



“Chile: Paving the Way towards the Reuse of Organic Residues from Fisheries and Aquaculture Activities to Contribute with Food Security”

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Chinese Taipei

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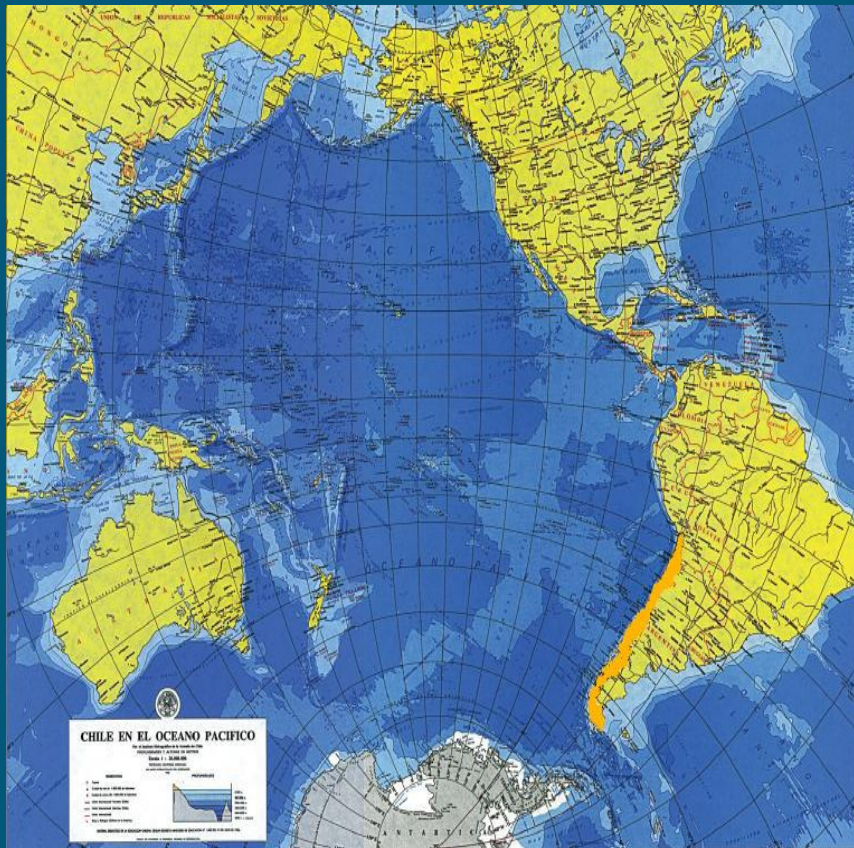


1.- Overview of Chile

2.- Chilean fisheries and aquaculture sector

3.-APEC project on the reuse of organic waste from fisheries sector

SUBPESCA



- ✎ Capital: Santiago of Chile
- ✎ Population: 18 million people
- ✎ Language: Spanish
- ✎ Political and economic stability
- ✎ 28 commercial agreements with 64 markets.
- ✎ Index / per cápita: US\$ 26.000

The logo for SUBPESCA, featuring a blue square on the left and a red square on the right, with the text "SUBPESCA" in white capital letters below them.

SUBPESCA

The longest country of the world

4,300 km from north to south

+ island linked to the continent:

84.000 km coast line



SUBPESCA

The longest country of the world





North : **Dry weather**



Center: **Mediterranean weather**



South : **Rainy and cold weather**



Austral south : **Polar weather**





Geographical location privileged: isolation due to natural barriers: Andes Montains (east) , Pacific Ocean (west), Artic Continent (south).



Counterseasonal.



Wide variety of weather.



Modern infrastructure and export logistics.



Development of high technological safety standards .

Potencia Alimentaria: Chile power food



Our world-known products are:



Our world-known products are:



SUBPESCA

Presence in the most important Food Exhibitions of the world: Food Taipei Fair, June 2019.



The logo for SUBPESCA, featuring a blue and red rectangular bar above the text "SUBPESCA" in white, bold, uppercase letters.

SUBPESCA



Chile is waiting for you

<https://www.youtube.com/watch?v=3MtdmoxZgRM>

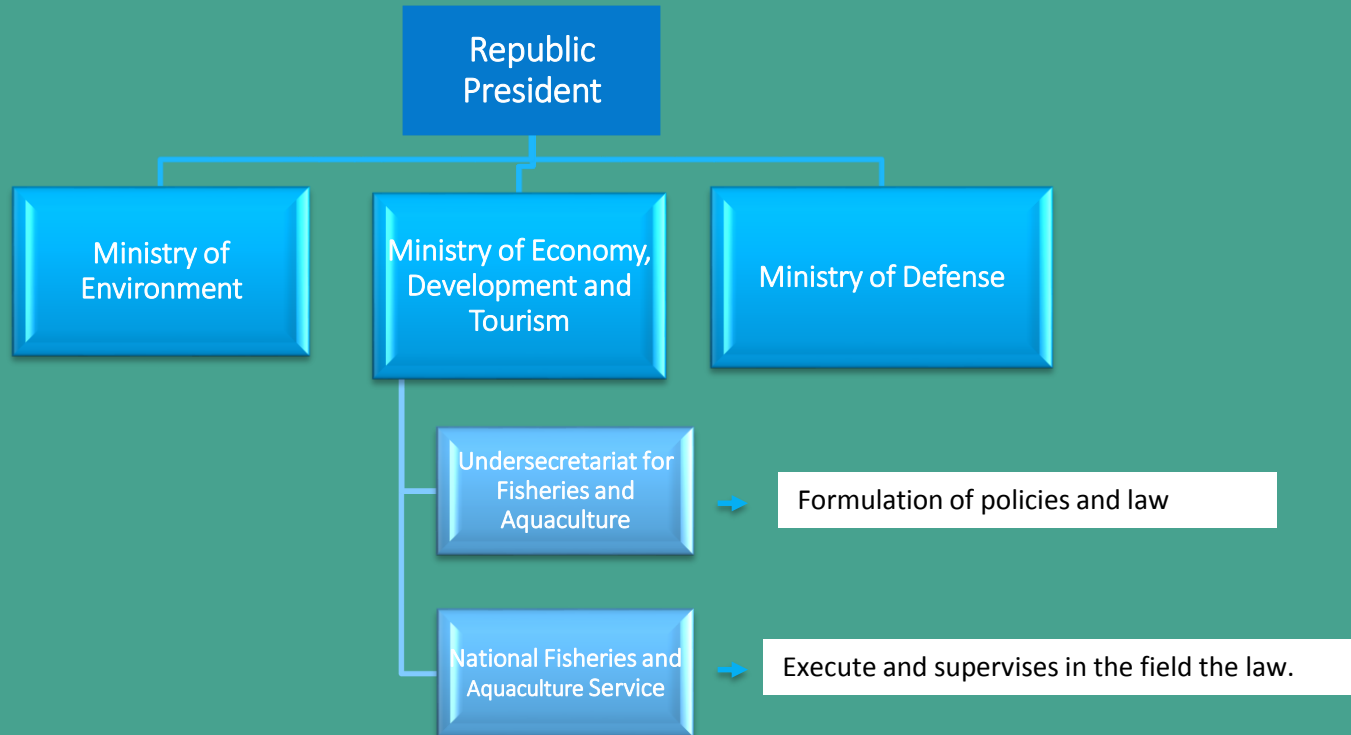
Chilean fisheries and aquaculture sectors



Humboldt Stream with cold, and very nutrient-rich waters.



Government institutions related to the sea



Three main sectors

- Artisanal fishing
- Industrial fishing
- Aquaculture



Artisanal Fisheries

- 90.891. legally registered fishers :
Women (24%); Men (76%)
- 460 fishing coves: productive, economical, social and cultural geographical area



MARINE WASTE ON FISHING COVES

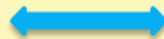
INORGANIC: plastic, etc.



ORGANIC: skin, bones, heads



Project between University and near fishing cove in Valparaíso



Santa María University, Valparaíso.

Portales cove, Valparaíso.

Problem detected: What happened with the more than 1.5 daily ton. of biological residues in these cove?: bones, skeletons, skin, heads, etc. ?



They generated a model to attack in problem, based on:

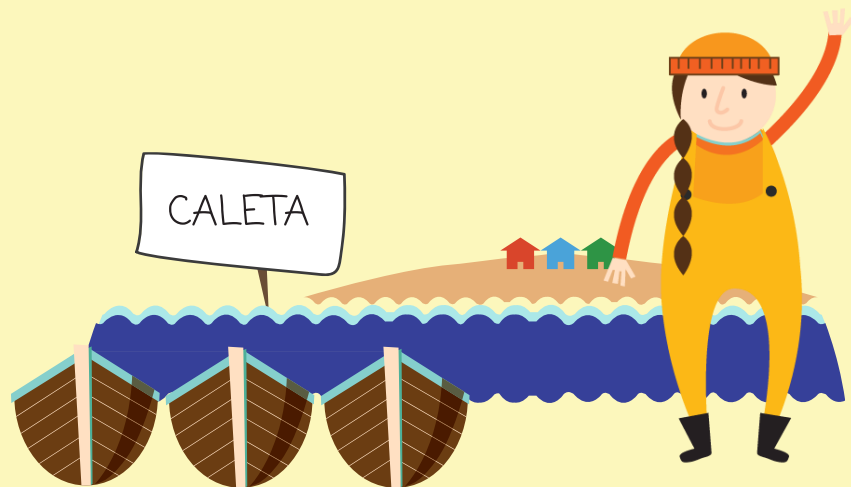
- ✓ Reuse the organic waste produced in the fishing cove.
- ✓ Strengthening the women who work in the cove giving them training in waste management.
- ✓ Installing a demonstrative plant
- ✓ The women transform waste into a protein soup
- ✓ Company food animals buy the soup.

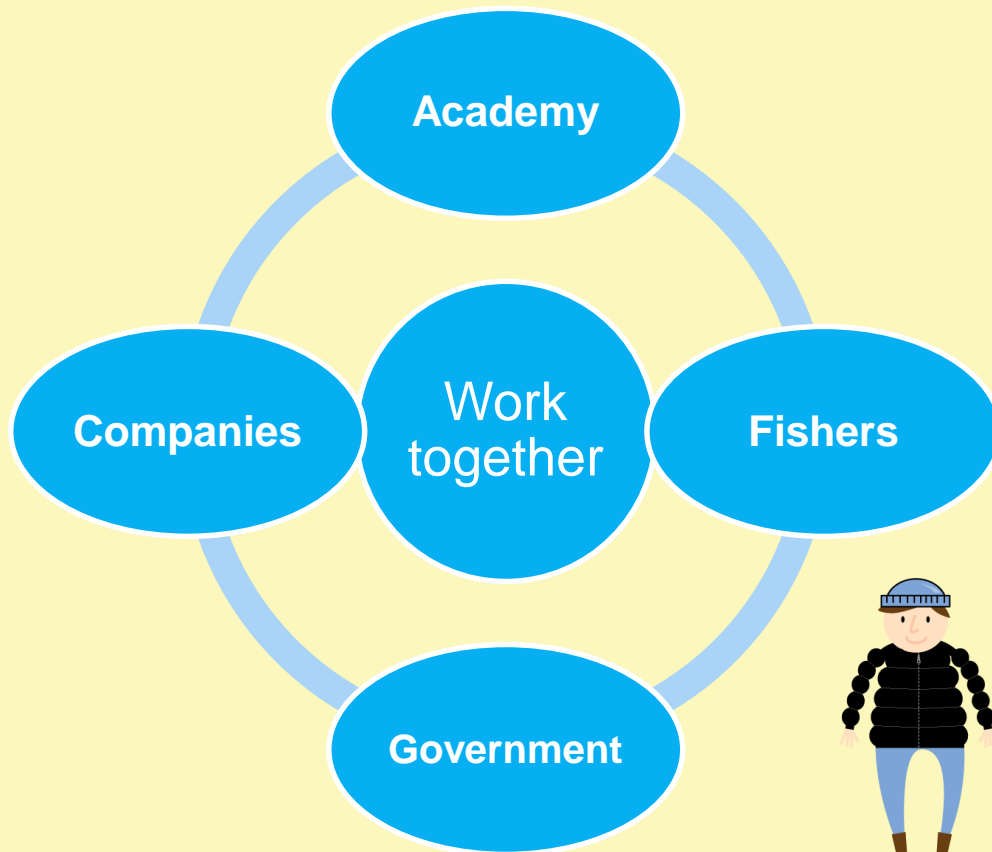


Benefits of the project

What was waste before, today is:

- Economic increase for small-scale fishermen organizations, especially women working in the project.
- Reduction of pollution in the fishing cove, less waste, less seabirds and rodents resulting in more tourism and more sales.





Good example work together

1. Academy: idea and coordination
2. Organization of Civil Society (artisanal fishers): implementation
3. Local Government: funding (container)
4. Private Sector: Food Peet Company
Private sector



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**Asia-Pacific
Economic Cooperation**



VIDEO CALETA PORTALES

After knew these proyect, we ask ourselves:
what similar experiences will other APEC economies have regarding marine
organic waste?



Exchange of Experience to Add Value to Organic Waste from
Small-Scale Fisheries and Aquaculture through its Reuse and
Conversion into Innovative Products, which Contribute to
Enhance Food Security
OFWG 03 2017



WORKSHOP

Where?
Northern Chile,
Coquimbo

When?
8-10 October 2018

Participants:
87 people from
10 Economies
(36 women and
51 men)



What could we learn?



Chitin for skin burns



Chitin for Pharmaceutical uses



From shrimp shells



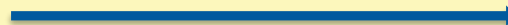
Building bricks



From mollusc shells



From seaweed – Organic compost for
agricultura.

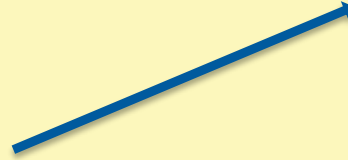


From seaweed - Algae hidrogel for
agricultura in dry áreas, like dessert in
north Chile •





Skin and fish bones



Snacks, souvenirs and artificial bait



From organic
waste

Fish oil



Fish meal



Biodiesel



*Products for
human health*



There was consensus that the reuse of organic marine waste:

- ✓ Generates employment : Improves economies of families.
- ✓ Contributes to enhance the value of women work in fisheries and aquaculture activity .
- ✓ Allows to promote circular economy and zero waste.

Iniciatives to promote zero organic waste



Strengthened APEC economies regulation and sanction for illegal dumping sites

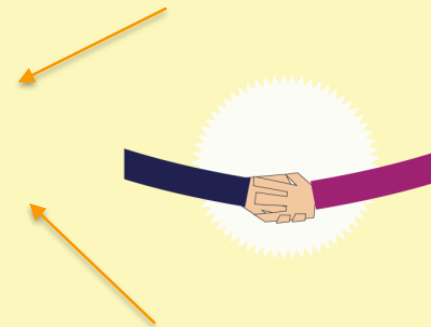


Fund the development of products from organic fish waste



Training courses for fishers communities

Zero waste on the coast of the APEC economies



Promote public and private relationships for organic waste collection.

Future actions

A critical gap was detected.

If we wanted to replicate some experience in another economy, there is not enough information about it:

- how much does it cost to develop the project? ,
- which institutions supported its development? ,
- what technology does it need, etc.



Future actions



Our economy will present to OFWG a Fase II to be implemented in 2021.

In order to make a more efficient use of the project resources and to facilitate attendance of more economies we are open to suggest that the venue for the conduction of this event could be an Asian Economy .

SUBPESCA

Thank you

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