Marine Capture Fisheries Profile of the Philippines

- **Section 1 – Introductions, endorsements, Index**

This section will introduce the profile – with endorsements from BFAR, DENR, DILG, NAPC?) document the process of the profile development and give full recognition to each institution and individual who were involved – Logos of each partner and contact info

This section should state the purpose and objectives of this document, e.g. to present a consolidated picture of the status of fisheries resources in the Philippines based on the best available data and information analyzed and prepared by nationally and internationally recognized experts in the field of fisheries management. This profile was developed specifically for policy makers and resource managers to provide an information base to guide informed policies development and regulatory and management programs; to state unequivocally to the nation and the world that Philippine fisheries are in serious decline with irreversible damage caused to some stocks; refer to Rio + 10 agreements and other international agreements

- **Section 2 – The state of Marine Capture Fisheries**

This section should begin by describing briefly the characteristics of tropical, multi-species fisheries describing general biological, ecological, economic, and socioeconomic characteristics with explanations of MSY, This can lead into more detailed descriptions, e.g. historical, biological, ecological, economic…etc.
This section will take a step back in time and look at the status of the fishery and habitats around the country from historical data until the present – illustrating the changes that have taken over time in the fishery and with the habitats, which has led us to our current reality for fisheries. Then look at some of the major issues (which have occurred due to the "open access regime") and the socioeconomic and economic trends also that have occurred. Then there will be a small section on information collection techniques for fisheries. This section will end with a summary of countrywide case studies, which highlight these changes and the impacts on the fishing industry as a whole, reinforcing that we need to implement fisheries management tools. Leading us into the fisheries management tools section;

- **Section 3 – The state of Fisheries Management**

This section will first look at the chronology of events that have taken place legally, institutionally and in terms of fisheries development approaches. It will finalize with a flow through time of the changes in intervention approaches over time ICZM to CBCRM to Co management. After this the main tools for fisheries management will be discussed – again focusing on the current reality in the country of their implementation. After this some key policy agendas will be discussed if fisheries management is to be successful in the country. Finally the key case studies will focus on the implementation of these fisheries management tools and policies and we will have several topical case studies to show the benefits of some of the tools.

Overall comments for the writers:

- **Each section need only be a maximum 2 pages(1000 words) – 3 in exceptional cases (for introductions etc)**
- **Some sections will need to be condensed and will overlap – we will just have to coordinate this during the workshop**
- **One diagram / map per page of text**
- **A real basic overview and some key facts on each section will be enough**
- **Some parts and key considerations we can put into boxes around the text**
- **Styling and other editing will be discussed in the next workshop**

Part 1: Introduction

1. Endorsements
2. Introduction
3. Index
4. Partner logos – electronic version and name and position of all contributors
5. Purpose and Objectives of the profile

Part 2: The current state of marine capture fisheries

Objectives of the section:

- Get a good current analysis of the fisheries, focusing on the historical state vis a vis the current state
- Have a good chronology of events in Philippines fisheries
- Case studies consolidate and focus on the information mentioned in the chapter and look at the habitats, issues and fisheries state in these areas

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
Section 1	*Brief description of general characteristics of tropical multispecies fisheries*	*ICLARM*		*How does a tropical multispecies fisheries compare to temperate single species fisheries in terms of changes in fish stocks, vulnerability to overfishing, indicators to detect decline, use of management tools* *What is MSY, shifting benchmarks*
Section 2. History of fishing in the Philippines	*Frank Thomas' book* *Dr. Rabanal book* *Noel Barut,* *Review the works of*	*BFAR*	*Perspective to address the ff issues:* *Timeline for fishing gears and*	*What are key changes in fishing over time – go back to Spanish times, American and then post second war independence*

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
	Ronquillo, Manacup		*technologies*	
Section 3. Current state of fisheries	*Small pelagic*	*CRMP*	*Connect fisheries with ecosystem* *Current = latest ('90s to present)* *Commercial/municipal fisheries* *Distant fisheries – EEZ poaching*	*State of fisheries vis a vis present situation* *Historical basis* *Major small pelagic species,* *Economics, market and trade,* *Type of fishing gears, practices and technological development* *Current status of the small pelagic resources, key trends*
	Large pelagic – refer to Lewis	*PCAMRD*		*Historical basis,* *Major large pelagic species,* *Fishing gears, practices and technological development using this key trends at present time, market and trade,*
	Demersal	*UPV-Iloilo* *BFAR Central Office*		*Historical basis,* *Major demersal species, Fishing gears, practices and technology* *Status of the resources*
	Invertebrates (crabs, shrimps etc.)	*WWF*	*Illustrate 1-2 key species within each section*	*Historical basis,* *Major invertebrate species,* *Fishing gears, practices and technology* *Status of the resources*
	Seaweeds, Mariculture	*BFAR Central Office*		*Historical basis,* *Major species* *Market, trade and economic contribution* *Bantayan experience*

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
	Non-traditional	*Live food trade - IMA* *Recreational – BFAR Central Office*		*History,* *Current top 10 species, Current reality, Capture and demand/ price?*
	Reef fisheries	*Silliman University*		*History,*
Map: Main Philippine fishing grounds	*FRMP – FSP, NSAP*	*FRMP* *BFAR Central Office* *UPV-Iloilo* *ICLARM*	Main fishing grounds and status of assessed fishing grounds -	*Showing overfished, very overfished, fully developed and underdeveloped fisheries around the country*
Box	*Shifting baselines concept*	*University of British Columbia*	*Shifting baselines concept* *Put brief intro about this and MSY in intro within the context of multispecies fisheries so that the box can stand on its own.*	
Box	*MSY in context of multi species fishery*	*UPV-Iloilo*	*Explain the concept of Msy and perhaps even Maximum production and MEY?*	*Explain simply what MSY, MEY and maximum production levels are for the Philippines*
Section 4. Status of critical coastal habitats	*Coral Reef status in Philippines (UP-MSI)* *Mangrove status (DENR)* *Reefs at Risk - WRI*	*CRMP / FRMP* *UP-MSI* *DLSU*	*Limited information required due to abundance of publications on habitats – look more at roles of these habitats on fisheries – juvenile ground, spawning and how they fit into a Philippine "typical marine ecosystem" and form the basis of fisheries*	*What was the historical status of the habitat* *What is the current status, what are the key roles of these habitats on fisheries in the country*
Coral reefs		*UP-MSI*		*Current reality versus historical*
Seagrasses		*DLSU*		*Current reality versus historical*
Mangroves		*DENR-CMMO*		*Current reality versus historical*
Soft Bottom		*UPV-Iloilo*		*Current reality versus historical*
Deep Sea				*Current reality versus historical*

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
Diagram 1			Showing habitats and types of fishes in the area which consolidates habitats and fisheries into one ecosystem	
Section 5. Key issues affecting habitats and fisheries in the country		*BFAR-7* *CRMP* *IMA Destructive fishing program* *DENR-EMB*	*Open access* *Pollution / water quality* *Reclamation* *Destructive and illegal fishing* *Ghost fishing* *Capture of fish on spawning aggregations* *By catch* *Fish aggregation devices and AR's* *Technology creep* *Population growth*	*Look at each issue in turn, then look at how they compound each other i.e. illegal fishing and poverty* *Lastly have a section on the Impact of FAD's on the country (payao) – issues and how they all inter-relate to each other and impact on each other*
Diagram	*A common municipality in the Philippines showing the common issues and pressures on fish stocks*		*Show key habitats and key fisheries*	*Look at issues spatially in a common municipality*
Section 6. Economics of fisheries an overview		*University of Maine*	*ICLARM study on supply and demand (Nelso and Jonathan – BFAR, Dr. Garcia – UPLB)*	*Fisheries management and its economics – trends and implications for management*
Private sector overview	*Gus Lorenzana interview, canneries,*	*DAP*	*What are private sector industries, how have they*	*History versus present – Commercial fishing industry in the country*

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
perspectives	*fish products*		*evolved over the years etc.*	
Socioeconomics And relevance of fish as food in the country		*DAP*	*Fish security for the country*	*Municipal fishers in the country – livelihood from fishing and other people in the fishing industry in the country;* *Also relevance of fish as food source in the country?*
Traditional practices and cultural aspects – harmful	*UPV publications*	*UPV-Iloilo (Baling case study in Davao? Tagum?)* *ICLARM-Philippines (Bangus fry collectors case study (I. Smith)* *CERD?*	*Cultural practices and how they affect fisheries*	*Purchase of fish roe, bait collection, young fish, Bagoong* *Fine mesh nets – Market demand for fry and juveniles in traditional foods*
Section 7. Information management systems for fisheries		*CRMP*	*Information as the key to determining the level of fisheries management interventions*	*Summarize how the aforementioned data was collected and national activities for information management, what are the key roles of government, NGO, academe and fisherfolk in information management*
Philfish	*FRMP*	*FRMP*		*Current status, what works, what will work for fisheries information management at BFAR*
National Stock assessment Program	*BFAR-NSAP*	*BFAR-Central Office*	*Overview of the working NSAP system*	*Key focuses, key developments – perhaps add map of NSAP sites*
Feedback mechanisms for research		*ESSC*	*How should data be more transparent and fed back to concerned groups – Governance aspects*	*Putting fisheries data into a more user friendly format*

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
The use of anecdotal evidence in research	*How old testimonies from communities can be integrated into the science of stock assessments*			*How is traditional knowledge relevant – how it has good participation*
Community based research techniques	*Mention of a participatory fishery resource assessment – CPUE, fish ruler etc*			*How to conduct a participatory fishery resource assessment* *Some of the key tools and how to integrate these into a fisheries management process*
Section 8. Overfishing		*ICLARM*	*Shift in species composition over time*	*Types of overfishing and their impacts what is overfishing and how does it affect the fishery in the long term*
Section 9. Geographical case Studies	*Luzon: Lingayen Gulf, San Miguel and Manila Bays* *Visayas: Visayan Sea, Samar Sea, Carigara|* *Mindanao: Panguil Bay, Gingoog Bay, Butuan Bay*	*ICLARM* *UPV-Iloilo* *UPV-Iloilo* *MSU-Naawan*	*Illustrate state of fisheries and the habitats in these areas and integrate some of the socio-economic and economic implications for the areas based on the state of the fisheries*	*Trends, current status of the bays, relate to MSY?* *Changes in these places over time, issues and the socio-economic impacts of these changes;*
Topical case studies	*Tuna Story –* *Private sector experience in fisheries – Gus*	*BFAR Central Office* *CRMP*		*History and current reality – economic implications*

Contents	Source/ Type of Information	Institutions Involved	Remarks on the Contents	Guide questions for authors
	Lorenzana *Protected/endangered species (whale shark, manta ray, marine turtles)* *Aquarium fishery and live grouper species*	*ICLARM* *DENR-CMMO* *Conservation International?* *IMA* *Reefcheck*	*Case study looking at the situation of endangered species in the context of fishing pressure – by catch etc?*	*Illustrate the number of protected species in the country and key migration routes / habitaatts – How are they affected by fishing – bycatch etc*
Section 10: Summary of part 2	*Consolidate the whole Philippine data in a map format showing the state of fish stocks around the country. Look at how dire the trends look and give approximate economic losses and implications of this for management*		*Show a strong impetus for fisheries management interventions and what level this needs to be implemented -*	*Answer the question – just how bad a state of management are we in and just how much effort needs to be put into fisheries management and how much effort needs to be reduced to manage the fisheries*

Part 3: Fisheries Management Interventions

Objectives:

- **Based on current state of Philippines Fisheries, management interventions are urgently needed at national and local levels, in coastal and offshore areas, by government and nongovernment institutions…**
- **Needs a strong introduction that synthesizes for the reader an overview of the legal and institutional framework for fisheries management and what it takes to manage fisheries so that the following sections don't seem so fragmented. Need to show this in terms of national and local management policies and implementation.**
- **Define fisheries management, habitat management, shared stocks, coastal stocks up front**
- **Define the tool:**
- **Show the current status of the implementation of the various tools for fisheries management in the country (map based if possible)**
- **Key implementation overview**
- **Lessons learned and future trends (i.e. what is required over the next few years)**
- **Case studies consolidate and focus on the tools mentioned in the chapter and their implementation and the lessons learned and where things need to go in future**

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
The objectives of fisheries management Flow of the chapter / index	*ADB-RETA*	*SEARCA*	*A strong introduction which explains the chapter and gives it in a logical flow* *An overview of the Objectives of fisheries management* *A framework for fisheries management*	*Need to define basic elements required to manage fisheries*
Section 1: Introduction				*The legal and institutional*

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Need for Fisheries Management Legal and Institutional Framework Timelines of changes in the Philippines situation (part 2) Legal time line (put the history in Part 2) Institutional time line (put history in Part 2) Fisheries development approaches and funding timeline (put history in Part 2)	*Environmental Laws in the Philippines (Central book supply, 1998)* *ELAC publications*	*MSU Naawan* *ELAC* *CRMP* *FRMP* *MSU Naawan*	*PD 704, RA 8550, RA 8435, RA 7586, FAO's etc* *DENR, DFAR, BFAR, LGU* Integrated Catchment / Watershed management framework *Fisheries code, NIPAS act* *External funders, Evolution of ICZM, CBCRM, Co management in the Philippine context and link with LGC 1992 changes etc.*	*framework for marine capture fisheries needs to go here, Legally mandated interventions and why they are logical* *Best Management Practices (those not specifically mandated by law but proven technologies)* *Put this information into perspective through the use of key timelines to explain the chronology of events in the Philippines fisheries* *Define Fisheries management responsibilities for the following – based on current laws:* *National responsibilities* *Regional* *Provincial* *Local (town and Village Look at roles of NGA's, NGO's, PO's and LGU within*

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Section 2: Tools for the Integrity of Coastal Stocks and Habitats Coastal mapping and issues identification	*Philippine guidebook series*	*CRMP* *?*		
Coastal zoning	*CRMP? FRMP? Any other sources*		*As a tool – how does it help in fisheries Conflict resolution*	*Relate to DAO 17, establishing municipal water boundaries (type of zoning) and why is 15 km needed*
Mangrove management	*Mangrove management handbook (CRMP)*	*DENR-CMMO*	Basic summary of best practices in mangrove management Experiences and lessons learned through the years	*Current status of its implementation of tools for mangrove management*
MPA's for fisheries	*NIPAS– other MPA types* *British Embassy study on MPA's around the country*	*AFMA-MFR*		*Based on AFMA project – current Philippine status and how networks of MPA's work better for fisheries*
Section 3: Tools for maintaining the Integrity of shared stocks and tools for limiting effort Fisheries Management planning	*Fisheries management planning in Region VII*	*BFAR-7*	*A simple and logical fisheries management planning process*	*Describe why it is relevant and what is the process – how do these tools all fit into a generalized fisheries management approach – they must be considered as part of a package of options and not as single stand alone tools; Once fisheries management activities are underway these can come in..*

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Commercial fishery licensing systems	*Salient features of FAO 196*	*BFAR-7* *CRMP* *FRMP* *BFAR-Central Office*	*Commercial fishing licenses – limiting effort*	*Need for improved commercial fishing licensing protocol that incorporates some knowledge of status of fisheries.*
Municipal fishery licensing systems	*FRMP guides to licensing*	*FRMP*	*How a licensing system should work ideally at municipal level*	
Size limits on fish caught	*Mesh size, returning gravid females?*	*UPV-Iloilo*	*Fecundity implications and maturity at catch / size at catch*	
Limiting new technologies to the fishing		*CRMP*	*Technological "creep" and its implications for fishing*	
Closed and open seasons		*CRMP*	*Female specimens mature and egg laden grouper spawning*	
Section 4: (new) **Coastal Law enforcement**	*CRMP, FRMP, PNP,*	*FRMP* *CRMP*	*Whole section on coastal law enforcement – the key to fisheries management*	*Current reality* *Key agencies* *Mainstreaming coastal law enforcement* *The creep of technologies for overfishing whilst the government has focused on illegal fishing activities alone – needs to focus on limiting effort and reducing illegal fishing*
Section 5: (new) **Fisheries Policy section**		*CRMP*	*Analysis of old poor policies and analysis of new policies*	

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Policy 1: Maximize Economic Benefits from the utilization of resources		*CRMP*	*Overview of the framework (diagram format)*	
subsidies – both direct and indirect	*DAP*	*DAP* *NFR* *CRMP*		*Put subsidies into context and see where they are focused*
Current nationwide spending on fisheries management – LGU Province and NGA's and NGO's	*Economics of Philippines Marine ecosystems book* *ICLARM Trawlbase paper*	*CRMP* *FRMP*		
Resource rents and opportunity cost of fishing	*Primex recommendations on resource rents (FSP)*	*CRMP* *FRMP*	Proper valuation of the resources vis a vis issuance of licenses	
Commercial fishing licensing rents	*Primex papers on resource rents for commercial fishing (FSP)*	*CRMP* *FRMP* *DAP*		
Fishpond licensing rents	*Primex - FSP papers on resource rents*	*CRMP* *FRMP*		
Technology dissemination and development		*CRMP*	*Low tech minimum technologies as opposed to huge infrastructure - Time line of Philippine technologies development*	*Efficiency of commercial versus efficiency of municipal*
Encourage income diversification		*EcoGovernance* *UP-MSI* *CERD*	*The fishing industry product flow*	
Low tech infrastructure for reducing post harvest losses	*PCAMRD study on post harvest losses* *FSP evaluation*	*PCAMRD?* *FSP*	*Key low tech infra*	

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Policy 2: Promote equity in sharing benefits from the utilization of the resources			*Overview of the objective*	
The National Government programs on livelihood and increasing production of the fishing industry		*BFAR*	*Current thrusts of govt programs*	
Developing market / appropriate technologies for small scale fishers	*PCAMRD*	*PCAMRD*		
Equity and preferential access to municipal waters of small scale fishers	*ELAC publications* *BFAR fisheries profile*	*ELAC*	*Key themes in fisheries code*	
Public education	*CRMP IEC component*	*CRMP* *ESSC*	*Consumer consciousness and awareness*	
Decision making structures for fisheries management	*FRMP*	*FRMP*	*Village, town, Bay, Provincial, regional and National*	
Establishment of National regional and local information centers on fishers		*BFAR-7* *BFAR Central Office* *PCAMRD?*	*An ideal information flow system*	*What would be an ideal flow of information system – FARCM – BFAR etc*

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Appropriate packaging of information at appropriate levels		*ESSC*		*Making fisheries data understandable*
Adaptation of tools to international scientific standards / Standardization of collection and analysis techniques		*UPV-Iloilo*		*What are key features that will provide a bare minimum for showing information*
Policy 3: Minimize poverty among small scale fishers	*National Anti Poverty Commission* *VSO-SPARK report*	*VSO*		*Overvieew of what works and what does not work in this sense*
Section 6: Fisheries Management Case Studies Luzon case study	*Lingayen Gulf?*	*FSP – FRMP* *ESSC* *UP-MSI*	*Explore a positive experience and its local nuances*	*Inter-LGU agreements on fisheries* *– Highlight some of the tools mentioned in previous sections* *How they can be implemented as part of a fisheries management planning process?* *What are some of positive benefits to resources users of these tools?*
Visayas Case Study	*FSP-FRMP*	*UPV-Iloilo* *ESSC*	*Explore a positive experience and its local nuances*	

Contents	Source/Type of Information	Individuals/institutions Involved	Remarks on the Contents	Guide questions for authors
Mindanao Case study	*FRMP bay* *LGSP experience in Mindanao (MSU-Naawan)*	*CRMP* *ESSC* *FRMP* *MSU- Naawan* *Pipuli foundation?*	*Explore a positive experience and its local nuances*	
Topical case studies Territorial use rights		*UPV-Iloilo*		*How is TURFs relevant in fisheries management*
Closed areas	*Cebu Alcantara experience*	*CRMP*		*How did one area change its management due to conflicting uses*
Artificial Reefs		*?*	*Case study on AR's and payaw's and how they didn't work in the country*	
Integrated watershed mgt	*A successful integrated management case study*			*Illustrate how ICZM should move upland to really solve the problems from a watershed approach*
A national fisheries management framework			*Key policy interventions that need implementation* *Ban on issuance of new commercial fishing licenses,* *Ban on use of Payao in certain circumstances* *Money re-focused on coastal law enforcement etc*	*Needs to summarize all the previous sections into a common framework with key agenda* *Highlight the role of fisheries management at the different government levels* *The ten key roles and policy agenda for a national fisheries management policy for the country*

The text should include certain boxes to respond to certain myths and misperceptions on fisheries in the Philippines, such as fisheries on the downtrend, indigenous notions of fisheries management and how they connect to fisheries management.

***Reference used strongly in the development of this framework was the ADB – Regional Technical Assistance No 5766 entitled "Sustainable Management of Coastal Fish Stocks in Asia" Courtesy of Cesar Luna - SEARCA.**

? When question mark placed means that it would be logical for this group to help with this, but still require their feedback on this