Food and Agriculture Organization of the United Nations

STRENGTHENING THE ADAPTIVE CAPACITY TO CLIMATE CHANGE IN THE FISHERIES AND AQUACULTURE SECTOR OF CHILE

2020 International Forum on the Effects of Climate Change on Fisheries and Aquaculture

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Subsecretaría de Pesca y Acuicultura
Gobierno de Chile

Ministerio del Medio Ambiente
Gobierno de Chile

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CAMBIO CLIMÁTICO en pesca y acuicultura

The objective of the Project is to reduce vulnerability to climate change in the artisanal fisheries and small-scale aquaculture sector in Chile and increase its capacity of adaptation.

The Project is implemented in 4 pilot sites

Región de Tarapacá

Caleta Riquelme
(Iquique)

Región de Coquimbo

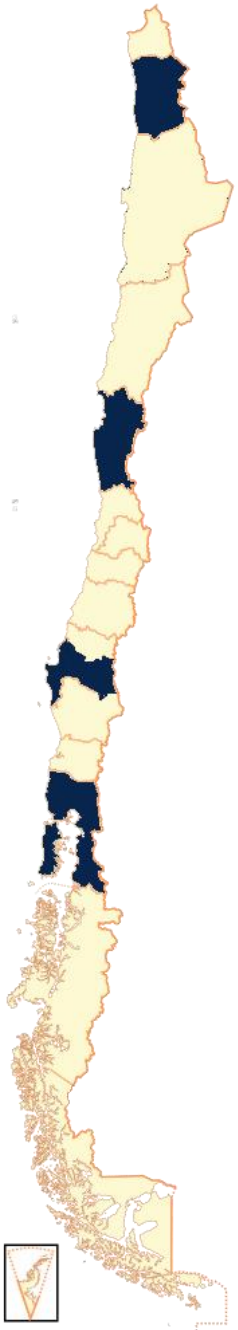
Caleta Tongoy
(Coquimbo)

Región del Biobío

Caleta Coliumo
(Tomé)

Región de Los Lagos

Caleta El Manzano
(Hualaihué)



Barriers:

Weakness of the institutional framework, including the absence of inter-institutional coordination and limitations of capacities to understand and cope with climate change in the fisheries and aquaculture sector

Limited experience and availability of technologies and implementation of best practices in the fisheries and aquaculture sector to adapt to climate change, increases the vulnerability of coastal communities

Limitations of information and knowledge at community level for an adequate management of fisheries and aquaculture resources addressing possible climate change impacts.

Expected outcomes:

Strengthened public and private institutional capacities to implement/improve CC adaptation actions in fisheries and aquaculture (at national and local levels)

Stakeholders **have established adaptive capacity** systems and invest in innovative adaptation technologies at local level

Local coastal communities are **aware, knowledgeable and prepared** to cope with climate change effects on fisheries and aquaculture

Project progress (to date)

IWG NATIONAL

Public and Private Inter-institutional Working Groups for Fisheries, Aquaculture and Climate Change (IWG).

IWG REGIONAL

IWG LOCAL

Key functions of the IWGs

- **Strengthen and articulate coordination between institutions**
- **Advise the sectoral authority to promote and facilitate the development and implementation of policies, programs and / or plans regarding CC, fisheries and aquaculture.**
- **Generate spaces for discussion and analysis on technical issues.**
- **Promote synergies between different initiatives (public and private).**
- **Support understanding and learning processes.**

Project progress (to date)

***Training programmes* on climate change adaptation in fisheries and aquaculture**

A Capacity Development Programme for public officials, national experts, regional and local decision-makers.

Pilot Capacity Programme to strengthen and develop adaptive capacities of fisheries and aquaculture communities and organizations in the four pilot sites.

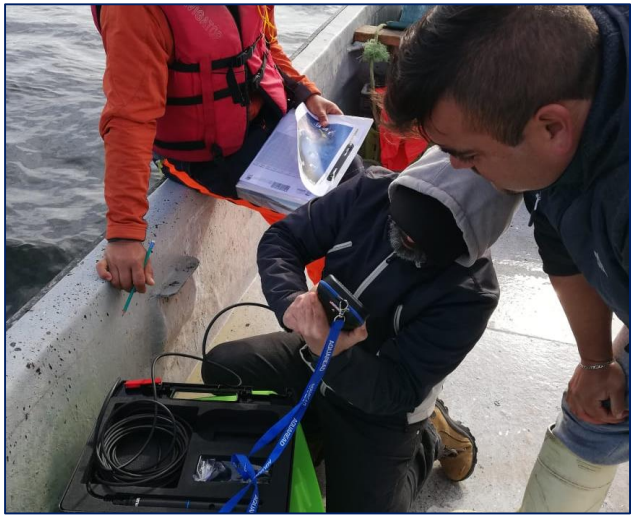
Project progress (to date)

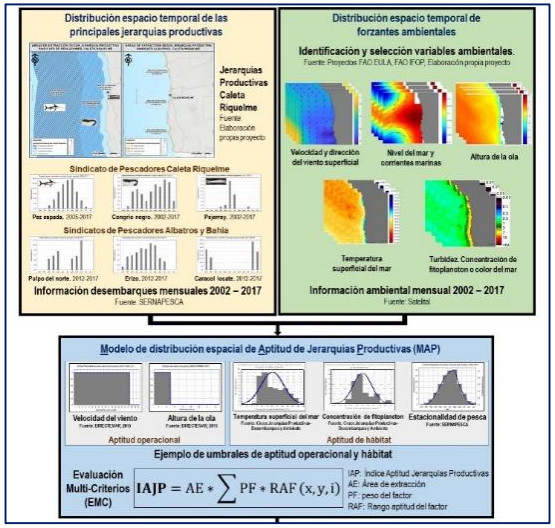
Support tools for decision making:

Interoperable information system that integrates fisheries, aquaculture and climate change data, to generate information for end-users and decision-makers.

Pilot environmental monitoring programme aimed at developing a mechanism to cope with climate change and support the implementation of adaptation measures at the local level.

Construction of thematics-dynamic maps that include CC effects and support decisions taken in the productive process (with operational, risk and environmental indicators).





Project progress (to date)

Incorporation of best practices and / or technologies

Identification, adaptive and sustainable exploitation and alternative processing of bycatch that appears due to climate change

Value addition to fishery and aquaculture products, based on better handling and/or utilization; semi-processed products and improved marketing.

Project progress (to date)

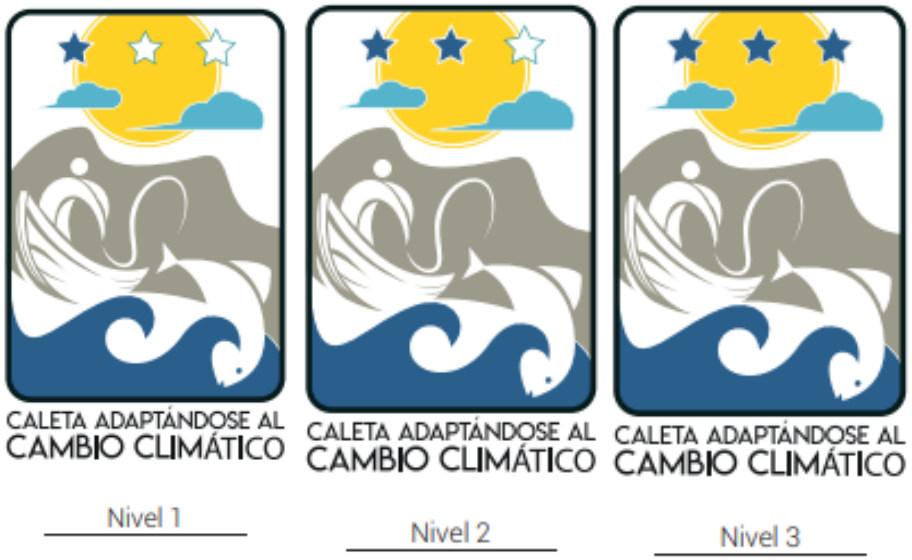
Incorporation of best practices and / or technologies

Project progress (to date)

Incorporation of best practices and / or income-generating alternatives

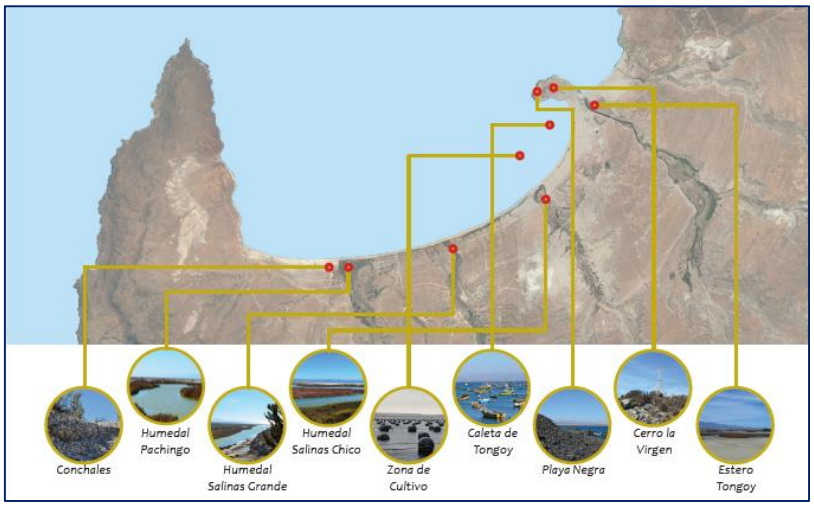
Identification and design of a tourism initiatives package including seafood stalls, eateries, recreational fishing, history and nature walks.

Elaboration of a protocol to grant an identity seal whose objective is to recognize fishing coves as a productive, economic, social and cultural unit that adopts the best climate change practices.



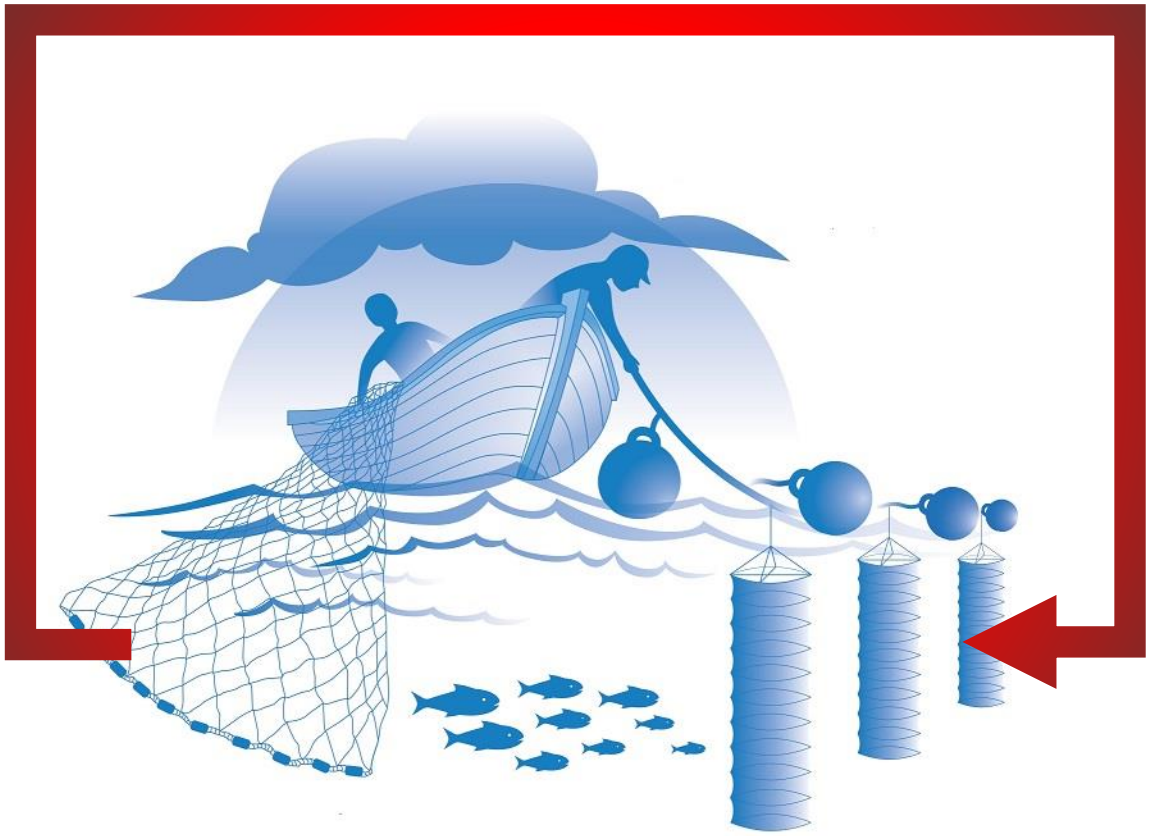
Project progress (to date)

Incorporation of best practices and / or income-generating alternatives



Project progress (to date)

Adoption of alternative technologies to diversify productive activities and improve production management

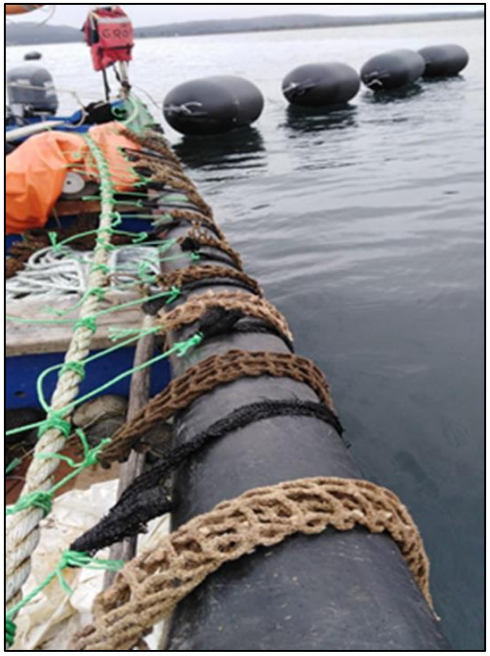


The project proposes to diversify the local economy base, among others, from FISHING TO AQUACULTURE in the face of decreased availability or changes in the behavior of fishery resources caused by climate change.

Project progress (to date)

Diversify productive: FROM FISHING TO AQUACULTURE

Technical innovation in mussel seed collection: a response to climate change from fishing communities in southern Chile.



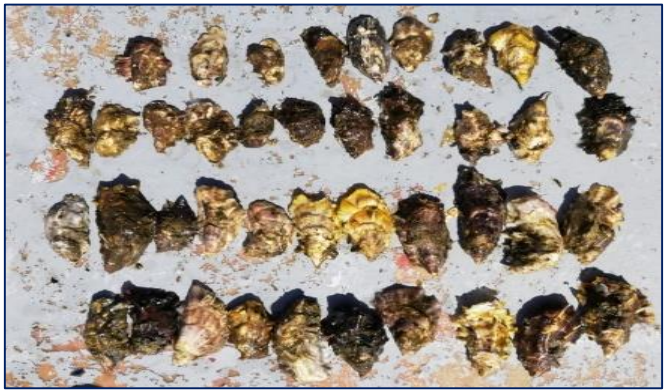
Anchoy fishing net

Raschel mesh

Project progress (to date)

Diversify productive: FROM FISHING TO AQUACULTURE

Technical innovation through an experimental cultivation of the exotic Japanese oysters (Crassostrea gigas) in order to diversify productive activity as a measure of adaptation to climate change.



Project progress (to date)

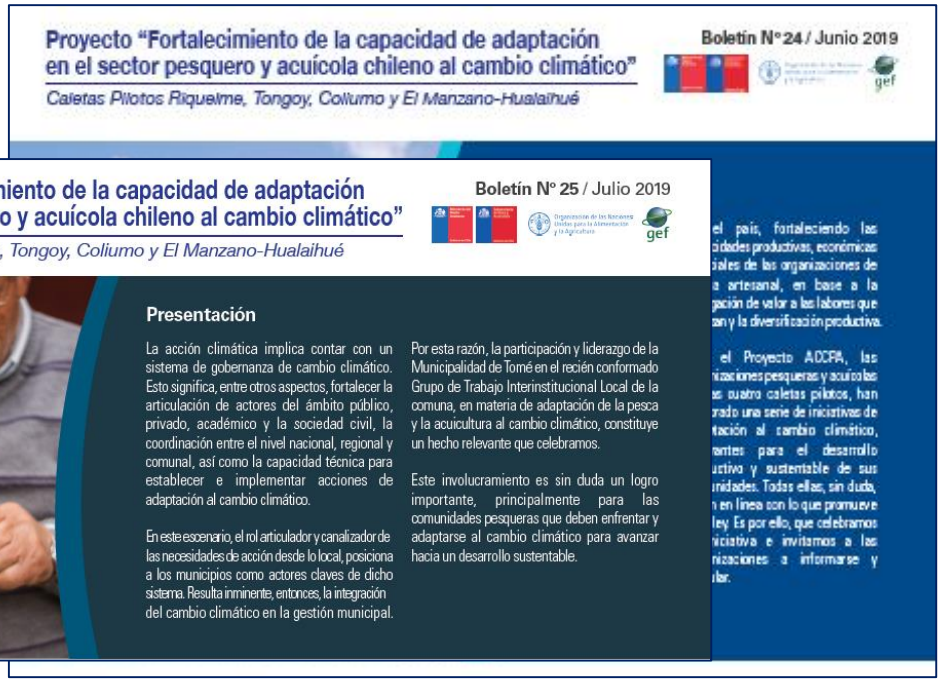
Diversify productive: FROM FISHING TO AQUACULTURE

Seaweed farming in management areas in order to diversify productive activity as a measure of adaptation to climate change.

Chondracanthus chamissoi
(Chicorea de mar)

Project progress (to date)

Information awareness


Proyecto "Fortalecimiento de la capacidad de adaptación en el sector pesquero y acuícola chileno al cambio climático"

Caletas Pilotos Riquelme, Tongoy, Coliumo y El Manzano-Hualaihué

Boletín N° 24 / Junio 2019

Proyecto "Fortalecimiento de la capacidad de adaptación en el sector pesquero y acuícola chileno al cambio climático"

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Boletín N° 25 / Julio 2019

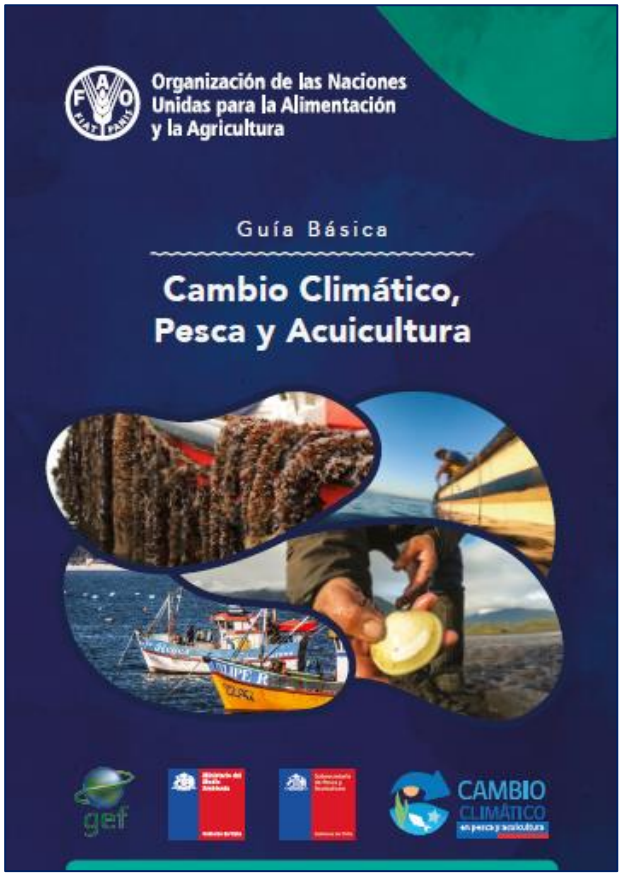
Presentación

La acción climática implica contar con un sistema de gobernanza de cambio climático. Esto significa, entre otros aspectos, fortalecer la articulación de actores del ámbito público, privado, académico y la sociedad civil, la coordinación entre el nivel nacional, regional y comunal, así como la capacidad técnica para establecer e implementar acciones de adaptación al cambio climático.

En este escenario, el rol articulador y canalizador de las necesidades de acción desde lo local, posiciona a los municipios como actores claves de dicho sistema. Resulta inminente, entonces, la integración del cambio climático en la gestión municipal.

Por esta razón, la participación y liderazgo de la Municipalidad de Tomé en el recién conformado Grupo de Trabajo Interinstitucional Local de la comuna, en materia de adaptación de la pesca y la acuicultura al cambio climático, constituye un hecho relevante que celebramos.

Este involucramiento es sin duda un logro importante, principalmente para las comunidades pesqueras que deben enfrentar y adaptarse al cambio climático para avanzar hacia un desarrollo sustentable.



Summary of progress and achievements to date:

COMPONENT 1

Strengthening public and private institutional capacity for effective climate change adaptation

- 7 Inter-Institutional Working Groups (IWG) established and functioning (1 National; 4 Regional and 2 Local).
- Advances in the design of an Interoperable Information System that systematizes fishing, aquaculture and climate change variables for decision making.
- 9 workshops held with 125 regional and community authorities within the framework of the Institutional Training Programme on adaptation to climate change in fisheries and aquaculture; 4 workshops with 82 national experts; A B-Learning course on adaptation to climate change in execution with a total of 142 training public officials.

Summary of progress and achievements to date:

COMPONENT 2

Improving the capacity of adaptation to climate change of local fisheries and aquaculture communities

- A Local Basic Environmental Monitoring Programme implemented and functioning.
- A Protocol for obtaining an identity seal that gives recognition to fishing and aquaculture coves in the process of CC adaptation.
- Programmes to add value to products coming from the fishing.
- Small-scale aquaculture projects in management areas: Experimental cultivation of mussels spp.; seaweeds; Japanese oysters; & a programme to improve mussel seed capture.
- Design and implementation of local Tourism Strategies.
- Bycatch utilization programme.
- Design of dynamic thematic maps that incorporate the effects of climate change and support decision-making in the production process.

Summary of progress and achievements to date:

COMPONENT 3

Increasing knowledge and awareness-raising on climate change in fisheries and aquaculture communities

- Design and implementation of a Communication Strategy
- Awareness process on the effects of climate change on fisheries and aquaculture at different levels: coastal communities; public workers; national, regional and local authorities and decision makers.
- 30 monthly newsletters prepared and distributed nationwide.
- Design and distribution of a basic guide to adaptation to climate change in fisheries and aquaculture
- Preparation and distribution of information leaflets;
- Radio and TV coverage; written press.

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THANK YOU

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