

Science for marine conservation in Peru: *lessons and challenges*

Eliana Alfaro Cordova
PERU



Who am I?

- Peru
- Biologist
- MSc. Marine and Lacustrine Science and Management (**Oceans & Lakes**)
- Researcher **PRODELPHINUS**

Scientific Interests

- Marine conservation - Fisheries



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Why?

- ✓ Unique ecosystems
- ✓ Little knowledge management



Pro Delphinus
Miloslavich et al., 2011

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How?

LEARNING



2009

SHARING



2010

Some lessons...

...



What did I see?

The complexity of conservation

Stakeholders



What did I see?

MEANING

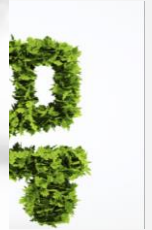
The complexity of conservation

Leopold, 1949

Conservation is a state
of harmony between
men and land.

- Aldo Leopold

©www.famouscelebrityquotes.org



y

What can be done?



What can be done?

① Research → with others.



What can be done?

① Research → with others.



What can be done?

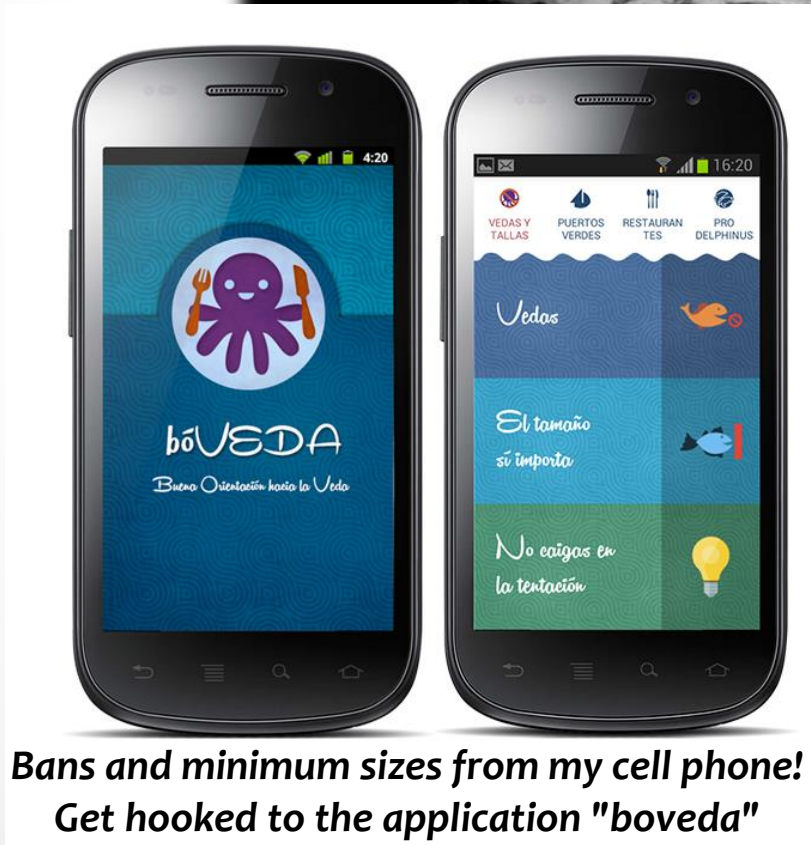
② Share → within different type of audiences.



What can be done?

③ Work → From the inside

As a consumer...



**Good Orientation
towards fishing
bans**



What can be done?

③ Work → From the inside

As a peruvian scientist



PROGRAMA NACIONAL
DE INNOVACION EN
PESCA Y ACUICULTURA



profonanpe
recursos para la naturaleza

Innóvate^{Perú}



What can be done?

③ Work → From the inside

As a woman





...

Some challenges...



It is no easy

PERU (and probably other parts of the world)

- Political instability
- Corruption
- Inequality (income, rights)



I don't want to be a part of this, but I am.



An aerial photograph showing a vast, dense colony of seabirds, likely terns, nesting on a sandy island. The birds are packed closely together, covering most of the visible ground. The terrain is sandy and appears to be a flat, open area. The overall color palette is dominated by the brownish-tan of the sand and the dark grey/black of the birds' bodies.

CASE STUDY

Lobos de Afuera Islands Project

Lobos de Afuera Islands Project

(2017 – 2018)



22 islands + 11 capes + sea → 140,833.47 ha

Conserving the biodiversity and ecosystem functioning of the NHCS.

Participatory approach – Co-management

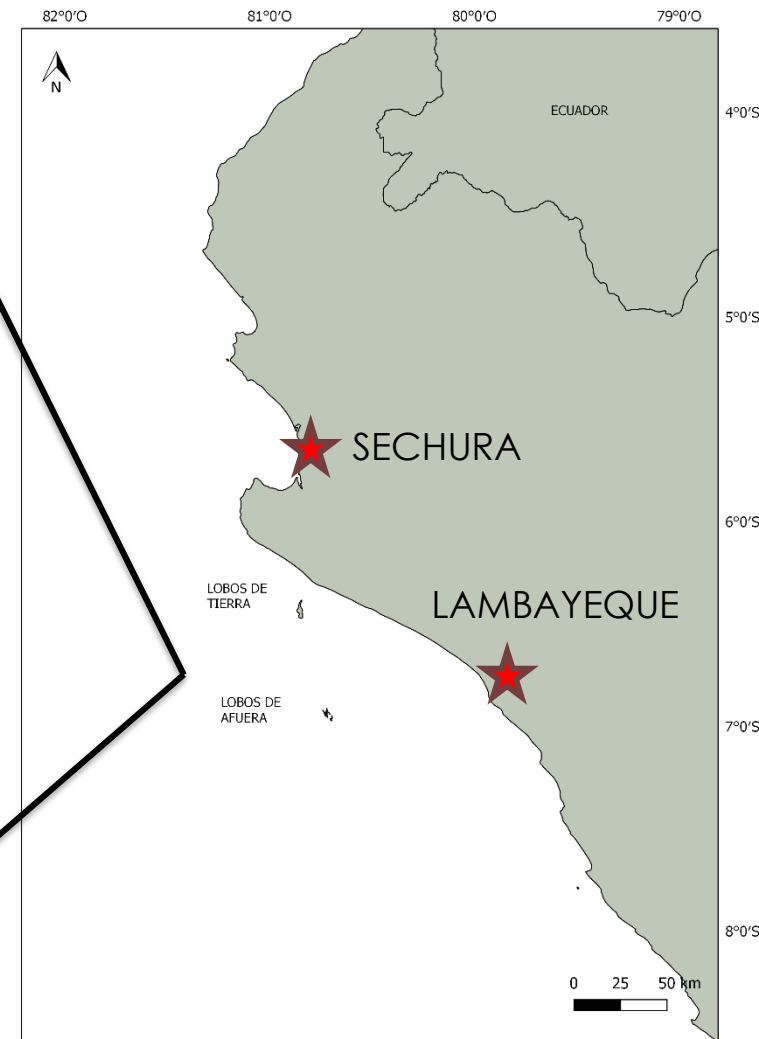


Objective: To collaborate with the improvement of marine ecosystem management in the Lobos de Afuera islands as part of the “Guano Islands and Capes National Reserve” MPA.

Lobos de Afuera Islands Project



- Land 282 ha
- Marine 7,983 ha
- TOTAL: 8,265 ha



Lobos de Afuera Islands Project



Highest biodiversity...

> 200 species

- ✓ Birds
- ✓ Fish
- ✓ Mammals
- ✓ Invertebrates
- ✓ Echinoderms
- ✓ Reptiles



ELEMENTS OF
CONSERVATION



Lobos de Afuera Islands Project



Environmental
Conservation
elements

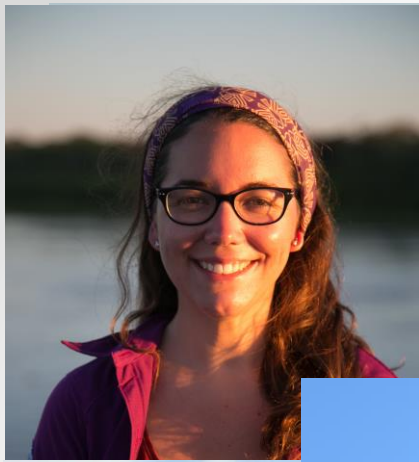


Economical
Small-scale fisheries



Social
Stakeholders

- ✓ Generate information (biological, social, economical)
- ✓ Promote participation of stakeholders in management actions



Lobos de Afuera Islands Project



Identified problems ... challenges

1. Lack of information within local population
2. Distance → 40 nm
3. Stakeholders “management committee”

Lobos de Afuera Islands Project



■ Stakeholders present in the islands → □ Not mapped, do not participate.

■ Former Stakeholders but not present in the islands

■ Included stakeholders but not present in the islands → indirect users

Lobos de Afuera Islands Project



RESEARCH



Balaenoptera musculus



Lobos de Afuera Islands Project



RESEARCH...with others



Lobos de Afuera Islands Project



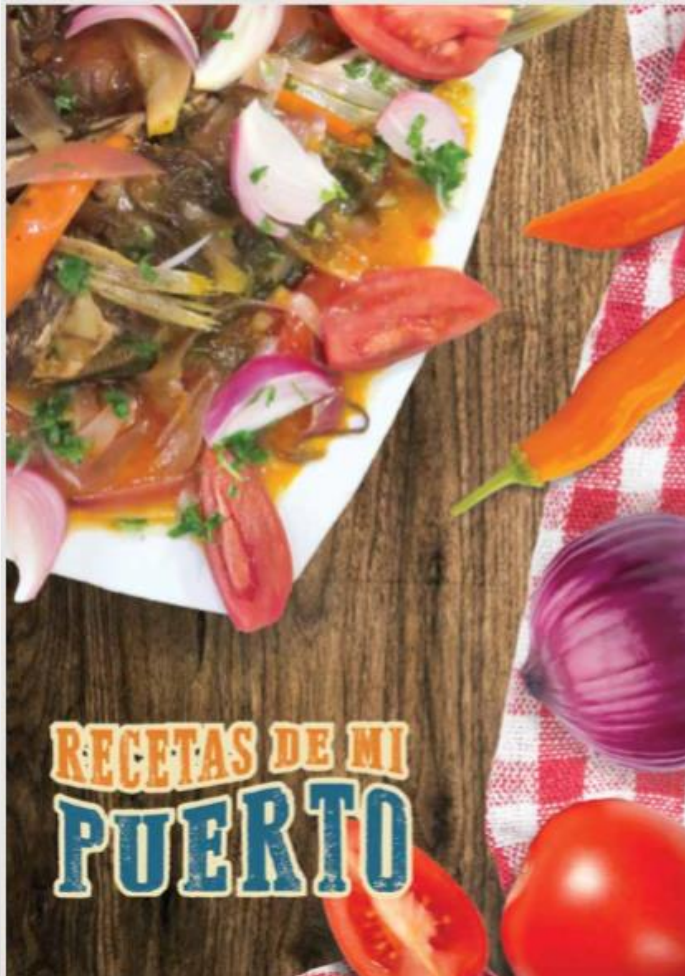
FISHERS → STAKEHOLDERS



Lobos de Afuera Islands Project



Local actors → women



Lobos de Afuera Islands Project



Local actors → Young people



Lobos de Afuera Islands Project



It is not an easy job...

- Conflicts between stakeholders
- Wrong expectations about our work

...Is it necessary to include all these stakeholders?



How to become a change agent in marine research?

Some ideas...

- Identify what it is necessary to change and why



- Read, think, question yourself about paradigms.
- Travel, learn
- Be conscious that you are part of a whole

THANKS

eliana@prodelphinus.org



Picture: Percy Bayona