

**GOAL 2
ECOSYSTEM APPROACH TO MANAGEMENT OF FISHERIES (EAFM)
AND OTHER MARINE RESOURCES FULLY APPLIED
AND OTHER MARINE RESOURCES FULLY APPLIED**

TARGET 1

STRONG LEGISLATIVE, POLICY AND REGULATORY FRAMEWORKS IN PLACE FOR ACHIEVING AN ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT (EAFM)

At the national and regional levels, a strong legislative, policy, and regulatory framework is in place for achieving an Ecosystem Approach to Fisheries Management (EAFM), designed to plan, develop and manage fisheries in a manner that addresses the multiple needs and desires of societies, without jeopardizing the options for the future generations to benefit from the full range of goods and services provided by marine ecosystems (in accordance with the UN FAO 2003 definition of EAFM).

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EAFM is a key approach toward addressing common trans-boundary policy and regulatory concerns, such as (i) over-fishing of shared pelagic fish stocks; (ii) illegal cross-border fishing by small-scale fishers (stimulated by depletion of local coastal fisheries), commercial-scale fishing operations, and trans-shipment; (iii) fishing overcapacity; and (iv) by-catch of protected and endangered species.

Annotations explaining Target #1

- EAFM strives to balance diverse societal objectives by taking account of the knowledge and uncertainties of biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecological meaningful boundaries. EAFM principles are the following; (i) fisheries should be managed to limit their impact on the ecosystem to the extent possible; (ii) ecological relationships between harvested, dependent and associated species should be maintained; (iii) management measures should be compatible across the entire distribution of the resource (across jurisdictions and management plans); (iv) the precautionary approach should be applied because the knowledge on ecosystems is incomplete; and (v) governance should ensure both human and ecosystem well-being and equity.
- In each CT6 country, adoption and strengthening of laws, policies, and regulations will help stimulate & achieve an EAFM.
- Specific legislative, policy, and regulatory frameworks will vary by country, but will include some common elements across all CT6 countries.
- Information on country-level legislative, policy and regulatory reform efforts will be actively shared across the CT6 countries, to help promote harmonization and effective action.
- An ecosystem approach to fisheries management requires greater data availability and data sharing among countries.
- Solid scientific information will be needed to serve as a basis for the formulation of EAFM policies; expanded scientific research, data management and monitoring programs will be needed to help craft national as well as regional management measures.

REGIONAL ACTION 1

Collaborate to develop a “common regional framework for legislation and policy” that would support EAFM; drawing on this, strengthen regional and national legislation, policies, and regulations.

Jointly develop a “common framework for legislation and policy” that would support EAFM. At the regional and national levels, conduct reviews of existing laws, policies and regulations, and identify and implement needed reforms and actions across all relevant sectors. At a broad level, a common framework could include (but not be limited to) the following elements:

- Incorporation of *internationally recognized definitions, principles and elements* of EAFM into legislation, policies, and regulations;
- Incorporation of the *precautionary approach* into legislation, policies, and regulations, and greater recognition of data gaps and ways to operate in this environment;
- Integration of EAFM into relevant *sectoral plans / policies* (e.g., fisheries management plans) and *cross-sectoral plans / policies* (e.g., integrated coastal zone management plans, poverty reduction strategies) and strengthened capacities (e.g., technical, scientific, enforcement) to effectively implement such plans;
- “*Institutionalizing*” EAFM *within the government*, including (i) building EAFM into corporate and strategic plans of relevant ministries; (ii) annual reporting of progress toward applying the EAFM; (iii) requiring the use of EAFM projection models that incorporate an EAFM as part of fishery stock assessment processes; and (iv) establishing fisheries management committees (or other appropriate bodies) to provide expert advice and analysis on the implementation of EAFM;
- Adoption of *market-based and other economic instruments and incentives* that promote the sustainable management of fisheries and an EAFM, including reforms, as needed, of *perverse economic subsidies* and other economic barriers impeding sustainable fisheries and EAFM;
- Establishment of national and sub-national *stakeholder forums* to promote dialogue on sustainable

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<p>fisheries management and EAFM;</p> <ul style="list-style-type: none"> • Action to address identified <i>fishing over-capacity, including transitioning measures</i> as appropriate (e.g., economic compensation, alternative livelihood support programs); • Greater <i>collaboration between national fishery management, environmental management and enforcement authorities</i>; • Improved <i>bilateral and multilateral communications</i> among CT governments concerning fishery issues; • Efforts to explore and advance standards for <i>certification, eco-labeling and other market-based incentive schemes</i> (such as Marine Stewardship Council certification) that promote improved management standards; • <i>Regulation of fishing industry activities</i> and promotion and engagement of <i>private sector collaboration</i> around EAFM; • Enforcement and other steps to reduce <i>destructive fishing practices</i> (e.g., cyanide, blast fishing); • Incorporation of best practices, approaches and technologies aimed at <i>rebuilding depleted fish stocks</i>; • Incorporation of science-based requirements for <i>"no-take replenishment zones" in marine protected areas</i>, needed to ensure sustainable fisheries supplies; • Criminalization and enforcement to combat <i>IUU fishing</i> as "transnational organized crime"; and • Monitoring and evaluation of established, time-bound objectives. 	
REGIONAL ACTION 2	
<p>Improve enforcement of IUU fishing through greater collaboration In accordance with the U.N. FAO International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing, accelerate collaborative efforts through:</p> <ul style="list-style-type: none"> • greater collaboration between national fishery management agencies, environmental management agencies, and enforcement authorities (e.g., police and navies), with stepped up efforts on prosecutions; • joint enforcement programs among CT countries; • independent on-board observer programs, in addition to national observer programs; • greater sharing of data, information and knowledge; • periodic intergovernmental meetings focusing specifically on IUU in the Coral Triangle region; • recognition of IUU fishing as transnational organized crime; • addressing illegal, cross-border fishing by small-scale, large-scale, and trans-boundary fishing operations; and • encouragement of Vessel Monitoring Systems (VMS) in monitoring fishing activities of large-scale and transboundary fishing fleets. 	Ongoing
REGIONAL ACTION 3	
<p>Incorporate EAFM and payments for environmental services (PES) in bilateral and regional commitments on fisheries management Incorporate EAFM and payments for environmental services (PES) in bilateral and regional commitments on fisheries management, as well as other governmental agreements. (The principle of PES may be considered for future fisheries management agreements where relevant. For example, future agreements could build in compensation and other mechanisms that recognize the spawning and nursery ground services provided by specific areas.)</p>	Ongoing
TARGET 2	
<p style="text-align: center;">IMPROVED INCOME, LIVELIHOODS AND FOOD SECURITY IN AN INCREASINGLY SIGNIFICANT NUMBER OF COASTAL COMMUNITIES ACROSS THE REGION THROUGH A NEW SUSTAINABLE COASTAL FISHERIES AND POVERTY REDUCTION INITIATIVE ("COASTFISH")</p> <p>Through a new, collaborative <i>Sustainable Coastal Fisheries and Poverty Reduction Initiative</i> ("COASTFISH") designed to apply an EAFM, a significant improvement has been achieved in the incomes, livelihoods and food security of millions of people living in targeted coastal communities. (<u>Note</u>: In each CT6 country, quantitative targets for COASTFISH will be established.)</p>	2020
<p><u>Annotations explaining Target 2</u></p> <ul style="list-style-type: none"> • The overall goal of this Initiative will be to enhance food security, income, and sustainable livelihoods of targeted coastal communities, through application of an EAFM. As such, COASTFISH has the potential to contribute significantly to achievement of the Millennium Development Goals (MDGs) in all six CT countries. This will require well-informed, customized, and sophisticated strategies and programs, supported by large-scale levels of investments in targeted coastal regions particularly dependent on coastal fisheries. Such investments will need to include both domestic and external sources of funding. 	

<ul style="list-style-type: none"> Numerous coastal fisheries projects and programs are already underway in our countries, designed to promote more sustainable fisheries. Building on these activities, COASTFISH will be designed to demonstrate successful models and significantly “scale up” and expand proven models. In each country, specific “COASTFISH Sites” will be identified and targeted for investment and action, based on poverty and biodiversity criteria. In each country, COASTFISH programs will need to be highly customized for specific local contexts. Coastal communities should be a primary participant in and beneficiary of this initiative. 	
REGIONAL ACTION 1	
<p>Design and launch a region-wide CTI COASTFISH Initiative</p> <p>Collaborate on designing a “common regional framework for the CTI COASTFISH Initiative”. Drawing on this framework, complete the design of national COASTFISH Programs in each CT6 country, and launch the CTI COASTFISH Initiative. Key elements of the CTI COASTFISH Initiative could include:</p> <ul style="list-style-type: none"> <u>Guidelines for EAFM and coastal fisheries.</u> Draw on, and adapt as needed, existing guidelines for the implementation of EAFM for coastal fisheries. <u>Maps of COASTFISH Sites / Regions.</u> Produce maps denoting locations of COASTFISH Sites or Regions, as well as other relevant spatially-referenced data. These sites will generally be large in scale, and linked to other goals in the CTI Plan of Action – e.g., “priority seascapes” (Goal #1) and sites / networks included in the Coral Triangle MPA System (CTMPAS) (Goal #3). <u>COASTFISH Investment Plans.</u> Develop COASTFISH Investment Plans in each country defining and costing a set of strategic actions identified through a range of studies (e.g., covering fisheries status; alternative livelihood, enterprise, and industry growth options; market analyses; legal analyses; future climate change impacts; and options for applying an EAFM). Information on how these COASTFISH Investment Plans are being developed, and the contents of these plans, will be shared across CT6 countries. Drawing on these national investment plans, develop a regional investment plan. (<u>Note:</u> Investments will vary based on country and local contexts; livelihood strategies will be customized for local resource conditions to achieve EAFM.) 	2012
REGIONAL ACTION 2	
<p>Collaborate around the mobilization of significant new financial investments to support COASTFISH</p> <p>To complement country-specific financing sources, mobilize multi-country financing such actions as:</p> <ul style="list-style-type: none"> <u>Investor Forums.</u> Organize jointly sponsored Investor Forums to present the COASTFISH Initiative to groups of potential public and private investors. <u>Joint approaches to individual public funding agencies.</u> Collaborate on joint approaches to select public funding agencies that have multi-country interests in COASTFISH. <u>Regional COASTFISH Fund.</u> Jointly explore the need for and feasibility of a regional fund to support the CTI COASTFISH Initiative. <u>Small-scale funding mechanisms for fishers.</u> Develop and share information on small-scale funding mechanisms for fishers. 	Ongoing
REGIONAL ACTION 3	
<p>Collaborate around technology and information sharing, lessons learned, and joint marketing of common products</p> <ul style="list-style-type: none"> <u>Technical support.</u> As appropriate, collaborate around mobilizing significant technical support by scientific institutions, NGOs, private sector actors, and others, particularly those interested in supporting COASTFISH at the multi-country and regional levels. <u>Share technologies, information and approaches.</u> Among the CT6, share technologies, techniques, methodologies, and approaches through such activities as: seminars, workshops, exchange visits, internet list serves, and lessons learned documents. This could cover: mariculture, sustainable livelihoods, fishing pressures, the role of “no-take replenishment zones” in MPAs, fishing gear selectivity and substitution, export marketing approaches, fish storage techniques, value-added processing, and methods for applying EAFM. <u>Joint marketing.</u> As appropriate, collaborate around joint marketing by CT6 countries of common products (e.g., tuna, seaweed, certified products for the live reef food fish and ornamentals trade). 	Ongoing
TARGET 3	
<p style="text-align: center;">EFFECTIVE MEASURES IN PLACE TO HELP ENSURE EXPLOITATION OF SHARED TUNA STOCKS IS SUSTAINABLE, WITH TUNA SPAWNING AREAS AND JUVENILE GROWTH STAGES ADEQUATELY PROTECTED</p> <p>Effective national and regional measures -- developed using an ecosystem approach to fisheries management -- will be in place to help ensure (through appropriate mechanisms) that exploitation of shared stocks for all species of tuna is sustainable and that, in particular, tuna spawning areas and juvenile growth stages are adequately</p>	2020

<p>protected. Such measures will help ensure long-term contributions of tuna fisheries to economic growth, incomes, employment, and food security.</p>	
<p>Annotations explaining Target 3</p> <ul style="list-style-type: none"> • Ocean areas under the jurisdiction of CT6 countries are considered to be particularly important as spawning and juvenile growth areas for highly migratory tuna species that underpin both domestic fisheries and the globally-significant tuna fisheries of the wider Indian and Pacific Oceans. • A series of regional actions (e.g., joint research and data sharing) are proposed which are intended to improve understanding of the tuna fisheries across the CTI Implementation Area, and to examine ways to increase the local flows of benefits, to improve understanding of the importance of the area in the life history of the commercially-important tuna species, and to strengthen the capacity in national agencies, industry bodies, and the wider community in achieving effective ecosystem-based management. • Strengthened collaborative governance for conservation of shared tuna stocks will be at the center of actions to achieve this target. There are existing treaty-level commitments and formal consultative processes through membership or involvement of CT6 countries such as, but not limited to, the Indian Ocean Tuna Commission (IOTC), the Western and Central Pacific Fisheries Commission (WCPFC) and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), where applicable which also involve countries outside the CTI Implementation Area. • Support and strengthen national capacity of CT countries to contribute effectively to any recognized international cooperation as they may apply to waters under national jurisdiction • Actions under this target will contribute to, coordinate closely with, and complement the work under these Regional Fisheries Management Organizations (RFMOs) and other relevant intergovernmental organizations (e.g., SPC and FFA). Under this target, CT6 governments will also establish a new, more informal and multi-stakeholder CTI Tuna Forum to (i) advance a more in-depth discussion of tuna governance issues specific to the Coral Triangle region; (ii) provide for a more active dialogue between the private sector and governments of the region; and (iii) create a more informal dialogue process that involves a broader range of stakeholders and addresses a broader range of issues related to tuna governance. During the establishment phase of this new tuna governance forum, participants will decide on the most effective ways to structure discussions, given the diversity and complexity of issues and interests associated with this topic. This new CTI Tuna Forum will consider establishing formal linkages to the RFMOs and other relevant intergovernmental organizations. • To make significant progress toward this target, all of the major relevant stakeholder groups will need to be engaged, including: (i) intergovernmental agencies and national governments; (ii) the private sector (tuna fishing industry, seafood buyers and traders, etc.); (iii) fishing communities (including women and marginalized groups); and (iv) NGOs and scientific / academic institutions. • To achieve significant progress toward this target, holistic “systems-level” solutions to the highly complex problems associated with the management of shared tuna stocks will need to be forged. Systems-level solutions will need to consider such issues as: (i) adequate protection of critical spawning and juvenile growth life stages, and financial mechanisms that reward this “ecosystem service”; (ii) fundamental actions needed to address IUU fishing; (iii) steps for addressing fishing over-capacity; and (iv) strategies that address the supply and demand sides of the “equation”. 	
REGIONAL ACTION 1	
<p>Develop a collaborative work program on this topic that covers a wide range of activities, such as jointly supported research, information-sharing, strategies for protection of spawning and juvenile growth areas, and financing mechanisms. More specific activities could include:</p> <ol style="list-style-type: none"> 1. Improve understanding of the contribution of tuna which spawn in the waters of the CTI Implementation Area to the commercially-important tuna stocks harvested in this area and more widely across the Indian and Pacific Oceans. Develop national and trans-boundary measures to minimize impacts on critical spawning and juvenile growth areas, such as collaborative tagging programs, and possible transnational cooperation between adjacent MPAs straddling borders of two or more CT states in the framework of MPAs and MPA networks scientifically selected to protect particularly critical spawning and juvenile growth areas for tuna. (Under such transnational cooperation, each MPA is individually located in the waters under national jurisdiction of respective CT countries which shall be operated pursuant to their respective state laws and regulations.) 2. Improve understanding of biological and ecological parameters, including trophic interactions and how such interactions relate to the protection of juvenile tuna, including yellowfin and bigeye which are currently under threat. 3. Develop and update assessments of (i) the status of tuna stocks and the catch of tuna in subsistence, artisanal and commercial fisheries in the CTI Implementation Area; and (ii) the contribution of tuna fisheries to local economies, employment of men and women, and food security. 4. Develop approaches to maximize the flow of economic and other benefits to CT6 countries from sustainable catches of tuna in their waters, including development of domestic industries, product 	2010

<p>branding and certification, value adding, and value chain and market analyses.</p> <ol style="list-style-type: none"> 5. Strengthen and maintain national capacity to implement effective EAFM for tuna and associated pelagic species, and to establish national tuna management plans and effective national and trans-boundary controls to ensure long-term sustainability, including: (i) national and regional catch limits or other input and output controls; (ii) by-catch reduction programs; and (iii) new surveillance, enforcement, and judicial cooperation measures to address IUU. 6. Assess and develop mechanisms (including regulatory and financial measures) to address the potential effects on subsistence and small scale, near-shore fisheries of conservation measures required to ensure long-term sustainability of commercial tuna species. These could include new financial mechanisms to compensate fishers and to support conservation measures to reduce fishing pressures on tuna spawning and juvenile growth areas within the CT. 	
REGIONAL ACTION 2	
<p>Establish an informal CTI Forum on Tuna Governance Establish a <i>CTI Forum on Tuna Governance</i>, to serve as an informal dialogue and partnership mechanism to share information, advance the above work program, and develop and promote practical solutions toward sustainable management of shared tuna stocks, including through public-private partnerships (PPP). Provisional elements of this Forum (to be refined) could include the following:</p> <ul style="list-style-type: none"> • <u>Host institution</u>. A host institution could be designated for a pilot phase. • <u>Membership</u>. Membership in the Forum could include CT6 governments and select partners, such as NGOs, multilateral agencies, and private sector companies that are early adopters of best industry practices (e.g., seafood retailers, fishing industry leaders in the area of by-catch reduction). • <u>Pilot phase</u>. A pilot phase could be carried out for the first three years. A provisional agenda for this pilot phase could incorporate the key activities and topics in the work program described above. 	2010
TARGET 4	
<p style="text-align: center;">A MORE EFFECTIVE MANAGEMENT AND MORE SUSTAINABLE TRADE IN LIVE-REEF FISH AND REEF-BASED ORNAMENTALS ACHIEVED</p> <p>A more effective management and more sustainable trade in live reef fish and reef-based ornamentals achieved, with the following objectives:</p> <ul style="list-style-type: none"> • a substantial reduction -- across the CTI Implementation Area -- of destructive fishing practices linked to the live-reef food fish (LRF) and ornamentals trade compared to an agreed baseline year; and • for identified “LRF and ornamentals priority areas” that provide significant supply for international trade, an increasing number of these priority areas will achieve viable population levels for selected targeted species (species to be determined). 	2020
<p>Annotations explaining Target 4</p> <ul style="list-style-type: none"> • Many activities are already underway to address important <i>aspects</i> of the international trade in live reef fish and reef-based ornamentals. Actions under this target will build on these existing activities, including establishment of new multi-stakeholder forums to (i) advance a more in-depth and comprehensive discussion of problems and solutions; (ii) provide for a more active dialogue between the private sector and governments of the region; and (iii) create a dialogue process that involves a broad range of stakeholders. • To make significant progress toward this target, all of the major relevant stakeholder groups will need to be engaged, and a vertically integrated, comprehensive approach will need to be forged. Such solutions will need to consider: (i) demand-side strategies, including assessment of opportunities to promote consumer demand for certified sustainable fish and ornamental supplies; and (ii) supply-side strategies, such as assessments of opportunities to expand full cycle mariculture of reef fish (to reduce pressures on wild-caught fish and associated reefs). • To help advance and measure progress toward achievement of this target, CT6 and other scientists will work together toward agreed definitions of key terminology, agreed principles, and other technical issues covering: <ul style="list-style-type: none"> ⇒ baseline years to use for measurement; ⇒ identification of target species; and, ⇒ Methodology for monitoring population levels. 	
REGIONAL ACTION 1	
<p>Develop a collaborative work program on management of and international trade in coral reef-based fish and ornamentals. The work program would cover a wide range of activities, such as jointly supported research, information-sharing, and strategies for addressing the supply and demand sides of the trade. More specific activities could include:</p> <ol style="list-style-type: none"> 1. Develop a “common regional framework for management plans and policies on live reef fish and ornamentals” that can be used to develop national management plans and policies, addressing EAFM and livelihood issues. 2. Share information on and assess past and current efforts to address issues related to the sustainable management and trade of live reef food fish and ornamentals, identifying concrete lessons learned and success factors from these experiences. 	2010

<ol style="list-style-type: none"> 3. Jointly analyze and develop demand-side strategies, including assessment of opportunities to promote consumer demand for certified sustainable fish supplies 4. Jointly analyze and develop supply-side strategies, such as assessments of opportunities to (i) expand mariculture of targeted reef fish and ornamentals (in order to reduce pressures on wild-caught organisms and associated reefs); (ii) introduce certification schemes and standards at the local level; (iii) reduce the use of destructive fishing practices; and (iv) increase capacity to meet existing sustainability standards. 5. Jointly analyze and develop strategies around cross-cutting issues, such as capacity building and sustainable livelihoods. 	
REGIONAL ACTION 2	
<p>Establish an informal CTI Forum on Management of and International Trade in Coral Reef-Based Organisms</p> <p>Establish a <i>CTI Forum on Management of and International Trade in Coral Reef-Based Organisms</i>, to serve as an informal dialogue and partnership mechanism to share information, advance the above work program, and develop and promote practical solutions for a more sustainable trade, including through public-private partnerships (PPP). <i>Provisional</i> elements of this Forum (to be refined) could include the following:</p> <ul style="list-style-type: none"> • <u>Host institution</u>. A host institution could be designated for a pilot phase. • <u>Membership</u>. Membership in the Forum could include CT6 governments and select partners, such as: intergovernmental agencies; other national governments (both supply and demand countries); the private sector (fishing companies, traders, buyers, and restaurant and aquarium industries in consumer markets); representatives of fishing communities; and NGOs and scientific / academic institutions. • <u>Pilot phase agenda</u>. A pilot phase could be carried out for the first three years. A provisional agenda for this pilot phase could incorporate the key activities and topics in the work program described above. 	2010