



## A Transdisciplinary Perspective for Small-scale Fisheries Research

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## Major concerns in global fisheries



♦ Complex, social problems cannot be addressed using technical fixes
♦ The complexity makes fisheries governance a 'wicked problem'
♦ Transdisciplinary approaches provide a framework for complexity.

Jentoft & Chuenpagdee (2009); Chuenpagdee & Jentoft (2018)



### Small-Scale Fisheries: Research concerns

Research on small-scale fisheries is low when compared to large-scale fisheries

Lack of research leads to erroneous policy-making, prolonging the problem. Erroneous policies trigger policy misfits, adding further problems to fishing communities





Goal 14: Conserve and sustainably use the oceans, seas and marine resources



Transdisciplinarity for Small-Scale Fisheries Governance

## Transdisciplinarity for Small-Scale Fisheries Governance

D Springer

**Analysis and Practice** 



## A Roadmap to SSF Sustainability

In our attempt to reach sustainability we are faced by **challenges to understanding** the context, and in **crossroads to agree** on the adequate solution to resolve the problem.

# **A Transdisciplinary Perspective**



## Why a Transdisciplinary Approach

Sustainability concerns and Issues are interconnected including access to resources, violation of human rights, food insecurity, overfishing

Capturing the roots of the problem necessitates an integrated approach that goes across, between and beyond different disciplines and knowledges.

Broadening the perspective: all possible links and interconnections are mapped out in a way that gives a holistic understanding of the situation.

Transdisciplinarity as an approach to inform empirical research and contextspecific governance for small-scale fisheries sustainability.

Let's look at 'overfishing' as an example....











### Implications of 'quotas' as a solution....



Said et al. 2016

Small-ITQ holders forced to lease

SSF are dependent on Tuna ranching corporations Accumulation by dispossession & reduced income TAC Increments benefitting Tuna ranching

## An Integrated approach through a Transdisciplinarity lens

To entice the involvement of actors from outside academia into the research process in order to

- integrate the best available knowledge
- reconcile values and preferences
- create ownership for problems and solution options.







## **Facilitating knowledge integration**



## **Mapping out Problems and Solutions**

The initiation of the transdisciplinary approach can vary but the entry point is usually an event or crisis identified by researchers, local stakeholders, policy-makers, and/or society.

Questions that can be asked:

- 'what happened to the fish stock (NS)
- 2. 'how are fishing communities dealing with declining catches'(SS)
- 3. 'what management techniques can resolve overfishing' (GS)



Said et al. 2018

Questions start from a single domain and through knowledge sharing and deliberation, the team makes the links and make the question a transdisciplinary one (TD).

### **Transdisciplinary research: Key Principles**



### **Common Challenges**

Trust and Legitimacy Issues in Co-design of Solutions

Lack of Integration Across Knowledge Types

Funding challenges for transdisciplinary research

# Transdisciplinarity in Fisheries A Training Course



### Transdisciplinarity in Fisheries Training Program

### Day 1

- What makes natural resource governance a wicked problem?
- Theories, concepts and perspectives in natural resource governance
- What makes natural resource sustainability a governability problem?
- The role of a transdisciplinary perspective in addressing wicked problems

#### Day 2

- Interactive governance for natural resources: theories and practices
- Introduction to the governability assessment framework
- The importance of 'step zero'
- A case study approach

### Day 3

• Case study analysis (practical exercise)

#### Day 4

- Case study presentation and discussion
- Lessons learned and general reflection



## **TD in Fisheries: A Training Course**

This course aims to examine and integrate the different theoretic perspectives often used to approach fisheries sustainability:

- 1) natural science,
- 2) social science, and
- 3) governance





During this course, it is expected that participants will acquire knowledge and practice skills used for ongoing problem solving through collaborative, adaptive, and contextdependent transdisciplinary process.

## TD in Fisheries Course: A multiple-audience pedagogy

Fishers and community-level training

Practitioner training and 'training-of-thetrainers'

Formal training and 'online learning' platform



## **TD in Action: Ongoing training courses**



Transdisciplinary for Policy and Practices for Natural Resource Sustainability' at Banpu Resort, Trat province, Thailand. The workshop was attended by about 30 participants from diverse backgrounds (Universities, governmental agencies, Fishers. The objective was to explain how transdisciplinary research can systematically identify problems and create possible solutions for natural resource sustainability. <u>http://toobigtoignore.net/tbti-course-on-transdisciplinary-research-held-in-thailand-august-2017/</u>

## **TD in Action: Thailand 2017**







At the end of the workshop, participants provided many positive

feedbacks saying how the knowledge and frameworks learned from the workshop are valuable for their work and have enlighten their vision about the natural resource governance and sustainability.

## **TD in Action: Mexico 2016**



During this two-day field trip, the group met with fishermen and fisherwomen to learn about their experiences and find out what they consider as important problems or important research areas.



## **TD in Action: Vietnam 2016**



To allow the participants to better process the concept of a "wicked problem", they were grouped according to the natural resource they mainly work in. Four thematic groups emerged: **forest, water, fish, and land**.

Each group was asked to identify the main issues, concerns, threats, and problems within each resource and to identify which of these are "wicked" problems and which have technical solutions.



#### 3<sup>rd</sup> World Small-Scale Fisheries Congress Chiang Mai, Thailand | October 22-26, 2018

# Transformation

### **The Future of Small-Scale Fisheries**

#### Don't miss!

Science symposium Policy forum Community roundtables Storytelling & talk circles Cultural exhibition Field excursion

### SAVE THE DATE!

October 22-26, 2018 Chiang Mai, Thailand