuna fisheries management are as follows :

- Establish a development plan offshore fishing, including oceanic tuna fisheries, in the direction of sustainability.

- Implement surveys and research in marine resources to make stock assessment of fisheries resources in general and stock of oceanic tuna in particular in order to develop marine capture fisheries properly and utilize sustainably marine resources;

- Promote application of fishing technology friendly with the environment for improving fishing efficiency and protecting resources and marine environment.

- Strengthen the capacity building of agencies responsible for management of marine capture and oceanic tuna fisheries such as DECAFIREP and Sub-DECAFIREPs of the coastal provinces and professional associations.

- Establish a system of fisheries statistical information robust enough to collect timely, accurate and reliable statistical data, on the catch by species, fishing boats, CPUE, etc. in marine capture fisheries and oceanic tuna fisheries. It would also provide managers at all the levels with analysis and evaluation of a current situation as well as a trend of development of marine fisheries to meet requirement of policy-making, planning and decision-making of the sector.

- Reinforce management and monitoring fishing activities, improve fishing boat registration and grant fishing licenses.

- Enhance the role of professional associations in cooperation with State administration agencies to propaganda and dissemination of international and national legal regulations on marine fisheries and to provide fishers with training and application of new technology in the

field of marine capture in order to improve production efficiency and stabilize fisher's livelihood.

- Set up a National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing and put it in practice.

- Promote international cooperation in marine fishing, prepare for accession to WCPFC and implement Viet Nam's commitments to international and regional regulations.

5.1. Legal

- The Law of Fisheries approved by the National Assembly of Viet Nam in November 2003 and come into force in 1st July 2004 has two chapters regulating marine capture fisheries and fisheries resources protection. In order to put the Law in practice, the Government promulgated some legal document under the Law aimed at concretizing the articles of the Law for marine fishing and resources protection. Those are the following Decrees :

- + Decree No 191/2004/NĐ-CP, dated on 18th November 2004 by the Government, regulates fishing activities of foreign fishing vessels in Viet Nam's sea waters.

- + Decree No 66/2005/NĐ-CP, dated on 19th May 2005 by the Government, regulates guarantee of safety for fishermen and fishing boats operating at sea.

- + Decree No 128/2005/NĐ-CP, dated on 11th October 2005 by the Government, deals administratively with infringements in the field of fisheries.

- + Decree No 123/2006/NĐ-CP, dated on 27th October 2006 by the Government, regulates management of marine fishing activities by Viet Nam's organizations or individuals in the sea zones.

Besides the Decrees above-mentioned, the Government and MARD (former MOFI) promulgated many decisions, circular letters on issues related to fishing activities. However, there has not been yet any official documents regulating oceanic tuna fisheries.

- For relevant international regulations, Viet Nam :

- + Ratified the Law of the Sea Convention (LOSC) in June 1994.

- + Propagandized and prepares to take part in and implement UN Fish Stocks Agreement.

- + Implemented application of FAO Code of Conduct

- + Set up a National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (NPOA-IUU) in order to implement IPOA-IUU done by FAO.

- For the countries in the region, Viet Nam signed the following agreements :

- + An Agreement of historical water zone between Viet Nam and Cambodia on 7th July 1982

- + An Agreement of sea boundary between Viet Nam and Thailand on 9th August 1997

- + An Agreement of allocation of the Tonkin Gulf and an Agreement of fisheries cooperation in the Tonkin Gulf between Viet Nam and China.

- + An Agreement of allocation of continental shelf between Viet Nam and Indonesia on 26th June 2003.

- In term of regulations of WCPFC, as Viet Nam has not been yet a member of WCPFC, participation in WCPFC Convention is not implemented.

Almost tuna longline boats of Viet Nam are small those are not capable of going on fishing at the international sea waters. They mainly operates in the sea waters of Viet Nam. However, together with the tendency to international integration, in 2005, Viet Nam started to study UN Fisheries Stock Agreement and prepare to implement it. In addition, Viet Nam's legal regulations on marine fishing and fisheries resources protection have mentioned on these issues.

Since 2007, Viet Nam started preparing for accession to WCPFC. DECAFIREP and a Department of International Cooperation were assigned by the Minister of MARD to be in charge of this mission.

5.2. Policy and institutions

In order to develop marine capture together with protection of fisheries resources that makes contribution to sustainable development of fisheries, in the last time, the Government and former MOFI and MARD currently granted many policies on this field. Those were :

- A policy on promotion of offshore fishing and stabilization of coastal fishing started in 1997 and a general program on development of marine capture fisheries and protection of fisheries resources towards 2020 was drafted.

- A Resolution of the Government on a change of professional structure in the agricultural sector in general and in the fisheries sector in particular was aimed at improving production efficiency, reducing a pressure of fishing on coastal resources, promoting offshore fishing and stabilizing livelihood and income of communities in the coastal areas.

- A program of development and protection of fisheries resources in the period of 2006 - 2010 was aimed at strengthening the management and development of fisheries resources, setting up forms of professional change in marine fishing to link closely with protection of fisheries resources. DECAFIREP is responsible for implementation of the program in coordination with relevant agencies under MARD those are RIMF, VIFEP and CIS to carry out program's specific activities. The program is in progress.

As mentioned in the above sections, apart from general policies on development of marine fisheries, there have been not yet specific policy on development of oceanic tuna fisheries. However, the following contents have been mentioned in the above policies :

- Development of marine capture fisheries is based on proper utilization of fisheries resources in Viet Nam sea waters in the direction of sustainability. Marine fishing is needed to link closely with development of fisheries resources in order to contribute to growth of the national economy

- Management agencies need to be improved to monitor fishing activities including oceanic tuna fisheries and prevent fishing activities those result in damages to marine resources and environment.

- Development of offshore fishing is encouraged, of which oceanic tuna fisheries is given priority to develop. Investment in infrastructure, fisheries logistics and services for offshore fishing is required.

- A change of professional structure of marine capture has been implented in order to create jobs and stabilize livelihood and income for inhabitants living in coastal areas.

- International cooperation in marine fisheries, especially oceanic tuna fisheries is promoted. International regulations on marine capture management and resources protection at international sea waters have been taken into consideration when making development policies of fisheries.

Since 2003, DECAFIREP was re-organized and entrusted with responsibility for managing all the fishing activities in the whole country. A system of Sub-DECAFIREPs at the local, however, have been now in progress after new MARD established in early 2008 that is responsible for management of the whole fisheries sector instead of former MOFI. At present, DECAFIREP is preparing to improve statistics of marine fisheries, coordinate with research agencies to carry out surveys and stock assessment, implement cooperation with other international and regional fisheries organizations in the field of marine fishing, of which there is international support to prepare for accession to WCPFC.

The budget for administration of this field is limited, especially in the area of fisheries statistics and stock assessment.

5.3. Compliance

DECAFIREP and Sub-DECAFIREPs of the coastal provinces are responsible for enforcement of legal regulations on marine capture and fisheries resources protection. The local Sub-DECAFIREPs have inspection vessels, but all the boats are small with insufficient equipment. Their capability of monitoring fishing activities at sea is very limited. Furthermore, the annual budget for the activities of inspection boats is so small that they do not frequently carry out patrols at sea. With ten thousands of fishing boats operating in the wide scope of sea waters, the monitoring of fishing boats operating at sea meet many obstacles and in some case it is impossible to carry out.

Most recently, fisheries sector has coordinated with Navy forces and the army in support of monitoring fishing boats and rescue of them from the risk at sea. DECAFIREP is now preparing to establish a monitoring centre of fishing boats aimed at improving capability of management of fishing activities.

It is needed to pay attention to training for a force of fisheries inspectors and invest budget in inspection boats in the coming time to improve their capability of carrying out this task, especially for offshore fishing and oceanic tuna fisheries.

5.4. Flag State Responsibilities

Up to now, as Viet Nam fishing fleets have not taken part in fishing in deep sea waters, there has not been yet specific regulations related to this issue.

5.5 Monitoring

A system of marine capture statistics is now not well-organized in term of human resources, methodology implemented, working facilities and the budget. There are no staff specialized in statistics of marine capture in the whole system. Consequently, statistical data on marine fisheries collected is unreliable and inaccurate. It is also not updated regularly and it is not timely. As a result of these, the system do not meet a demand of management agencies at all the levels.

It is the same situation for oceanic tuna fisheries. Data collected is very poor which do not reflect sufficiently the state of this fishery.

- Logbooks : the Law of Fisheries regulates application of the logbooks. DECAFIREP drafted contents of a logbook. However, it is not put in practice yet.

- Database of fishing boats : DECAFIREP and Sub-DECAFIREPs of the coastal provinces have got data on fishing boats of a province and of the whole sector including oceanic tuna longline boats. But the IT-based database is not yet developed that results in restriction of exploitation, utilization and update of the data. Moreover, a number of small

boats with engine power of under 20 hp is still very much which leads to difficulties for the administrative agencies to manage fishing activities.

- Port sampling : Due to lack of human resources operating fisheries statistics as well as a proper method of collecting data, implementation of data collection by using port sampling is weak. In fact, there is not person in charge of doing the port sampling program.

- Landings : As mentioned above, because there is not the port sampling program, data on landings is very poor and it can not provide sufficient information for analysis and evaluation of fishing operations. In addition, oceanic tuna fisheries are mainly in small scale of operation, therefore, fishermen can land the catches at anywhere they like. In that cases, it is difficult to collect landings data.

- Observers : In early 2000s, RIMF carried out the observation programs of oceanic tuna fisheries. This was activities implemented under research project or research cooperation with SEAFDEC or financial support by international donors e.g DANIDA. Up to now, these programs are not maintained due to limited budget.

- Tuna trading : There are now not statistical data on consumption of tuna catch at ports and landing sites. Data of tuna export have been got from Viet Nam's Customs Department. However, data on tuna export by types of product is not available except frozen tuna.

In coming years, fisheries statistics need to be prioritized investment in human and financial resources at both of levels of ministry and province. It is necessary to cooperate with WCPFC in the scope of the project of improvement of oceanic tuna fisheries management in order to prepare for taking part as its members.

5.6. Scientific research

RIMF is an agency responsible for stock assessment, research and application of new fishing technology that is suitable for the realities of small-scale fisheries of Viet Nam. But, with the limited annual budget, stock assessment is not carried out usually to keep track of annual change in marine resources. It does not meet a demand of making policies of sustainable utilization and proper exploitation of marine resources, particularly oceanic tuna resources. Consequently, prediction and provision of information on the fishing ground and marine resources are not effective.

In the field of oceanic tuna fisheries, researches in methods and techniques of fishing oceanic tuna have been not much. Few years ago, a research project of definition of oceanographic factors affecting resources funded by the Government was implemented to meet a requirement of resources prediction. The results of this research, however, were not applied in practice. Recently, DECAFIREP and RIMF coordinated with SEAFDEC to carry out experimental application of C-hook in tuna longline for protection of marine turtles. This trial is now in progress on a few tuna longline boats at three central provinces.

Recently, although scientific researches in fisheries were paid much attention, research in marine capture still has a low priority. Scientific consultation for management of marine fishing is limited and not effective. Technical and financial supports from international organizations and other donors to strengthening of predictive operation and scientific advices are necessary in coming years.

6. ISSUES NEED TO BE SUPPORTED

At the consultative workshop on development of oceanic fisheries in Viet Nam held in Nha Trang city (Khanh Hoa province) in September 2008, participants discussed and evaluated the current situation of oceanic tuna fisheries in Viet Nam in general, and in three provinces of Binh Dinh, Phu Yen and Khanh Hoa in particular. They were also provided with overview of oceanic tuna fisheries and proposed some activities needed to be supported. Taking part in the consultative workshop were representatives from agencies of fisheries management of three provinces, participants representing Tuna Fisheries Associations of two provinces of Binh Dinh and Khanh Hoa as well as Viet Nam Tuna Fisheries Association which will be established in coming time, participants representing fishers who operate oceanic tuna longlines and WCPFC's specialist.

Some major issues were discussed at the workshop as follows :

- Stock assessment, prediction and provision of information on fishing ground to fishers; how to define a proper number of fishing boats operating in the grounds based on general assessment of fisheries resources to develop well marine capture and protect marine resources effectively.

- Establishment of fishing fleets equipped with communication devices to improve fishing efficiency, to help each other when being at risk; Organization of fisheries services at sea in order to reduce production cost and improve post-harvest quality of the tuna catch.

- Propaganda of relevant international regulations for fishermen; Training for fishers operating tuna oceanic tuna longline on how to use navigation facilities, communication devices and new techniques of fishing.

- Upgrade of infrastructure of fisheries logistics such as fishing port, landing site, fish market to meet a requirement of trading and increase in the catch quality, improvement of earnings and livelihood for fishermen.

- Strengthening of trading promotion and marketing of tuna products for export target.

- Strengthening of capacity building of the local Tuna Fisheries Associations to be a core organization to support their own members and provide services, professional trainings on application of advanced technology in tuna fishing.

- Intensification of international cooperation in the field of oceanic tuna fisheries.

From the results discussed at the workshop, based on the situation and trend of marine fisheries of Viet Nam presented in the above, some areas of oceanic tuna fisheries were defined to be supported by WCPFC under the WPEA-OFM Project in coming years are as follows :

1. Research in fishing ground prediction

- + Support to cooperation with other countries in the region of Asian-Pacific in research in stock assessment and provision of prediction information on fishing grounds.

- + Technical support of methods of prediction and tools of disseminating information on resources for fishermen.

2. Improvement of statistical coverage of fisheries

This is an important area attending to a demand of oceanic tuna fisheries management in the direction of sustainability and WCPFC's relevant regulations. Data collecting of this field

is now weak at human resources, method of gathering data and annual budget. Based on an existing system of marine fisheries management, WCPFC will support routine sampling surveys and supervision activity of data collection of tuna catch at fishing ports and landing sites of Viet Nam, support study tour for exchange of experiences in tuna fisheries management between countries in the region such as the Phillipines and Indonesia.

3. Pilot implementation of statistical data collection on tuna catch by species at three provinces of the Central area :

During a period of 2000 - 2003, the ALMRV project funded by DANIDA set up a forces of enumerators in coastal provinces. Coverage of data collected under this project was so wide including all the marine capture fisheries, but did not focus on oceanic tuna fisheries. Moreover, much of enumerators were not staff of the existing management agencies under the sector. Thus, these activities was not maintained after the project fishished.

The GEF project will support data collection and port sampling at fishing ports or landing sites carried out by enumerators and supervisors those are staffs of agencies responsible for oceanic tuna fisheries management at three pilot provinces of Binh Dinh, Phu Yen and Khanh Hoa.

4. Training to improve capacity building of agencies related to oceanic tuna fisheries including DECAFIREP, CIS and local Sub-DECAFIREPs.

5. Support to establishment and operation of Viet Nam Tuna Fisheries Association :

At present, two Tuna Fisheries Associations of Binh Dinh and Khanh Hoa provinces were established and have come into operation. The other one of Phu Yen province is in progress of establishment. Viet Nam Tuna Fisheries Association will be established in coming time.

The support from the GEF project to these professional associations is significant in order to promote their role in fisheries development and protection of oceanic tuna resources. The project will support working facilities, training for staff of the associations at the national and local levels, study tours for experience exchange with other similar associations of the countries in the region.

6. By-catch issues : Recently, DECAFIREP and RIMF in coordination with SEAFDEC to carry out a trial of application of C-hook in tuna longline for protection of marine turtles. However, it needs to have an observer program of tuna fisheries. Under the GEF project, Viet Nam proposes support for a pilot observation program.

7. Support to application of techniques of post-harvest preservation to improve the quality of tuna catch.

8. Support to review of legal documents related to oceanic tuna fisheries management in accordant to Viet Nam's situation and requirement of WCPFC.

9. Support of Viet Nam to preparation for accession to WCPFC.

7. CONCLUSIONS

In recent years, Viet Nam's marine capture fisheries have showed steady development. They contribute to a rapid growth of the fisheries sector, provide an important sources of raw materials for seafood processing and export, create more jobs, improve income and the life of inhabitants living in the coastal areas and contribute to poverty alleviation.

Recently, Viet Nam's oceanic tuna fisheries developed rather quickly, especially in three provinces of Binh Dinh, Phu Yen and Khanh Hoa. It is estimated that annual production of oceanic tunas is over 10,000t . This fishery is considered as the target one for development of offshore fishing.

Although having a rapid growth, marine fishing including oceanic tuna fisheries is mainly small scale. Management and statistics of oceanic tuna fisheries still does not meet the demands of sustainable development..

Shortcomings and issues to be define and solved are : i/ Lack of prediction information on target species and fishing ground; ii/ Lack of advanced gear types and fishing method; iii/ Much of fishing boats are small with insufficient fishing facilities and operate mainly on a small scale; iv/ Backward techniques of post-harvest preservation affecting catch quality; v/ Fisheries logistics and services do not meet requirement for development of oceanic tuna fisheries; vi/ Fishers lack information on markets and demand; and vii/ The system of collection of statistical data on marine fishing including oceanic tuna fisheries is not well-organized to meet the requirements of management. In addition, up to now there is not a general program of tuna stock assessment to define TAC and sustainable utilization of tuna resources in Viet Nam' sea waters. An observer program for tuna fisheries has not been set up as well.

It is necessary to make appropriate investment in tuna fisheries in order to properly develop oceanic tuna fisheries that contribute significantly to implementation of the offshore fishing program. Under the conditions of developing country like Viet Nam, the Government's budget for development of marine fisheries including oceanic tuna fisheries is still limited. Therefore, international support to this field is very significant. Participation in the GEF project will create good opportunity for Viet Nam to improve effectiveness of management and development of oceanic tuna fisheries as well as to prepare for accession to WCPFC.

Annex 1 Stakeholder Inventory and Analysis (including consultative mechanism inventory)

Country: Viet Nam
 Date: 30th Nov. 2008
 Data Recorder: Duong Long Tri

Stakeholder	Representative	Description of Interests [factors that may influence participation]	<i>Stakeholder analysis and preliminary participation plan</i>		
			<i>1^o s/holder [role in decision-making]</i>	<i>2^o s/holder [2-way flow of information]</i>	<i>Other [Keep informed]</i>
National level					
Department of Capture Fisheries and Resources Protection (DECAFIREP)	Director	National fisheries authority	X		
Centre for Informatics and Statistics (CIS)	Vice Director	Fisheries Statistics	X	X	
Research Institute for Marine Fisheries (RIMP)	Vice Director	Stock assessment and resources prediction		X	
Viet Nam Institute for Fisheries Economics and Planning (VIFEP)	Director	Strategy and Planning		X	
National Agricultural and Fisheries Extension Centre (NAFEC)	Vice Director	Fisheries extension		X	
Fisheries College. Vocational Schools and University of Nha Trang	Training division	Training in Fisheries			
Administration Departments under MARD	Senior Officials	Policy and management		X	
Viet Nam Fisheries Society (VINAFIS)		Aquaculture and Fisheries		X	
Viet Nam Tuna Fisheries Association (VNTFA) - (to be established soon)		Tuna fisheries		X	
Viet Nam Seafood Exporters and Producers (VASEP)		Tuna processing and export		X	

Provincial level					
Sub-DECAFIREPs under Provincial Department of Agriculture and Rural Development (DARD)	Director	Provincial fisheries authority	X		
Fishing Ports	Manager	Port authority		X	
Provincial Tuna Fisheries Associations of three provinces in the Central area		Tuna fisheries at the local		X	

Inventory of Project-related national consultative mechanisms

Consultative body	Parent/host body	Representative/contact details	Area(s) of interest	Frequency of meetings	Members and affiliations
DECAFIREP	DECAFIREP		Tuna fishery		Three provinces of the central area

Annex 2. Record of Stakeholder Consultation

Consultative workshop on development of oceanic fisheries in Viet Nam

1. The workshop on development of oceanic fisheries in Viet Nam was held in Nha Trang, Khanh Hoa province on 25th September 2008. 24 participants attended the workshop including representatives from Department of Capture Fisheries and Resources Protection, the Center for Informatics and Statistics (MARD); Departments of Agriculture and Rural Development, Sub-Department of Capture Fisheries and Resources Protection in three provinces such as Binh Dinh, Phu Yen, Khanh Hoa; Nha Trang University; Tuna Associations of Khanh Hoa, Binh Dinh and Viet Nam Tuna Association (to be established soon), fishermen and WCPFC specialist. The list of participants is enclosed in an Annex 3.
2. Mr. Pham Trong Yen, Vice Director of Department of Capture Fisheries and Resources Protection chaired the workshop.
3. In the welcome speech, Dr. Antony Lewis, WCPFC specialist, addressed the importance of oceanic fisheries conservation and management issues. He introduced the coming project on development of oceanic fisheries in Viet Nam.
4. In the opening speech, Mr. Pham Trong Yen noted that Vietnam fisheries have developed rapidly during the last years. In 2007, total fisheries production in Viet Nam was 4.14 mil. tones and export value was US\$ 3.75 billion. Tuna industry in Viet Nam also developed and it considerably contributed to development economy in coastal areas, especially in three provinces of Binh Dinh, Phu Yen, Khanh Hoa. At the same time, with the development of tuna industry, it also has faced a lot of challenges related to increasing production inputs like prices for fuel, food, Equipments, etc and trade barriers from imported countries. In this context, it is highly appreciated the formation and implementation of West Pacific and East Asia Oceanic Fisheries Management Project sponsored by GEF.
5. Mr. Duong Long Tri, Vice Director of the Center for Informatics and Statistics (CIS - MARD) introduced the production and export status of national tuna industry. The export value of tuna and tuna-like species in 2006 was US\$ 75 mil. It increased to US\$ 150 mil. in 2007 and more than US\$ 100 mil. during 8 first months of 2008.
6. Dr. Antony Lewis showed the picture of world tuna fisheries and trade. Regarding to the Vietnam tuna fisheries, he noted that Viet Nam's tuna fisheries have considerable potential for development. According to his report, biomass estimation of offshore species (tuna) is 500.000 T and annual possible sustainable harvest is about 230.000 T while the present catch is only 40.000 T. He also addressed some main issues of tuna fisheries development relating to statistical data collection on tuna catches; Contribute to regional stock assessments; Flag state responsibilities; Scientific cooperation and Enhanced capture technology...
7. Mr. Pham Trong Yen presented on WCPFC, the relationship between Viet Nam and WCPFC and content of coming West Pacific and East Asia Oceanic Fisheries Management Project.
8. Mr. Nguyen Duy Lam from Sub-DECAFIREP of Binh Dinh province; Mr. Nguyen Van Dau from Sub-DECAFIREP of Khanh Hoa and Mr. Nguyen Van Do from Sub-DECAFIREP of Phu Yen provinces introduced the production and exporting of tuna in their own province.
9. Mr. Vo Thien Lang, former Director of Khanh Hoa Department of Fisheries, representing the VINAFIS in Central Viet Nam, reported on the process of establishment of Viet Nam Tuna

Association. He emphasized that the establishment of Viet Nam Tuna Association will be a very important issue for development of tuna industry in Viet Nam. He highly appreciated and looked forward to have support from coming project in establishment of the Association.

11. Fishermen presented difficulties in their work.

12. All participants discussed issues to be input in coming project activities.

13. Mr. Pham Trong Yen summarized the issues of discussion that are suggested to be included in project. They could be :

1. Fishing ground prediction
2. Need for improved statistical coverage of the fishery
3. Pilot scheme for improved catch stats
4. Capacity building for involved stakeholders
5. Support the formation of Vietnam Tuna Fisheries Association (VTFA)
6. By-catch issues
7. Post-harvest technology for the fishery
8. Brand name for Vietnam tuna (assist marketing)
9. Research on value chain. with a view to optimizing benefits/returns to fishermen
10. Review of legislation and regulations...

14. In response to above mentioned, Mr. Antony Lewis gave his comments on each issue. He could fully agree with some proposals from the workshop, especially with some issues such as a need for improved statistical coverage of the fishery; Pilot scheme for improved catch stats; Support the formation of Vietnam Tuna Fisheries Association (VTFA). Capacity building for involved stakeholders, etc. For the rest issues, he noted that they may be considered partly in the project document or they would be carried out by other ongoing and coming projects sponsored by other donors. His comments is enclosed in an Annex 4.

15. On behalf of MARD and DECAFIREP, Mr. Pham Trong Yen thanked WCPFC for the formation of the project, thanked GEF for financial support. He hoped that the implementation of West Pacific and East Asia Oceanic Fisheries Management Project will help Viet Nam tuna industry to develop and it would bring Viet Nam closer to WCPFC in the future.

Other separate relevant activities

From 14th – 18th September 2008, some meetings were conducted in Binh Dinh and Khanh Hoa provinces. Taking part in the visit to these provinces were Mr. Duong Long Tri, NRS, Mr. Pham Minh Tri and Ms. Bui Thi Xuan from the Centre for Informatics and Statistics (CIS - MARD). Consultation group discussed with :

- DARD of Khanh Hoa province :

Ms. Nguyen Thi Hoa, Vice Director of DARD, Mr. Nguyen Van Dau, Vice Director of Sub-DECAFIREP

- DARD of Binh Dinh provinces :

Mr. Tien, Director of DARD, Mr. Hoang, Head of Fisheries Management Division, Ms. To Thi Hang Nga, Deputy Head of Planning Division

- Sub-DECAFIREP of Binh Dinh province : Mr. Nguyen Huu Hao, Director; Mr. Tran Van Vinh, Head of Fishing Boat Registration Division

The main contents discussed at the above meetings were related to situation of province's marine fisheries, how to re-organize statistical system of the whole sector and improve statistics of marine fisheries including data collection of tuna fisheries. The

preparation for next stakeholder consultation, which would be held in Nha Trang, was mentioned.

Annex 3. A list of participants of a Stakeholder Consultation in Nha Trang city

Binh Dinh province :

1. Mr. Nguyen Cong Binh Senior official, DARD of Vinh Dinh
2. Mr. Nguyen Duy Lam Senior official Sub-DECAFIREP and Vice Chairman, the Tuna Fisheries Association of Binh Dinh province

Phu Yen province :

3. Mr. Bien Minh Tam Vice Director , DARD of Phu Yen
4. Mr. Ha Vien Official, DARD of Phu Yen
5. Mr. Nguyen Van Do Director, Sub-DECAFIREP of Phu Yen
6. Mr. Le Hong Tu Official, Sub-DECAFIREP of Phu Yen

Khanh Hoa province :

7. Tran Nhu Cuong Official, DARD of Khanh Hoa
8. Nguyen Van Dau Vice Director, Sub-DECAFIREP of Khanh Hoa
9. Ms. Nguyen Thi Toan Thu Official, Sub-DECAFIREP of Khanh Hoa
10. Mr. Lu Thanh Phong Official, Sub-DECAFIREP of Khanh Hoa
11. Mr. Vo Thien Lang Chairman, Fisheries Society of Khanh Hoa
12. Mr. Le Ke Thuong the Tuna Fisheries Association of Khanh Hoa

The University of Nha Trang :

13. Dr. Phan Trong Huyen Deal, Fishing Technology Faculty
14. Mr. Tran Van Phuong Lecturer

Fishermen's representatives

15. Mr. Huynh Van Phanh Fishers, Oceanic tuna fishing
16. Mr. Huynh Si Fishers, Oceanic tuna fishing
17. Mr. Dang Dinh Don Fishers, Oceanic tuna fishing
18. Mr. Tran Van Cu Fishers, Oceanic tuna fishing
19. Mr. Nguyen Van Phuoc Fishers, Oceanic tuna fishing
20. Mr. Nguyen Van Huong Fishers, Oceanic tuna fishing

Resource persons

21. Mr. Duong Long Tri NRS, Centre for Informatics and Statistics (MARD)
22. Mr. Pham Trong Yen Vice Director, DECAFIREP, National key person
23. Ms. Tran Thu Huong Centre for Informatics and Statistics (MARD) Support staff
24. Ms. Nguyen Trang Nhung Official, International Cooperation Dept. (MARD) Concurrently Interpreter

Annex 4. Comment by WCPFC specialist (Dr. Antony Lewis)

Issues identified in Chair's summing up as possible activities	Commentary of WCPFC specialist
Fishing ground prediction (currently traditional information only)	Technology is available and could be transferred but direct technical and development assistance may be beyond the scope of the project - GEF emphasis is on incremental costs
Need for improved statistical coverage of the fishery	Probably the key issue for Vietnam in terms of meeting WCPFC requirements; data collection needs to be initiated at provincial level so one possibility is dedicated enumerators in 3 provinces initially. building on existing structure in stats/NADADREP; may also wish to consider funding a National Tuna Coordinator with responsibility for oversight of data collection in provinces and national compilation; lessons could be learned from existing systems in Philippines and those under development in Indonesia
Pilot scheme for improved catch stats	Initiate logsheet scheme on selected vessels as pilot; some previous work done under ALMRV - should check these data and methods first - some done in Binh Dinh
Formation of Vietnam Tuna Fisheries Association (VTFA)	Good activity for the project - start-up funding then self-funded; VASEP provides good example of this approach; existing TFAs in provinces provide baseline; will need equipment. training and possible visits to study similar FAs elsewhere.
By-catch issues	Previous work by WWF on turtle by-catch; work needed to scope the extent of the problem; probably only by-product with some incidental catch of high profile species e.g turtles; pilot observer program?
Post-harvest technology for the fishery	Explore possible links with DANIDA FSP which has a post-harvest component; may not be a good fit with the GEF project. as technical assistance
Brand name for Vietnam tuna (assist marketing)	These two issues important to the fishery but possible outside the scope of the GEF project - more an issue trade and marketing assistance; possible role for VTFA
Research on value chain. with a view to optimizing benefits/returns to fishermen	
Review of legislation and regulations	Good activity for the project - international legal expertise likely to be available for such a review and also workshops; possible assistance from long-running NORAD project

