



NATIONAL DIAGNOSTIC OF FISHING ORGANIZATIONS

SUMMARY OF ORGANIZATIONAL RESULTS



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SUMMARY OF ORGANIZATIONAL RESULTS

Duke
UNIVERSITY





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INTRODUCTION

In Mexico there are more than 250,000 registered small-scale fishers that contribute 23% of the national fishery production¹. In 2015 there were nearly 3,200 documented fishing cooperative societies². Although the exact number of the fishers organized in fishing cooperatives is unknown, it is estimated that around 78% of registered fishers are members of the cooperatives. A small percentage of cooperatives are organized in federations at the regional level, and confederations at the national level.

In 2016 we started a project with the objective of developing a national program to strengthen small-scale fishing organizations as a strategy to achieve sustainable fisheries. This project was built on the premise that well-functioning fishing organizations form a basis and engine for the adoption of responsible fishing practices.

During the first phase of the project, that took place in 2017, we generated critical information with the execution of a National Diagnostic of Fishing Organizations that included: a) a general revision of public policies related to the organizational development of the fishery sector, and b) an assessment of fishing organizations (confederations, federations, and cooperatives) based on their level of organization and strengthening needs. Through this work we seek to generate relevant, current, and useful information that will allow both fishing organizations and the national government to create strategies and manage the necessary resources for sector's ongoing strengthening and development.

This study is an innovative exercise that has integrated most recent approaches at the international level regarding how to carry out studies to diagnose the state of fishing organizations. To achieve these objectives, we formed a working group between the civil society organizations Sociedad de Historia Natural Niparajá A.C., Comunidad y Biodiversidad A.C. (COBI) and Duke University (North Carolina, USA). The working group has extensive experience in marine conservation activities, sustainable fisheries, and common pool resources governance in the country. This collaboration ensures the use of scientific, community, and logistic aspects necessary to carry out a project of this size.

This document describes the methodology used to assess organizations, some of the relevant results, and several recommendations to guide initiatives for public policy development, training, and strengthening of the sector.

The information provided in this summary is part of a lengthy investigation included in the National Diagnostic of Fishing Organizations report³.

¹ CONAPESCA (2013). Aquaculture and Fishery Statistics Yearbook.

² Information gathered from CONAPESCA's fishery production data, 2015.

³ Link to full document:

<https://sites.nicholas.duke.edu/xavierbasurto/our-work/projects/diagnostico-nacional/>





OVERALL CONTEXT

The term small-scale fishery or artisanal fishery encompasses a high proportion of the fisheries around the world. The term is so broad and diverse, that experts have agreed that a universal definition is not possible or desirable. The description adopted by most is the one included in FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries. In this document, small-scale fishery is characterized by a diverse and dynamic activity, whose practice is closely linked to the unique context of the place, way of life, and local culture. The scientific literature and the State have often overemphasized the role played by technology to differentiate between small-scale and industrial fisheries, complicating the challenges faced by small-scale fisheries in developing sustainable and responsible fishing practices.

The significance of small-scale fisheries has not been properly documented in the past and therefore, has received little attention within the sphere of public policy. However, the most recent estimates suggest that small-scale fisheries account for

over 90% of the world's commercial fishers, processors, and others employed along the value chain, equivalent to over 108 million people. Roughly half are employed in the ocean and the other half in inland fisheries—making small-scale fisheries far and away the ocean's largest employer⁴. This level of activity translates into about 46% of the total fish catch, and 38% of the fish caught in the ocean. The vast majority of the catch is destined for human consumption.

The premise of this study, as mentioned previously, is that strong fishing organizations are required to achieve responsible fisheries, which in turn is necessary to achieve the Sustainable Development Goals set by the United Nations. Small-scale fisheries have a direct relationship with many of the Sustainable Development Goals such as End poverty (SDG1), End hunger (SDG2), Promote sustained, inclusive, and sustainable economic growth (SDG8), Reduce inequality (SDG10), Make cities and human settlements sustainable (SDG11), Ensure sustainable consumption and production (SDG12), and Conserve and sustainably use the oceans (SDG14).

⁴ Compared to other ocean activities such as gas and oil, shipping, and tourism among others.

METHODOLOGY

Based on scientific literature and lengthy consultations with fishers, we defined organizational success in terms of 'functionality' which was measured in five different dimensions: 1) Operational efficiency of the organization, 2) Equity based on proportionality between rights and obligations of the organization, 3) Accountability among members of the organization towards external authorities or agents, 4) Adaptive capacity to unexpected events, and 5) Presence of organizational or collective values.

The study carried out a rigorous national-level assessment of the functionality of the confederations, federations, and cooperatives. The assessment consisted of three different approaches: 1) self-assessment of the organization by a member of the board, 2) assessment of the organization by a key informant with full knowledge of the organization's operations, but does not form part of the organization, and 3) assessment of the organization by a member that does not serve on the board. The results from the three approaches were averaged out in a single identifier known as "360° assessment."

Possible causes of functionality were identified through lengthy consultations with the fishery sector, analyses of governance literature, and national fisheries laws. This process produced a list of 54 possible causes of functionality (called elements) for cooperatives and 38 for federations. These elements were organized in nine categories based on their characteristics and functionality: 1) Internal and external rules; 2) Administration, management, and technical capacity; 3) Cross-scale linkages; 4) Cooperativism and transparency; 5) Benefits and social responsibility; 6) Infrastructure and equipment; 7) Economy of fishing resources; 8) Commercialization of fishing resources; and 9) Inspection, surveillance, and sanctions.

FUNCTIONALITY DIMENSIONS

1

Operational efficiency

of the organization

2

Equity

based on proportionality between rights and obligations of the organization

3

Accountability

among members of the organization towards external authorities or agents

4

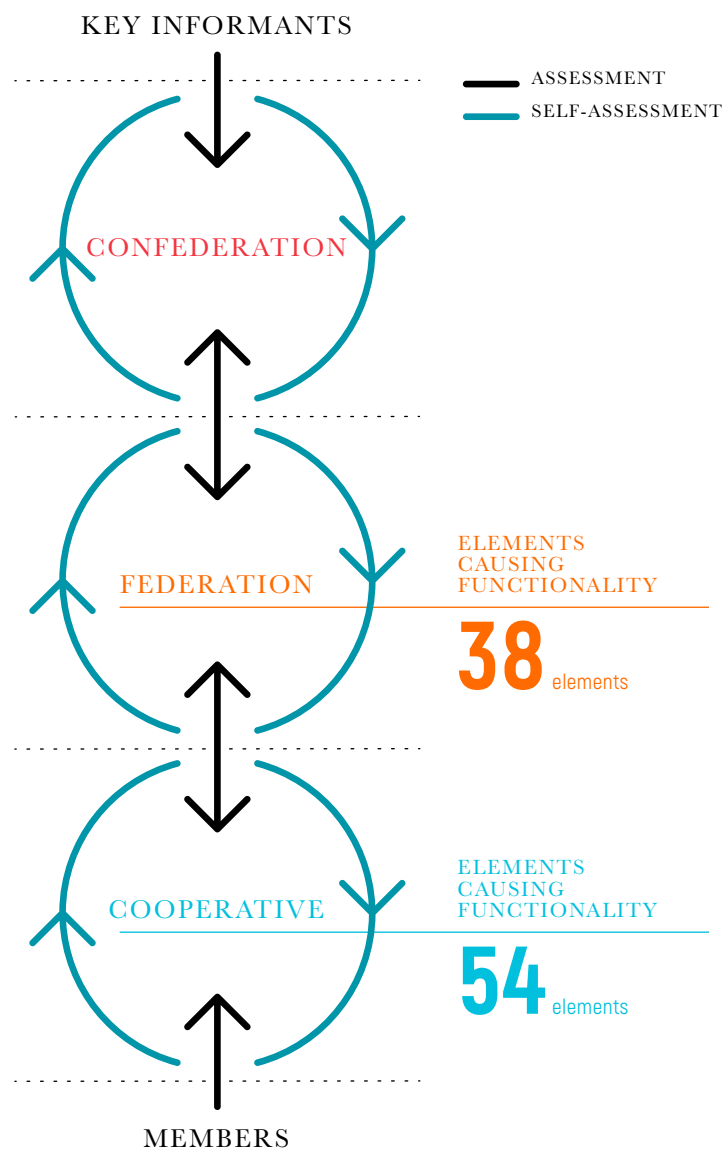
Adaptability

to unexpected events

5

Organizational or collective values

360° ASSESSMENT



CATEGORY OF ELEMENTS

MEASURED ELEMENTS

1	Internal and external rules	11
2	Administration, management, and technical capacity	9
3	Cross-scale linkages	6
4	Cooperativism and transparency	4
5	Benefits and social responsibility	5
6	Infrastructure and equipment	5
7	Economy of fishing resources	4
8	Commercialization of fishing resources	5
9	Inspection, surveillance, and sanctions	5

METHODOLOGY

The process of measuring the 360° assessment was based on operationalization of the elements identified as possible drivers of organization's functionality, and their implementation using different data collection tools: from focus groups and pile sorting to surveys and interviews with key informants.

Between February and July of 2017, these tools were implemented in six different regions of the country. Within each region a central location was selected to which representatives of fishing organizations that were members of confederations and well as non-members were invited. During this period 41 federations and 199 cooperatives were sampled representing about 6% of the total number of fishing cooperatives in Mexico. To achieve this coverage a team of 9 people was hired and trained. In total, we completed 397 surveys, applied 48 pile sortings, and facilitated 45 focus groups.

SAMPLED

199 cooperatives

41 federations

14 states

COMPLETED

397 surveys



APPLIED

48 pile sorting



FACILITATED

45 focus groups



MAP OF REGIONS

MEETING VENUE

- RI** Tonalá, Chis.
- RII** Tampico, Tamps.
- RIII** La Paz, B.C.S.
- RIV** Los Mochis, Sin. / Tepic, Nay.
- RV** Acapulco, Gro.
- RVI** Frontera, Tab.



RESULTS

DEMOGRAPHIC CHARACTERISTICS OF THE SECTOR

The following data allows us to describe fishing organizations at a national level and depicts differences and similarities in various aspects that are shown below.

AVERAGE AGE OF THE ORGANIZATIONS

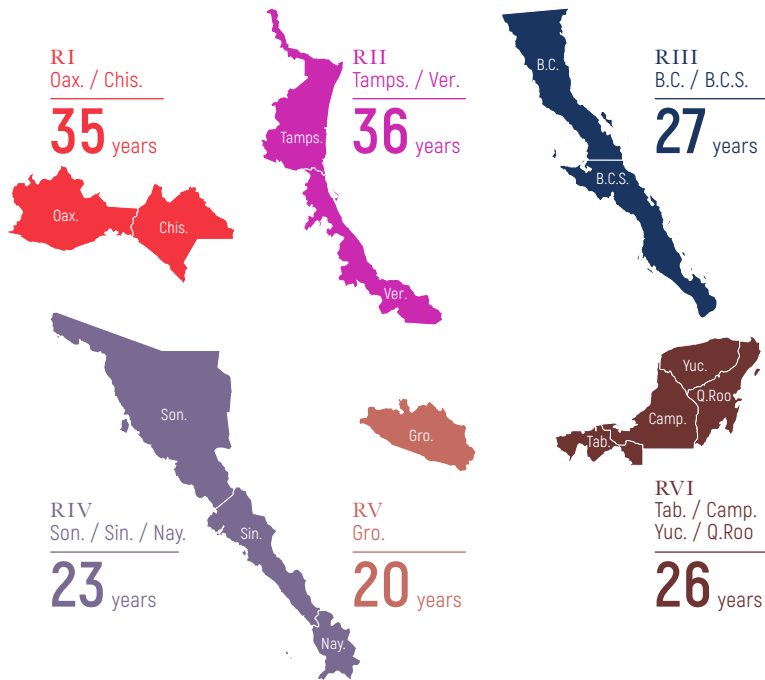
COOPERATIVES

AVERAGE AGE
OF COOPERATIVES

26 years

YEAR ESTABLISHED
(majority)

1991



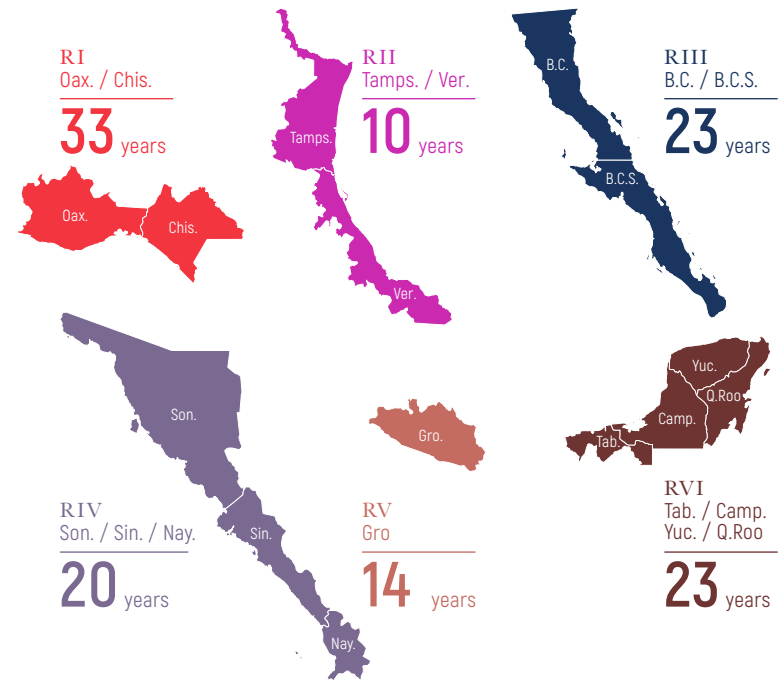
FEDERATIONS

AVERAGE AGE
OF FEDERATIONS

22 years

YEAR ESTABLISHED
(majority)

1995

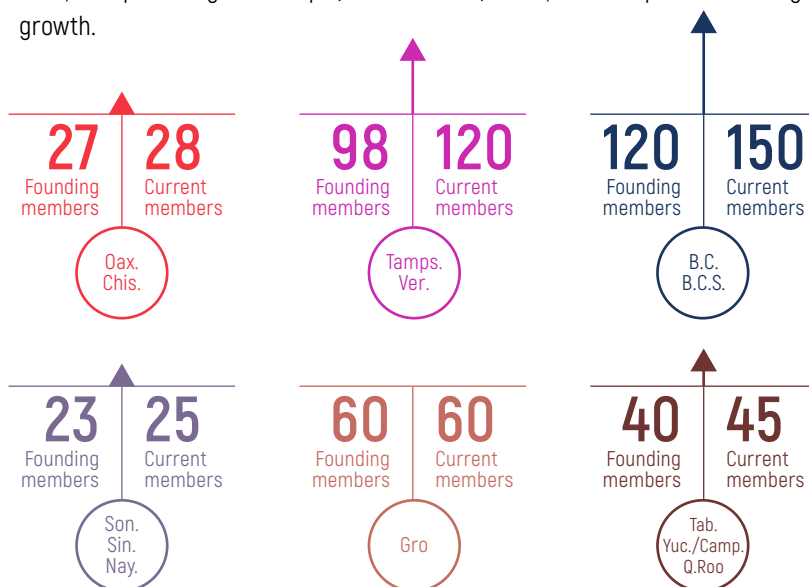


DEMOGRAPHIC CHARACTERISTICS OF THE SECTOR

REGISTERED MEMBERS AT EACH ORGANIZATIONAL LEVEL

COOPERATIVES

In general, the number of members per cooperative has only slightly grown with time, except for regions Tamps./Ver. and B.C./B.C.S., which experienced a higher growth.

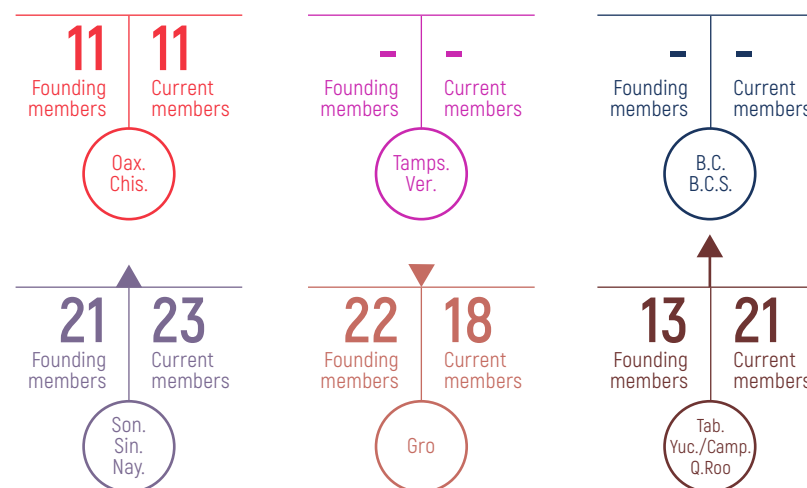


Nevertheless, when considering the organization's age relative to the number of members, we find that cooperatives used to be bigger (larger number of members) and their size has decreased with time:



FEDERATIONS

The number of cooperatives within federations has remained steady, except for Guerrero recording a slight downward trend.



At the federation level the results are inconclusive due to the small number of federations in our sample that were established prior to 1990.

RESULTS

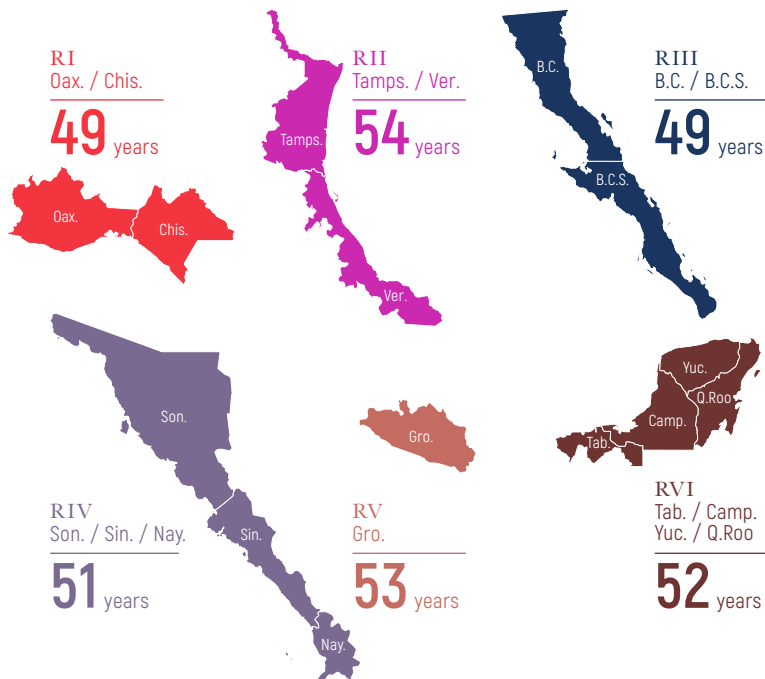
DEMOGRAPHIC CHARACTERISTICS OF THE SECTOR

AVERAGE AGE OF EXECUTIVES

COOPERATIVES

AVERAGE AGE
OF EXECUTIVES

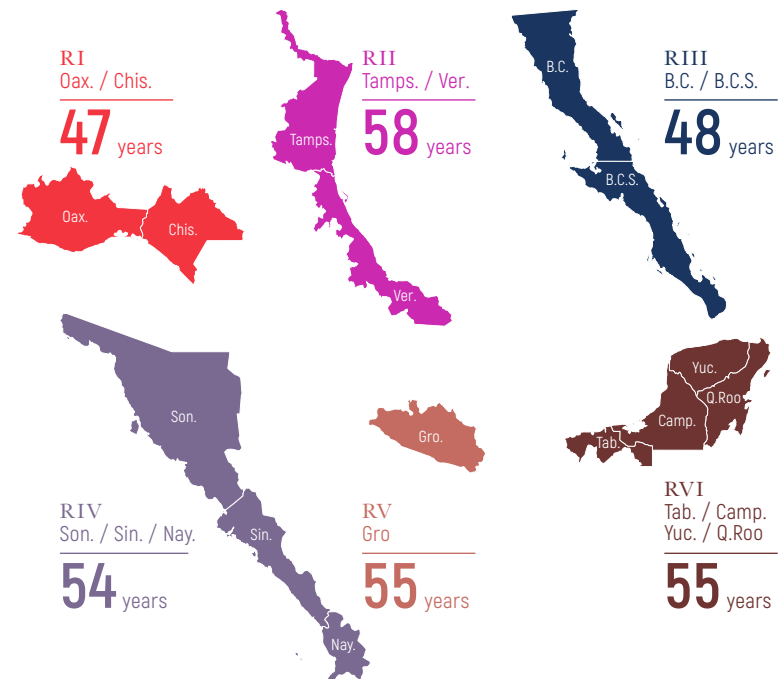
51 years



FEDERATIONS

AVERAGE AGE
OF EXECUTIVES

53 years



DEMOGRAPHIC CHARACTERISTICS OF THE SECTOR

TENURE OF EXECUTIVES

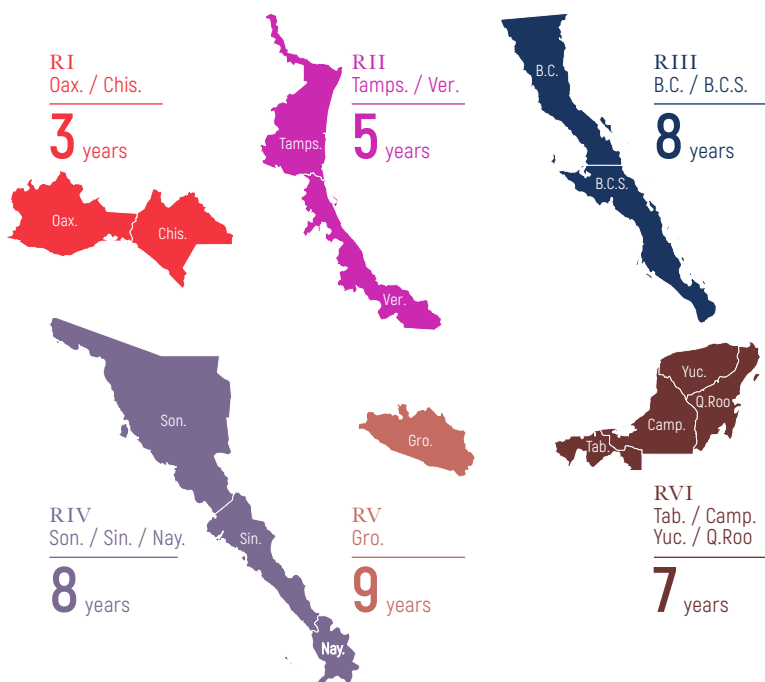
COOPERATIVES

AVERAGE TENURE
OF EXECUTIVES

7
years

PERCENTAGE OF EXECUTIVES IN
THEIR POSITION MORE THAN ONCE

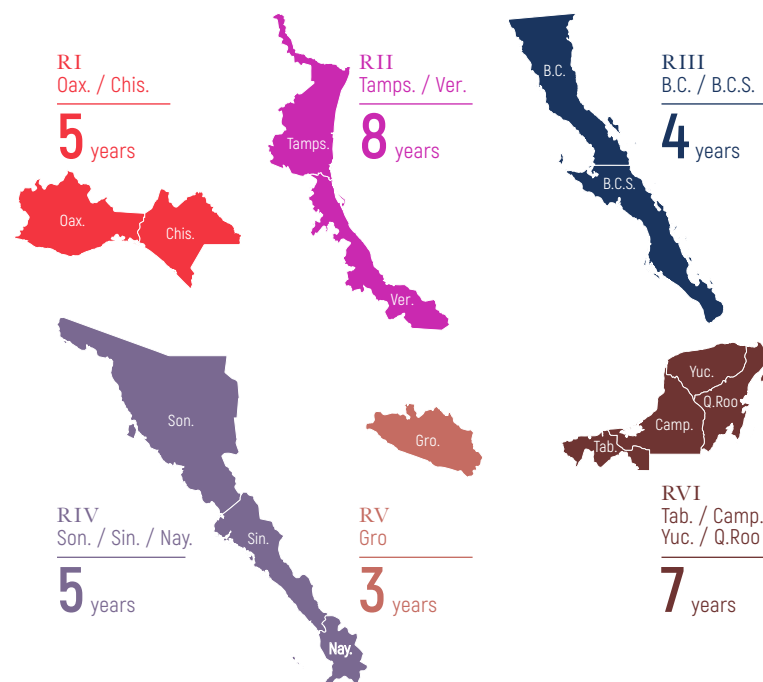
51%



FEDERATIONS

AVERAGE TENURE
OF EXECUTIVES

5
years



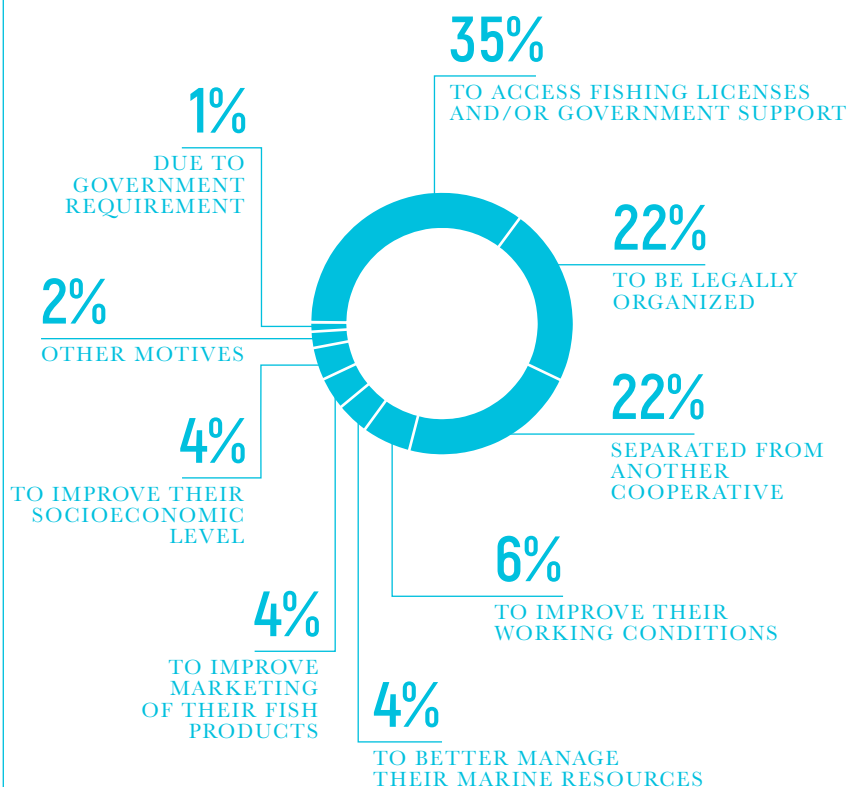
RESULTS

DEMOGRAPHIC CHARACTERISTICS OF THE SECTOR

INCENTIVES TO SELF-ORGANIZE

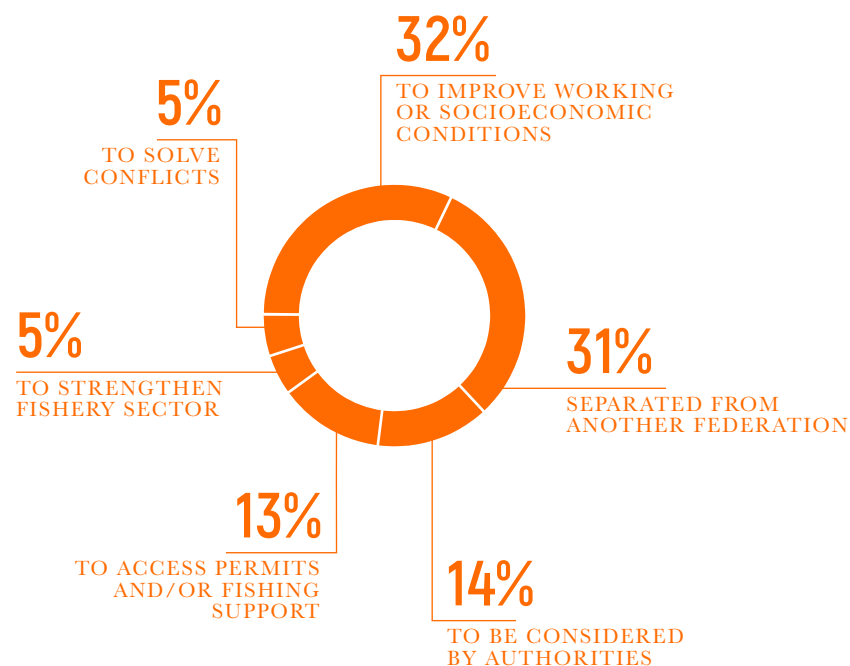
COOPERATIVES

One of the main reasons to create cooperatives, no matter the age, is to be able to access fishing licenses and government support programs. Over the last 30 years, separation of members from existing cooperatives has become an important factor to create new cooperatives.



FEDERATIONS

The main reasons that drove the creation of federations were to improve working or socioeconomic conditions and also separation of members from existing federations. However, due to the small federation sample, these reasons cannot be interpreted with certainty.







RESULTS

CHARACTERISTICS OF A FUNCTIONAL ORGANIZATION

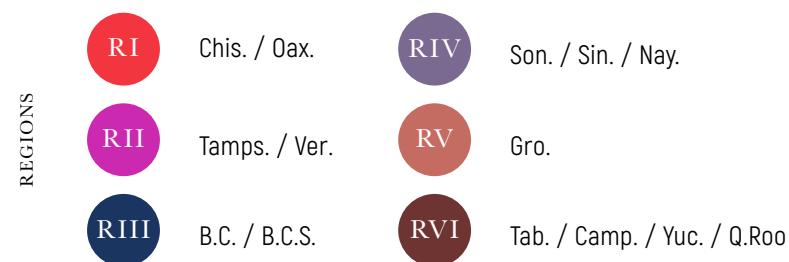
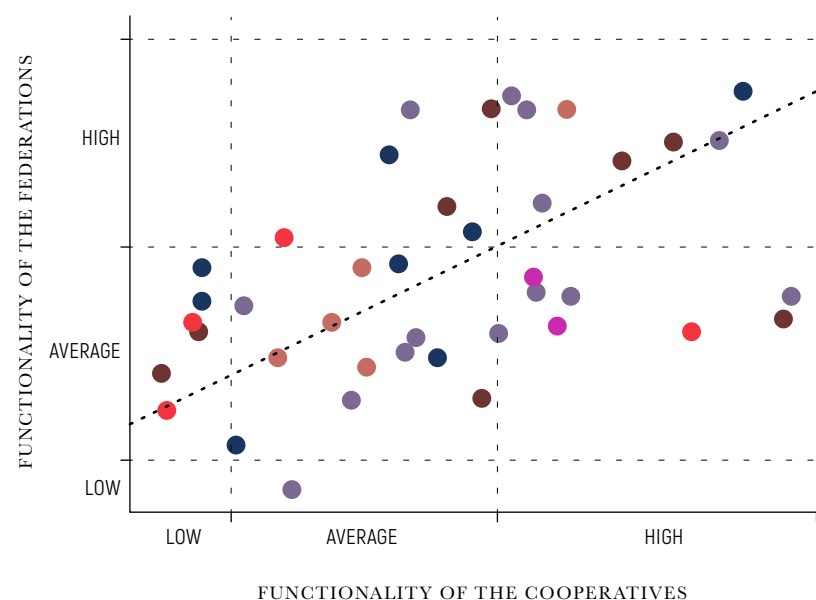
LEVEL OF FUNCTIONALITY

COOPERATIVES AND FEDERATIONS

The following graph depicts the relationship between mean levels of functionality of the federations and their cooperatives. The circles represent each federation sampled in the study and the color matches the region they belong to.

The graph shows a slight tendency where cooperatives with a high level of functionality belong to federations with a high level of functionality as well. However, we can also note several federations with a high level of functionality that unionize cooperatives with a low degree of functionality and vice versa.

The next two sections show separate results from data analyses for cooperatives and federations. In general, the results illustrate a similar pattern across both levels.



RESULTS

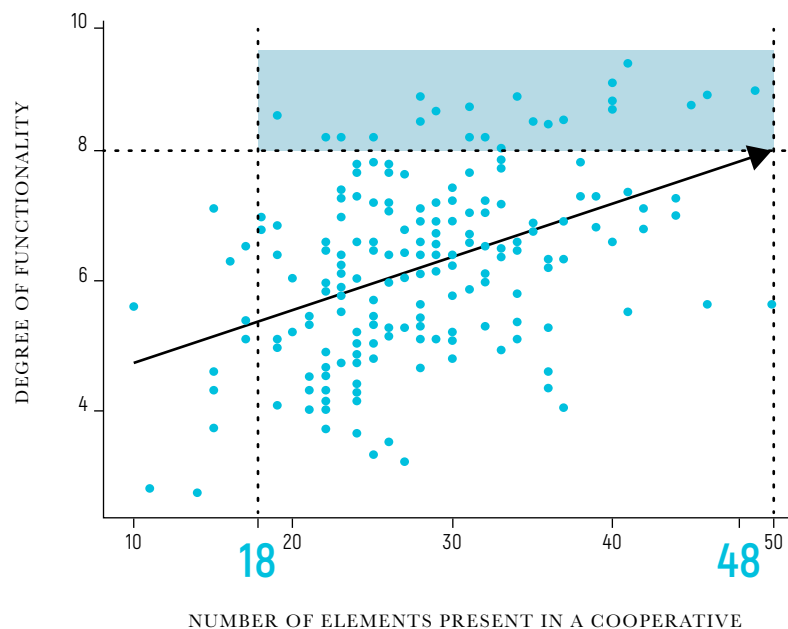
CHARACTERISTICS OF A FUNCTIONAL ORGANIZATION

LEVEL OF FUNCTIONALITY

COOPERATIVES

The analyzed cooperatives have different elements that determine their functionality. We found that a highly functional cooperative (those that scored above 8) is not related to a high number of elements present in it, despite the slight positive tendency marked by the black arrow. The shadowed area indicates that the number of elements present in highly functional cooperatives varies between 18 and 48.

This is why we shouldn't focus on how many elements are present, but instead on which of the 54 elements are present in a cooperative, as well as how those that are present interact among themselves. For this, it is important to know the elements that bear more influence on a cooperative's functionality. They are listed below in order of importance.



16

KEY ELEMENTS
IN HIGHLY
FUNCTIONAL
COOPERATIVES

1. Project collaboration with other organizations
2. Region where cooperatives operate
3. Administrative infrastructure
4. Ability to manage permits
5. Territorial rights
6. Social welfare funds
7. Higher economic value resources management
8. Ability to manage funding
9. Product delivery and marketing
10. Social and health insurance
11. Marketing infrastructure
12. Members respect internal rules
13. Members pay their contributions (dues)
14. Social responsibility toward the community
15. Establishment follow legal requisites
16. Surveillance infrastructure

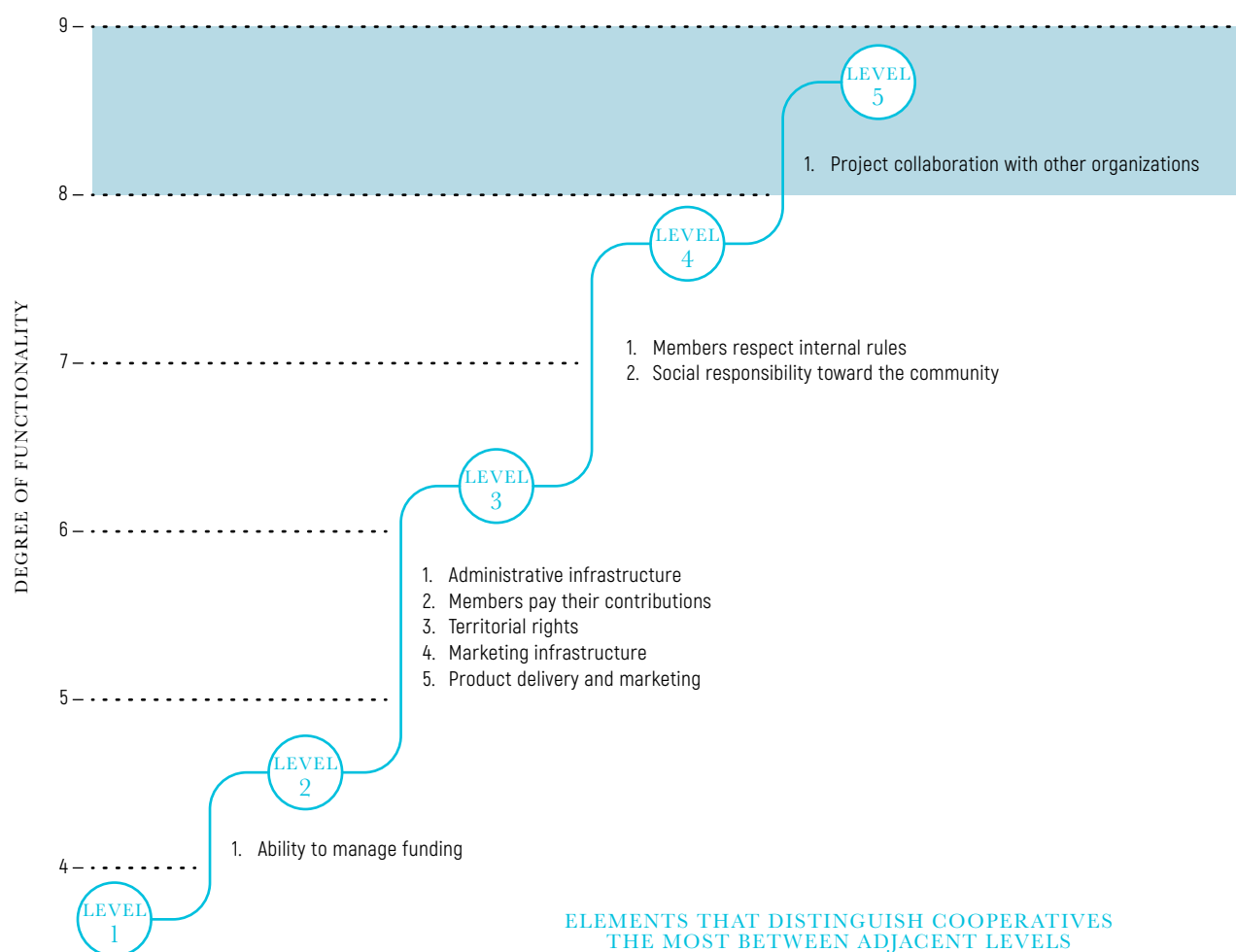
CHARACTERISTICS OF A FUNCTIONAL ORGANIZATION

LEVEL OF FUNCTIONALITY

COOPERATIVES

Additional analyses identified five groups of cooperatives with statistically significant differences in their degree of functionality and revealed the elements that contribute the most toward the difference between consecutive levels, as shown in the following graph.

It is important to emphasize that the difference in the upper levels almost always includes the elements from the previous comparison in addition to the new ones. Identification of key elements at each of the five levels enables a more tailored design of policies needed to improve cooperative's functionality within a particular level.



RESULTS

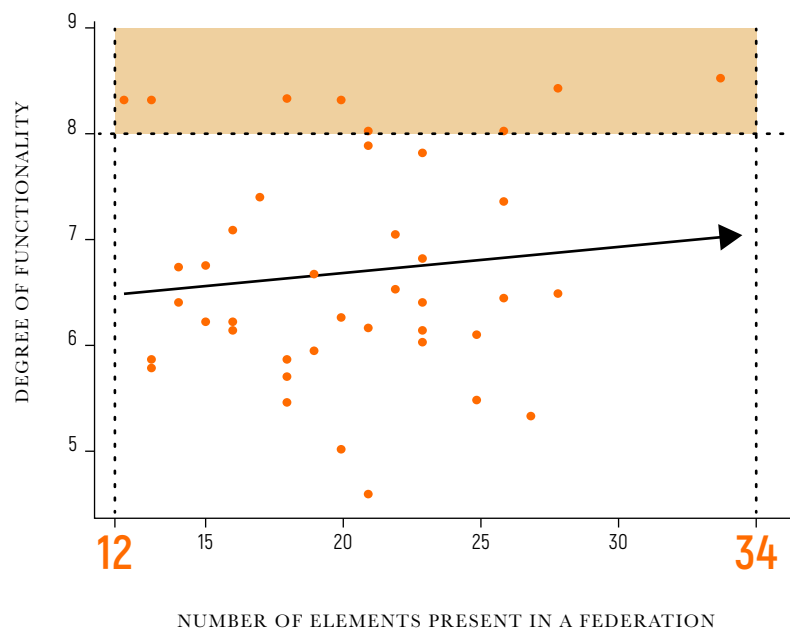
CHARACTERISTICS OF A FUNCTIONAL ORGANIZATION

LEVEL OF FUNCTIONALITY

FEDERATIONS

Same as with the analysis carried out for the cooperatives, there is no correlation between a highly functional federation (those that scored above 8) and a high number of elements present within it. As the graph below depicts, the number of elements present in highly functional federations varies between 12 and 34.

Therefore, we shouldn't focus in how many elements are present, but which of the 38 elements are present in a federation. At this level of organization we only found 2 elements that greatly influence a federation's functionality.



2

KEY ELEMENTS
IN HIGHLY
FUNCTIONAL
FEDERATIONS

1. Administrative infrastructure
2. Access to technical advice

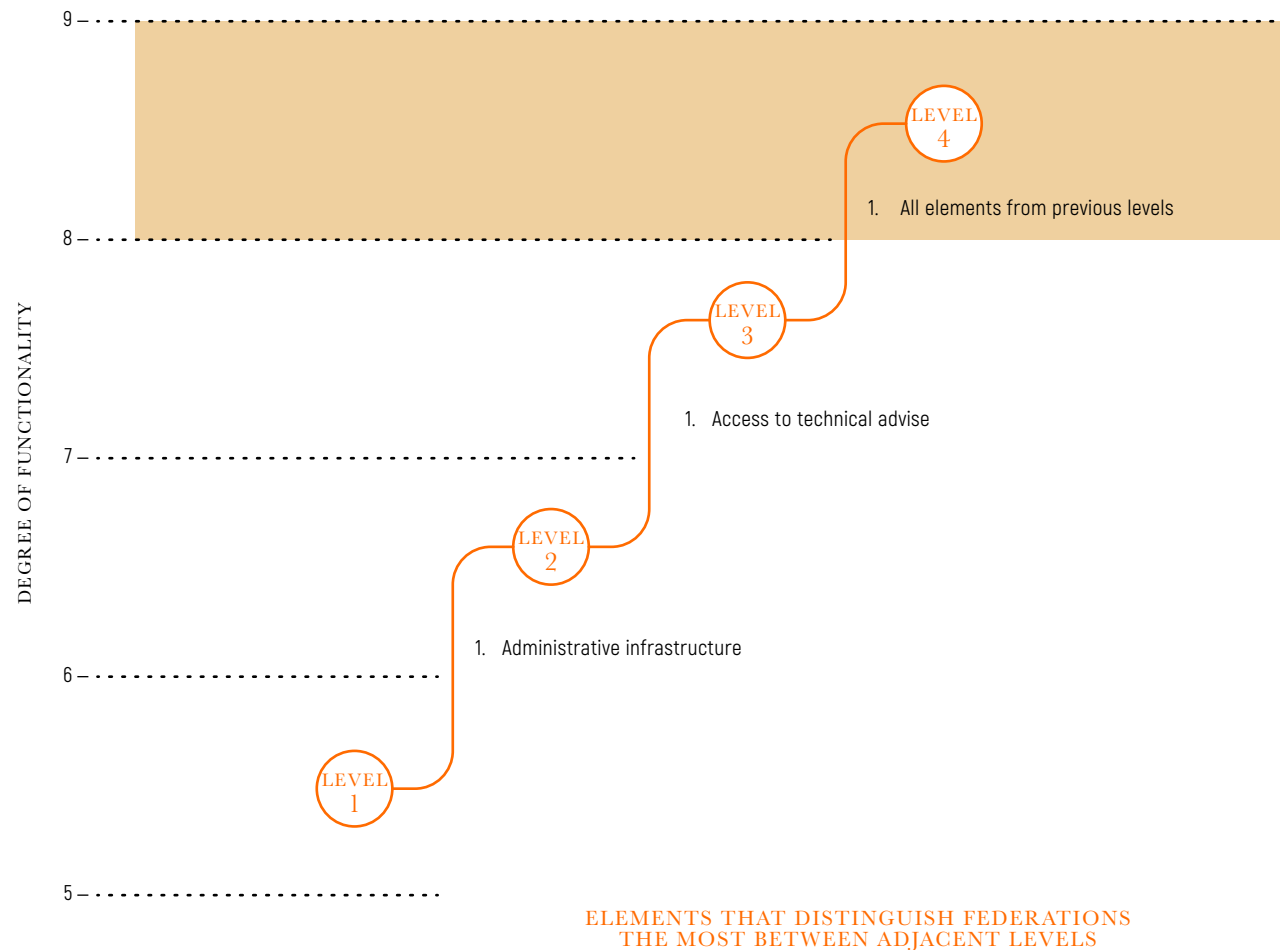
CHARACTERISTICS OF A FUNCTIONAL ORGANIZATION

LEVEL OF FUNCTIONALITY

FEDERATIONS

Additional analyses identified four groups of federations with statistically significant differences in relation to their degree of functionality. Furthermore, they showed the contribution of the two elements towards the difference between levels, as shown in the following graph.

In this case, improving the administrative infrastructure is the first activity that should be strengthened in federations at the lowest level. Once the administrative infrastructure improves, options to develop and/or access technical advice should be promoted.



RECOMMENDATIONS

Comparing results at the cooperative and federation levels reveal many similarities in terms of degree of functionality of fishing organizations. Nevertheless, the most notable differences suggest that these two types of fishing organizations require very different improvement measures. We cannot simply strengthen cooperatives and expect effects in federations and vice versa. Instead, we need different strategies for each that will be coordinated so that the costs of such programs as well as incentives for their adoption are more effective.

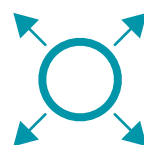
Studies and diagnostics like this one can serve as a baseline upon which better informed approach can be developed with a goal of forming a strengthening program and thus accomplishing improvements in fishing organizations. Therefore, it is essential to know what approaches are being done well and what areas require additional strengthening in order to perform better.

We have identified the following two areas and six strategies within them to create and drive the changes in the organizations:



INTERNAL CHANGES IN THE ORGANIZATIONS

These are the elements or factors that depend only on the same organizations and people that form the organization and that respond to the question 'how can I improve my cooperative's or federation's functionality?' Examples include: If it has clear rules; If it has a good administration; If they know how to collaborate with other groups. Some of these needs can be addressed when building capacities within the organization. For this it is necessary to create a capacities' agenda for cooperatives and federations.



CHANGES TO THE POLITICAL AND OPERATIONAL CONTEXT

These are external elements or factors to the organizations, but that create the context in which the organizations operate and therefore respond to the question 'how to strengthen the sense of cooperativism?' Based on the analysis of current fishing policies and how they affect the way an organization operates, we need to identify the key policies to reach changes in favor of the fishing organizations' future. Identifying a public policy that requires changes will not be enough, we also need to create the path and the strategy to reach identified changes. Moreover, we also need to land several of these proposed changes to better understand how and where public resources meant for subsidy programs should be invested.

Next, we describe how the six strategies can drive the necessary internal and external changes to strengthen organizations. These include authority areas in confederations, federations, and cooperatives, but also in government agencies (i. e., national policies, funding programs), that can be strengthened and complemented by other stakeholders such as academia and civil society organizations.

STRATEGIES



VERIFICATION SYSTEM FOR COOPERATIVE OBLIGATIONS

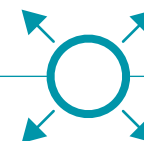
This strategy seeks the creation of verification schemes to fulfill elements required by law or by the organization, and that can be linked to federal funding programs.

CAPACITY BUILDING PROGRAM

This strategy suggests developing and implementing a capacity program to strengthen fishing organizations. Priority themes are cooperative system (rules and regulations), management (government processes) and access to technical consultancy. This should be linked to the federal government's training programs.

MONITORING AND ASSESSMENT SYSTEM

This strategy is related to designing a system that brings the strengthening progress of the organizations up to date and in a collective action manner.



INCENTIVES POLICY TO STRENGTHEN COOPERATIVISM

This strategy seeks to reform funding and incentives programs to enhance functionality of cooperatives and federations. Territorial rights were acknowledged as important incentives for cooperatives. Likewise, making it easier for federations to benefit from funding programs, mainly for administrative infrastructure and marketing (distribution centers), is considered strategic for the strengthening of federations.

INCENTIVES POLICY FOR SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

Fundamental elements to strengthen cooperatives: Access to social insurance (IMSS, welfare funds) as well as the development of mechanisms to foster a culture of social responsibility, of caring for the environment, and of fisheries management.

CREATING ALLIANCES

Creating alliances is an essential element for the functionality of both cooperatives and federations. It should focus on collective agendas and impact in public policies.

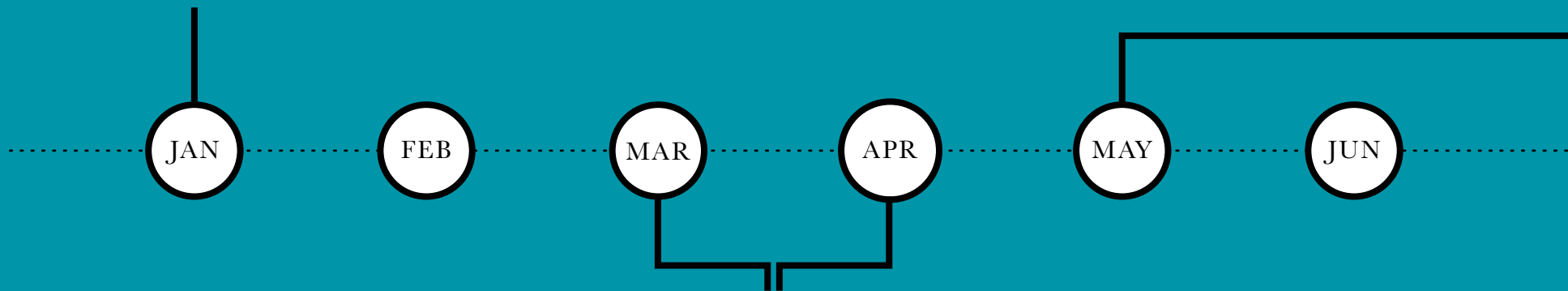
NEXT STEPS

2018

During the upcoming years we have various activities planned to develop the Strengthening Plan for fishing organizations. Description of the activities is outlined below.

CONAPESCA

Present diagnostic results to CONAPESCA.



REGIONAL WORK VISION AND PLANNING WORKSHOP

Carry out a vision and planning workshop to identify possible actions and strategies based on diagnostic's results in order to implement them in collaboration with fishery sector representatives (confederations) and the government (CONAPESCA).

REGIONS

Present results and recommendations in regions where meetings and data collection took place.

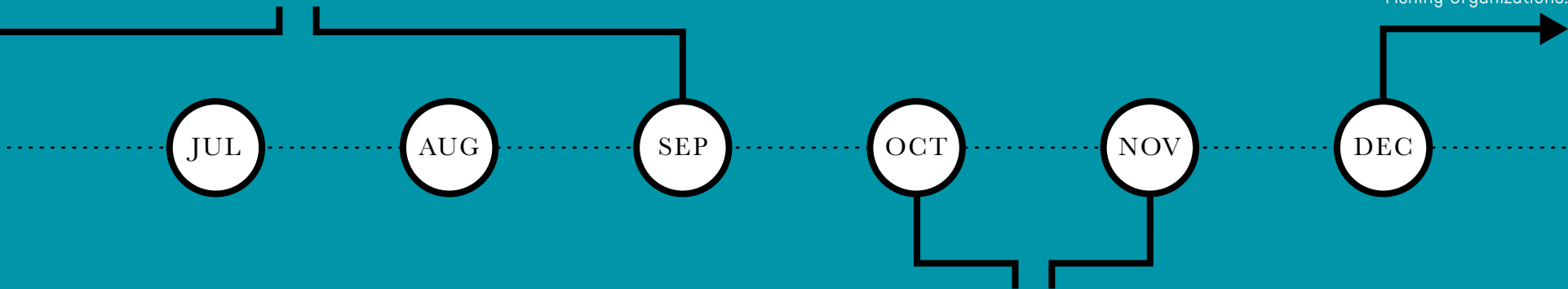
Compile opinions and proposals from the fishery sector that arise during these presentations.

STRENGTHENING PLAN

Develop Strengthening Plan for Fishing Organizations.

ACTION PLAN

Refine the action plan based on the feedback from fishery sector and other stakeholders (CONAPESCA).







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Coasts and Commons Co-Laboratory
Duke Marine Lab Rd. Beaufort, NC 28516
Telephone +1 (252) 504 7540
xavier.basurto@duke.edu
<https://sites.nicholas.duke.edu/xavierbasurto/>



© Sociedad de Historia Natural Niparajá, A.C.
Revolución de 1910 #430
Colonia Esterito, C.P. 23020
La Paz Baja California Sur, Mexico
Telephone +52 (612) 122 11 71
contacto@niparaja.org
www.niparaja.org



© Comunidad y Biodiversidad, A.C.
Calle Isla del Peruano #215
Colonia Lomas de Miramar, C.P. 85448
Guaymas, Sonora. Mexico
Telephone +52 (622) 22 24990
contacto@cobi.org.mx
www.cobi.org.mx



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diagnacionalop@gmail.com

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