



## Member's report on activities related to ICRI

Reporting period December 2015 – November 2016

1. **Contribution to the ICRI Plan of Action and GM.** *Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the current ICRI Plan of Action (<http://www.icriforum.org/icri-secretariat/current>) and objectives of the general meeting.*

- a. **Bleaching event**

*Were you affected by the Third Global Coral Reef event? Did you do some monitoring, if yes what are the results and could you explain what method did you use? Would you like to report during the ICRI Meeting?*

Bleaching in Costa Rica during the 2015-2016 bleaching event was minimal, in sites as Marino Ballena National Park, Isla del Caño Biological Reserve, Playa Blanca Beach and Culebra Bay, in Guanacaste. No significant bleaching was observed and no mortality. Fast monitoring were did and corals communities were normal.

- b. **INDCs - Intended Nationally Determined Contributions** – *Did your national contribution mention 'marine ecosystems or coral reefs'? Would you be interested in joining an Ad Hoc committee to develop guidelines to integrate coral reefs in the INDC?*

Costa Rica is interested in joining an Ad Hoc committee to develop guidelines and collaborated in other aspects.

- c. **Nature-based Solutions to address Climate Change** - *Do you have some example(s) of Nature-based (coral reef and related ecosystems) Solutions to address climate change? If yes, could you please provide use some details?*

A coral garden has been set up as a pilot study to replant coral reefs with low coral coverage. This initiative started in 2015 and the plan is that in short time, it would extended to other places in North Pacific of Costa Rica. In this moment, the final report is pending.

- d. **UN Sustainable Development Goals** – *Do you have example(s) showing how coral reefs and related ecosystems address the SDG (SDG 14 but also other related ones such as SDG 1 – End poverty in all its form; SDG 2 – End hunger, achieve food security and improved nutrition...)*

Reduce the population of lionfish individuals using capture techniques and local knowledge of fishermen, maintaining the integrity of coral reef ecosystems. Encouraging local lionfish intake both within the population and tourist shops for it to be sold as exotic dish, also sensitize the local community (people and businesses) about the threat of lionfish and as increased intake contributes to controlling population.

- e. Do you have national measure(s) – existing or in development - to ban the sale and manufacture of cosmetics and personal care products containing plastic microbeads? And plastic bags?

Not in this moment.

f. **Upcoming events** - Do you plan to attend:

- o November 2016 - Marrakech Climate Change Conference / The twenty-second session of the Conference of the Parties (COP 22)
- o December 4, 2016 to December 17, 2016 - Convention on Biological Diversity COP13
- o June 2017 - Oceans & Seas Global Conference, Fiji
- o Other(s):

Although Costa Rica possibly may participate in these events, the decision will be take later.

2. **Updates on your activities.** The following table is a summary of ICRI's *Framework for Action* (FFA) and its four cornerstones. (The full text of the FFA is available in English, French, and Spanish at <http://icriforum.org/icri-documents/icri-key-documents/continuing-call-action-2013> ).

Integrated Management	Objective	Manage coral reefs and related ecosystems using an ecosystem approach, recognizing place based activity; connectivity within and among ecological, social, economic, and institutional systems; as well as with attention to scale; resilience of ecological and social systems; and long-term provision of ecosystem services.
	General Approach	Integrated management, using a strategic, risk-based, informed approach, provides a framework for effective coral reef and related ecosystem management which supports natural resilience, ecosystem service provision, and enhances the ability to withstand the impacts of climate change and ocean acidification.
	Desired outcome	There is a demonstrable reduction in the threats to coral reefs and related ecosystems through management action.
Capacity Building	Objective	To build capacity in all facets of management of coral reefs and related ecosystems and support dissemination and application of best practices to achieve the widest possible engagement of all stakeholders in planning and management activities.
	General Approach	Continued collaboration, partnerships, outreach, information sharing and education to ensure the uptake of best practices and encourage behavioural change. This can only be successful if the diversity of cultures, traditions and governance among nations and regions are taken into account.
	Desired outcome	Persons who have influence in the management of coral reef and related ecosystems have the knowledge, tools and capital necessary to apply best practices, adapted to the cultural and socio-economic context.
Science & Monitoring	Objective	To support research and citizen science approaches to enable countries and communities assess and report on the status of and threats to their coral reefs and related ecosystems in a coordinated, comparable and accessible manner.
	General Approach	Research and monitoring programs are essential to ensure that management of coral reefs and related ecosystems is based on best available (scientific) information.
	Desired outcome	Knowledge of the status and trends in coral reefs and related ecosystems health is enhanced and used to inform planning and management, improving management outcomes.
Periodic Assessment (Review)	Objective	To engage in periodic review of the impact and effectiveness of all elements of management to enable evaluation and refinement of management measures in an adaptive framework.
	General Approach	Periodic assessments of management effectiveness and evaluation of projects and activities to ensure the efficacy of management tools and systems in tackling the range of pressures affecting coral reefs and related ecosystems and protecting the values associated with them.
	Desired outcome	Management processes and activities are regularly reviewed and improved using a structured approach, to enhance their ability to effectively reduce pressures and

		threats.
--	--	----------

Using the table on the previous page, as well as the detailed descriptors of approaches and strategies available in the full text of the FFA as a reference, please give us an update on an activity/project/program(s) which has been particularly successful in your country/organization during this reporting period.

### Project 1

Cornerstone(s) implemented through the project	Check all that apply: <input checked="" type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building <input type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)
Project Title	Lionfish Control and marine life conservation in the Southern Caribbean of Costa Rica
Location	South Caribbean, Costa Rica
Dates	2015 - 2016
Main Organizer(s)	Association of south Caribbean artisanal fishermen
Main Stakeholder(s)	UNDP, SINAC-MINAE, UCR-CIMAR, INCOPESCA, Trichechus Foundation
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	In Costa Rica are priority efforts to reduce populations of the invasive lionfish ( <i>Pterois volitans</i> / miles). Some scientists believe that the colonizing coastal ecosystems multiple speed and voracity of the species can replace 90% of the fauna of Caribbean reefs over four years from its establishment. According to other authors, maybe to the Caribbean this invasion is the most important change since the start of industrial fishing. In this sense, this project include action defined in the Strategic Plan attention to this specie and taken to the field local including traditional fishing areas and protected wildlife and marine areas. The specific objectives of this proposal also follow the latest recommendations at international and regional level provided by Morris (2013) among others.
Outcome (Expected outcome)	<ul style="list-style-type: none"> <li>• Reduce the population of lionfish by implementing actives and passives methods of extraction.</li> <li>• Promote the creation of an interagency network of collaborators led by SINAC and the Association.</li> <li>• Build a base of scientific information, updated and quality, to provide information to decision makers to the various institutions involved</li> </ul>
Lessons learned	Strategic alliances and respecting local customs and knowledge of coastal residents, is an excellent way to achieve a common goal. Reduce the population of the exotic invasive fish species leon.  Institutional support is essential to execute this project, but the birth of the proposal by the fishermen ensures the success and sustainability.
Related websites (English preferred)	<a href="https://www.facebook.com/AsociacionDePescadoresDelCaribeSur?f=ts">https://www.facebook.com/AsociacionDePescadoresDelCaribeSur?f=ts</a> <a href="http://www.minae.go.cr/index.php/es/152-presentan-protocolo-para-la-captura-extraccion-y-disposicion-final-del-pezo-leon-2">http://www.minae.go.cr/index.php/es/152-presentan-protocolo-para-la-captura-extraccion-y-disposicion-final-del-pezo-leon-2</a> <a href="http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&amp;nValor1=1&amp;nValor2=81635&amp;nValor3=104161&amp;strTipM=TC">http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&amp;nValor1=1&amp;nValor2=81635&amp;nValor3=104161&amp;strTipM=TC</a>

### Project 2

Cornerstone(s)	Check all that apply: <input checked="" type="checkbox"/> Integrated Management <input type="checkbox"/> Capacity Building
----------------	---

implemented through the project	<input type="checkbox"/> Science & Monitoring <input type="checkbox"/> Periodic Assessment (Review)
Project Title	<a href="#">Consolidating Costa Rica's Marine Protected Areas</a>
Location	<a href="#">Costa Rica</a>
Dates	<a href="#">2012 - 2016</a>
Main Organizer(s)	<a href="#">National System of Conservation Areas (SINAC)</a>
Main Stakeholder(s)	<a href="#">United Nations Development Program (UNDP) Costa Rica</a>
Description of Project (Please elaborate on how the project implements the FFA cornerstones)	The project propose provide global environmental benefits by expanding and/or creating 10 MPAs, to increase marine ecosystem representation by up to 32.44% of the total area that was identified in the coastal and marine conservation gap analysis, including up to 407 km <sup>2</sup> of terrestrial areas; 1,534 km <sup>2</sup> of coastal-near coastal areas that are 0 to 30 meters deep; 4,472 km <sup>2</sup> of marine areas that are 30 to 200 meters deep; and 422 km <sup>2</sup> of oceanic areas that are deeper than 200 meters. This will benefit over 20 coastal and marine ecosystems (coral reefs, seagrasses, mangroves, beaches, coastal lagoons, and estuaries) and habitat for at least nine key marine and coastal species (the humpback whale, the manatee, sharks, and five species of sea turtles). In addition, the management effectiveness of MPAs will increase by 20% through: a) the implementation of participatory management arrangements in three MPAs; b) strengthening inter-institutional cooperation mechanisms; and c) developing a marine ecology monitoring strategy and a CC mitigation and management adaptation strategy for MPAs. Finally, the project will strengthen current sources of financing and revenue generation, as well as the inclusion of new financial mechanisms that will reduce the existing financial gap needed to cover MPA management costs. Overall, the project will promote effective biodiversity conservation in 12,235 km <sup>2</sup> of coastal and marine areas in Costa Rica, enabling the protection of coastal and marine biodiversity of global, national, and local importance.
Outcome (including expected outcome)	Outcome 1: Strengthened institutional framework and improved individual capacity for effective MPA management.  Outcome 2: Increased and diversified funding for MPAs.  Outcome 3: Expanded MPA coverage for improved ecological representation.
Lessons learned	<a href="#">The project close recently and the systematization is in construction.</a>
Related websites (English preferred)	<a href="http://www.cr.undp.org/content/costarica/es/home/operations/projects/environment_and_energy/areas-marinas-protegidas.html">http://www.cr.undp.org/content/costarica/es/home/operations/projects/environment_and_energy/areas-marinas-protegidas.html</a>

*Note: If you have more activities/projects/programs you would like to report on or share with other members, please duplicate the table above and fill it in for as many projects as you wish.*

**3. Publications.** Please list relevant publications/reports you have released during this reporting period.

Title (incl. author and date)	Website URL if available	Type of publication (Paper, report, etc.)
Sandel, V., D. Martínez-Fernández, D. Wangpraseurt, & L. Sierra. 2015. Ecology and management of the invasive lionfish <i>Pterois volitans/miles</i> complex (Perciformes: Scorpaenidae) in Southern Costa Rica.	<a href="http://www.scielo.sa.cr/scielo.php?pid=S0034-77442015000100017&amp;script=sci_arttext">http://www.scielo.sa.cr/scielo.php?pid=S0034-77442015000100017&amp;script=sci_arttext</a>	Scientific
McDonald Herrera, H. 2015. Conservation of the Costa Rican, South Caribbean Sea: Balancing a Sustainable Artisanal Trap Fishery with Invasive Lionfish Control	<a href="https://afs.confex.com/afs/2015/webprogram/Paper21335.html">https://afs.confex.com/afs/2015/webprogram/Paper21335.html</a>	Symposium
Salas, E., C. Sánchez-Godínez, A. Montero-Cordero. 2015. Marine Fishes of Caño Island Biological Reserve: Reef fish community structure and updated list for the coastal fish.	<a href="http://revistas.ucr.ac.cr/index.php/rbt/article/view/23098">http://revistas.ucr.ac.cr/index.php/rbt/article/view/23098</a>	Scientific
Alfaro-Montoya, J., A. M. Monge-Ortiz, D. Martínez-Fernández & E. Herrera-Quesada. 2015. First record of the nonindigenous <i>Penaeus monodon</i> Fabricius, 1798 (Penaeidae) in the Caribbean Sea of Costa Rica, Central America, with observations on selected aspects of its reproductive biology	<a href="http://www.reabic.net/journals/bir/2015/3/BIR_2015_AlfaroMontoya_etal.pdf">http://www.reabic.net/journals/bir/2015/3/BIR_2015_AlfaroMontoya_etal.pdf</a>	Scientific
Alvarado, J.J., A. Beita-Jiménez, S. Mena, C. Fernández-García, A.G. Guzmán-Mora. 2015. Osa Conservation Area (Costa Rica) coral ecosystems: structure and conservation needs.	<a href="http://revistas.ucr.ac.cr/index.php/rbt/article/view/23105">http://revistas.ucr.ac.cr/index.php/rbt/article/view/23105</a>	Scientific

**4. General Information.** (Note that this information will be posted on the ICRI website on your member page: <http://www.icriforum.org/about-icri/members-networks>.)

Member type (Country / Organization):	Costa Rica
<b>Focal Point 1:</b>	
Name:	Mauricio Mendez Venegas
Title/Organization:	National System of Conservation Areas, Ministry of Environmental and Energy
Email:	mauricio.mendez@sinac.go.cr
<b>Focal Point 2:</b>	
Name:	
Title/Organization:	
Email:	

*Thank you very much for sharing your valuable experiences and information with ICRI.*