Fish Right Program

Theory of Change

Implemented by: The University of Rhode Island

Implementing partners are:
PATH Foundation Philippines Inc.
Silliman University
Marine Environment and Resources Foundation
NGOs for Fisheries Reform
Resonance
Sustainable Fisheries Partnership

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DISCLAIMER

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ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AOR	Administrative Officer's Representative
BMB	The Biodiversity Management Bureau
BFAR	Bureau of Fisheries and Aquatic Resources
C3	Community Centered Conservation
CLEC	Coastal Law Enforcement Council
COP	Chief of Party
CDT	Catch Documentation and Traceability
CIG	Calamianes Island Group
CNFIDP	Comprehensive National Fisheries Industry Development Plan
CRC	Coastal Resources Center
DCOP	Deputy Chief of Party
DENR	Department of Environment and Natural Resources
DILG	Department of Interior and Local Government
EAFM	Ecosystem Approach to Fisheries Management
EBA	Ecosystem Based Adaptation
ECOFISH	Ecosystems Improved for Sustainable Fisheries
EO	Executive Order
EMMP	Environmental Mitigation and Monitoring Plan
FARMC	Fisheries and Aquatic Resources Management Councils
FISH	Fisheries Improved for Sustainable Fisheries
FMA	Fishery Management Area
GPH	Government of the Philippines
IFMP	Inter-LGU Fisheries Management Plan
IUU	Illegal, Unreported, and Unregulated (Fisheries)
LGU	Local Government Unit
MEL	Monitoring, Evaluation, and Learning
MERF	Marine Environment and Resources Foundation
MKBA	Marine Key Biodiversity Area
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPA	Marine Protected Area
NFARMC	National Fisheries and Aquatic Resources Management Councils
NFR	NGOs for Fisheries Reform

NFRDI	National Fisheries Research and Development Institute
NGO	Non-Government Organizations
NOAA	US National Oceanic and Atmospheric Administration
NSAP	National Stock Assessment Program
PCSD	Palawan Council for Sustainable Development
PCSDS	Palawan Council for Sustainable Development Staff
PFPI	Path Foundation Philippines, Inc.
PO	Peoples' Organization
PPP	Public Private Partnership
SFP	Sustainable Fisheries Partnership
SN	Southern Negros
SNCDMC	Southern Negros Coastal Development Management Council
SOPs	Standard Operating Procedures
TOC	Theory of Change
URI	University of Rhode Island
USAID	United States Agency for International Development
VMS	Vessel Monitoring System
VS	Visayan Seas
WINFISH	Women in Fisheries

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1. INTRODUCTION

The Philippines' marine ecosystems provide food, livelihood, recreation, and resilience for millions of Filipinos. The country is often among the top 10 marine capture fisheries producing countries, catching around 2 million metric tons[1] composed of over 100 species and species groups[2] annually. The ocean economy contributes approximately 7% to the nation's GDP and employs around 2.2 million Filipinos.[3] Fish and fish products provide more than 50% of Filipinos' dietary protein.[4] About 60% of the population live in coastal zones and depend on coastal resources for their livelihoods.[5] Coastal and marine tourism contribute around 25% of this value while fisheries and aquaculture contribute around 20% of this value. Marine capture fisheries employ an estimated 1.4 million[6] Filipinos. These values are achieved in light of the Philippines being one of the top three countries most at risk of natural disasters.[7] Contributing to the country's resilience to provide ecosystem and goods and services[8] is the rich biodiversity across coral reef, mangrove and seagrass habitats which have made the Philippines a global center of marine biodiversity.[9]

Unfortunately, these socio-ecological systems that provide food security, livelihoods, and resilience for millions of Filipinos are threatened by overfishing, destructive and illegal fishing[10], degradation of habitats, pollution, and climate change.[11] Analysis of catch trends

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[1] FAO (2018) The State of World Fisheries and Aquaculture 2018 – Meeting the Sustainable Development Goals. Rome, Italy.
[2] Palomares MLD, Pauly D (2014) Philippine Marine Fisheries Catches: A Bottom-Up Reconstruction, 1950-2010. In Palomares and Pauly (eds.). Fisheries Center Research Reports 22(1), Vancouver, Canada.
[3] Baling N, Recide R (2017) State of Oceans and Coasts: Philippines. PEMSEA, Quezon City, Philippines.
[4] Catherine A. Courtney et al., Coastal Resource Management for Food Security (Cebu City: Coastal Resource Management Project Philippines, 1998): 4.
[5] https://www.adb.org/sites/default/files/linked-documents/cps-phi-2011-2016-ena.pdf
[6] FAO (2014) FAO Fisheries and Aquaculture Country Profile: Philippines. Rome, Italy.
[7] Kirch L, Luther S, Mucke P, Prütz R, Radtke K, Schrader C (2017). World Risk Report. Analysis and prospects 2017. Berlin: Bündnis Entwicklung Hilft. p. 39.
[8] Hooper et al. (2005) Effects of biodiversity on ecosystem functioning: a consensus of current knowledge. Ecological Monographs 75(1):3-35.
[9] Carpenter KE, Springer VG (2005). The center of the center of marine shore fish biodiversity: The Philippine Islands. Environmental Biology of Fishes 72(4):467-480.
[10] Pomeroy, Robert & Parks, John & Reaugh-Flower, Kathleen & Guidote, Mar & Govan, Hugh & Atkinson, Scott. (2015). Status and Priority Capacity Needs for Local Compliance and Community-Supported Enforcement of Marine Resource Rules and Regulations in the Coral Triangle Region. Coastal Management. 43. 301-328. 10.1080/08920753.2015.1030330.
[11] DENR-Biodiversity Management Bureau (2016) Philippine Biodiversity Strategy and Action Plan 2015-2028.

per fishing area commonly indicate declines[12] while local ecological knowledge indicates the disappearance (zero catch) of over 50 finfish species between the 1950s and 2014.[13] Annually, the Philippines loses about $1.29 billion to illegal, unreported and unregulated (IUU) fishing.[14] More than half of the mangroves—which serve as essential fish nurseries — have been lost since 1918, mostly by conversion of habitat to fish and shrimp ponds. [15] From 2006 to 2015, fishers have consistently been among the poorest sectors of Philippine society.[16] Thus, fishers have less ability to adapt and earn from other livelihood opportunities, becoming more susceptible to the use of unsustainable and illegal fishing practices to survive. When fish harvest is low, women in fishing households bear the burden of diversifying the family's income by gleaning and engaging in piecemeal jobs.

Open access to the fishery drives those losing livelihood from other sectors into fisheries, further worsening overfishing. Fisheries management regulations are insufficient to control harvesting within maximum sustainable levels. Open access combined with non-compliance of fisheries rules and regulations dissipates economic rent and drives fisherfolk and their families further into the poverty trap.

Recommendations for fisheries recovery include: "(1) regulate or reduce fisheries exploitation and other human activities impacting the fisheries to allow fisheries to rebuild or recover, (2) enforce effective networks of marine reserves, (3) engage fishers, consumers, and other stakeholders in fisheries management, (4) improve fisheries science, monitoring, and management capacities, and (5) provide alternative livelihood, skills, and improved education to fishers and their families."[17]

Significant effort over the last few decades have gone into establishing mostly nearshore coral reef based marine protected areas and there are now over 1,500 marine protected areas (MPAs) in the Philippines. However, most MPAs are tiny and <1% of Philippine marine waters are protected, far from the Philippines' Coral Triangle Initiative – National Plan of Action target (by 2020) of 10% of each habitat type within no-take zones and the Philippine

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[12] Anticamara JA, Go KTB (2016) Spatio-temporal declines in Philippine fisheries and its implications to coastal municipal fishers' catch and income. Frontiers in Marine Science 3:21.
[13] Lavides MN, Molina EPV, de la Rosa GE, Jr, Mill A., Rushton SP, Stead SM, et al. (2016) Patterns of Coral-Reef Finfish Species Disappearances Inferred from Fishers' Knowledge in Global Epicentre of Marine Shorefish Diversity. PLoS ONE 11(5): e0155752.
[14] http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1589&context=theses
[15] UNEP (2014). The Importance of Mangroves to People: A Call to Action. van Bochove, J., Sullivan, E., Nakamura, T. (Eds). United Nations Environment Programme World Conservation Monitoring Centre, Cambridge. 128 pp.
[16] https://psa.gov.ph/content/farmers-fishermen-and-children-consistently-posted-highest-poverty-incidence-among-basic
[17] Anticamara and Go, 2016.

Fisheries Code (1998) target of 15%. Eighty-five percent (85%) of no-take area is in just two sites and 90% of MPAs are less than 1 sq.km. (100 hectares).[18]

However, pelagic fish dominate the nation's marine catch[19] and the nearshore MPAs are not expected to contribute much to the sustainability of pelagic fisheries. For these, annual closed seasons for commercial fishing have been implemented with positive results. In 2015, the Philippines also temporarily stopped issuing new licenses for new commercial fishing vessels and fishing gear for three years to conserve its fish stocks. The growing support for an ecosystem-approach to fisheries management (EAFM) has laid the groundwork for bringing stakeholders together and strengthening the governance system at an ecosystem scale. Nonetheless, more efforts are needed to strengthen stakeholder engagement and implementation of existing laws and plans both for nearshore (e.g. MPA networks) and offshore fisheries.

Efforts to improve fisheries management capacity have been supported by national government and many donors including almost two decades of USAID support and most recently the FISH and ECOFISH Projects. These projects made significant progress in strengthening governance, building social capital and constituencies among fishing communities, and reversing the decline of fisheries in some of its project areas. Both projects also point to the need to address excess fishing effort (by right sizing the fishing effort), because if the number of fishers increase in response to an increase in fish biomass, then the positive effects of a biomass increase will dissipate.

[18] Weeks et al. 2009. https://www.jstor.org/stable/40603378?seq=1#page_scan_tab_contents
[19] Palomares and Pauly, 2014.

2. PROGRAM DESCRIPTION

The USAID Fish Right Program is a partnership between the Government of the Philippines and the United States Government through the U.S. Agency for International Development (USAID) to influence system change within the fisheries sector by improving resource user compliance with agreed upon fisheries practices resulting in increased fish biomass in three marine key biodiversity areas (MKBA). This will be achieved by reducing the threats to biodiversity, namely: overfishing, destructive and illegal fishing, and degradation of coastal and marine ecosystems. The primary beneficiaries include the municipal and commercial fisherfolk and their families, provincial and municipal governments, and community organizations including fishing associations, cooperatives, and women's associations.

The Program is implemented by the University of Rhode Island (URI) in collaboration with a team of core implementing partners: PATH Foundation Philippines Inc., Silliman University, Marine Environment and Resources Foundation (MERF), NGOs for Fisheries Reform (NFR), Resonance, and the Sustainable Fisheries Partnership (SFP). The Program collaborates closely with the Philippine government through the Department of Agriculture's Bureau of Fisheries and Aquatic Resources (BFAR), the Department of Environment and Natural Resources (DENR), and coastal municipalities, as well as local partners, such as the University of Philippines Visayas, the Women in Fisheries Network, the El Nido Foundation, the Culion Foundation, and Community Centered Conservation (C3).

2.1. Goal and Objectives

The overarching goal of the USAID Fish Right Program is to influence system change within the fisheries sector by improving resource user compliance with agreed upon fisheries practices resulting in increased fish biomass in the selected MKBAs. At the end of five years, Fish Right will result in an average of 10% increase in fish biomass, across the three sites, based on catch-per-unit-effort and observed reef fish biomass. This will be achieved by reducing overfishing, destructive and illegal fishing, and degradation of marine ecosystems. The Fish Right Program has five program objectives that will contribute to the overall goal based upon a baseline to be established at the start of the program:

> **Objective 1.** Put in place at least 2.5 million hectares of marine area under improved management effectiveness and sustainability based on a suite of regulatory and economic instruments;
>
> **Objective 2.** Improve capacities and accountability of at least 50 institutions to implement resilience and ecosystem-based fisheries management;
>
> **Objective 3.** Establish and/or improve at least 40 policies/regulations that support resilient and ecosystem-based fisheries management;

Objective 4. Enhance participation and leadership of at least 100 civil society organizations or networks of organizations (representing women and men) in resilient and ecosystem-based fisheries management; and

Objective 5. Increase investments leveraged from at least 8 public-private partnerships that contribute to resilient and ecosystem-based fisheries management.

2.2. Geographic Scope

The geographic scope of the Program is the entire Philippines, but priority is given to areas of biological significance where there is a high level of poverty and high dependence on capture fisheries. It will be implemented in the Calamianes Island Group (CIG), Southern Negros (SN), and the Visayan Sea (VS) covering 7 provinces and 44 municipalities. (Table 1)(Figure 1)(Annex L). The Program will also scale up its interventions to promote EAFM at the national level and to other MKBAs for expansion and replication.

Table 1. Summary of Field Site characteristics, fisheries and illustrative approaches

Characteristic	Calamianes	Southern Negros	Visayan Sea
# of LGUs/Provinces	4/1	13/2	22/ 5
Population (2015)	109,656	622,956	1,333,655
Marine Area (sq. km)	10,378	3,932	11,969
Marine Jurisdictions	Mainly municipal	Municipal 1 BFAR region	Municipal, 3 BFAR regions
# of MPAs/NIPASs	12	38	11
Dominant Ecosystems	Coral reefs, mangroves, seagrass	Mangroves, coral reefs, open deep sea pelagic	soft bottom demersal, shallow sea small pelagic, Coral reefs, mangroves
Main Fisheries	Mainly a municipal fishery: Squid, octopus, crab, anchovies, grouper, jack/scad, pompano, snapper	Municipal and Commercial fishery: Tunas, bigeye scad, mackerel, herring, sardine, anchovy	Commercial and municipal fishery: Mackerel, sardine, anchovy, grouper, tunas, siganid
Approaches to affect change for illustrative Target Fish Stocks	Octopus – FIPs Mangrove scads –Right Sizing	Small pelagics – FIPs Mangrove and reefs fisheries – right sizing	Blue Swimming Crabs - FIPs Demersal fin fish – commercial fishery FIP and inter-LGU management plans Small pelagics – FIPs

Calamianes Island Group MKBA

The Calamianes Island Group (CIG) MKBA is located in the northernmost portion of the Palawan province. It is composed of about 160 islands and divided into four municipalities: Busuanga, Coron, Culion, and Linapacan. This MKBA is one of the most biodiverse-rich groups of islands in the Philippines, endowed with extensive fringing reefs, mangrove forests, seagrass beds, estuaries, sandy beaches, shoreline cliffs, protected bays, coves and inlets. Nearshore fisheries are primarily reef and mangrove dependent, producing valuable catch for subsistence and live fish trade. The CIG has been a recipient of multiple USAID-funded fisheries management projects, most significantly the FISH and ECOFISH Projects.

Southern Negros Island MKBA

The waters of Southern Negros Island MKBA is geographically part of the East Sulu Sea. It is bound by the southern municipalities of Negros Oriental and the southernmost municipalities of Negros Occidental. The East Sulu Sea is mainly deep water - hence large and small pelagic fishes like tuna, scads, sardines, and anchovies are the main fishery harvest in the area. Mangroves cover about 1,300 hectares, and coral reefs are known to be

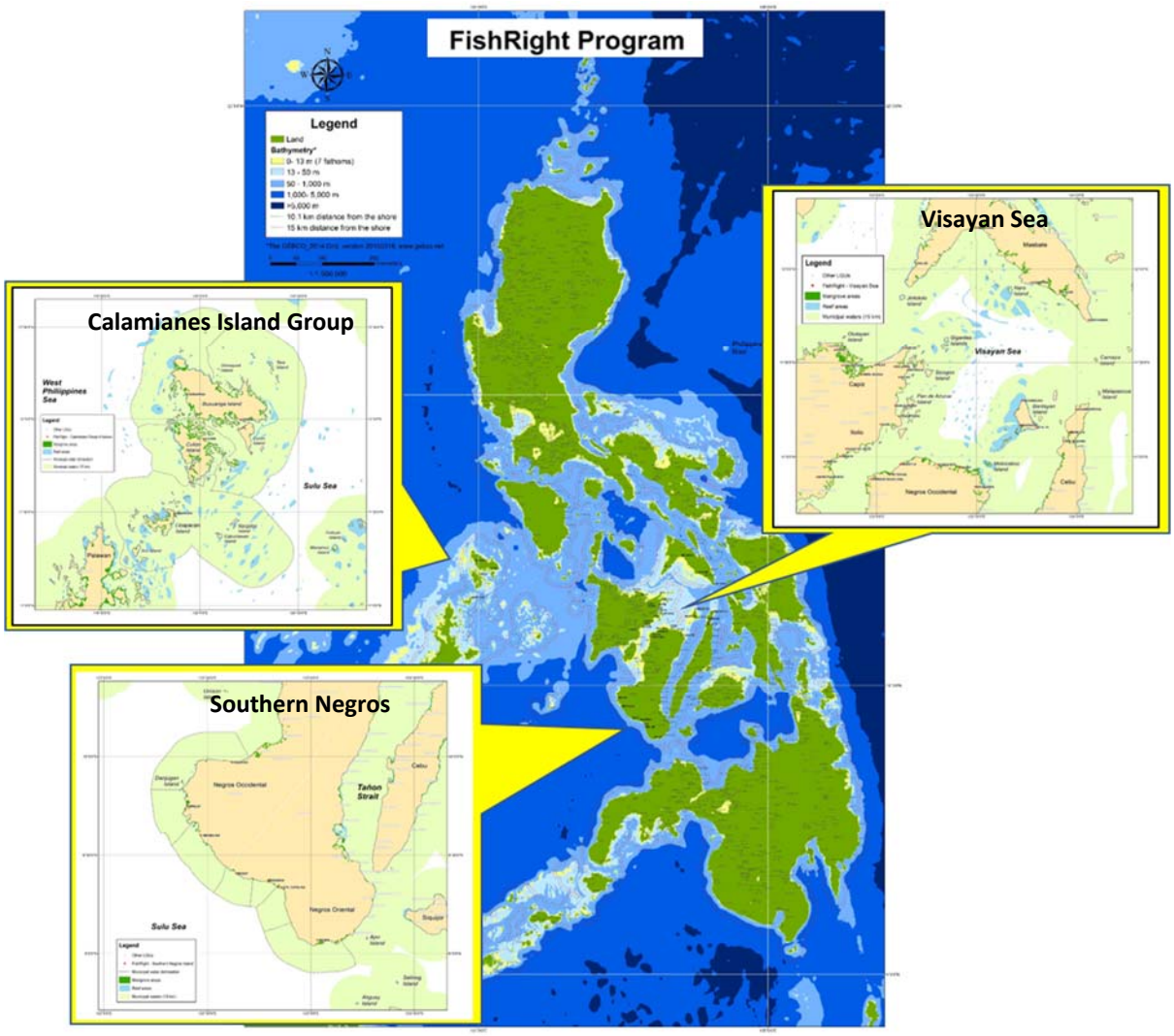
in generally poor condition with only 10% in excellent condition.[20] Compared to fishing grounds in the Central Visayas, there is a lower concentration of fishers, fishing boats and gears in the Southern Negros MKBA.[21] The Southern Negros MKBA was also a target area under the ECOFISH Project.

Visayan Sea MKBA

The Visayan Seas MKBA, located in the central part of the Philippines, is considered one of the most productive fishing grounds in the country. It is composed of thirty-three municipalities and cities and it is bounded by Panay, Negros, Masbate, and Cebu Islands. It includes five Provinces: Iloilo, Capiz, Masbate, Negros Occidental, and Cebu. These cities and municipalities manage a total area of 1,290,590 hectares. Beyond this area, BFAR manages about 10% of the total area of the Visayan Sea, equivalent to 159,400 hectares.[22] The Visayan Sea has coral reefs, mangroves and sea grass ecosystems covering roughly 78,000 hectares of coral reefs, 3,000 hectares of mangroves and 8,000 hectares of seagrass.[23] The Visayan Sea was not a target area during previous USAID supported fisheries projects.

[20] Ong, P. S., L. E. Afuang, et al., Eds. (2002). Philippine biodiversity conservation priorities, PAWB-DENR.
[21] Armada, N. B., J. N. Fragillano, et al. (2004). Municipal capture fisheries profile of Central Visayas, 2003. Final Report. Cebu City, Philippines, University of the Philippines Visayas Foundation, Inc. and Coastal Resource Management Project.
[22] Visayan Sea Management Plan: A plan to manage the fisheries of the Visayan Sea applying the Ecosystem Approach to Fisheries Management. First Draft March 2018.
[23] Ibid.

Figure 1: Fish Right Program Sites



3. THEORY OF CHANGE, STRATEGIC APPROACHES AND OUTCOMES

3.1. Situational Analysis

A workshop was organized during the Fish Right Program's startup period to learn from past fisheries initiatives and develop a theory of change (TOC). During this workshop, it was agreed that the situational analysis presented in Figure 2, which was developed in preparation for the USAID request for applications, is still valid and a good general representation of the situation surrounding fisheries biodiversity in the Philippines. Smaller refinements were introduced during the TOC and learning workshop. This included updating the biodiversity focal interests and geographic scope. The ecosystems services were identified and goals related to human well-being clarified. The direct threats were refined and prioritized and associated opportunities and constraints were identified.

Ecosystem Services and Human Well-Being Impacts

The ecosystem services identified during the TOC workshop include provisioning services, regulating services, supporting services, and cultural services. Healthy ecosystems provide sustainable and affordable food and raw materials for natural-resource-based livelihoods. Regulating services include mitigating impact of stronger storms due to climate change. Supporting services include protection of habitats necessary for sustainable and resilient biodiversity. Cultural services include recreational benefits and sustainable cultural benefits especially for indigenous peoples.

To achieve the goal of improving biodiversity focal interest, Fish Right interventions has to meet the needs of local communities' dependent on capture fisheries. This should include improving health and nutrition by providing an adequate and quality food supply. Improving habitats will provide more natural resources for livelihoods and increase incomes from eco-tourism. The increase in fish biomass can translate to more equitable benefits, especially for marginalized groups, such as youth, women, and subsistence fishing households. Provisioning services can increase household resilience and strengthen communities that are dependent on coastal and marine ecosystem resources.

Opportunities and Constraints identified as part of the situational analysis

Furthermore, the participants in the learning and TOC workshop identified a number of constraints and opportunities that the Fish Right program needs to address. Table 1 provides a summary of the opportunities and constraints. The summary of constraints is also depicted in Annex D and a comprehensive list is presented in Annex C (Learning Event Notes).

Figure 2. Fish Right Situational Analysis

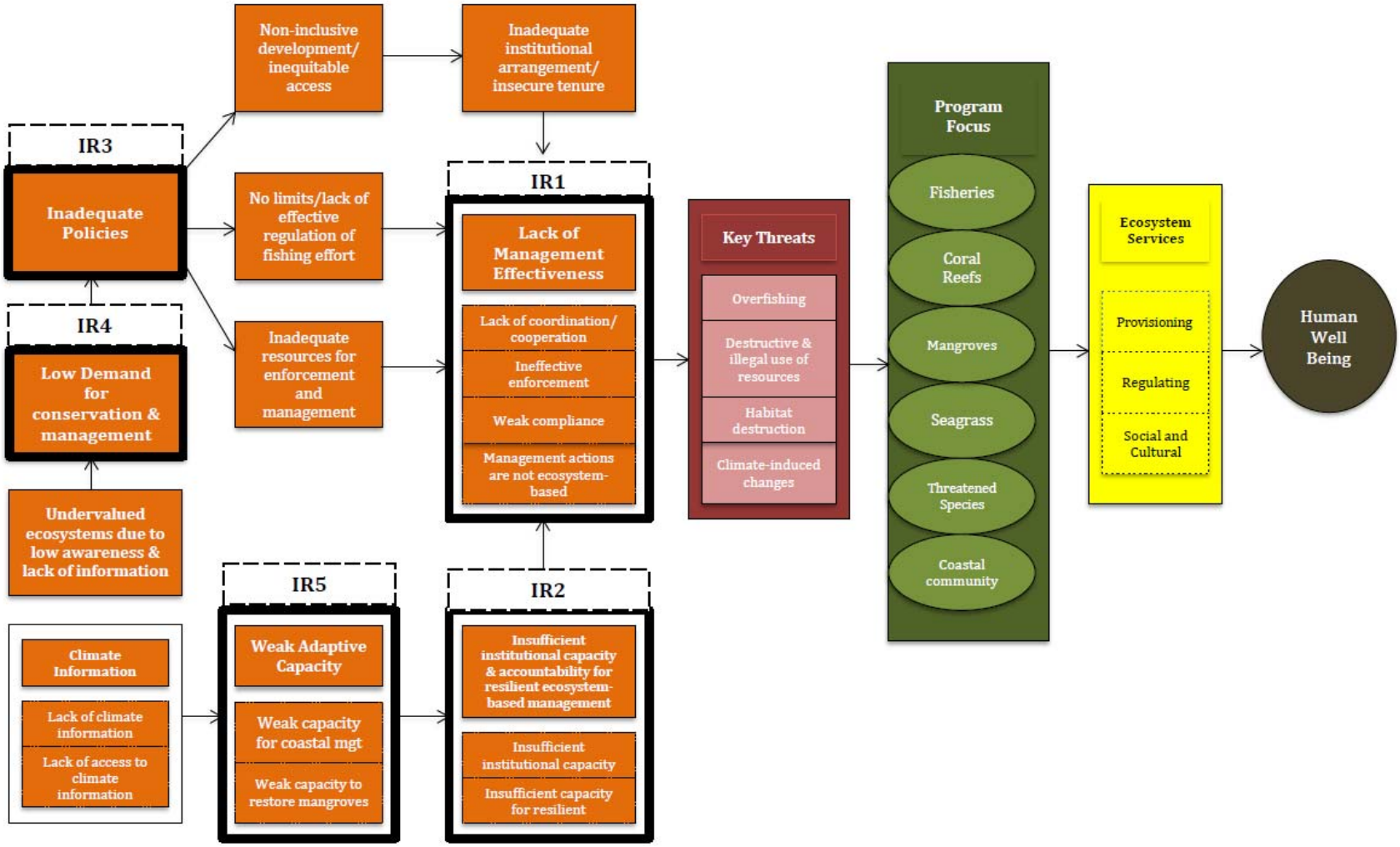


Table 2. Summary of Opportunities and Constraints Identified by TOC Participants.

Topic	Opportunities	Constraints
EAFM governance	• BFAR adopted EAFM as framework in fisheries management • A number of alliances and integrated institutions have been established in various areas • Some Provinces took a lead role in supporting collaborative work (e.g. Alliances, inter-agency councils for fisheries)	• Weak enabling environment to: o Harmonize national and local policies o Create sense of ownership o Implement use rights and marine tenure • National policy not addressed at the local level • Lack of compliance by local stakeholders • Weak implementation • Communities not adequately involved
Habitat protection and management	• Holistic ecosystem management (EAFM) • Setting targets at the national level or site-specific • Integrated Coastal Management (we can't isolate land-based issues from aquatic regimes)	• Lack of evidence that coastal zoning has been effective as a model (other zones besides MPA - tourism zones, rebuilding fisheries, use of gear/methods) • Difficult to implement holistic management (costly, human capacities)
Constituency building	• Incentives for managed access • Presence of champions (government, communities); best practices (MPAs, Awards) • Availability of tools to communicate value of natural resources	• Lack of managed access to fisheries • Local political dynamics (i.e. low participation, lack of political support) • Lack of understanding, appreciation of value of natural resources and management approaches
Law enforcement and compliance	• Interagency coastal law enforcement • Administrative adjudication system of BFAR • Participatory rule-making (FARMC)	• Change in leadership (LGU, agencies) • Formula on the computation of penalties • Limited LGU Support
Stakeholder participation in EAFM	• Participation of stakeholders in the formulation of EAFM plan • Strong fisher community organizing / IEC by NGOs • FARMC organizational strengthening • EAFM Plan adopted by LGUs (Southern Negros) • Fisheries / environmental laws complementing with DRRM/CC laws	• Top-down decision making • Non participatory planning • Insufficient involvement of state colleges and universities on fisheries governance • Lack of meaningful participation of communities • Weak representation of FARMC / fisher folk leader in the alliance/TWG
Livelihoods	• Available local and international markets • There are available models and resources • Livelihoods can serve broader objectives of EAFM	• Livelihood program design doesn't support biodiversity conservation • Inadequate implementation (social preparation, monitoring) • Implementation at scale impact

Topic	Opportunities	Constraints
Strengthening fisheries markets	• Government support and technical knowledge available • Provision of incentives for responsibly sourced fish/fishery products • Tourism markets link to fisheries • Food safety as opportunity for traceability (e.g. Tuna's eye)	• Limited understand how market interventions change fishing effort • Lack of information about value chains and equity of benefit distribution • Community groups lack skills, facilities, technology tools, and capital to improve value of fish products
Public Private Partnerships	• Private sector can be a positive force in influencing policy (FIPs, closed seasons) • Private sector can demonstrate best practices beyond compliance	• Need improved understanding and transparency in supply chains

3.2. Development Hypothesis

The Fish Right Program posits that if the challenges that hinder fisheries governance systems are reduced or eliminated, coastal and marine resource management will be sustainable. Healthier and better managed coastal and fishery resources will promote more sustainable and equitable economic development. Furthermore, intact coastal and marine ecosystems will be more resilient and better able to weather natural disasters.

At the end of five years, Fish Right will result in an average of 10% increase in fish biomass in selected marine key biodiversity areas (MKBAs) from a baseline to be established at the start of the Program. The increase in fish biomass will be a result of declining threats to marine biodiversity in the target MKBAs. The following program outcomes will contribute to reducing marine biodiversity threats:

a) Increased number of fishery management areas implemented with a system of regulatory and economic instruments, leading to improved management effectiveness and sustainability;
b) Improved institutional capacity to implement resilient and ecosystem-based fisheries management;
c) Increased number of policies established and/or improved that support resilient and ecosystem-based fisheries management;
d) Enhanced economic benefits and community resilience demonstrated from improved management of fisheries and mangroves;
e) Increased investments leveraged from public-private partnerships that contribute to resilient and ecosystem-based management; and
f) Key threats to marine biodiversity show a declining trend in the target MKBAs.

3.3. Fish Right Program Theory of Change

The Fish Right Program Theory of Change (Figure 4) describes how the Programs' six strategic approaches (in yellow hexagonal boxes) will lead to a series of changes and results (blue boxes). The results will assist the Program achieve its biodiversity goal (in the green group box), which is to increase fisheries biomass by 10% on average across all sites. The logical causal chain of results demonstrates how Fish Right will contribute to the reduction of threats to fisheries and the associated ecosystems, thus, resulting in improved biodiversity, which in turn will improve human well-being. The Fish Right Program Theory of Change can be described as:

IF significant numbers of resource users and beneficiaries are motivated to actively participate and collaborate in ecosystem-scale and equitable management for sustainable fisheries

AND management institutions, enabled by an inclusive and participatory policy environment, are knowledgeable, capable and equipped with resources to implement an ecosystem approach to fisheries management

AND supply chain and other relevant private sector actors increase investments in sustainable fisheries

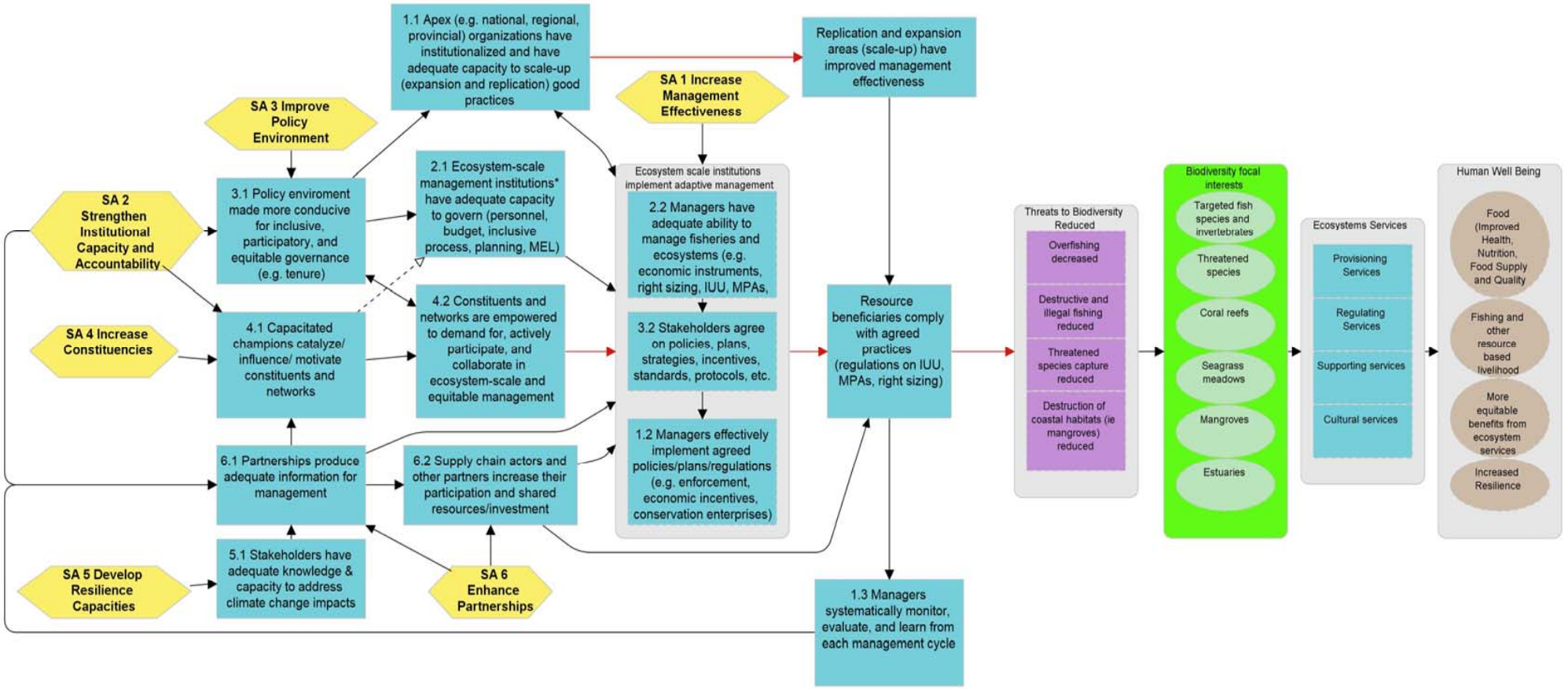
THEN an ecosystem-scale governance system will be in place and characterized by:

→ Women and men who are capable of managing fisheries and ecosystems
→ Stakeholders who agree on gender-fair policies, strategies, plans, incentives for more sustainable and resilient fisheries at ecosystem-scale
→ Managers who adaptively and effectively implement these agreements through sustained incentives and enforcement
→ Apex organizations that are capable to replicate and expand improved management effectiveness

Which **WILL THEN** result in increased compliance of resource users and beneficiaries with agreed upon practices

And **IN TURN** will reduce threats to fisheries and marine ecosystems, leading to an increase in fish biomass. This increase in fish biomass will provide ecosystem services that benefit human well-being and improve resilience.

Figure 3. Fish Right Program Theory of Change



3.4. Strategic Approaches, Outputs, Outcomes

As shown in Figure 4, Fish Right Program will employ six Strategic Approaches to achieve its biodiversity goal of increasing fish biomass and improving coastal and marine ecosystems through improved compliance with fisheries rules. The Program will support capacity development, provide technical support and mentoring, build social capital through increased stakeholder dialogue, and facilitate strengthened high-level organizational performance (e.g. BFAR) for support, oversight, and scaling up of EAFM. The relationships of Strategic Approaches, Outputs, Objectives, and Outcomes are shown in Table 3.

Table 3. Strategic Approaches/Objectives, Outcomes and Outputs.

Goal	Outcomes
To influence system, change within the fisheries sector by improving resource user compliance with agreed upon fisheries practices resulting in increased fish biomass in the selected marine key biodiversity areas by reducing the threats to biodiversity, namely: overfishing, destructive and illegal fishing, and degradation of coastal and marine ecosystems.	An average of 10% increase in fish biomass across selected sites based on catch-per-unit-effort and observed reef fish biomass
	Reduced threats to marine biodiversity across selected sites, measured by reduced overfishing, decreased destructive and illegal fishing, and increased protection of coastal and marine ecosystems
Strategic Approach	**Objectives/Outputs**
SA 1 Increase management effectiveness of fisheries and coastal resources based on stakeholder agreements	• Put in place 2.5 million hectares of biologically significant areas under improved management effectiveness and sustainability based on a suite of regulatory and economic instruments
SA 2 Strengthen institutional capacity and accountability to implement resilient and ecosystem-based fisheries management	• 4,000 people trained in sustainable natural resources management and/or biodiversity conservation • Improve capacities and accountability of at least 50 institutions to implement resilient and ecosystem-based fisheries management
SA 3 Improve the policy environment that enables participatory and equitable governance system for resilient and ecosystem-based fisheries management	• 100 consensus-building forums for resilient and ecosystem-based fisheries management held • Establish and/or improve at least 40 policies and/or regulations that support resilient and ecosystem-based fisheries management
SA 4 Enhance participation and leadership of resource users and stakeholders for coastal and marine	• Enhance participation and leadership of at least 120 CSOs or networks of organizations

Goal	Outcomes
biodiversity conservation and ecosystem-based fisheries management	representing women & men in resilient and ecosystem-based fisheries management • At least 750 people volunteering and/or contributing to improved fisheries management
SA 5 Develop capacities to mainstream resilience into ecosystem-based fisheries management	• At least 10 ecosystem-based adaptation actions mainstreamed into management plans and implemented
SA 6 Enhance partnerships and research and development support for coastal and marine biodiversity conservation and ecosystem-based fisheries management	• At least $8M in investments leveraged from at least 8 Public-Private Partnerships that contribute to resilient and ecosystem-based management • Four (4) Science, Technology and Innovation (STI) models developed and pilot-tested

Strategic Approach 1: Increase management effectiveness of fisheries and other coastal resources based on stakeholder agreements

The interventions under SA 1 will deliver the major expected results of the Fish Right program. SA 1 (Annex F) focuses on enabling effective implementation of agreed-upon policies, plans, strategies, and protocols. Fish Right will assist in the implementation of integrated fisheries management plans that have been developed for the MKBAs. The program will work with stakeholders to decide on management objectives and qualitative or quantitative target reference points, and negotiate additional harvest control and other measures that may be needed to rebuild a healthy fishery. The planning will need to consider existing municipal ordinances, inter-municipal management plans and other national scale BFAR administrative directives and then craft additional institutional arrangements for implementation and monitoring as needed.

The Program will support LGUs and LGU networks by developing constituencies and capacity, providing technical assistance, and developing local ordinances to implement management plans. This is a key intervention area of Fish Right to address implementation challenges and to further the progress of the initial Inter-LGU fishery management plans already established. The Program will also support BFAR in the management of the waters beyond municipal waters as certain fish stocks like the small pelagics and demersal fisheries straddle municipal and national waters. In the Visayan Sea, Fish Right will assist BFAR in finalizing and implementing a small pelagics management plan. Research will also focus on the status of the demersal and pelagic stocks and the impact of climate change on the abundance and distribution of stocks.

Fish Right will utilize existing fisheries information (e.g. fish catch monitoring) as well as new technologies such as VIIRS and VMS. Information from fish landing survey and VIIRS and VMS are helpful in supporting focused enforcement actions. As part of this, Fish Right will implement activities to strengthen the legitimacy of rules including but not limited to establishment of

tenure instruments, which in turn will foster voluntary compliance. To follow progress, Fish Right will monitor compliance, focusing on the commercial fishing sector. The program will ensure that economic incentives are established in managed access areas, and these may include conservation enterprises where appropriate.

Apex organizations will be strengthened to support sustainability efforts to ensure that best practices reach a wider scale. The Provincial Government will also be capacitated to oversee the implementation and expansion of existing ecosystem-level fisheries management and support the establishment of new ones. A capable Provincial Government can provide a venue for collaboration of government institutions and the private sector. In some sites, other institutions can take that role. For example, in Palawan, Fish Right will work with the Palawan Council for Sustainable Development (PCSD) in the implementation of species-specific intervention and marine spatial planning. The Program will also continue to work with Alliances (SNCDMC, NIACDEV) for strengthening and sustainability especially on monitoring and evaluation. Fish Right will support BFAR in taking lead on the institutionalization of EAFM and supporting expansion of ecosystem scale management. The Program will continue to support BFAR in replicating EAFM in other FMAs.

Strategic Approach 2: Strengthen institutional capacity and accountability to implement resilient and ecosystem-based fisheries management

SA 2 (Annex G) focuses on developing capacities as well as accountability of relevant organizations and ecosystem scale institutions to govern effectively and efficiently. These include BFAR, LGUs (municipal and provincial), FARMCs. Their capacity to facilitate participatory processes, use science to inform decision-making, and hold management bodies accountable will be critical in increasing the legitimacy of the ecosystems-scale institutions so that they could in turn increase compliance of their constituency. Fish Right will support the long-term institutional capacity for fisheries management of the National Fisheries Research and Development Institute (NFRDI) and universities that engage in applied fisheries research and extension. A certification system of fisheries management professionals will be established. Fish Right will also support the next generation of researchers, scholarships for Master's Degrees will be provided for study at URI as well as domestic studies in UP's Professional Masters in Tropical Marine Ecosystems Management that was established with assistance from USAID.

Fish Right will develop an applied research and development strategy in collaboration with these actors and fisherfolk through the partnership labs (discussed more in SA6). Potential areas of focus include a balance of social and natural science such as political economy analysis, institutional capacity assessments, supporting existing national programs and databases related to stock assessments (e.g. how to include reference points and harvest controls), mangrove health, use of destructive gear, payment for ecosystem services, or how to improve the fish examiners program.

Fish Right will support capacity building activities in fisheries ecology, multi-species fish stock assessments and ecosystem-based fisheries management, with emphasis on socio-economic

and anthropological dimensions. At the start of the program, Fish Right will engage economic managers and increase the capacity of LGUs to ensure sustainable financing for fisheries management actions. To service the target MKBAs, Fish Right will also strengthen universities by developing partnerships in research and development, technology innovation and verification, and applied studies as service to the various sectors. The Program will also support the establishment and strengthening of advisory groups such as the Scientific Advisory Group of the Visayan Sea and the national level.

The ultimate goal is to advance capacity and accountability to the extent that local organizations are able to develop plans in a participatory manner and establish systems to institutionalize EAFM. This will ensure that managers have the capacity to plan and execute system change – and that they have established the compliance resources, economic incentives, and constituencies needed to implement right sizing, marine protected areas (MPAs) and MPA networks, and combat IUU fishing.

Strategic Approach 3: Improve the policy environment that enables participatory and equitable governance system for resilient and ecosystem-based fisheries management

SA 3 (Annex H) focuses on making the policy environment more conducive for inclusive, participatory, and equitable governance. Fish Right will engage with the national government and other stakeholders to identify, adopt, and create support for policies and guidelines to implement Republic Act 10654 (*An Act to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*) and the Comprehensive National Fisheries Industry Development Plan (CNFIDP). Policy dialogues at the local and national level will be held to review the status of the critical fisheries (e.g. the small pelagic fishery), to find ways to cap and eventually reduce the fishing fleet (commercial and small scale), to develop innovative ICT applications in fisheries, to foster use rights in fisheries. These policy dialogues will also serve as venues to discuss how to implement participatory rule-making to increase the legitimacy of rules, and innovative voluntary compliance strategies focused on moral persuasion and deterrence through monitoring, control, surveillance, and enforcement. Emphasis should be given to:

- ✓ Developing protocols to require the use of science in the development of policies and protocols
- ✓ Enhancing inter-agency collaboration at multiple levels
- ✓ Making resource users and other stakeholders understand not just the laws but the implementing rules and regulations
- ✓ Developing coherent and unified ordinances at the LGU level based on RA 10654.

Fish Right will engage with consultative governance bodies such as the National Fishery Aquatic Resource Management Council (NFARMC), Philippine Council for Agriculture and Fisheries (PCAF), and other stakeholders to identify gaps in processes, policy, and mandates. The end goal is to have empowered constituents actively participating in fisheries management and decision-making.

An opportunity exists for moving forward on tenure rights for marginalized communities, including women, in relation to inshore marine habitats such as mangroves. There are several ongoing initiatives across the Philippines that Fish Right can learn from and adapt to the local context to create a conducive policy environment. To support the implementation of fisheries management plans and increase resilience of fisheries related ecosystems and the communities they support, the project will work with university led partnership labs (See SA6) to conduct studies related to EAFM and mangrove conservation focusing on tenure rights. This will lead to the development of frameworks for tenure right systems for mangroves and intertidal areas.

Strategic Approach 4: Enhance participation and leadership of resource users and stakeholders for coastal and marine biodiversity conservation and ecosystem-based fisheries management

SA 4 (Annex I) highlights the importance of empowered constituents. Raising awareness, communicating the benefits, heightening the desire for change, and identifying and clarifying roles and responsibilities will encourage stakeholders to participate and demand conservation, especially those directly and indirectly affected by the actions and decisions. A key segment of the fisherfolk targeted for strengthening are the medium-scale commercial fisherfolk (larger than 3 gross tons) who often fish within the 10-20km range and are sensitive to changes in policy. In addition, expanding the scope and range of the constituency to include women, youth, indigenous people and other untapped stakeholders, and building local capacity to manage resources not only contributes to constituency building, but revitalizes conservation and EAFM actions, which can sustain resulting gains. To create demand for conservation and management, the project will promote behavior and policy change among community and policy decision makers, respectively.

The Fish Right Program will implement two streams of work to strengthen stakeholder and institutional capacity. First the Program will strengthen local leaders and champions with the end goal of influencing, catalyzing, and motivating constituents and networks. Simultaneous advocacy efforts for policy and decision makers will be conducted to attain policy change. Fish Right will endeavor to establish a results-oriented, synergistic working relationship with national and MKBA level government. These efforts will aim to increase knowledge and understanding for sustainable fisheries management and climate change risks and facilitate support for marine/coastal management actions within existing policies, frameworks, and programs. The focus is to organize fisherfolk and other key fisheries actors into networks that can engage in policy and implementation at the EAFM scale. While the primary target audiences are fishers and policymakers within the focus areas, interventions will reach communities in contiguous areas, other key policymakers and stakeholders at various levels, fishing businesses and related businesses, enabling a supportive environment for attitude and behavior change.

Second, the Program will target broader constituencies and networks, working to empower them to actively participate in EAFM. This will include using social media to create public awareness and to alter behavior towards resource protection. An associated approach is to collaborate with private sector partners, such as supermarket, national and multilateral

government agencies, and conservation organizations to organize multi-partner alliances and communications campaigns. The project will also identify and train community outreach and peer educators (youth, women, fishers, etc.) to educate, motivate, plan and support their peers to engage in conservation actions within their households and communities. They will engage underrepresented groups in decision making, promoting responsible practices. This approach will instill appreciation at the community level for the value of taking care of their resources and of individual and community actions they can do and sustain for marine/coastal conservation. Peer outreach education and community education will also help to create a space where youth, women, and civil society organizations can serve as conservation and climate risk vanguards and champions.

Strategic Approach 5: Develop capacities to mainstream resilience into ecosystem-based fisheries management

SA 5 (Annex J) recognizes the value of increased capacity to develop and implement Ecosystem-based Adaptation (EBA) actions to improve resiliency of the stocks, thus increasing resiliency of the resources users as well. Coastal areas, fishers' communities, and the fisheries sector are particularly vulnerable to extreme storm events and climate related stresses and shocks. Sufficient information for coastal managers and stakeholders to address risks is needed as well as identification of policy options and possible response strategies, and initiation of stakeholder dialogues with focus on gender-differentiated impacts. Opportunities exist to assist the fisheries actors to access existing lines of capital and tailor interventions to align with EBA.

To strengthen resilience, Fish Right will mainstream climate resilience and disaster risk management into EAFM. Fish Right will seek opportunities, through small grants or other forms of mechanisms, to support those activities that protect and restore critical marine habitats, strengthen conservation-based enterprises in the fisheries sector, and provide access to social and financial safety nets for fisherfolk and women. In regards to enterprises, research shows that the greatest success in the Philippines is in developing vocational skills. Therefore, Fish Right will work with government agencies such as the Technical Education and Skills Development Authority (TESDA) to support vocational skills related to post-harvest processing, sustainable tourism ventures for indigenous communities and job links between the Provinces and corporations.

Maintaining accurate and accessible data on climate change is critical to improving coastal and fisheries resilience. Fish Right will strengthen existing data systems to include a multi-dimensional analysis of conditions – including climate and storms, habitats and species, socio-economics and gender. Data will be used to conduct resilience assessments for each MKBA that identify key areas for improvement and barriers for implementation as it relates to biodiversity and vulnerable coastal communities.

Strategic Approach 6: Enhance partnerships and research and development support for coastal and marine biodiversity conservation and ecosystem-based fisheries management

SA 6 (Annex K) focuses on forming partnerships with the private sector to support system changes as well establishing information labs that can support data needs for an evidence-based decision support system. Fish Right will pioneer the establishment of "Partnerships Labs" that will build a spirit of innovation and local ownership. This cross-cutting strategy is built on partnership platforms and alliances to facilitate critical dialogues that build collaboration, develop innovations, and link to financing to rapidly pilot. The centerpiece of this strategy are the university-led partnership labs that bring key fisheries sector actors together from the start to curate priority issues and package fundable pilots for the investment community. Housed both physically and virtually within a network of partner universities and educational institutions, the Partnership Labs will serve as local "beacons" – or meeting points and knowledge and resource centers – that will serve as the base for dialogues between government, local communities, and businesses. Research needs will be identified with stakeholders through these Partnership Labs to ensure strong constituency support and engagement in the learning and application process. Fish Right will provide support to conduct the priority research.

Fish Right will explore science and technology innovations and platforms that help strengthen coastal livelihoods and resilience, improve government performance leading to stakeholder compliance, improve stock assessments for data poor systems and multi-species ecosystems, vessel monitoring, mobile phone and crowdsourcing apps, tablet-based electronic data collection and reporting systems, and climate and ocean change predictions. Fish Right will also work with national, regional, and multinational partners to leverage a wide range of private resources for coastal resource management, and community resiliency building. This will include supply chain improvement and traceability initiatives that deliberately address IUU in the commercial and municipal fishing sectors.

3.5. Illustrative Activities

As part of developing results chains for each SA, the participants also brainstormed potential activities that can be implemented under each SA. The following table (Table 4) provides an overview of the activities proposed to support the six SAs:

Table 4. Illustrative Activities for each Strategic Approach

SA/ Sub-SA	Strategic Approach/Sub-SA/Activity
1.	**Increase management effectiveness of fisheries and coastal resources based on stakeholder agreement**
1.1.	*Apex (Provincial, Regional, National) organizations have institutionalized and have adequate capacity to scale-up (expansion and replication) good practices.*
	Support strategy and organizational development of apex organizations and inter-sectoral (inter-LGU) Alliances, inter-LGU or inter-agency enforcement teams
	Mentor apex organizations to share and scale up good practices
	Participate in and support the development of FMA policy (including HCRs and RPs)

SA/ Sub-SA	Strategic Approach/Sub-SA/Activity
	Support monitoring, evaluation, and learning of incentive systems awards and recognition systems for scale-up
1.2.	*Managers effectively implement agreed policies/plans/ regulations (e.g. regulations, economic incentives, and conservation enterprises).*
	Strengthen incentives for biodiversity conservation (e.g. provision of microfinance and capacity development in enterprise development)
	Strengthen disincentives (strengthening community-based and inter-agency enforcement)
	Establish and strengthen networks of Marine Protected Areas
	Improve registration of fishers and fishing vessels as well as licensing based on right sizing fishing effort.
1.3.	*Managers systematically monitor, evaluate and learn from each management cycle including the use of improved information systems*
	Enhance the EAFM governance benchmark tool to include gender, socio-economic, PHE, and climate change concerns
	Assist MPA management teams/committees in the development and setting up of monitoring, evaluation and feedback systems
	Review and improve existing plans (EAFM, LCCAP/DRRM, CLUP/CDP); support periodic planning with emphasis on advancing through the EAFM benchmarks, incorporating gender and resilience; and promote use of refined EAFM benchmark in awards and incentives
	Support NSAP and other partner research institutions in small pelagics, blue swimming crabs, seagrass rabbitfish, scallops fisheries data consolidation and stock assessment
2.	**Strengthen institutional capacity and accountability to implement resilient and ecosystem-based fisheries-management**
2.1.	*Ecosystems-scale management institutions have adequate capacity to govern (personnel, budget, inclusive process, planning, MEL).*
	Assess capacity of ecosystem-scale fisheries management institutions
	Organize and strengthen ecosystem-scale fisheries management institutions through trainings and skills building in leadership, fundraising, conflict management, and MPA enforcement.
	Facilitate utilization of scientific information to inform decision-making
	Support establishment sustainable financing schemes
2.2.	Managers have adequate ability to manage fisheries and ecosystems (e.g. economic instruments, right-sizing, IUU, MPAs, etc.).
	Capacity development in EAFM through the development of a certification program for EAFM managers/professionals and EAFM trainings
	Conduct capacity development in survey and monitoring technologies
	Conduct capacity development in planning, including right sizing and MPA good practices
	Conduct capacity development in financial management
	Conduct capacity development in policy and regulation development
	Conduct capacity development in communication, advocacy and incentives
	Conduct capacity development in enforcement and disincentives
	Conduct capacity development in understanding and implementing economic instruments for fisheries conservation (e.g. how to translate management plans into business plans
	Strengthen NFRDI and universities for long-term capacity development (graduate, post-graduate, short term courses)

SA/ Sub-SA	Strategic Approach/Sub-SA/Activity
	Support events, forums and workshops to strengthen accountability and transparency (e.g. monitoring and evaluation workshops, presentation of results, feedbacking sessions, and forging agreements with other agencies and institutions
3.	**3 Improve the policy environment that enables a participatory, and equitable governance system for resilient and ecosystem-based fisheries management**
3.1.	*Policy environment made more conducive for inclusive, participatory and equitable governance (e.g. tenure).*
	Identify areas suitable for mangrove and seagrass tenure rights
	Support the development of policies on tenure rights on fisherfolk settlements and preferential use rights
3.2.	*Stakeholders agree on policies, plans, strategies, incentives, standards, protocols, etc.*
	Review and improve EAFM strategies and plan
	Mainstream gender and climate resilience priority actions into EAFM strategies and plans
	Facilitate the formulation of fisheries management plans and fishers support programs
	Facilitate the formulation and implementation of an "industry roadmap" for the commercial fisheries sector that aim to improve compliance
	Identify and implement incentives for compliance and stewardship
	Strengthen regulations for expanded MPAs and spatial plans
	Implement inter-LGU marine spatial planning
	Strengthen and implement regulations for right-sizing, including licensing schemes and/or economic instrument that support right sizing
	Support policies on tenure rights for marginalized communities including women
	Conduct training and workshops to increase capacity of institutions to climate-proof and increase resilience of plans and policies
	Identify, adopt, and create support for policies and guidelines to implement RA 10654 (IUUF) and CNFIDP
	Develop and implement ICT Applications and STI Models
4.	**Enhance participation and leadership of resource users and stakeholders for coastal and marine biodiversity conservation**
4.1.	*Capacitated champions, influence/ catalyze/ motivate constituents and networks.*
	Identify/tap/develop champions at the community and higher level (industry, media, LGU)
	Support forums, workshops, and events for collaboration between community and higher-level champions
	Conduct gender-sensitive BCC campaign
	Organize fisherfolks and other key fisheries actors into networks
4.2.	*Constituents and networks are empowered to demand for, actively participate and collaborate in ecosystem-scale and equitable management.*
	Strengthen volunteer (in terms of active reporting of illegal activities, participation to enforcement activities, peer-to-peer education, MPA management, advocacy on mangrove management) networks by supporting field visits on other sites and local advocacies
	Collaborate with private sector partners, especially market/supply chain actors
	Conduct training on community outreach and peer educators to rally support and engagement in conservation actions
5.	**Develop capacities to mainstream resilience to EBFM**

SA/ Sub-SA	Strategic Approach/Sub-SA/Activity
5.1.	*Stakeholders have adequate knowledge and capacity to address climate change impacts.*
	Mainstream resilience into baseline development and monitoring as well as capacity development modules
	Review local climate change action plans and disaster risk reduction plans and incorporate priority resilience actions into key local plans (e.g. multi-sectoral plans, marine spatial plan, local development plans, business plans, investment plans, fisheries management plan)
	Seek opportunities through small grants or other mechanisms to support activities such as improving coastal protection, strengthening conservation-based enterprises, and providing access to social and financial safety nets
	Conduct training of vocational skills (post-harvest processing), sustainable tourism ventures for indigenous communities, and linking trainees to job opportunities with local corporations.
	Conduct training to maintain accurate and accessible data on climate change (climate and storms, habitat and species, socio-economics, and gender) to improve coastal and fisheries resilience
6.	**SA 6 Enhance partnerships and research and development support for coastal and marine biodiversity conservation resilient and EBFM**
6.1.	*Partnerships produce adequate information for management.*
	Develop "Partnerships Labs" that conduct research on agreed-upon management questions, technology verification, and test innovative interventions
	Implement baseline assessments and scientific research that support EAFM at local, MKBA, and national level
	Explore and pilot-test STI models that can improve coastal resilience, improve stock assessments for data poor systems and multi species systems, implement vessel monitoring and catch documentation and traceability systems to address IUUF
	Conduct gender analysis to identify entry points for gender mainstreaming
	Identify economic incentives and socio-economic impacts of implementing fisheries regulations
	Conduct value chain analyses and implement fisheries improvement projects that strengthen key fisheries
	Conduct oceanographic studies and biological research to complement fisheries surveys and assessments that support right sizing efforts
	Support fishhackatons
6.2.	*Supply chain actors and other partners increase their participation and shared resources/investment.*
	Sponsor capacity-building activities aiming to improve post-harvest handling and storagae
	Facilitate dialogue between key players in local fisheries supply chains to discuss potential instruments, such as long-term purchasing commitments that can in turn be used to finance a transition to a more sustainable fishery.
	Facilitate partnerships between fisher groups and hotels/food industry and other supply chain actors to promote increased demand for sustainably sourced and managed seafood

3.6. Proposed Program Performance Indicators

The Program aims to measure its progress and effectiveness in line with its Theory-of-Change (see above) through the proposed program indicators described in Table 5.

Table 5. Proposed Program Indictors and LOP Targets

No	Strategic Approach	Indicator	Total LOP
1	**Program Goal**	Percentage increase in the biomass of selected fisheries in the focal areas across field sites	10%
2		Reduced threats to marine biodiversity across selected sites, measured by reduced overfishing, decreased destructive and illegal fishing, and increased protection of coastal and marine ecosystems	Decreased/Decline
3	**SA 1** Increase management effectiveness of fisheries and other coastal resources based on stakeholder agreements	Area (hectares) of biologically significant areas put in place under improved management effectiveness and sustainability based on a suite of regulatory and economic instruments	2.5 Million
4	**SA 2** Strengthen institutional capacity and accountability to implement resilient and ecosystem-based fisheries management	Number of people trained in EAFM (MPA, IUUF, MSP, Sustainable Financing, EBA)	4,000
5		Number of Institutions with improved capacity and accountability to implement resilient and ecosystems-based fisheries management	50
6	**SA 3** Improve the policy environment that enables participatory and equitable governance system for resilient and ecosystem-based fisheries management	Number of consensus building forums for resilient and ecosystems-based fisheries management	100
7		Number of laws, policies, or regulations on *EAFM* drafted, adopted and implemented	40

No	Strategic Approach	Indicator	Total LOP
8	**SA 4** Enhance participation and leadership of resource users and stakeholders for coastal and marine biodiversity conservation and ecosystem-based fisheries management	Number of CSO or network of organizations representing women & men in resilient and ecosystem-based fisheries management	120
9		Number of people volunteering and/or contributing to resilient and ecosystem-based fisheries management	750
10	**SA 5** Develop capacities to mainstream resilience into ecosystem-based fisheries management	Number of Ecosystem-based Adaptation actions mainstreamed	10
11	**SA 6** Enhance partnerships and research and development support for coastal and marine biodiversity conservation and ecosystem-based fisheries management	Number of Public Private Partnerships established and operational	8
12		Value ($) of investment leveraged from public-private partnerships	$ 8M
13		Number of STI models developed and pilot tested	4

3.7. Assumptions

The Fish Right Program strategy is based on an understanding of the current situation and plausible pathways over the coming years. For the interventions to lead to desired behaviors that reduce threats to biodiversity the in the three MKBAs, the following assumptions need to occur:

1. Current decentralized governance framework, where municipalities have jurisdiction to 15 nautical miles and BFAR have jurisdiction between 15-200 nautical miles, is adequate to manage stocks that straddle the national and municipal jurisdictions. Also, the high transaction costs of large numbers of administration units needed for large-scale management are not overly burdensome (e.g. no major change in laws or policies needed for effective governance - challenges are more on building effective mechanisms and capacity within these frameworks).

2. The current model of inter-LGU plans, coupled with coordinated BFAR policies and management measures/provincial compacts, can adequately manage large marine ecosystems like the Visayan Sea.
3. Commercial and municipal fishers' interests align with sustainable fisheries goals.
4. Fisherfolk will be motivated to form strong organizations or constituencies that will enable more equitable decision-making in fisheries.
5. Ecosystem shifts from IUU, destructive fishing and overfishing do not prohibit recovery of key stocks.
6. Change to federalism and other political election issues will not over turn progress in improved fisheries governance at EAFM scales.
7. Individual LGUs, including those in Inter-LGU alliances, and national-level government support EAFM.
8. Inflation and economic climate will not significantly affect fish prices.
9. The market will be a positive influence on fisheries management.

4. LEARNING AGENDA

Biodiversity conservation activities are often implemented within complex and changing natural and human systems. It involves a series of complex issues that are difficult to define; have tangled up root causes; involve stakeholders with diverse values, interests and positions; vary from person to person and community to community; are constantly evolving; and, have no obvious answers. In this context, it is critical to have a clear learning and adaptive management strategy, because when learning happens haphazardly, lessons that could have led to either incremental or transformative changes may be lost. The Fish Right Program will implement a learning agenda, which will formally investigate a number of **learning questions**.

4.1. Learning Questions, Timing, Activities, and Resources

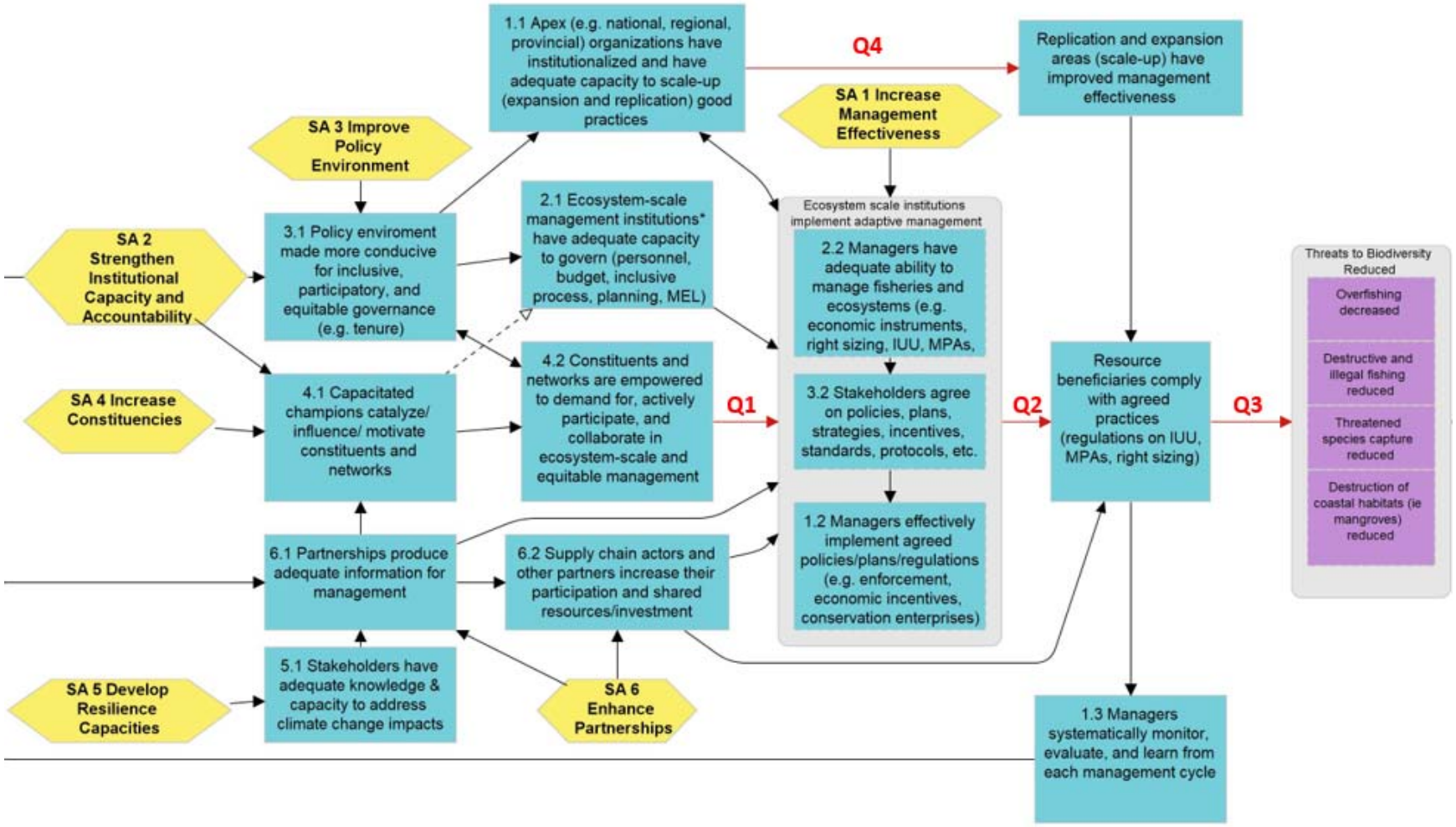
Table 6 provides an illustrative learning plan for Fish Right. The learning questions are based on the Program Theory of Change – and their relation to the TOC is marked in Figure 4. The plans for how each learning question will be implemented will be finalized during a learning agenda planning event, which will be held in Year 1. At this event, the participants will (1) review the learning questions and finalize learning indicators, (2) plan a suite of activities to gather baselines and follow-up monitoring, (3) organize the resources needed, and (4) set up an implementation schedule. During the learning agenda planning event, the evaluability and practicality of the learning questions will be assessed.

Table 6. Draft learning questions, indicators and implementation plan

Learning Questions	Draft learning indicators	Learning activities and timing	Resources needed
LQ 1: To what extent and under what conditions will empowered constituents and networks actively participating in, and collaborating for ecosystem scale and equitable management result in improved management effectiveness of fisheries and coastal resources?	% change in demand for conservation % change in active participation State of collaboration	Collect data on the role of constituents and networks; Assess agreed-upon policies; Assess implementation of agreed-upon policies	Staff time; field travel, research assistants.
LQ 2: What are the critical elements of effective management that lead to compliance with agreed-upon rules and practices?	Change in governance benchmark; % change in compliance to agreed rules	Governance baseline and annual EAFM benchmarking	Staff time; field travel, research assistants.
LQ 3: To what extent and under what conditions will improved compliance result in a reduction of key biodiversity threats?	% change in compliance State of threats (reduced)	Assessment on compliance; enforcement assessment, gear survey, VIRRS	Staff time; field travel, research assistants.
LQ 4: To what extent and under what conditions will capacitated apex organizations and institutions lead to replication and expansion of improved management effectiveness?	% change in institutional capacity Rate of replication and/or expansion	Biannual apex organizational capacity assessments	Staff time

The learning questions are designed to track areas of the TOC where Fish Right needs to ensure that the logic model holds up. In Figure 4, the red arrows with LQs show where each of the learning questions fit into the TOC. In the spirit of adaptive management, the questions will contribute to exploring if the Program is reaching its intended results and if there are gaps in the theory of change and results chains. If Fish Right has been unsuccessful in achieving certain results, the learning questions will help explore what assumptions proved inadequate – and if the gaps a result of theory or implementation failure.

Figure 4. Location of Learning Questions in the Theory of Change



ANNEX A. START-UP WORKSHOP AGENDA

USAID Fish Right Program Start-Up Workshop Agenda

August 7-10, 2018

City Garden Grand Hotel

8008 Makati Ave. cor. Kalayaan Ave., Makati, Philippines 1200

Description

The U.S. Agency for International Development (USAID) Fish Right Program is a partnership between the Government of the Philippines and USAID to improve fish biomass in select marine key biodiversity areas (MKBAs) by addressing threats to several marine ecosystem types, including mangroves, reefs, open-water pelagic and demersal ecosystems. Fish Right will use an ecosystem approach to fisheries management to 'right-size' fisheries and enhance the sustainable use and resilience of critical coastal and marine resources. The five-year Program will be implemented by the Coastal Resources Center (CRC) at the University of Rhode Island (URI) as a cooperative agreement in collaboration with a team of core implementing partners.

To learn from past experience, understand the situation today, and apply to identifying plausible strategic approaches for Fish Right, USAID will host a 1½-day learning event. The learning from this event will support the Fish Right Program in developing strategic approaches and theories of change (TOCs), during a subsequent 3½-day TOC workshop facilitated by USAID's Measuring Impact (MI). MI is a six-year initiative funded by the USAID/E3 Forestry and Biodiversity Office (E3/FAB) collaborating with the Bureau for Policy, Planning and Learning (PPL) to improve biodiversity conservation and integrated programming. The goal of these Activity start-up workshops is to support TOC-based Activity design, monitoring, evaluation and learning; and, as part of the USAID Program Cycle, align the Activity ME&L Plan to inform USAID/Philippine's learning priorities and to track progress towards achieving the project purpose.

Objectives

1. Based on the findings from the learning event, review and refine the Fish Right **strategic approaches** using theories of change-results chains.
2. Use results chains to identify **actions** for implementing strategic approaches to structure the Fish Right life of program (5-year) strategic plan and the first year work plan
3. Use results chains to identify **outcomes, indicators, and learning questions** for the MEL plan.
4. Consider how to apply the overall elements above to **site-specific plans**.

Day	Session
Tuesday, August 7	
2:00-2:15	**Introductions and Review of Agenda (Judy Boshoven & Guillermo Placci, Measuring Impact/MI)**
2:15-2:25	**Workshop Context: Mission CDCS, Fish Right Program, and Overview of Fish Right Activity (Rebecca Guieb, USAID)**
2:25-2:30	**Overview Application of Theories of Change in the USAID Program Cycle (Barbara Best, USAID)**
2:30-3:30 (coffee/tea break included in session)	**Develop Results Chains and Actions for Fish Right Strategic Approaches (1, 2, & 3)** - Brief presentation to introduce the topic - Break out groups review and refine results chains for 3 strategic approaches
3:30-4:00	**Plenary Reflection on the Day**
Wednesday, August 8	
8:30-8:45	**Recap and Review of Previous Day**
8:45-11:00	**Continue to Develop Results Chains and Actions for Strategic Approaches 1,2, & 3** - Break out groups finalize draft results chains and actions
10:00-10:15	*Coffee/tea break*
11:15-12:00	**Develop Results Chains and Actions for Fish Right Strategic Approaches 4, 5 & 6** - Break out groups: o review and refine results chains for strategic approaches o add actions to results chains
12:00-1:00	*Lunch*
1:00-3:30 (coffee/tea break	**Continue to Develop Results Chains and Actions for Fish Right Strategic Approaches 4, 5 & 6** - Break out groups finalize draft results chains and actions

included in session)	
3:30-5:00	**Plenary Reflection on the Day**
Thursday, August 9	
8:30-8:45	**Recap of Day 3**
8:45-10:15	**Use Results Chains for Fish Right Strategic Approaches 1, 2, & 3 to inform MEL Plan** - Brief introduction of topic - Break out groups use results chains to identify key outcomes and learning questions
10:15-10:30	*Coffee/Tea Break*
10:30-12:00	**Use Results Chains for Fish Right Strategic Approaches 4, 5, & 6 to inform MEL Plan** - Break out groups use results chains to identify key outcomes and learning questions
12:00-1:00	*Lunch*
1:00-2:00	**Report Back to Plenary** - Break-out groups report back to plenary on results chains, actions, and key outcomes, learning questions (15 min. per team) - Break out groups incorporate team feedback
2:00–3:00	**Prioritize Learning Questions** In plenary review and prioritize learning questions for Fish Right
3:00-3:30	*Coffee/tea break*
3:30-4:00	**Reflection on process and progress**
Friday, August 10	
8:00-8:15	**Recap of Day 4**
8:15-10:15	**Discuss overall TOC: SAs working together to achieve the FR purpose.**

	Discuss site-specific actions: - **Use FR scoping report as an input**
10:15-10:30	*Coffee/Tea Break*
10:30-12:00	**Review & Finalize Outline for TOC-Based Work Plan Using Workshop Results** - Fish Right team presents proposed outline for TOC-based work plan using workshop results
12:00-1:00	*Lunch*
1:00-2:45	**Review & Finalize Outline for TOC-Based MEL Plan Using Workshop Results** - Fish Right team presents proposed outline for TOC-based MEL plan using workshop results
2:45-3:00	**Closing Remarks and Workshop Evaluation**

ANNEX B. PARTICIPANT LIST

Organization/Institution	Person	Position/Representation
USAID/DC	Barbara Best	E3/FAB Senior Advisor
USAID/Philippines	Rebecca Guieb	EO, AOR Fish Right
Measuring Impact	Judy Boshoven	Program Specialist, FOS
Measuring Impact	Guillermo Placci	Program Specialist, FOS
URI-CRC (PH)	Nygiel Armada	Chief of Party
URI-CRC (PH)	Jim Orprecio	Deputy Chief of Party
URI-CRC (PH)	Andre Uychiaoco	Senior Fisheries Advisor
URI-CRC (US)	Elin Torrel	Principal Investigator
URI-CRC (US)	Glenn Ricci	Program Manager
URI-CRC (US)	Brian Crawford	Senior Advisor
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URI-CRC (PH)	Andrea Barcelona	Visayan Sea Field Coordinator
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PFPI	Ferdinand Esguerra	Behavior Change Specialist
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MERF	Sam Mamauag	Right Sizing Modeling Specialist
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Silliman University	Enrique Oracion	Anthropologist
Silliman University	Rene Abesamis	Fisheries Ecologist
NFR	Marrieta Rodriguez	Executive Director, NFR
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B+WISER	James Kho	Policy
BFAR - National	Drusila Bayate	Assistant Director for Administration

Organization/Institution	Person	Position/Representation
NFRDI	Maria Theresa Mutia	Chief, Administrative and Finance Division, NFRDI
BFAR 6	Remia Aparri	RD BFAR 6
BFAR 6	Sheryl Mesa	NSAP Coordinator BFAR 6
BFAR 6	Maria Aimee Sobrevega	VS Coordinator
BMB	Marlynn Mendoza	Division Chief, CMD
NFARMC	Yasmin Tirol	Member - Academe
NFARMC	Martha Cadano	Member - Municipal Fisherfolk
Negros Occidental	Maria Elena San Jose	Provincial Environment Management Office
PCSDS	Dorcas Besa	Palawan Council for Sustainable Development Staff
PCSDS	John Martin Caligdong	Palawan Council for Sustainable Development Staff
PLGU Iloilo	Ildefonso Toledo	Provincial Agriculture Office
PLGU Negros Oriental	Faith Napigkit	Aquaculture Center Chief
CCEF	Marlito Guidote	Fisheries Enforcement Advisor
Rare	Rocky Tirona	Director, Strategy, Partnerships and Development
REECS	Rina Rosales	Vice President, Resources Economics Specialist
UP Diliman	Jonathan Anticamara	Associate Professor
UP Visayas	Emelia Santos-Yap	Dean, College of Fisheries

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ANNEX C. LEARNING EVENT NOTES

Summary

The Learning Event organized by FISH RIGHT as a venue for fisheries experts, professionals, and beneficiaries to share their experiences in coastal resource management over the past 20 years, as well as present a picture of the state of biodiversity in the Philippines.

On Day 1, an overview of the long-term vision for MKBAs and Fisheries was first presented, followed by Status on Implementation of Fisheries Management in MKBAs. A panel presentation and discussion were further presented by representatives from lead or model organizations on subjects categorized as drivers of change.

Lessons in the last 20 years on Policy Reforms, Constituency Building, Governance towards EAFMS, Public and Private Partnership, Habitat Protection and Management, Livelihoods, Law Enforcement and Compliance, and Fisheries Markets were presented. Panel discussions (Q&A) were conducted after each set of presentations (Panel 1 & 2).

After each panel discussion, the plenary divided themselves into four breakout groups to identify constraints and opportunities in the driver of change assigned to each group. The output of each group was presented in a 'world café', where participants moved around the room to listen to each presentation. Some suggestions were taken and integrated into the final output which was presented the following day.

On Day 2, the final output for each driver of change was presented by each group. There was a brief review of the first day's output before proceeding to the presentation of the identified Immediate Results (IRs) of FISH RIGHT. Aside from giving an overview of the strategic approaches that were conceptualized for the project, another objective for it was for everyone to be on the same page in terms of the terminologies and in what context these are used in the project.

The presentation of the IRs allowed participants to ask for clarifications, share experiences, or suggest or recommend strategies that could be taken into consideration in the final strategic plan.

FISH RIGHT is a partnership between the Government of the Philippines and the U.S. Agency for International Development (USAID) to improve fish biomass in selected marine key biodiversity areas. The Program will be implemented by the Coastal Resources Center (CRC) at the University of Rhode Island (URI) in collaboration with a team of core implementing partners, which were selected for their complementary expertise.

FISH RIGHT is the fourth of a series of projects on coastal resource management in the Philippines in the past 20 years. It hopes, that in this Learning event, players are able to learn from the lessons of past projects, and from there, craft the Life of Project Plan as well as the basis for the Monitoring, Evaluation, and Learning plan for the project.

A total of 65 representatives participated in the workshop; composed of 36 females and 24 males. Professionals composed of experts in Fisheries, Environmental Management and Policy representing

Regulatory Agencies, Local Government Units and the Academe attended the event. Government agencies were represented by officers from both the national and regional/ provincial level.

Introduction

Long-term vision for MKBAs and Fisheries

Presenter: Nygiel Armada, Fish Right COP

Biodiversity focus

- 500 species of **coral reefs** cover an area of about 26,000 square kilometers, 40% of which are in poor condition, and only 1% is in excellent condition. It is home to 1,658 associated species (fish).
- 16 species of **seagrass** covers 978 square kilometers, but 30% to 50% lost due to economic activities, such as construction of beach resorts and fish ports.
- 42 species of mangroves cover about 2,912 square kilometers. It is home to 110 fish and 117 invertebrate species. 66% or 2,786 square kilometers of it were lost from 1950 to 1990, when the government at the time (1950s) encouraged people to develop mangroves into fishponds on these areas. There was no awareness about its role in the ecosystem.
- 2,724 marine fishes in about 254,547 square kilometers of the continental shelf. Almost all of them are over exploited.

Threats to biodiversity

- Major threats to coral reefs mainly started with coastal development, overfishing, and destructive fishing, with sedimentation and pollution as minor threats in 2002. In the succeeding 10 years, the major threats remained the same, with the numbers slightly increased. However, sedimentation and pollution has significantly increased that by 2012, with the numbers more than doubled.
- Fish biomass has continuously declined from 1948 to 1995 as recorded from wildlife surveys conducted by the Fish and Wildlife Bureau in the 1940s. the Bureau of Fisheries and the academe in the 1990s. Demersal stock has been reduced that in Manila Bay, only 10% of the stock remain; the San Miguel Bay, 12% and even the Visayan Sea, only 30% of the stock of the 1948 level remain.
- There's a high exploitation ratio of our major fish stocks. The E-value can be measured in a way that if fishing mortality equals natural mortality, it's still considered a good balance. But once the fishing mortality exceeds the natural mortality, then there is a problem. Almost 80% of resources were already beyond the exploitation ratio by the 1990s.

Past projects

- The FISH Project (2003-2010) wanted to arrest the decline in fish stocks and at the same time increase it by 10%. In reality, the project aimed to increase fish stocks by 28 to 30%, since they were swimming against the decline and at the same time aimed to increase 10% on top of it.

- The FISH project's focus was fisheries resource management. It was implemented using a management mechanism, categorized into growth mechanism, control mechanism, and maintenance mechanism.
- Growth mechanisms included the establishment of MPAs refugia network, environment-friendly enterprises, specie-specific management especially for demersal species, and seasonal closures.
- Control mechanisms included gear restriction and size limit, registration and licensing system, zoning, law enforcement, and policy development.
- Maintenance mechanisms included supported management planning, develop management interventions, inter-LGUs arrangement with the objective of getting communities working together in sharing a common resource.
- Measuring the gains was a unique element of the FISH Project. They used Fisheries dependent and independent surveys, as well as Reff/MPA surveys to measure the improvement or decline in coral reef areas.
- The FISH project achieved the 10% increase but on closer inspection, it turned out that the interventions that brought about the increase in fish catch was mainly due to better fishing gears which required more capital, which means that it did not redound to the rightful beneficiaries.
- ECOFISH (2012 -2017) demonstrated that fish decline can be arrested, if not reversed with management, governance is key to the success and sustainability of fisheries management and that the ecosystems approach fisheries management (EAFM) can be successfully implemented to a certain governance scale.
- The ecosystem approach, experimental at that time, is about managing fisheries on an ecosystem scale instead of the scales defined by jurisdictional boundaries.
- Lessons carried over from FISH to ECOFISH:
    - For EAFM to succeed, governance scale should match the spatial scale (right scaling)
    - Equity issues remained a big challenge – efforts should redound to the right beneficiaries
    - There is a serious need to address excess fishing effort – biomass is increased, but users also increase in number,
    - There is a need to right size the fishing effort.
- Right-sizing is about addressing the equity issue: increasing biomass but not redounding to the right beneficiary.
- Right sizing of fishing effort:
    - Ecosystem modeling serves as a guide to decision making on the appropriate fishing configuration
    - How science was communicated and appreciated
    - Demonstrated that ecological well-being can be met without sacrificing human well-being
- Conservation enterprise set up for the fisher folk families to address overfishing and at the same time build constituency. It aims to provide livelihood for these families with non-harvesting income, addressing at the same time the problem of over-capacity.
- ECOFISH started a serious attempt to address illegal fishing through public private partnership. **D**edicated **A**lert **L**ines for **O**cean biodiversity (DALOY), an SMS platform for anonymous reporting was set up, which is a crowd sourcing broadcast service that would allow anybody community can text the authorities to inform about infractions and violations committed by members of the community. The aim was that the authorities can go to the field and catch the perpetrators. The

response of the PNP was not totally achieved but its real value was that the PNP was able to set up a database that helped them improve their planning process in addressing these issues.

- An evaluation of past USAID projects on coastal management showed that the major intervention was like a building block to the current project. The projects did not just provide continuity, but it provided a expansion of the base, that it became very strong. Each succeeding project continued the management efforts of the previous one and at the same time added new interventions. The projects started with CRMP, followed by ECOGOV, FISH, ECOFISH, and now FISH RIGHT.

Fish Right Program

- FISH RIGHT is designed takes off from the FISH and ECOFISH experiences. It's about scale and sustainability.
- Sites were selected based on (a) biodiversity priorities as determined from the Priority Conservation Sites in the Philippines, and, (b) demonstration site for EAFM.
- Habitats like coral reefs has been the focus of most of our marine protected areas, not so much on mangroves and seagrass. Special attention is given on the management of mangrove forests and seagrass beds in FISH RIGHT.
- Management of resources is only as good up to the point where good governance works. Cited the experience on fisheries management in Bohol. They started in the Northern Bohol area, with four municipalities and expanded to nine municipalities. But when they started to expand to the Camotes Sea, it no longer worked. Take away from that experience was for governance to work, it was best to separate the Bohol and Leyte sites.
- Areas covered: Calamianes Island Group, South Negros, Visayan Sea (5 provinces, 3 regions, and 37 municipalities).
- Scale and Challenge: In the 1980s, it was about managing ecosystems, bays, and growth, but governance was not there. Currently, there is the scale of the efforts in the 1980s but with a big difference. There is now better support from the LGUs, a better understanding of ecosystems and their resources, better science to back up interventions.

Status on Implementation of Fisheries Management in MKBAs

Presenter: Andre Uychiaoco, Senior Fisheries Advisor, FISH RIGHT

Methodology

- Review of published ECOFISH documents, EAFM plans, and other related documents
- Actual interview of stakeholders
- Site visits from June 18 to July 13, 2018
- Questions asked were about fisheries species, ecosystems, and ecosystem services, top 3 issues and potential solutions to these, what has been implemented, results observed, and priorities.

Current state

- Fisheries species varied among the three sites. Ecosystems consisted of almost the same elements but with a difference in emphasis, where one may have a more developed element compared to the others but may be weak where the others are more developed. Ecosystem services were similar, but not the same. There is mining value in South Negros, tourism is much stronger in Calamianes compared to the other sites.

- Common issues: Topping the list is law enforcement (weak compliance) and not enough sources of livelihood, even though it's always included in the local government plans.
- Everyone says that overfishing is among the top problems but when asked about a solution, nobody can come up with one. It's not clear to them on what to do about overfishing and over population.
- Interventions have strengthened ecosystem-scale governance. First, areas have to be defined. Calamianes and the Visayan sea are somewhat distinctly defined. South Negros however has a bigger range in fish species and there is an issue as to human system, which includes where they catch fish and where they trade them. Hence, there is an issue in selecting the site, and the manageability of the site.

Observations

- Low compliance is still a top concern. Violators are displaced from LGUs where enforcement is strong. Fisheries management is highly dependent upon the support of the local government chief executive. Example: The mayor wants to prioritize something else that might be personally beneficial to a select group other than fisheries management.
- Weak buy-in of commercial fishers in management initiatives. The level of their buy-in is uncertain and need to be studied further.
- Livelihood support is among the top requests. Inadequate fisheries income impacts household welfare. Immediate financial needs are more pressing than the sustainability objective
- Inadequate human and financial resources for management
- Weak monitoring and subjective views on perceived progress. Perceptions vary, and the basis for measuring progress or improvements is not clear.

Drivers of Change

Panel 1: Lessons from the past 20 years

BFAR Policy Reforms

presenter: Remia Aparri, BFAR Regional Director, Region 6

What has changed over time

- The Local Government Code devolved the function of managing municipal waters to the local government units. Coastal Resource Management was promoted to be considered one of the basic services of the LGUs. Municipalities recognized the need to work with other municipalities in managing shared ecosystems.
- Republic Act 8550 – Philippine Fisheries Code of 1998, was passed to provide for the development, management and conservation of fisheries and aquatic resources. Republic Act 8435 - Agriculture and Fisheries Modernization Act of 1997 complements RA 8550.
- The UN FAO adopted International Plan of Action to prevent, deter and eliminate illegal unreported and unregulated fishing (IPOA-IUU) in 2001. In response to it, the Philippines enforced 4 Closed Seasons from 2011 to 2015 in the Visayan Sea, Davao Gulf, Zamboanga Peninsula and Northeastern Palawan
- In 2013, illegal unreported and unregulated fishing became more rampant. The Philippines adopted its own NPOA against IUUF (Executive Order 154), which was anchored in the context of the code of conduct for responsible fisheries.
- The Philippines was issued a warning Yellow Card due to its failure to comply with the international obligation to fight IUUF and improve the fisheries management and conservation measures. The EU pre identified the Philippines as a non-cooperating country in the fight against IUUF.
- RA 8550 as amended by RA 10654 was passed into law in 2015, which was consistent with the IPOA and NPOA against IUUF. A national program for fisher folk registration, gear and boat registration was established. Law enforcement trainings were also conducted. These efforts paid off with the lifting of the Yellow Card.
- The *Malinis at Masaganang Karagatan (MMK)* program simplified the implementation of RA 10654 in the Local Government Units.

- The new law includes higher deterrent penalties, speedier adjudication, and stronger measures for conservation and monitoring. Additional Prohibited Acts and harsher penalties for violations under the RA 10654.
- Legal remedies as provided for in RA 10654:
    - Citizens' Suit
    - Administrative Adjudication
    - Anti-Strategic Lawsuit Against Public Participation (SLAPP)
- BFAR Deliverables:
    - Observer Programs, Vessel Monitoring System, FMMA and other provided in RA 10654
    - Determine Reference Points and implement Harvest Control Rules to complement existing fisheries management actions
    - Strengthen Monitoring, Control and Surveillance of LGUs, BFAR and other enforcement agencies (Vessel Monitoring Measures, Reportorial Requirements and others)
    - Ensuing seafood sustainability throughout the value chain (reducing post harvest losses, improve fish production and quality) by developing and implementing catch documentation and traceability schemes
    - Establishment of Fisheries Management Areas
    - Jumpstarting of BFAR's Ecosystems Approach to Fisheries Management (EAFM) through MMK

Constituency Building

presenter: Rocky Tirona, Vice President, RARE Philippines

- The successful implementation of a project largely depends on getting people behind it, if long term behavior change is to be achieved.

Lessons from co-management on building constituencies

- It's about being clear who gets to participate, which individuals or core groups that actually take responsibility, and incentive structures are aligned across different players.
- The overfishing is really about equity. If one needs to reduce effort in fishing, then others should also do the same. They should really have a voice in the program, to be part of the decision making process.
- Spouses can influence their husbands to fish less, pressure to produce income from fishing is lessened. It's not just about the fisher, it's about the entire household. Example: House savings club program of wives, where they build up their household assets is an additional cushion in terms of finances. They don't have to illegal fishing to meet their needs.
- Conditions that are highly linked to successful co-management include:
    - Membership of those allowed to fish and participate in management is clearly defined
    - Those affected are allowed to participate
    - An individual or core group takes responsibility for the management process
    - Incentive structure considers different players
    - Local leadership is a critical and necessary condition for success (formal and informal)
- Also critical: Trust, political support, capability building of individuals and communities, involvement in rule formulation

Widening the frame

- Constituencies are not limited to fisher folks. It is beyond individuals, it cuts across networks. It involves the communities, local government, national government, and the international treaties that direct national policies to be aligned with international efforts on coastal resource management.
- All these layers have people who need to be convinced and adopt some form of behavior to support the project.

Beyond IEC or even social marketing: the role of behavior adoption strategies

- Behavior is influenced by behavior levers, such as rules and regulations, economic incentives, information, choice architecture, social incentives and emotional appeals.
- Rules and regulations influence behavior through laws that offer options or create punishment.
- Information promotes awareness and understanding of what's allowed and not allowed.
- Emotional appeals is used in decision making process, such as pride. It's a very powerful incentive.
- Social incentives help build equity all around. People will cooperate if there is a consensus to follow the rules.
- Provide space to build trust, to ensure the buy-in of the community and across different layers of stakeholders.

Governance for EAFM

Presenter: James Kho, Governance Specialist

- Inter LGU alliances are more common now.
    - Lanuza Bay Development Alliance – from 7 LGUs to 10 in 2018 (from LGSP, then supported by FISH; now by FishCoral) – almost 2 decades from 1999 initial stages to formal recognition in 2009 and to present
    - Negros Occidental coastal LGU alliances (NNARMAC since 2000; SNCDC since 1996). Still going strong after more than 20 years
    - Emerging: ABB-BP Alyansa ng Baybaying Bayan ng Bulacan at Pampanga (flood control issues)
- Issues bring them together, which usually starts with enforcement. Local governments share experiences and revenues. Example: In Bantangas, they share the fees for tourism. Incentives are common and shared in some LGUs
- Champions are material to the success of these alliances. They do not need to be politicians. Sometimes they are the technical people that support local officials.
- What may be an ideal ecological scale, but it becomes impractical in terms of governance. Example: Lingayen Gulf governance body is inactive.
- Negros Oriental – modeled after Bohol after exposure trip; worked for a number of years, but burden too heavy on Bayawan (as lead LGU); decided to disband. The LGUs are currently working on a broader cooperation on CRM, but not finalized; no support from province. When expectations among the LGUs is not working anymore, they may disband and rethink their strategy.
- While political boundaries should not be the determining factor for defining the management area, it is a significant limiting factor. How to think of a governance that would work in a bigger area with many regions.
- In the Visayan Sea, provinces, on their own initiative, decided to jointly manage Visayan Sea. There is an opportunity for Fish Right to provide the strong scientific basis for decision making and to set the context for conservation enterprises. Conservation enterprises would be strongly connected to the biodiversity goals.

Public Private Partnership

Presenter: Lawrence Ang, Director for Asia, Resonance

Key Learnings from other PPP all over the world

- The private sector is almost always underestimated as a partner for development projects. They are always perceived as corporate sponsors for events. They can do so much more than that. Over the last decade the private sector has taken a more proactive approach to sustainability, creating a clear business case for partnerships.
- The private sector is governed by their own set of rules; the law of supply and demand; profit, and pushing the agenda or their business. It does not mean that the agenda of their business does not overlap with our development challenges.
- They are very important in the quest for sustainability as they are a major driving force of it. Private sectors are participating in round table discussions about putting out a sustainable supply chain plans, from work force development, fair trade, and traceability.

- They are market makers. The terms they set influence their suppliers.
- Catch documentation has taken hold in the private sector. Hotel chains are now rethinking how to manage their supply chains. They have to keep up with sustainability requirements of their clients.
- BFAR has implemented Catch Documentation and Traceability through its program *From Bait To Plate*, a first in Asia.
- The challenge for FISH RIGHT is mobilizing the private sector in a way where they can access meaningful partners, where they can demonstrate leadership in terms of a business where they are able to push the agenda on sustainable fisheries, but also demonstrate the business viability for them.

~ * * * ~

Q&A – Panel 1

How does the gains in constituency building translated into strengthening institutions?

- Inter LGU alliances. By building up local officials to be champions, so they can see the point of working together. The more we formalize those networks, we put governance into place. The role of fishers in management boards and committees, where they can take on committee roles so they can take charge of managing their resources.
- There is a disconnect between the government side, in terms of inter LGU alliances and from the community side, in terms of participation in the decision making. Most fisher communities cannot participate without the mayors pushing for participation. At the national level, it is good, but those are not replicated at the local level.

Does Policy Reform lead to Public Private Partnerships, and vice versa?

- Yes it does. We need the public private partnership to drive policy reform. It cannot be just the government and the fisher communities working on this. It is important for the business sector to be involved as they have better enterprise management capability compared to the fisher folks who may never gain that kind of capability.
- At the national level, there are policies are translated to partnerships or some kind of private sector response, like setting up traceability. We've just shipped our first container of 100% traceable fish on its way to the EU now.
- Translating policy reforms to the private sector at the local level is still very challenging. There's a question of scale since they are mostly small scale players. But there are now partners on the ground where they facilitate sustainable sourcing for hotels.

Has EAFM been fully applied as the management approach in MKBA sites? If not, what policy or institutional changes need to be made if you want to adopt EAFM?

- In region 6, the implementation of EAFM in a scale of 1 to 10, we are still at level 3. However, the new program (MKK) simplified the approach, which makes it simpler to follow that would hopefully lead to EAFM. We have started it in the Visayan sea the concept of EAFM. What we need is capacity building on the ground. We need dedicated and capacitated personnel from the LGUs, because they are the ones really managing the resources.
- We need to work on downscaling the EAFM plans. Oftentimes they are often broad in itself, that it doesn't clearly spell out the contribution of each LGU and what they get out of the participation. Plans at every level of governance should really be aligned for it to work.
- BFAR to rethink its approach on FMA by letting the locals decide what the structure and scope is, rather than predetermine it at the national level, where BFAR provides the vision and guidance for the entire area, but it is the local governments that will implement this on their own.

What policy reforms or public private partnership or other interventions can address overfishing?

- The effective implementation of the IPOA and the NPOA against IUUF under the new law. That law should also address the problem of overfishing.
- Right sizing is the more nuanced approach to reducing fishing effort. If you just cut the IUUF, what remains can easily be reconfigured and reallocated so legal fishing effort can be maintained. These should address equity and sustainability issues. And these decisions should be left for the locals to make.

Panel 2: Lessons from the past 20 years

Habitat Protection

Presenter: Rene Abesamis, Fisheries Ecologist, Silliman University

MPA Networks as Tools for EAFM

- The report is more applicable to demersal fisheries than pelagic.

Theory behind MPA network

- MPA Networks must protect a sufficient proportion (20-30%) of population of target species during critical life stages (adult and juvenile stage). Note: Ideally at least 20% to be protected.
- After critical life stages, both larval connectivity and habitat connectivity should be considered. And it should result to a synergistic and faster recovery protected populations because networks are interactive through exchange of individuals between MPAs and 2.) fisheries enhancement because those MPAs are supplying larvae to fish stocks.
- This is really important especially in addressing overfishing as where else will the babies come from but from those protected populations.

Evidence for MPA Network effects

- There is overwhelming evidence of biomass accumulation inside well protected MPAs (best examples are Apo Island and Tubataha); but full recovery may take decades due to overfishing.
- There is almost no empirical evidence for synergistic recovery and fisheries enhancement via larval connectivity (see Grorud-Colvert et al. 2014); but there is a growing number of studies showing larval dispersal amongst MPAs. Knowing that extent can define the scale of management needed.
- There is not much evidence (or it's growing) for habitat connectivity enhancing MPA performance. ***Note***: In the Solomon Islands, there is evidence that MPAs close to mangroves are better or recovering faster. This might be worth considering in the plans for Fish Right.

How are we doing with MPA Networks?

- ***Good***: We have over 1,800 MPAs nationwide; Success stories which became models (Apo Island and Tubbataha); MPAs often the cornerstone for CRM;
- There's a push to scale-up to networks of MPAs through LGU alliances (LGU alliances; Lowry et al. 2009; Horigue et al. 2015)
- ***Not so good***: MPAs are supposed to cover large areas, but most MPAs that we have are small (10-50 ha); <0.5% of municipal waters; <3.5% of coral reefs
- Very few MPAs explicitly include adjacent mangroves, seagrass, algal beds and in reality
- 7/10 MPAs are just "paper MPAs". In reality only 3 out of every 10 MPAs are existing or are doing well.
- There are reports that there's less interest in implementing these on the part of LGUs. Are we losing interest?

Challenges for MPAs

- Create more MPAs that encompass home ranges of more fish species
- Design MPA networks that include mangroves, seagrass, algal beds aside from coral reefs to protect habitat connectivity

- Aim for dense systems of closely-spaced MPAs (<<15 km apart), protecting at least 20% of all critical habitats – implications for local, provincial, regional governance levels.
- Strengthen fisheries management outside of MPAs if there are still huge shortcomings in 1 – 3. (e.g., if MPAs protect less than 20% of critical habitats, need to limit fishing effort, gear types, fish catch). There are studies warning that if this is not done, even if 20% is protected, these are still at risk of collapse.

- Empirically evaluate MPA network effects (synergistic recovery and fisheries enhancement) across various social and ecological settings in order to learn and adapt. Learn from the evaluations because not all social and ecological settings are the same, but this takes time.

Livelihoods

Presenter: Dr. Joan Castro, Executive Vice-President, Path Foundation

- The Philippines has over 30 years of experience implementing livelihoods projects in coastal fishing communities. Many of these were implemented in past fisheries management projects. Research shows that only 15-20% of efforts were successful.
- There wasn't a lot of transfer of information from existing livelihood projects to the other. Most of these were source-based.

What have we learned from past projects?

- Provision of support services (take from the ECOFISH experience).
    - Grants, such as cash for work
    - Provision of savings and credit
    - Provision of business and micro-enterprise training
    - Insurance and safety at sea initiatives
- Creation of new employment opportunities, that's either marine-based or land-based.
    - Seaweed farming
    - Backyard gardens
    - Animal husbandry
    - Vocational training – very important, especially to the youth who are not interested in fishing.
- Add value to existing livelihoods
    - Fish processing (salting, drying, value added products)
    - New technologies (e.g. for oyster cultivation – done in Capiz area)
    - Strengthening of market chains

Why add value to existing livelihoods in fisheries?

- To reduce spoilage and improve product quality. When processing is improved, the value also goes higher. ***Note:*** To reduce fishing pressure, initiatives to add value to existing fisheries livelihoods must be implemented in combination with effort control.
    - Ice/cooling facilities on boats
    - Reduce time from catch to market
    - Improve hygiene and sanitation on boats and at markets
- Improved processing
    - Improved smoking and drying techniques
    - Refined products (fish sausage, canning, etc.)
- Support required to continue livelihood initiatives:
    - Tools and structures: ice, freezers, water, structures to handle fish, smokers, solar dryers, etc.
    - Training: technical trainings, financial literacy, business management
    - Social organization: producer and marketing organizations and cooperatives (those involved in marketing fisheries products)

    - Access to capital: grants, loans, conditional cash transfers (not sustained when there's no more financing).

Options for livelihood initiatives

- ***Low skill livelihoods*** that provide a small but steady income for many entrepreneurs (e.g. backyard gardens, oyster cultivation, seaweed farming, and beekeeping). These are relevant to building resiliency in communities. Households continue to have money when harvest is low.
- ***Relatively low skill livelihoods*** that can provide a good and steady income, but where the market can only support a small number of entrepreneurs (e.g. bread baking and solar multi-chargers in Tanzania).
- ***Livelihoods where the revenue varies*** depending on individual skills and entrepreneurial spirit (e.g. jewelry making, basket weaving, etc.)
- ***High skill jobs requiring vocational training*** (seamstress, mechanic, etc.).
- ***Note***: Alternative livelihoods will not reduce fishing pressure unless there's controlled entry into fishery.

Lessons Learned in Alternative Livelihoods

- Connect entrepreneurs with sustainable financing systems
- Consider enterprises that require low levels of capital investment
- Develop systems for financial transparency
- Heavily subsidized livelihoods risk failing once the subsidy is removed. This where most enterprises fail.

Lessons Learned in Diversified Livelihoods

- Marketing and commodities – look at the whole picture.
    - Focus on non-perishable commodities unless there are markets nearby
    - Ground the enterprise in a feasibility study and a sound business plan that includes product development, finances and marketing.
    - Develop an exit strategy for ending project support
    - Ensure that products are culturally appropriate
    - Ensure that products are resilient to climate change
- Leadership and access
    - Ensure that LGUs have the capacity and priority to support the livelihood initiative
    - Provide sufficient extension support, while being clear about roles and responsibilities of the entrepreneurs.
    - Livelihoods that derive their value from ecosystem goods and services that the entrepreneurs control do better than those that do not.
- Stakeholders
    - Build on people's strengths and capacity. It is easier to achieve results with simple enterprises that use local skills rather than complex ones that require new skills.
    - Listen to local stakeholders –Ensure that the participants are interested in the proposed livelihood.
    - Keep expectations realistic for time and effort needed to succeed
    - Build partnerships. Negotiate and maintain core relationships, including with the private sector
- Design the program carefully, conceptually and operationally. Listen to stakeholders, be realistic with expectations, and engage the LGUs to support or prioritize it - are some factors that continue to the success of these efforts.
- In some past projects, there was no proper monitoring and evaluation. This is critical as this is where corrections, refinement or enhancement of programs stem from.

Key points for future livelihood investments

- Look at households and their portfolio of livelihoods and assets.
    - In some places it may make sense to support fisheries related livelihoods, but in others it may be better to diversify livelihoods

    - People from the household should be included in the consultation processes.
- Vocational training for youth might reduce entry into fisheries
- Be cognizant that livelihoods on their own will likely not reduce pressure on biodiversity
- Focusing on women strengthens the household resilience. If the woman is healthy, it's usually an indication that the environment, family are healthy. Place women at the center of it because they exert influence that indirectly reduce the threats.
    - Diversifying household income reduce the household's reliance on fisheries
- Environmental NGOs are not necessarily the best implementing partners for livelihoods
    - Look into private sector partnerships

Law Enforcement and Compliance

Presenter: Marlito Guidote, Fisheries Enforcement Advisor, CCEF

Compliance Promotion and Enforcement

Breakthroughs

- Many voluntary inter-LGU alliances, regional inter-agency alliances have been formed in the past 20 years.
- There are more regulatory officers per region. This came about after the crafting of the NPOA.
- BFAR has more vessels than the Philippine Navy, protecting MPAs.
- Reporting system that's national in application is in place (DALOY).
- Adopt-a-Marine Protected Area

Changes over time

- Sophistication of violations: soundless dynamites. Dynamites don't make that much sound now
- Fisheries violations and other crimes. Drug use among fishers is a problem
- Other enforcement and security agencies doing/assisting fishery enforcement
- Volunteer Bantay Dagat to remunerated municipal enforcers
- Women and PWD in field enforcement
- Paralegal modules to more encompassing modules. Tactical training is done by BFAR for law enforcement units
- LGU-level administrative adjudication
- Fishery administrative adjudication
- Electronic surveillance systems (VIIRS)
- Rules of procedure in environment cases

Gaps

- Standard modules incorporated in police, coast guard (other agencies) training
- Fisheries forensics: standard module for fish examination.
- Regulation of nitrates to control IED. If we want to control dynamite fishing, then it should start with strict regulation of nitrates.
- Centralized data-banking (e-blotter, CIRAS, VIIRS, FLEMIS)
- Science and technology: VMS, VIIRS, intelligence analytics. Still lacking for it to be truly effective as more eyes are needed to monitor activities.
- Outcomes and impacts of enforcement: attributions
- Shift in the way enforcement is understood. Most people look at it as field operations and don't look at the preventive aspect of it.

Fisheries Markets

Presenter: Emilia Santos-Yap, Dean, College of Fisheries, UP Visayas

Trade and Marketing

- Trade and marketing plays a major role in the fisheries and aquaculture sector, serving as an employment creator, food supplier, income generator, and contributor to economic growth and development and to food security.
- Plays a critical role in the different nodes of the supply chains of different commodities
- Philippines National Standards (PNS): 24 out of 192 PNS on fish / seafood are fisheries projects. 13 of the 24 are from captured or wild fishing. This affects sustainability. Standards to be set should be sustainable (example: if size of danggit is to be standardized, the question is, is this sustainable). There's not enough information available to establish PNS that would, at the same time, be sustainable.

Programs

- Fish R is basically about registering the small traders. Registering is different from regulation.
- Big traders are required to have export permits, import permits, licenses and other permits. The concentration is on big traders compared to the small players, like the middle men. There is no control over middle men, which affects equity significantly in the chain.
- Construction of community fish landing sites. As of last year, only 32% have been completed. This is a big help to the small players. After construction, these will be turned over to the LGUs. The problem is whether the LGUs have the capability to sustain and maintain these, some of them may not have the capability needed to keep it running.

Changes over time

- Consumption patterns have changed over the years and are largely affected by consumer acceptability of the products, the availability of fish in the market, how these are processed etc.
- Currently, the market is flooded with a lot of products, but not all of them are value added products, which are not controlled in terms of quality and safety.
- Niche market interests – some companies focus attention on the production of products that are geared towards a particular market.
- We are importing from fish, mostly from Vietnam, because their fish is cheaper.
- There are a lot of significant changes in the food service market in terms of preference for specific qualities of fishes.
- There are new ways of marketing. The use of social media is a significant change. It has become accessible and easier for some.

Gaps that need to be addressed

- Improve post-harvest practices and facilities in order to reduce post-harvest losses (decrease fishing pressure); but careful planning is needed to ensure sustainability. Losses include nutritional losses through processing.
- Incorporate the principle of value chain approach that can result in synergistic development of the key players in the chain. Look at the different players in the chain to determine a more equitable distribution of benefits along the chain.
- Strengthen marketing strategies that will increase access in areas with limited supply. There are areas that do not have enough supply of fish. A strategy is needed that would help them have more.
- Come up with strategies that will promote sustainable resource management while rewarding responsibly sourced fish / fishery products with preferred market access and other incentives. Reward those who have been doing responsible fishing, such as better access to markets.

Q&A – Panel 2

What are the relationships and tipping points between livelihood and habitat protection

- Conceptually, livelihood and habitat protection are directly linked, but it's more complex operationally on the field. If livelihoods are designed in a way that they address the threats to biodiversity conservation, then the people are able to appreciate and understand the value and benefits from habitat protection.
- Livelihoods increase constituency because non-fishers and fishers are encouraged to be more engaged in the livelihood initiative in such a way that there is habitat protection as a result of it. Incorporation of habitat protection should be introduced at the start of the livelihood project and not as an afterthought. ***Note***: Successful projects comprise only of about 15% to 20%.
- Fishery squeeze – if you don't address fishing effort and increase protection using MPAs, fishing intensity will actually increase outside your MPAs. Think about whether MPAs will actually help in the long term or short term.
- The important question is about effort reduction - What percent of equitable effort reduction to determine the actual benefits from habitat protection. Once that tipping point is determined, address it with alternative livelihood that would be equitable to players.

How do we engage the markets to ensure better compliance and enforcement with fisheries?

- At the start, it was hard to engage the market to do so. But there has to be continuous effort, for the program to make them realize that using sustainable technologies in fishing would actually result to premium market prices.
- It will take a lot of effort to do that. Market denial complicates whatever benefit they get from illegal fishing.
- We can focus on commercial fishing, which is a major issue. How do we make commercial fishing boats comply with 1.) that they do not encroach into municipal waters, 2.) that they do not use gears that they're not supposed to use. Only fishing incentives available are not directed to commercial fishing.

If we review the fisheries, what's the target? Is there a scoring system that works? How many fishers should be allowed to go on fishing, and how many are to divert to another livelihood? The numbers are important. Can we do something that's more specific that can be measured?

- Our targets should be thought out thoroughly. If we are to rebuild fisheries, what would be the baseline? These need to be determined if we are to measure recovery. It is important that these baseline figures are set up, so progress and success can be measured.

~ * * * ~

Breakout Discussions for the Drivers of Change (Post-Panel Discussion)

Policy

Key Discussion Points
Biodiversity Focal Area

- It was suggested that mudflats be added and recognized as an important ecosystem
- It was suggested that by-catch be specified apart from target fish species
- The group wanted to emphasize the interconnectivity of the different biodiversity focal areas
- It was suggested that estuaries also be added and recognized as an important ecosystem

Improved Human Well-being

- Economic and social justice must be recognized as part of the human well-being component of EAFM; this includes gender equality, equitable distribution of incomes, equitable access to fisheries resources, opportunities to participate in co-management, etc.

Ecosystem Services

- The initial list largely refers to the Provisioning service of the ecosystem; Ecosystem services can be further grouped into several sub-categories; the items that were added were: REGULATION & MAINTENANCE (e.g. the maintenance of biodiversity), CULTURAL values/services (provides for eco-tourism), and ENVIRONMENTAL SECURITY (e.g. coastal protection, protection against the impacts of severe weather/storms

The group proceeded to review the direct threats to the different biodiversity focal areas. The following were added to the original list:

- **Improper land development and land use** that result in increased sedimentation in coastal waters
- **Land-based pollution** (solid and liquid wastes)
- **Genetic pollution and contamination of aquatic ecosystems** with the introduction (intentional or unintentional) of biological organisms
- **Destructive fishing**, Illegal-Unreported-Unregulated-Fishing (IUUF)

Constituency Building

Key Discussion Points

- Incentives are usually perceived as opportunities, but the misalignment of incentives or giving the wrong incentives is a constraint that leads to low compliance. Example: The giving of fishing gears contributes to overfishing or a local government encouraging mining over sustainable industries.
- Incentives can come in the form of information or added knowledge about the program might influence meaningful participation on their part.
- There is an unequitable distribution of benefits along the supply chain which goes back to the equity issue. Cooperation and collective efforts hinges on the perception of equality among fisher folks.
- There are model communities (MMK) that are considered opportunities for learning for communities that are still in the process of implementing EAFM in their areas.
- Political dynamics in the locality is a significant factor in building constituency. Affiliation with different parties affect decision making and support. Mayors may not have the same level of understanding or appreciation of how EAFM redounds to their long term benefit.
- USAID has just completed a 2-year project called 100 savings club set up in coastal communities. There is a way to do it based on the existing models on this. This kind of program helps families with funds to tide them over when there's not enough harvest.
- Controls in terms of rules should be balanced with incentives. If fisher folks are asked to follow the rules in the regulation of fishing, there should be an incentive that would provide security while there is no or not enough income from fishing. Alternative livelihood programs can address this.
- The lack of income does not necessarily mean there's a lack of programs. There are a lot of programs that are opportunities, but access to it may be an issue. This can be addressed with having the right communication channel.
- Having champions are opportunities to influence change. If there is no political support at the local level, champions can compensate with their support. Highlight champions at all levels, from national, regional to local level if available at the local level.

Public Private Partnership

Key Discussion Points

- There are MPAs used exclusively for tourism. It can be income for the village and the province, but not to fishers (co-management of MPAs).
- Tourism provide alternative livelihoods, but on the downside, they're also considered as threats because they're competing with fishermen because of their high demand.
- Traders are paying lower than market rates, which drives fishers to overfish since they need to earn more by increasing their catch volume.

- Tourism is a contributor to the exploitation of marine resources, but there's also an opportunity for them to be a valuable partner in fisheries management. They need to understand the impact of their demands to the conservation effort.
- There is too much demand from hotels and restaurants on particular species, which affects fish stock for that specie. It also encourages overfishing. There's also the issue of food waste.
- Landing sites offer opportunities for monitoring the catch, but it doesn't really also show where the fish is coming from.
- Public Private partnership to work towards a more harmonized water use. This is projected to eliminate or control conflict – which can also be an indicator if it's working or not. As a market, the private sector has influence over policy reforms if they have a better understanding of their role in conservation.
- They can influence enforcement to compliance if they source responsibly. In essence they can choose to buy only from compliant sources down the supply chain. Example: Source from vendors who can provide traceability (Catch Documentation?)
- On the issue of lack of understanding. The sector/s that lack understanding should first be identified, and to what degree. Different sectors may require different approaches in intervention.

Institutions and Governance towards EAFM

Key Discussion Points

- There is a need to focus on audit tools to improve governance, all environmental-related laws and full compliance with fisheries laws (LGU). **Case in point:** *DILG has recently passed a memo that they will monitor compliance of all LGUs in terms of fisheries laws. They have done this in Manila Bay and will be rolled out nationwide.*
- Governance involves three (3) major players – ***the state, private sector, and stakeholders/civil society (including fisherfolk and communities)***. *The state provides policy direction, civil society gives feedback, and the private sector invests.* Although some collaboration is being done through alliance or network formation, there is still an imbalance and a need to increase the participation of each player. This "balance" refers many elements such as power, decision-making ability, available scientific support or data to provide information, capacity-building, responsibility, and resource availability.
- Power refers to the ability in decision making, taking responsibility, exercising authority, and calls for accountability. It is important to think about ***what authority is given to what or who, who is exercising governance, and who has the capacity to influence behavior change***.
- Additional suggestions from the group on key results under *Improved Human Well-being*:
    - Food – "improved health and nutrition, supply quality"
    - Biodiversity - "pelagic systems/open seas, estuaries, sift bottoms"

Other Notes

- One facilitator encouraged the group to think about how to "weave a story," use the "If / Then" relationship, and see how a stream of drivers has influence to biodiversity interests.
- Governance is the sound exercise of economic, social, and administrative authority of those in position. From this, the group can cull out opportunities and constraints that relate to it.
- Overall guidance during session: *Focus on **opportunities and constraints** to **reduce direct threats** to our **biodiversity focal interests** that provide **ecosystem services** for **improving human well-being**.*
- The group ended the session by formulating a summative statement that encompasses the opportunities and threats.

Habitat Protection and Management

Key Discussion Points

- Most projects in the past focused on MPAs. The impact of these were measured within the MPAs, but the impact of it outside was not considered. Research on fished areas outside of MPAs should be done. The information or results can be used in our management plans.

- The study should help identify gaps and the needed interventions. Priorities can be set based on these figures. These should be science-based evidence.
- There is an opportunity to synthesize scientific evidence and knowledge on Philippine habitat and diversity for recovery strategy.
- There is an opportunity to formulate EAFM for the management of the whole ecosystem. There is an opportunity use other zones (De Facto MPAs?), not just MPAs in rebuilding fisheries, tourism zones etc.
- Maximize the E-NIPAS. Expand it by using MKBA evidence of effectiveness at that scale.
- Tourism zones may not be identified as protected areas, but it still has value. There are lessons from tourism zones, such as large scale degradation, like in Boracay and how it impacts habitats.
- Land use around MPAs have an impact to it. These should be factored in integrated coastal management plans. Use habitat connectivity principle; inclusion of mangroves, seagrass.
- Set up a biodiversity conservation scheme ('pay for nature scheme'), co-management opportunity.

Livelihoods

Key Discussion Points

- There is a link between ***effort control*** (managed access) with ***alternative livelihood opportunities***. If there is no effort control, it still becomes open access. This might be good for economic development for households but it does not address overfishing. On the flipside, if there is effort control, alternative livelihoods are still needed to cushion the economic impact.
- Alternative livelihoods can serve the broader objectives of EAFM. It should be contextualized and developed within the theme of ***conservation-based enterprises, eco-managed access and right sizing of fishing effort***. Not taking this into account might not necessarily *reduce threats such as overfishing, illegal fishing, and lack of managed access*. The project should also involve and educate local officials in this development process.
- In USAID, there was a retrospective on conservation enterprises. For them to have impact on resources such fisheries or forests, there had to be conditions in place. There needed to be a contract with the community: *If we helped you do this; you will do this*. There has to be an enabling environment and a balance between human and nature. If they want benefits, they have to be stewards.
- There are different effects of alternative livelihood enterprises. Some would temporarily explore other enterprises, but would use their income to return to fisheries. In other cases, there is a permanent shift to other industries such as eco-tourism, which reduces the number of fishing households.
- In ECOFISH, the project used the term, "conservation enterprise" instead of "livelihood." *Enterprise development should always support conservation and EAFM.*
- Investment costs need to be factored when looking at scale, scope and impact of program interventions. For example, activities such as generic business trainings are low in cost, but can impact many households.
- Building ***social capital*** can be the bigger gain or goal in establishing these enterprises, and not just economic gains. The emergence of local champions and contextualized development of enterprises builds and strengthens constituency.
- There are gaps or inadequate implementation in enterprise development. Some implementers are not familiar how to create or set-up design successful enterprises. This includes social preparation, impact evaluation, monitoring, planning, and design.

Law Enforcement and Compliance

Key Discussion Points

- Participatory Rule Making. Determine who is doing compliance and how it is being done. The role of each stakeholder is important in coming up with interventions to promote compliance. Participation and ownership are key factors in achieving compliance.
- There are a lot that contributes to non-compliance; lack of political will, lack of enforcement, lack of budget, materials.

- What contributes to compliance: sanctioning system, training of law enforcers, facilities, capacity building programs. If the enabling conditions are present, compliance can increase. Smaller LGUs do not have enough budget, most of them don't even have a fishery officer.
- Most of the efforts are on law enforcement. There was a suggestion to focus on compliance instead, as this increases, there would be less need for law enforcement.
- Regulations should be formulated in a way that would encourage voluntary compliance. Get the fisher folks involved in the process of crafting these resolutions to promote ownership over it. Incentives can then be placed to encourage compliance.
- Involve the spouses; they have influence in terms of reducing the pressure to fish more, which is why fishers resort to illegal fishing.
- Inter-agency and inter-LGU alliances are affected by change in leadership. The continuity of programs are affected when the leadership changes; transfer for agency leadership, and election of new officials for LGUs.
- Support from local government is dependent on the priorities of the local chief executive.
- Formula on computation of penalties for violations should be established.

Fisheries Markets

Key Discussion Points

- For mangroves, "thinning" is allowed but not complete cutting of trees.
- 'Sedimentation' as a direct threat relevant to Fisheries Market
- 'Macroinvertebrates' (like sea cucumbers) to be added to biodiversity
- Urban vs Rural markets: Urban markets have more variety while Rural markets are more subsistence
- 'Identify where post-harvest losses take place' - sounds more like a solution than a constraint or opportunity
- Sardines - seasonality also needs to include seasonality of employment and even storage capacity. In terms of surplus, there is already loss.
- Opportunity - distribution and transport channels. These can be tapped in cases of such losses (as mentioned in preceding item).
- Harvesting gravid crabs has led to a situation of no more crabs and no more employment

Take Away Points

- Lack of information on intervention impacts efforts.

Outputs

Policy

Summary

CONSTRAINTS	OPPORTUNITIES
1. National policy not addressed at the local level 2. Lack of compliance by local stakeholders 3. Weak implementation 4. Communities not adequately involved	Provide enabling environment to address these : 1. Harmonize national and local policies 2. Sense of ownership - Use rights - Marine tenure

Raw Inputs

- Translation of statutory policies to customary policies
- National policy is not adequately addressed at the local level
- Conflict of interests (power holders are violators), (rent-seeking)
- BMB-BFAR MDA on conservation

Visayan Sea EAFM Plan

- Lack of cultural valuation of ecosystems in policies
- NLVA bill certified as urgent by the President

Lack of compliance with BFAR regulations
- Lack of adoption of BFAR regulations at the local level
- Communities are not adequately involved in policy reforms
- Lack of technical manpower in government (RA 10654)
- Lack of IEC and effective statutory and customary governance
- Slow implementation of conversion of AVV ponds into mangroves

Direct threats > Destructive Fishing
- Adverse impacts of land use
- Habitat conversion

Direct threats > Climate Stressors
- Sedimentation
- Pollution (liquid, biological, solids)
- Ecosystem interconnectivity

Biodiversity > Targeted Fish Species
- By catch

Biodiversity > Seagrass Meadows
- Estuaries (Southern Negros)

Biodiversity > Mangroves
- Mud flats

Ecosystem services
- Biodiversity & ecosystem maintenance and regulation

Ecosystem services > Provisioning for ecotourism
- Provision and cultural value
- Environmental Security

Ecosystem services > Storm
- Mitigating the impacts of severe weather events (coastal protection)

Improved Human Well-being > Coastal Protection
- Economic and social justice

Constituency Building

Summary

CONSTRAINTS	OPPORTUNITIES
1. Lack of managed access to fisheries 2. Local political dynamics (i.e. low participation, lack of political support)	1. Incentives for managed access 2. Presence of champions (government, communities); best practices (MPAs, Awards)

3. Lack of understanding, appreciation of value of natural resources / management approaches	3. Available tools to communicate value of natural resources / management resources

Raw Inputs

CONSTRAINTS	OPPORTUNITIES
• Low level of meaningful participation of fisher folks / organizations • Lack of information/ knowledge • Need for harmonization of costal management programs • Unequal distribution of benefits along the supply chain • Lack of political support (dynamics) • Wrong (lacking) incentives • Lack of alternative income sources • Low compliance • Weak implementation of government programs delays delivery of promises	• Positive incentive schemes / awards (Para El Mar, MMK, local MKBA Awards • Increased channels of communications • Model MPAs • Women and youth clarify ways to participate • Savings and loans clubs (available models) • Managed access as incentive for equity • Private sector as a major actor • Available alternative livelihood programs • Emerging social enterprise models • Champions in government (role models) • Low compliance

***Uncategorized Input*:** Violators are displaced from LGUs with enforcement

Institutions and Governance towards EAFM

Summary

There is an imbalance between government, private sector, civil society, and communities concerning:

- Participation
- Science-based decision-making
- Authority/ responsibility
- Accountability
- Capacity
- Resources

Raw Inputs

THEME	OPPORTUNITIES	THREATS
Information	• Social and scientific research by academic institutions	• Lack of capability for share management planning • Lack of resource/ecosystem assessment • Poor understanding and use of climate data • Planning not data-based / science-based
Financial and Human Resources		• Weak community engagement / participation integrating climate risk • Weak coordination of law enforcement agencies (DILG, PCG, BFAR, PLGU, LGU, NGOs) on Fishery law enforcement • Lack of resources for implementation / enforcement • Unwillingness of LGUs to appropriate funds for inter-LGU alliance creation • Absence of legal team
	• Availability of funds for climate actions (People Survival Fund)	
Participation and Stakeholder Engagement	• Participation of stakeholders in the formulation of EAFM plan • Strong fisher community organizing / IEC by NGOs • FARMC organizational strengthening • EAFM Plan adopted by LGUs (Southern Negros) • Fisheries / environmental laws complementing with DRRM/CC laws	• Top-down decision making • Non participatory planning • Insufficient involvement of state colleges and universities on fisheries governance • Lack of meaningful participation of communities • Weak representation of FARMC / fisher folk leader in the alliance/TWG
Scale	• Governance greater than province	
Lack of Compliance	• Negros Occidental and Iloilo with province-led engagement team	• Conflict of interest of enforcers / implementers • Lack of political will to enforce fishery laws and ordinance
Political Will / Power Relations	• Drafting of the MOA with the partners re: adoption of EAFM	• Lack of recognition on role of women in fishery; in planning (equity issue) • Poor governance

THEME	OPPORTUNITIES	THREATS
Information	• Social and scientific research by academic institutions	• Lack of capability for share management planning • Lack of resource/ecosystem assessment • Poor understanding and use of climate data • Planning not data-based / science-based
	• Formation of TWG at the PLGU & Alliance level • Increasing support for MPA Networks • Fisheries compliance by DILG • SN MKBA with alliances formed SNCDMC & SN MPA network	• Maintenance / sustaining inter-LGU alliances • Open access; lack of use rights (group or individual) • Political divisions among LGUs • Lack of private sector participation
Knowledge / Understanding		• Fish catch monitoring not feedbacked to users and decision makers • Lack of understanding of ecosystems and their connectivity • Absence of communication and business plan formulation • Lack of awareness of need to "right size" or reduce efforts / capacitate

Public-Private Partnership

Summary

1. Improving impact understanding and transparency on supply / value chain, and value addition options (ex. Post-harvest)
2. Private sector to influence policy implementation and functionality of policy environment (e.g. FIPs, conflict resolution, close seasons – basic compliance
3. Private sector can demonstrate best practices beyond compliance (e.g. CDT MPAs first movers)

Raw Inputs

<u>Opportunities</u>

- FIPs on BSC, led by PACPI
- Matching ORR, alignment of public-private partnership (operationalize)
- Private Sector's capacity to provide livelihood to vulnerable fishers
- FLDT/Cs
- e-CDTs

- Agreements on limits and standards
- Unrealized full potential of mariculture
- Need for post-harvest facility
- Respond quickly to market signals
- MPAs > Tourism
- Ageing Art. Youth not interested in Fishing
- Water-use zones identification
- Delineation of coastal Environmentally Critical Areas Network (ECAN) zones (special and investment plan in C16

Constraints

- Government demand for increased production via commercial fishing
- Resource-use conflict
- MPAs > Displacement
- Coastal development
- Intrusion of commercial fishing vessel

Constraint / Opportunity

- Changing / shifting fish stocks (how the fishery will adjust?)
- Artisanal fishers as highly vulnerable economically, and socio-economically whose interests can be a barrier
- Live fish trade
- Increased demand in tourism
- Post-harvest loss

Opportunity?

- P-P-P for Tuna / Billfish, small pelagic fisheries in SN
- P-P-P in communicating science and policy
- Traceability could lead to closed fisheries
- Private sector's support to MPAs
- Growing demand for food and raw materials (market pressure)

Not categorized

- Private sector as "agents" + "victims" of unsustainable

Habitat Protection and Management

Summary

OPPORTUNITIES	CONSTRAINTS
1. Holistic management of ecosystem (EAFM) 2. Setting targets at the national level or site-specific 3. Integrated Coastal Management (we can't isolate land-based issues from aquatic regimes)	1. Lack of evidence that coastal zoning has been effective as a model (other zones besides MPA - tourism zones, rebuilding fisheries, use of gear/methods) 2. Difficult to implement holistic management (costly, human capacities)

Raw Inputs

OPPORTUNITIES	CONSTRAINTS
• Use data results for setting national targets, NIDAS, and non-NIDAS • Research on fished areas outside of MPAs • Opportunities to synthesize current science / knowledge on Philippine habitat and diversity for-recovery strategy • Opportunities via MKBA protection SPPLIST • Biodiversity conservation (e.g. through 'pay for nature scheme') • EAFM whole management of ecosystem • Opportunities to use other zones (not just MPAs), i.e. rebuilding fisheries, tourism zones • Opportunities of habitat connectivity principle (coral reef, mangrove, seagrass) • De facto MPAs	• MPAs cannot solve all habitat / fishing issues • Need evidence that this has been effective • Hard to do • Cost • Use other methods/management – gear restriction • Not solved by MPAs • Resource use conflicts
• E-NIDAS • Land use planning, Integrated Coastal Management (ICM) – some practicing, some not practicing	

Livelihoods

Summary

OPPORTUNITIES	CONSTRAINTS
1. Available local and international markets 2. There are available models and resources 3. Livelihoods can serve broader objectives of EAFM	1. Livelihood program design doesn't support biodiversity conservation 2. Inadequate implementation (social preparation, monitoring) 3. Implementation at scale impact

Raw Inputs

OPPORTUNITIES	CONSTRAINTS
• Conservation enterprises contribute to EAFM • Successful enterprises show promise in social capital build-up	• Lack of social preparation • Underestimating the importance of social preparation and the lengthy process needed • Gaps in identifying livelihoods • Lack of engagement from beneficiaries

• Diversification of household income sources (not just the fishers) • Emergence of local champions in successful enterprise • Successful livelihood showcased • Various financing windows from government and private sector sources emerging • DENR push / support for biodiversity friendly enterprises • Human and fisheries resources • Presence of modern technologies that can be used in livelihood projects • E-commerce can reduce steps to end markets • Government fund availability for livelihood assistance • Certification of fair trade • International and local demand for legal and sustainable seafood • Responsibilities of markets: *taking up some responsibility (not just states/government) for livelihood protection, social sustainability*	• Market opportunity not always factored into choice of project / intervention • Lack of understanding climate change impacts that leads to non-priority of identifying alternative livelihoods • Lack of information sharing regarding lessons on livelihood • No common platform link to biodiversity ***DESIGN** • Link to conservation is not always established • Politically motivated livelihood activities • Effort control • Lack of managed access and secure use rights • Livelihood mismatch • Difficult to scale to have big impact • Promotion of a failed paradigm of "alternative" livelihoods • Lack of monitoring during implementation • Lack of impact evaluation • Family-based livelihood projects

Law Enforcement and Compliance

Summary

CONSTRAINTS	OPPORTUNITIES
1. Change in leadership (LGU, agencies) 2. Formula on the computation of penalties 3. Limited LGU Support	1. Interagency coastal law enforcement 2. Administrative adjudication system of BFAR 3. Participatory rule-making

Raw Inputs

Who is doing C&E*	How C&E is done	Availability of Resources
• Presence of Province-Led Enforcement Teams (Iloilo, Negros Occ., Cebu and Masbate) • Presence of alliances NIACDEV, NNARMAE, SNC	• Adjudication System • Presence of incentives for compliant fishers • Presence of Visayan Sea Enforcement Plan • Active participation of farm and coastal communities	• Presence of good practices in enforcement at various levels • Incentives for Bantay Dagat from user fees • Availability of new patrol boats from BFAR

DMC, Visayan Sea Princess • Presence of enforcement champions (catalysts) • Creation of BFAR Adjudication Board	• Participation of fisher folk in formulating policy • Compliance to international agreements	• Availability of enforcement facilities and floating assets • Available capacity building program • Planned procurement of patrol boats for LGUs from BFAR • Presence of BFAR FPLEG in areas; capiz, Negros Occ. and Iloilo

* C&E – *Compliance and Enforcement*

***Uncategorized Inputs*:**

- Limited influence/ participation of women in decision-making on the livelihood types
- Absence of paralegal and paralegal teams in LGUs
- Absence of a FARMC
- Some LGUs do not have operational BD (50% of Visayan Sea LGUs)
- Lack of coordination among law enforcement agencies
- Weak commitment of LGUs and NGAs
- Delay in prosecution
- Lack of appreciation of national government on illegal fishing (policy statement, DA)
- Low appreciation especially on the outcomes of enforcement
- Low compliance on rules and regulations
- Disappearing value of cooperation and voluntarism
- Lack of political will on mayors to enforce laws
- Rules of procedure on admin adjudication (problematic formula)
- Limited incentives on compliance
- Limited local support to law enforcement, logistics and maintenance
- Owners of commercial and illegal fishing vessels are people in power (politicians, judges, military, policy)
- Indigenous/ customary compliance measures
- Lack of IEC materials
- Lack of budget to support FLE operations (LGU)

Fisheries Markets

Summary

- Need management / enforcement if increase market
- Understand how market interventions change fishing effort

Raw Inputs

OPPORTUNITIES	CONSTRAINTS
• Issuance of local transport permit (LTP) and auxiliary invoice for product traceability	• Scope: mid-sized hotel vs. one small-scale site

• Government support and technical knowledge available, e.g. DOST, DTI, to improve market/value chain • Consumer and education of labels / sustainability • Provision of incentives for responsibly sourced fish/fishery products • Tourism markets link to fisheries • Food safety as opportunity for traceability (e.g. Tuna's eye)	• Lengthen storage capacity (technology, transport and distribution channels) • Seasonality of fish products affecting processing / markets → alternatives of employment • Low benefits, and equity • Fishers still beholden by operators / compradors / traders • Community groups lack skills, technology tools, and capital to improve value of fish products • Lack of information on value chain (harvest losses) • Lack of information on how interventions (market) impact fishing effort • Mismatch of supply and demand (useful / accurate intervention) • Lack of enforcement / management • Lack of compliance • Lack of post-harvest facilities • Lack of awareness and understanding on sustainable market requirements • Lack of facilitators to implement the value chain approach • Label fatigue • Lack of information and understanding of gap between production volume and value • Lack of national sustainability level

***Uncategorized Input*:**

- Engaging buyers more in decision-making

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Review – Learning Event

A review of the outputs of Day 1 was conducted by Nygiel Armada, COP of FISH RIGHT.
Reference: Outputs and Breakout Group Discussion sections

Q&A / Plenary Discussion

Partipatory rule making is an opportunity identified by one group, and it's listed as a constraint in another. Can you give clarification on that?

- The two are complementary. There is low participation because they are not involved in rule making. Once they are involved in the latter, the stakes can go higher and they would want to participate. One is because of the other.
- The context of having participatory rule making included is not just for everyone to participate in the discussion but for them to be part of and own the process. If this is done, the likelihood of compliance is very

high, not just at the municipal level but also close season for the commercials. We did not even enforce commercials to comply, they complied because they were part of the rule making process.

Except in the case of livelihood, we have not really touched on the matter of scale. Those strategies would affect gender, climate resilience, only to the extent that they make a difference in terms of scale. We have identified the things to do but to what extent should we do those things, and how so that we will achieve a scale by way of a momentum of stakeholders.

- The challenge in participation is an opportunity - to scale it to match the decision making level of the inter LGU which is broad to cover a reasonable scientific ecosystem scale. One challenge is the act at the community level effort. The other challenge is to enable them to meaningfully get involved in the decision making.
- Reaction on the low participation from NFARMC from a registered fisher folk and chairman of an NFARMC of a small municipality. We are participating, in fact an ordinance affecting fisheries cannot be passed without consulting us.

LGUs who have FARMCs that are actually involved are to be commended. But these are exceptions rather than the rule. FARMCs are not able to drive initiatives without the support of the LGU or NGOs. It's hard to do on their own, when the priority is on livelihood. The challenge is to have FARMCs that are actually involved to be the rule, and not the exception.

- FARMCs cannot do dual roles. They are only recommendatory, they cannot enforce, since they do not have the authority. It is not their function. In law enforcement, there is weak participation, but perhaps it's because we failed in the advocacy of informing them of rules and prohibitions. *The best thing for law enforcement is when they do not need to be enforced* (Atty. Oposa).
- The work of the NFARMC is commendable. At the national level, the participation is very robust. The lobbying capacity is not the same across groups. But there is an uneven situation in terms of how FARMCs are operating across the different municipalities. Maybe this is an outcome of having stronger strong FARMCs in municipalities that we want when we do the Theory of Change.
- The support of the LGU is crucial in getting the FARMCs involved. I came from a hearing where there were only less than 5 people there and I asked why there were so few people invited. The public officer did not invite them because they will only oppose the ordinance.
- Only few municipalities have strong FARMCs. There is a concern on the functionality of FARMCs. We are always talking about the social preparation of cooperatives, but we don't have people who can do that. There is no mentoring, coaching, which is one of the requirements in organizing FARMCs. In essence, they are organized without meeting these requirements. So how can they function accordingly?
- There are members from the LGUs that are required to be capacitated. But in the process of doing that, only the fisher folks are present. The capacity of fisher folks is also limited. Education of people at the grassroots is not happening.
- We should be sensitive in talking to FARMCs, because it's part of building relationships. Based on experience, those who do not have much resources are the ones who are very willing and involved.

In terms of rule-making participation, does the system now have a science body that would dissect the rules for harvest control and the FARMCs for the allocation?

- It's provided for in Republic Act 10654. For us in Region 6, we have now established for the Visayan sea the data needed. These scientific data is being shared to the LGUs for them to use as a basis in crafting fishery ordinances. We also have a science advisory group in the region.
- We have the scientific data organized hierarchically. On the first level are information gathered from NFARMCs, the second one are web based information, the last level is about assessments (risk assessment). These are reference data that are available. The BFAR is ready to draw these out on a regional basis. The academe are also contributing to this effort.
- There are places where it's difficult to set target reference points. Other global ecological knowledge can also be used as a reference point. Natural references used by locals can also be used.

- The aim is to give that information to the stakeholders. Scientific data may not be appreciated the same way. The value of the data depends on the perception and priorities of the recipient. As of now, we are working on a baseline that's difficult to increase (fisheries are depleted).
- An ecosystem does not by itself function without interacting with other ecosystems, thus management of such ecosystem must take into account how the other neighboring municipalities manage theirs.

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Strategic Approaches for FISH RIGHT

Presenter: Glenn Ricci, Principal Investigator, Program, URI-CRC (US)

IR1: Increased management effectiveness of fisheries, mangroves and other coastal resources in target MKBAs.

1.1. Integrated Fisheries Management Planning for target MKBAs
1.2. Right-sizing the fisheries
1.3. Fisheries Improvement Projects
1.4. Increase voluntary regulatory compliance in the commercial fishery sector
1.5. Tenure systems for mangroves and intertidal zones

- Management effectiveness is about participatory implementation.
- Fish Right is focused on joint implementation activities. How do we get people to do things together?
- We want to go to scale but if we are struggling with one hectare, how are we going to do that? Functional management is important and may be discussed further.
- In terms of benefits, focus should be on specific fisher folks.
- Law enforcement should be discussed in the context of management effectiveness and compliance.

IR2: Strengthen government institutional capacities and accountability to implement resilient and ecosystem-based fisheries management and mangrove restoration.

2.1. Certification of fisheries management professionals
2.2. Build institutional capacity through research and application

- There is enough policy, but economic instruments are equally important. Fishery is a business, it's about managing people. And economics
- Institutional strengthening highlights government, but it is not confined to government agencies as there are a lot of players, individuals and organizations involved in fisheries.
- Customary rules are more operant. As one goes up, the government and its agencies deal with statutory rules but in the field, it's customary rules that govern.
- Emphasis on government is necessary for the long term sustainability of fisheries management, but at the same time, there is that intervention for constituency building among fisher folks. The inclusion of other organizations is important, but the success of the project cannot do away with the involvement of government.
- When a private public partnership project ends, the sustainability of the program is left to government. Although a project can be implemented with minimal involvement of government, it cannot do away with government's participation.
- It's only the government that can impose laws and mandatory measures in fisheries. Law is needed in day-to-day life. Statutory governance is a necessary condition but it is not sufficient. The challenge is how to translate these into customary rules for a more effective implementation.
- There is a trend globally, there is a decreased state capability. The Philippines is one of those listed with the stronger decreases. We have to be cognizant of the challenges and not expect government to do everything. We can use a systems approach.
- Social science issues are critical issues that need to be addressed. It's the same around the world, so the question is how to get those in power to share more to the people.
- Governance is not confined to government only. For governance to work, the participation of civil society and the private sector is needed.

- Government has to take the lead because they have the mandate to provide an enabling environment for the fisheries sector. They are accountable and responsible for these. It was suggested that a systems for some kind of auditing process to encourage accountability on the government side. Example: the Yellow Card given to the Philippines was determined through an audit, and the government acted on it.

IR3: Improved policy environment for resilient and ecosystem-based fisheries.

3.1. Participatory dialogue to understand gaps in the policy environment
3.2. Develop guidelines and procedures for nested governance

- Observations: 1.) There are many good existing policies in the Philippines, 2.) Open access issue. Can we make progress and still with open access. What is managed access? Is there a window of opportunity here?
- The biggest opportunity is in the revised fisheries code, but there is still no Implementing Rules and Regulations on the FMAs. That is an opportunity to develop all these discussions on rule requirement.
- The revised code provides for municipal waters to be prioritized, especially the municipal seashores. But the municipal water delineation implementation is very slow.
- Policy environment. Policy can be confusing among stakeholders. Example: The compatibility of the ecosystem with governance is only going to work if your governance is within the scale of the key resource, which is within the FMA.
- Before Fish R was established, only about more than 100k small-scale fishers were registered. In less than a year from implementation, the program registered 1.2 million fishers. This is being done by BFAR with their own resources.
- In one municipality, the LGU through the DSWD giving financial support to communities. They use it to pay for the insurance premium, to insure their boats and fishing gear. This is on-going and it's all government.

IR4: Increased constituencies and demand for coastal and marine biodiversity conservation and ecosystem-based fisheries management, especially for capture fisheries.

4.1. Behavior change communications for constituency building
4.2. Advocacy targeting decision makers

- The three pillars of governance; government, civil society, and private business sector, should work together.
- Increase constituencies; to have their capacity to affect change, to have a voice.
- Focus on minorities that would need support to be heard.
- The strategy should really emphasize inclusiveness, sensitivity to gender and other issues.

IR5: Developed Resilience Capacities of Coastal Communities and Other Stakeholders.

5.1. Improve climate information and decision support tools for decision making
5.2. Support community actions to enhance resilience

- Sustainable livelihood programs help fishers become resilient during seasons when they cannot fish. There are groups offering financing to fishers at a very low interest. These are intended to fund their alternative livelihood and other economic activities when they are not fishing. But these efforts need to be linked to market, otherwise the fishers will end up being exploited.
- There is an unused fund allocated for climate change by Congress. Only about 6 LGUS availed of the funds. There is about Php 2 Billion of funds for climate change that's sitting, waiting to be used. This is an opportunity to develop proposals that would enhance the adaptive capacities of the communities.
- LGUs need to analyze the vulnerabilities of their areas so they can access the People Survival Fund. They are still in the process of identifying the project, which are usually infra projects. The problem is they have difficulty justifying it, that it would develop adaptive capabilities of their communities.
- If people realize that their fisheries are not only affected by current trends but also the impending threats, they provide more value as to why they need to protect it and increase that protection alongside managing the other threats. We should really change the way we manage our fisheries.
- Sedimentation and population will further accelerate with climate change. But these should be addressed at the local level and context specific. LGUs are at different stages at identifying their vulnerabilities. Most of them have very nice disaster maps, but it doesn't show where most people are most affected.

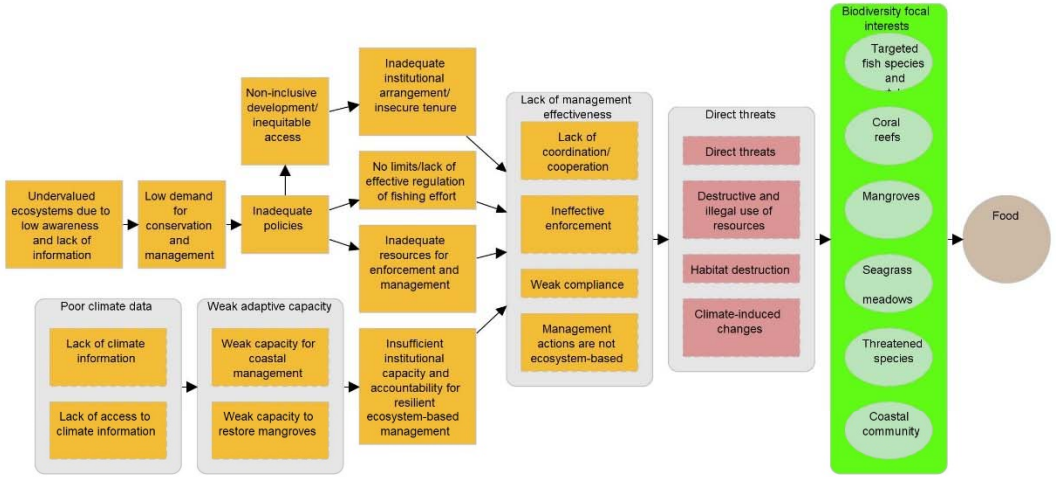
- In assessing the capacity of the communities, the same needs to be done with LGUs. The partnership with DILG is very important because it is their mandate to develop LCCAPS for them to be able to access the People Survival Fund for their constituency.
- Communities need to understand how climate change affects life in the sea. It is by these interventions that community resilience is developed. CRMP in Camiguin conducted a vulnerability study in one of the small islands and showed it to the local government. They were able to move people to higher land as a preventive measure.
- Disaster prevention can be complemented with efforts on resiliency development.
- Haiyan brought about a lot of changes, lessons, and improvements in the affected communities. These communities were able to bounce back because of the financial support that came in. In fact, fishers who did not own a boat before the typhoon hit, now have their own boats, acquired through the recovery programs for the affected areas. There is still a need however to assess the damage to the ecosystem and the estimated time for recovery.

IR6: Enhanced partnerships and research and development support for resilient and ecosystem-based fisheries management.

6.1. Partnership labs
6.2. University strengthening
6.3. Science and technology innovations and platforms
6.4. Cultivate public-private partnerships as a cross-cutting tool to support fisheries resource management and resilience.

- It's important to defined the research agenda when partnering with universities. The agenda should align with the agenda of fisher folks, since it is to them the long term benefit should redound to.
- Lesson from India experience: Let the private sector see the impact of threats to their interests. It is what got them on board in terms of support and participation.
- Are university research and extension programs opportunities as an institutional home for trainings? There are now institutional programs that are designed to be related learning experiences. But for this work, it has to be attract interest not just from outside the university but also from enrolled students. (Is this a question of sustainability of the program in the university?)
- There is a rich opportunity to enhance research. An actual research and planning is done with the local government for the town of Bacong, where coastal resource management students are actually doing the research. Students are enrolled in the research course, conducting studies that would benefit the local government.
- There is also a biodiversity research being done through partnership with the DOST for the RP-US biodiversity agreement, another one with the DENR. There are existing partnerships on research, including monitoring of MPAs.
- Action research can also be good. They are very short that could easily respond to an immediate need. Example: there's a shift in the species composition the Visayan Sea, increasing the stock for one kind. The people are throwing them away because they don't know what to do with it. An action research has a quick turnaround so it's ideal for such situations.
- The project should include national waters that are beyond municipal waters. The Philippines is now importing galunggong because fishers do not have or have limited access to these waters. There must be something that can be done because the small scale fishers are deeply affected by it.

ANNEX D. CONSTRAINTS AND OPPORTUNITIES



Compliance and Enforcement	
+ Interagency coastal law enforcement	Change in leadership (LGU, Agencies)
+ Administrative adjudication system of BFAR	Formulation of the computation of penalties
+ Participatory rule making (FARMC)	Limited LGU support

Constituencies	
+ Incentives for managed access	Lach of managed access to fisheries
+ Presence of champions (govvernment, communities) best practices (MPAs Awards)	Lack of polytical dynamics (ie. low participation , lack of political support)
+ Available tools to communicate value of NR / Management approaches	Lack of understanding / appreciation of value of NR / management approaches

Markets
Lack of information on how market interventions impact fishing effort
Lack of information on the value chain (which part of the chain , when and how, harvest loses)
Low benefits least equity?
Lack of post harvest facilities

Public Private Partnerships
Need for improved undestanding and transparency in supply / value chain and value addition options (eg. Post harvest)
Privte sector to influence policy implementation and functionality of policy environment (FiPs, conflic resolution, close season, basic compliance)
Private sector candemostrate best practices beyon compliance (eg. CDT, firstmovers, MPAs) Top runner innovations

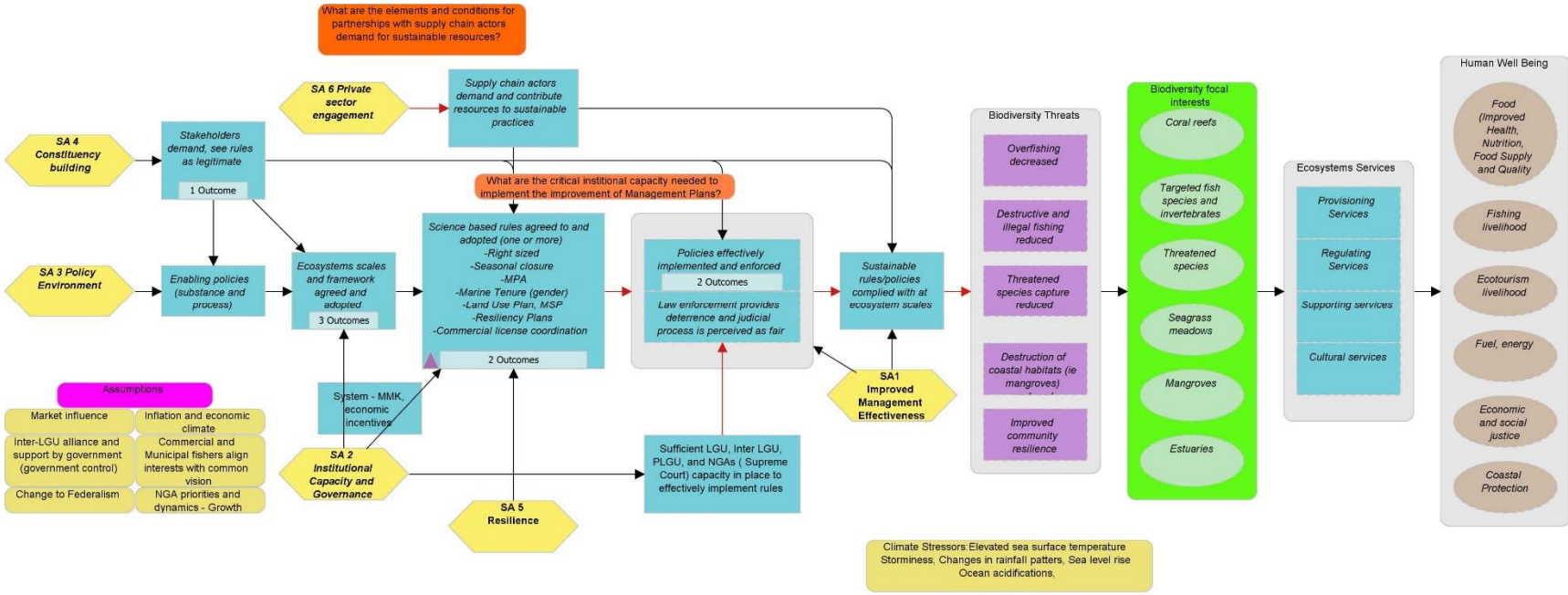
Policies	
Provide enabling environment to address these: 1. Harmonize national w/ local policies 2. Sense of ownership - Use rights - Marine tenure	Communities not adequately involved
	Weak implementation
	Lack of compliance by local stakeholders
	National policy not adressed at the local level

Livelihoods	
+ Available local and international markets	Livelihood program design doesn't support biodiversity conservation
+ There are available models and resourses	Inadequate implementation (social preparation, monitoring)
+ Livelihoods conserve brother objectives of EAFM	Implememntation at scale to impact

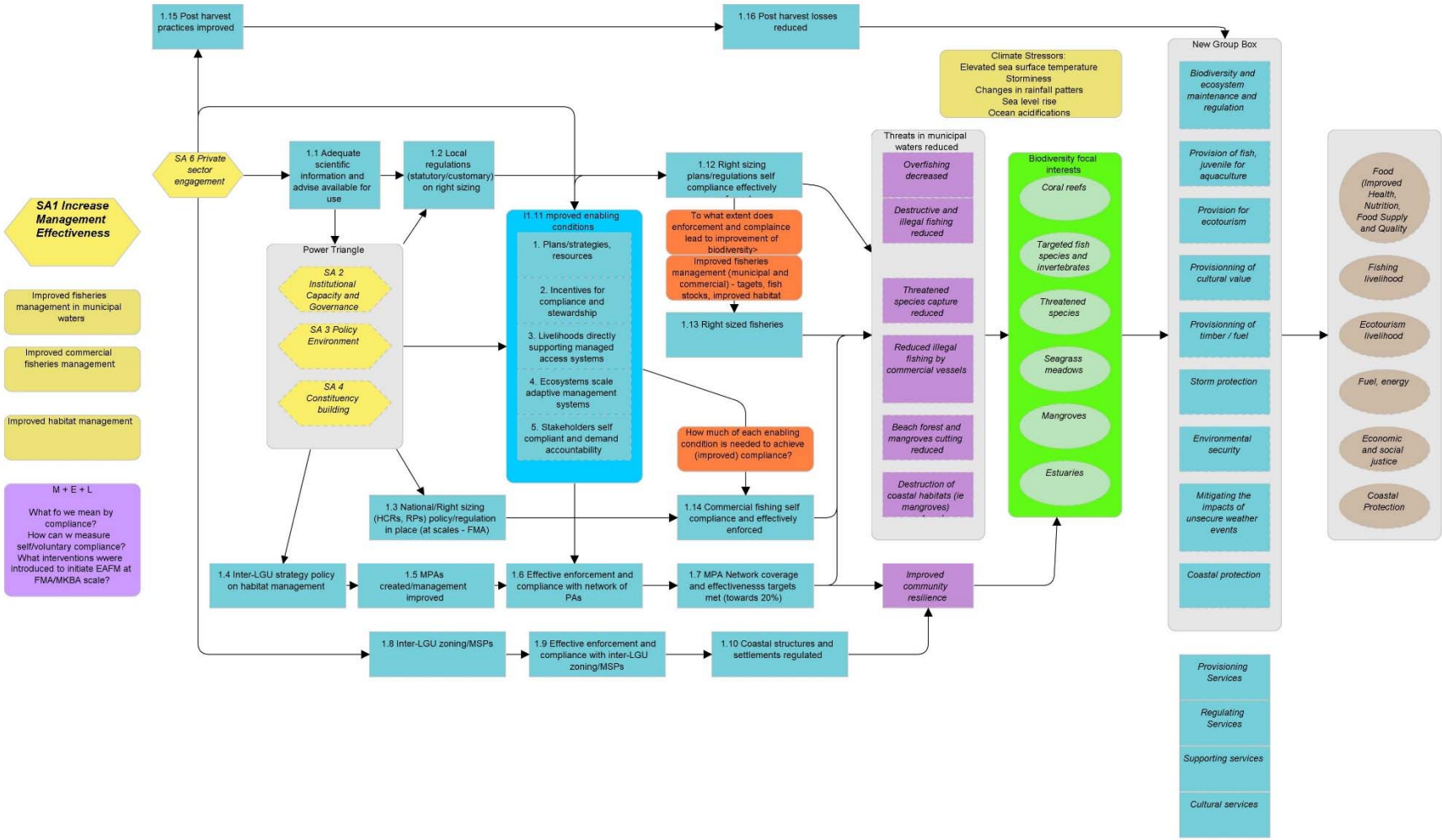
Institutional Governance for EAFM
Current imbalance between government, private sector, civil society and communities concerning: - Participation - Science based decision making - Authority / responsibility / accountability - Capacity - Resources

Habitat management
Use models of E-NIPAS
Ecosystem approach beyond MPAs
Develop / implement Land Use Plans and Integrated coastal management plans

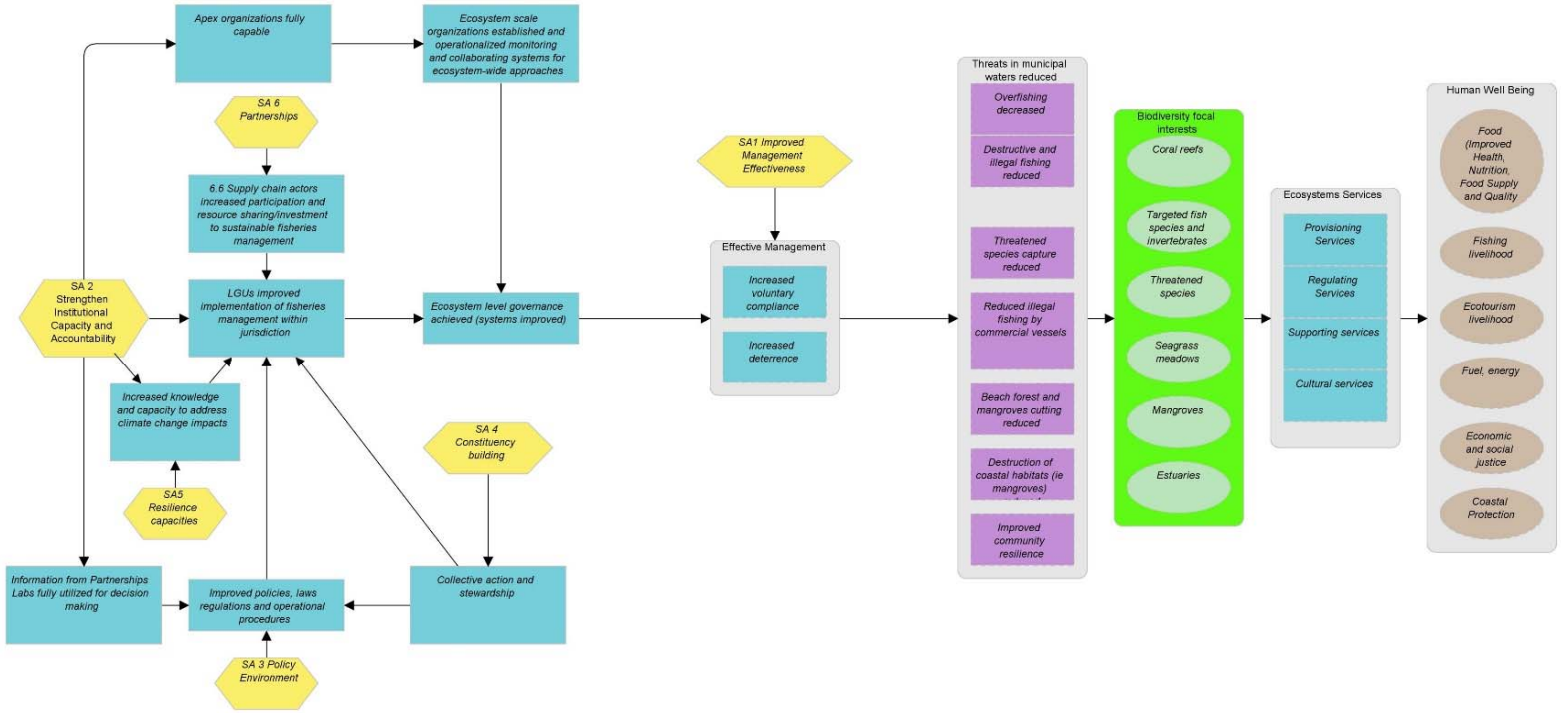
ANNEX E. DRAFT THEORY OF CHANGE FROM WORKSHOP



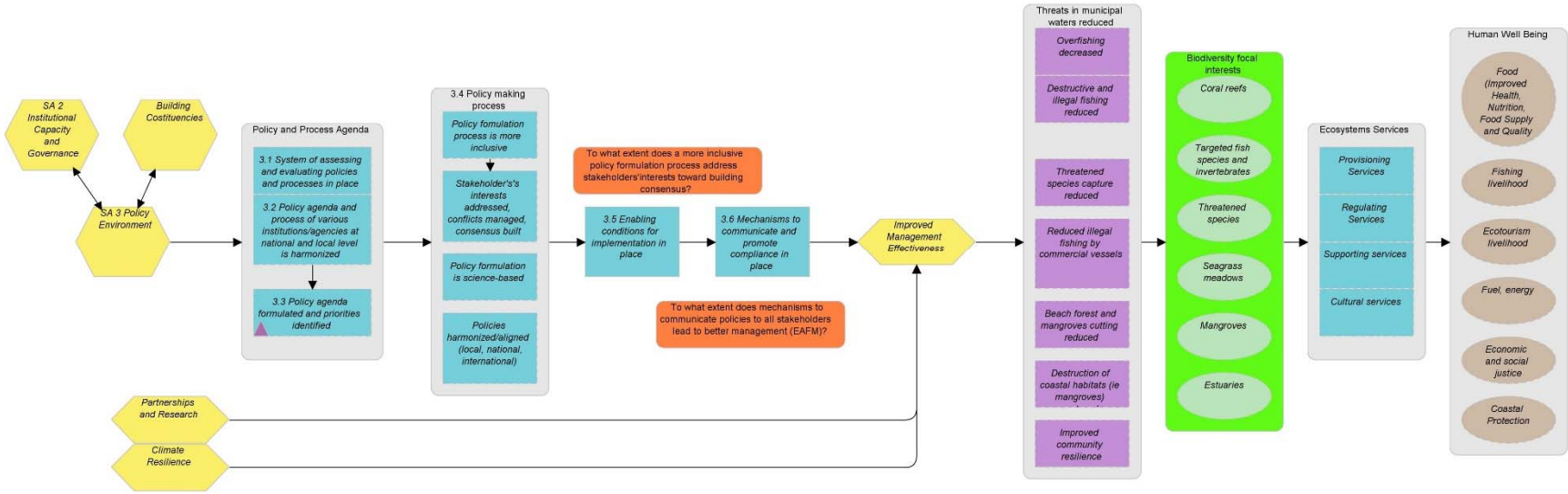
ANNEX F. STRATEGIC APPROACH 1 – EFFECTIVE MANAGEMENT



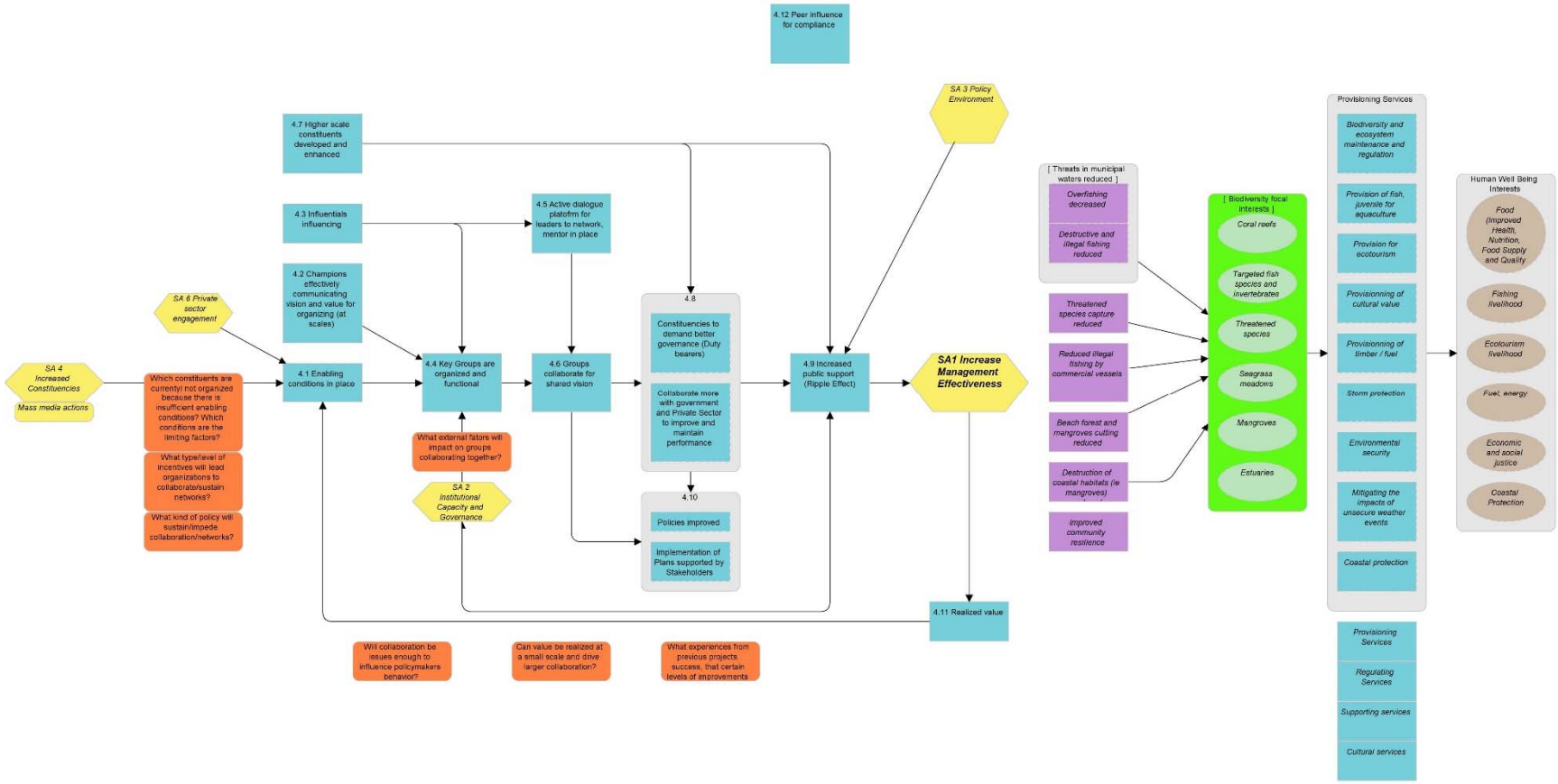
ANNEX G. STRATEGIC APPROACH 2 – STRENGTHEN INSTITUTIONAL CAPACITY



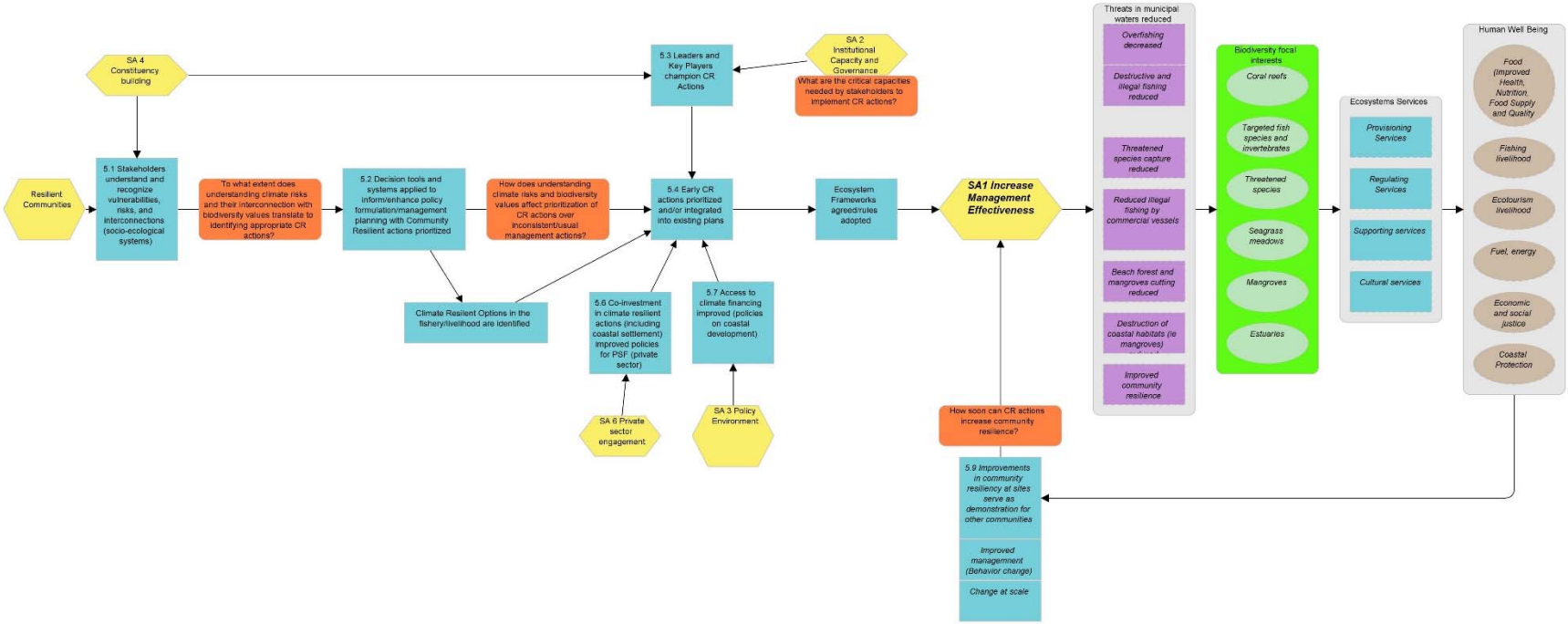
ANNEX H. STRATEGIC APPROACH 3 – ENABLING POLICY ENVIRONMENT



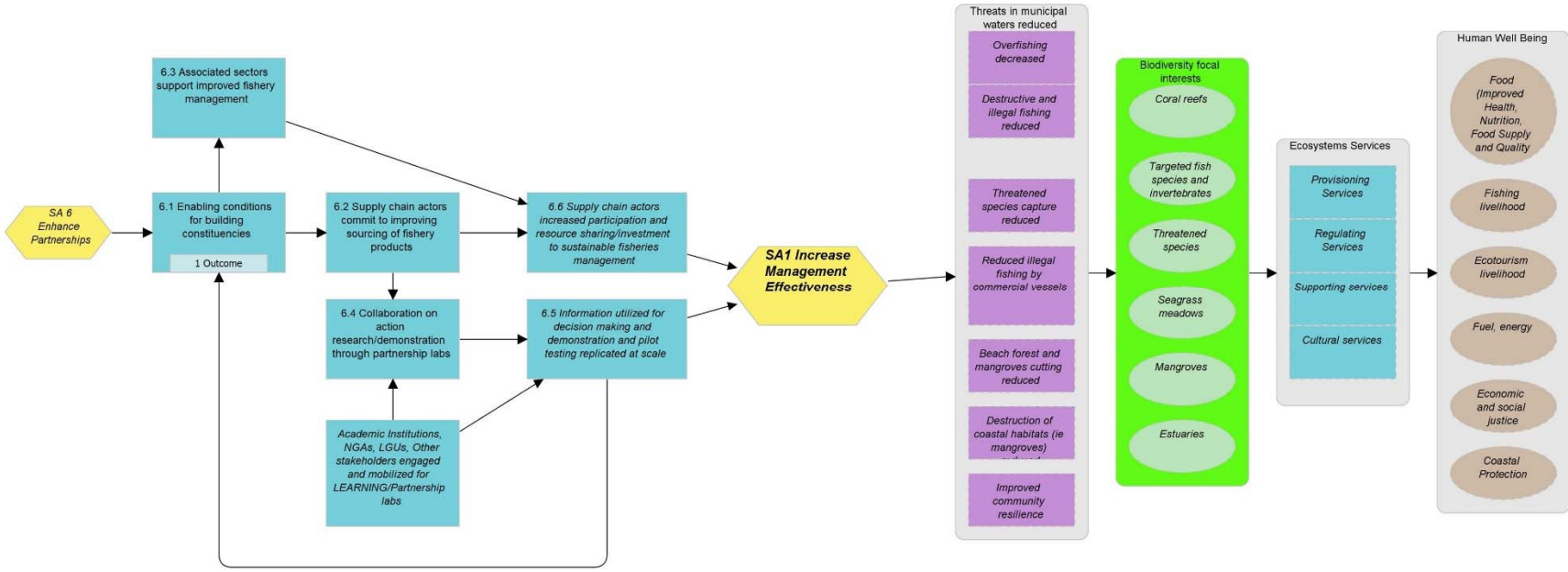
ANNEX I. STRATEGIC APPROACH 4 – INCREASED CONSTITUENCY



ANNEX J. STRATEGIC APPROACH 5 – RESILIENT FISHERIES



ANNEX K. STRATEGIC APPROACH 6 – ENHANCE PARTNERSHIPS



ANNEX L. OVERVIEW OF FISH RIGHT FIELD SITES

The following table summarizes existing information available for the Fish Right field sites. The number of fisherfolk in each municipality will be collected during year 1 of the Program.

Province	Municipality	2015 Population	Dominant Fishery Species	Area of Municipal Waters (ha)	Area of Man-groves	Area of Coral Reefs
Palawan	Busuanga	22,046	Squid, octopus, crabs, anchovies, grouper, jacks, scad, pompano, snapper	209,390	1,361	8,817
Palawan	Coron	51,803		359,073	2,486	20,021
Palawan	Culion	20,139		96,664	2,732	7,208
Palawan	Linapacan	15,668		434,868	615	9,977
Negros Occidental	Cauayan	102,165	tuna, bigeye scad, mackerel, herring, sardine, anchovy	89,444	128	1,007
Negros Occidental	City of Sipalay	70,070		46,493	280	457
Negros Occidental	Hinoba-an	56,819		52,508	195	539
Negros Oriental	Basay	26,566		28,000	70	83
Negros Oriental	City of Bayawan	117,900		13,404	260	6
Negros Oriental	Santa Catalina	75,756		28,494	72	23
Negros Oriental	Siaton	77,696		74,621	179	123
Capiz	Pilar	45,287	mackerel, sardine, anchovy, grouper, tuna, siganids	14,390	36	310
Capiz	President Roxas					
Capiz	Pontevedra					
Capiz	Panay					
Capiz	Roxas City	154,052				
Cebu	Bantayan	79,084		86,318	157	12,713
Cebu	Daanbantayan	84,430		117,595	90	4,412
Cebu	Madridejos	36,429		91,426	27	914
Cebu	Medellin	55,332		15,664	182	2,568
Cebu	San Remigio	57,557		29,381	245	1,709
Cebu	Santa Fe	28,603		57,084	26	1,056
Masbate	Balud	38,124		186,537	195	3,987
Masbate	Cawayan	67,033		91,465	622	7,463
Masbate	Esperanza	18,568		58,304	98	493
Masbate	Milagros	57,473		53,138	409	1,476
Masbate	Placer	55,826		54,659	859	1,065

Province	Municipality	2015 Population	Dominant Fishery Species	Area of Municipal Waters (ha)	Area of Man-groves	Area of Coral Reefs
Negros Occidental	Cadiz City	154,723		30,830	442	789
Negros Occidental	City of Escalante	94,070		32,371	281	1,546
Negros Occidental	City of Victorias	87,933		3,622	216	-
Negros Occidental	Manapla	54,845		10,636	65	13
Negros Occidental	Sagay City	146,264		54,769	763	4,415
Negros Occidental	Eb Magalona					
Iloilo	Ajuy	52,268		31,973	135	257
Iloilo	Balasan	33,088		209	35	-
Iloilo	Batad	21,298		3,330	11	22
Iloilo	Carles	68,160		153,123	122	3,801
Iloilo	Concepcion	43,159		98,754	14	2,968
Iloilo	Estancia	48,546		4,589	2	91
Iloilo	San Dionisio	38,775		4,421	66	56
Iloilo	Barotac Viejo					
Iloilo	Barotac Nuevo					
Iloilo	Banate					
Iloilo	Anilao					