# Fishermen Learning Exchanges for Conservation: An Examination of Lessons Learned

# Intercambios de Pescadores para la Conservación: Un Análisis de Lecciones Aprendidos

# Échanges D'apprentissage des Pêcheurs pour pa Conservation: Une Analyse des Leçons Apprises

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#### ABSTRACT

Fisher learning exchanges, in which representatives from different fisher communities are brought together to share knowledge have emerged as a key tool for improving fisheries management globally. Organized by fishermen, NGOs and governments to share fisheries challenges and solutions, they are widely considered to be highly effective. Despite this perception and considerable investment in producing fisher-learning exchanges, their effectiveness has not been assessed. In order to develop better understanding of the values and effectiveness and a protocol do so, a National Science Foundation funded workshop was held at the National Socio-Environmental Synthesis Center (SESYNC) entitled *Fisher Learning Exchanges for Conservation: An Examination of Lessons Learned (FLExCELL)* in May 2014. The workshop brought together fishers, NGOs, government managers, and academics in order to share their lessons learned for how to best produce fisher learning exchanges, focusing on what has worked best and what can be done to optimize future exchanges. It became the first ever large-scale analysis of how best to design and produce fisher-learning exchanges in order to improve fisheries management. This presentation will share the outcomes of this workshop and present the path forward to enhancing this widely accepted tool for addressing overfishing and other conservation outcomes.

KEY WORDS: Fisher's exchange, FEK, learning exchanges

### RATIONALE

Fisher learning exchanges are used worldwide for improving fisheries management. Organized by fishermen, NGOs and governments to share fisheries challenges and solutions, they are considered to be highly effective, and are credited as integral in the diffusion and adoption of fisheries management strategies such as catch shares and technologies, including turtle excluder devices. Despite this perception and considerable investment in producing fisher learning exchanges, to date their effectiveness has not been assessed. We organized the SESYNC workshop *Fishermen Learning Exchanges for Conservation: An Examination of Lessons Learned (FLExCELL)* to bring fishers, NGO practitioners, government managers, and academics together in order to share and compile their lessons learned for how to best produce fisher learning exchanges, focusing on what can be done to optimize future exchanges.

### WORKSHOP OVERVIEW

With \$50,000 from SESYNC, twenty-two workshop participants gathered from Canada, USA, Mexico, Jamaica, Belize, Madagascar, Palau, Guam, Malaysia, and Antigua and Barbuda with the following objectives:

- i) Establish a community of practice for fisher learning exchanges,
- ii) Develop a shared understanding of what defines a fisher learning exchange, andCompile lessons learned for conducting fisher learning exchanges.

During the three-day FLExCELL workshop, there were large-group discussions, breakout sessions, and time set aside for participants to share their fisher learning exchange stories. Interviews were also conducted in order to begin documenting these stories and experiences. Through collaboration among participants, the workshop objectives were fulfilled. The outputs of the workshop include:

- i) Formed learning exchange network among participants that extends to their partners worldwide,
- ii) Compiled lessons learned and outlined a guide of lessons learned as a resource for organizing future fisher learning exchanges,
- iii) Designed a research plan for deriving best practices through comparative case studies, and
- iv) Identified focus groups to participate in future research.

Enthused by the workshop, many of the participants volunteered to pursue activities to add to and share the lessons learned with others. The activities completed thus far include:

- i) Created short documentary film about the workshop,
- ii) Presented at the Gulf and Caribbean Fisheries Institute Conference,

- iii) Continued conducting interviews and gathering information about exchanges, and
- iv) SESYNC publicized the workshop to their international constituency at:

https://www.sesync.org/blog/fisher-learning-exchanges

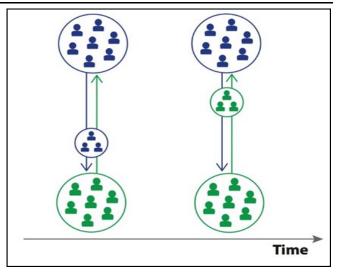
## COMMUNITY CONSENSUS ABOUT LEARNING EXCHANGES

Through discussions at the workshop, participants developed a shared understanding of what defines a fishermen learning exchange:

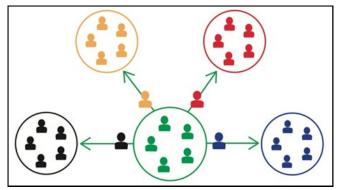
A fishermen learning exchange is a peer-to-peer gathering in which fishermen from different communities freely exchange information, experiences, and/or lessons learned about a common practice (fishing) in order to expand awareness, knowledge, skills, and networks for the betterment of fisheries resource management and/ or the communities involved. Where appropriate these exchanges may include other fishery stakeholders and members of the wider community.

Participants then identified three different formats fisher learning exchanges typically follow:

- A reciprocal exchange is when delegations of fishers and other stakeholders from two or more communities reciprocally visit each other to identify and co-derive, solutions to common problems (Figure 1). For example, from 2005-2007 delegations from Mexico, Japan and Hawaii travelled among the three countries to share bycatch mitigation challenges and solutions, facilitated by the Ocean Foundation and the Umigame Association. As a result of this reciprocal exchange, bycatch mortality of endangered loggerhead sea turtles was dramatically reduced in Mexican waters, and the groundwork was laid for doing so in Japanese pound nets.
- ii) A model transfer exchange is when fishery/ community representatives visit a model fishery/ community to learn about a management solution or technology (Figure 2). For example, in order to encourage the adoption of catch shares in international fisheries, EDF brought fisheries stakeholders from around the world to learn firsthand the benefits of the catch shares system of British Columbia. As a result, participants have initiated catch shares programs in numerous sites.
- iii) <u>A congress-style exchange</u> is when representatives of fishing communities gather in a central location to exchange ideas and solutions (Fig. 3). For example, Pescador a Pescador is a congress organized biennially by COBI and



**Figure 1.** Representation of a reciprocal exchange where delegations of stakeholders (small circles) visit each other's communities (large circles) over a certain period of time in order to co-derive solutions. The arrows denote the exchange of information between communities.

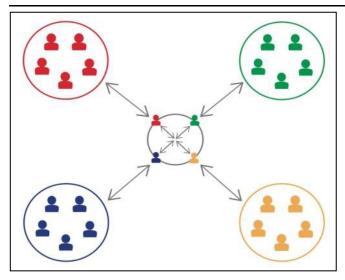


**Figure 2.** Representation of a model transfer exchange where representatives from communities (outer circles) visit a model community (inner circle) to learn a management solution. The arrows denote learning about a new management strategy.

Niparajá that brings together fishers and other stakeholders from Mexico and other countries to identify sustainability opportunities. In these exchanges, fishers collaborate on fishery management strategies and are given the opportunity to present their own management proposals to government authorities in a non-threatening environment.

## **RESEARCH PLAN**

As previously mentioned, participants of the FLEx-CELL workshop designed a research plan (Figure 4) for deriving best practices of fisher learning exchanges. The research plan is divided into three phases with timeframes for completion of these phases. Thus far, the baseline research and SESYNC workshop of Phase I are



**Figure 3.** Representation of a congress-style exchange where representatives of communities (large outer circles) come together (small inner circle) in order to exchange ideas and solutions. The arrows denote exchange of information.

complete. In the coming months, we will begin Phase II by conducting focus groups in order to refine lessons learned with communities who have already participated in exchanges and to expand the community of practice to include these communities with exchange experience. We hope to conduct these focus groups either in-person or via video conferences, whichever the budget and logistics allow. Based on the participants' input, three potential sites for focus groups were selected:

- i) Punta Gorda, Belize near Port Honduras Marine Reserve. Rationale for selection: Fishermen in this community have previously participated in exchanges with Jamaica and Grenada. There are various fisheries in the area, including lobster, conch, finfish, and sea cucumber, as well as sport fishing and diving communities. Additionally, the site has good technology and internet access and there is a space available to meet and host video conferencing.
- ii) *Bahía de Kino, Sonora, Mexico*. Rationale for selection: Local fishermen and divers have participated in the Pescador a Pescador exchanges and have returned from these exchanges with a strong motivation to make changes in their community, including instituting a local diving group that conducts underwater monitoring. There is also reliable internet connection and options for meeting areas.
- iii) Ligüi, Baja California, Mexico. Rationale for selection: A successful local women's cooperative, Mujeres del Gulfo, has participated in the Pescador a Pescador exchanges and has hosted groups interested in its model of maintaining

quality jobs and social benefits through an aquarium fish project. This site also has a good meeting area.

Following the focus groups, the research team will conduct a series of two retrospective and two prospective comparative case studies. A likely candidate case study would be Pescador a Pescador, because the organizers have maintained good records of past events, which would facilitate a retrospective case study. Also, Pescador a Pescador is likely to occur again in the future with the same level of success as past events, making it a good candidate for a prospective case study. The comparative case studies would not only test hypotheses about the lessons learned in order to derive best practices, but it would also provide evaluations of the individual exchanges. These evaluations are in direct response to a request from the learning exchange community to provide products from the research that are practical and beneficial to the exchange community.

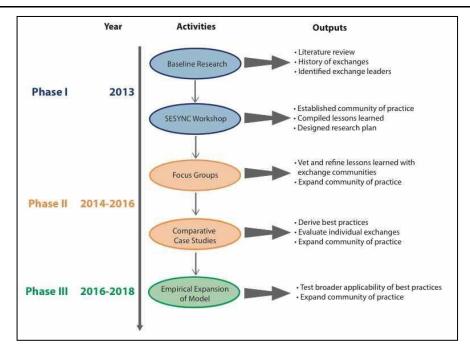
In Phase III, from 2016-2018, the team will then take those derived best practices and test their broader applicability so that they can be used in other exchange contexts. By the end of the project, the goal is to have identified and rigorously tested fisher learning exchange best practices and to make these best practices available to exchange organizers in the form of a comprehensive guidebook and conference presentations, in addition to publishing scholarly articles.

#### NEXT STEPS

The outputs of this Phase I workshop have been and will continue to be refined and reported in conference presentations and publications during 2013 and through 2014, including a planner's guide of lessons learned for fisher exchange practitioners as well as academic publications which characterize and situate fisher learning exchanges in the scholarly literature. Currently, the FLExCELL organizers are seeking funding to initiate Phase II in which the newly established Fisher Learning Exchange Network will partner with the FLExCELL organizers to test hypotheses about the lessons learned in order to develop design principles and best practices.

In many ways, the FLExCELL workshop was similar to a fisher learning exchange in that it brought together people with a diversity of backgrounds in order to exchange knowledge and experiences. The community formed through this workshop now has a better idea of how fisher learning exchanges are being conducted around the world and what steps need to be taken in order to improve the effectiveness and increase the prevalence of exchanges. Some participants used the workshop to plan future exchanges between their home countries. Given these positive outcomes, we can see the success of this workshop and how it will contribute to improving fisher learner exchanges worldwide.

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**Figure 4.** Diagram for the research plan of deriving best practices of fisher learning exchanges. The planned activities, intended outputs, and proposed timelines of each of the three phases are included.





### **ACKNOWLEDGEMENTS**

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