



Convenio UNAL - UNICAUCA acuerdo Asdi No. 12745

# Policy recommendations Pacífico Econavipesca Project

## KTH Royal Institute of Technology Field study report 2022 - 2023



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### Other Partners of Pacífico Econavipesca Project







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Asociación Nuevabellavista

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## **Project Description**

The objective of the Pacífico Econavipesca project is to develop a sustainable artisanal fishing model that reduces the environmental, social, and economic impacts on the ecosystem in the municipality of Guapi, Cauca, in Colombia. A major challenge is to reduce dependence on fossil fuels for the fishing boats and engage in dialogues with the local community about ways to create social entrepreneurship opportunities to make fishing activities more sustainable long-term. The project's main methodology is transdisciplinary co-creation, that includes the local community as part of the team together with academic team members from different disciplines. The focus of fieldwork activities in the project is to create room for dialogues and mutual learning rather than importing or imposing certain technology or ways of thinking to any local community.

## What is transdisciplinary co-creation?

It is important that local and scientific knowledge, and local culture and values, is considered together for co-production of new solutions and for input towards policy creation. This is also known as transdisciplinary cocreation. Transdisciplinarity acknowledges the complexity of societal problems and uncertainty in local contexts that needs action-oriented research with continuous collaboration between individuals beyond the academic disciplinary structure. Transdisciplinary co-creation allows the team to take advantage of both the traditional knowledge of local communities and scientific knowledge of academics from several different disciplines, to produce a new collective knowledge with political and practical implications.







## Timeframe

Oct 2022

1st field work in Guapi Interviews in Medellín

#### Nov 2022

Interviews in Bogotá and Popayán Presentations at SIDA and UniCauca

#### Dec 2022

2nd field work in Guapi Reflection workshop with academic team Feedback from stakeholders

#### Jan 2023

Initial analysis of results Post-field work presentation at KTH

#### Feb 2023 - Mar 2023

Further analysis of results Draft and publish <u>article on WaterBlog@KTH</u>

Apr 2023 - May 2023 Prepare and carry out reflective workshop with community leaders from Guapi

#### Jun 2023 - Aug 2023 Analysis of workshop with community leaders Draft technical report for academic team

Sep 2023 - Nov 2023 Gather feedback on technical report Finalise technical report

#### Dec 2023 - Feb 2024

Finalise technical report Create and publish public communication material

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## **KTH Field Study**

The KTH field study from October 2022 to February 2024 focused on understanding community engagement, co-creation strategies and actor interactions to identify challenges and opportunities for sustainability of the project. The KTH team engaged in dialogue with different actors such as academics and community team members to gather data for the field study, using methodologies such as observational studies, interviews, actor-network mapping, co-creative activities, and reflective workshops together with the local community. Several themes were brought up in these activities such as local and ancestral knowledge, inter-generational knowledge sharing, roles of key change-makers and other actors in the project, interaction between humans and the environment, importance of hands-on learning, and sharing of culture through food.

#### New roles of universities

During the fieldwork, the role of academics in transdisciplinary projects was better understood. In dialogues with different actors, academics took on the role of mediators instead of their traditional role of knowledge transmitters. This allowed actors like local community members, students, researchers and professors, to share their ideas, opinions and knowledge with each other. Academics should also acknowledge and consider different types of knowledge - scientific, local, ancestral, intergenerational, etc. to co-create sustainable solutions.



## Lessons learnt through dialogues and acitivities with the local community representatives in Guapi

### Why is transdisciplinary co-creation needed?

- 1. The environmental, social, and economic sustainability issues and solutions would affect the local community the most, so their involvement is essential.
- 2. The local knowledge and resources should be included to ensure that solutions are feasible and relatable to the community in the long term.
- 3. Sustainability is a complex and multi-faceted issue, making it essential to include different types of knowledge, especially local. This will allow a holistic understanding of the local context and implementation of relevant solutions.



## What is required for transdisciplinary co-creation to be successful?

- 1. Building of strong relationships and trust amongst the team members
- 2. Being open to different types of knowledge (beyond academic) and inclusive of various actors

  listen to the local community, don't discriminate and respect local knowledge and different disciplines of scientific knowledge, change one's mindset if required by the differences
- 3. Communication structure in the team ensure there is continuous dialogue, share information among different members of team to learn from and build on each other's knowledge





## **Policy Recommendations Summary**



1. Make use of specific historical, geographical, social, and environmental context and local knowledge when choosing and implementing a policy.



3. Incorporate time for development of knowledge and skills of the local community as part of the policymaking process.



2. Include local representatives in transdisciplinary collaboration for policy-making.



4. Acknowledge and take into consideration interlinkages between ecological, social, and economic factors in national and local policy-making.



5. Find inspiration from United Nations (UN) Sustainable Development Goals (SDGs) to guide policy-making and enable synergies between different SDGs in your local environment.



## **Detailed Policy Recommendations**



1. Make use of specific historical, geographical, social, and environmental context and local knowledge when choosing and implementing a policy.

This would ensure that the policy is relevant to the context that it is implemented. The policy framework does not have to be completely brand new. Existing frameworks could be used as long as they consider and integrate the local context and knowledge.

## 2. Include local representatives in transdisciplinary collaboration for policy-making.

The locals are the experts of their own situation and environment. Including them would allow the root causes of the problems to be identified, enabling targeted long-term solutions and policies to be formulated. Incorporating local skills and knowledge would also ensure that the policy and solutions can be maintained and kept useful in the long term.





## 3. Incorporate time for development of knowledge and skills of the local community as part of the policy-making process.

Developing the knowledge and skills of the locals in the area of the policy topics from the beginning of the policy-making process would allow the locals to participate in a more equal way. Locals would also be able to drive policy updates in the long-term application to keep it relevant. However, time is required to develop this and should be incorporated into the timeline for policy creation.

4. Acknowledge and consider interlinkages between ecological, social, and economic factors in national and local policy-making.

Sustainability is inherently complex as the different areas of ecological and socioeconomic factors are deeply interlinked. Transdisciplinary collaboration would allow development of policies that are capable of understanding and targeting these complexities.



5. Find inspiration from United Nations' Sustainable Development Goals (SDGs) to guide policy-making and enable synergies between different SDGs in your local environment.



SDGs are guiding principles for policy-making towards sustainable development by targeting different areas that are highly interdependent. Action on one goal has either negative or positive repercussions on other interlinked goals. Hence, it is very important to holistically consider the SDGs when designing policies to encourage synergies between the SDGs. This project makes valuable contributions to the realisation of SDGs 6 (water), 7 (energy), 11 (sustainable communities), 13 (climate action), 14 (marine life) and 17 (partnerships) by deeply involving the local community at every stage to allow different perspectives and types of knowledge to be considered.



## Further information about Pacífico Econavipesca Project



#### Pacífico Econavipesca project description:

https://www.kth.se/philhist/historia/forskning/environmental-humani/ecosystem-for-sustainable-fishing-navigation-in-the-municipality-of-guapi-cauca-1.1124350

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## • KTH Water Centre blog article - Transdisciplinary co-creation on the river in search for more sustainable futures:

https://www.kth.se/blogs/water/2023/03/transdisciplinary-co-creation-on-the-river-in-search-formore-sustainable-futures-fieldwork-experiences-with-local-fishing-communities-in-colombia/



Interview with Katarina Larsen, Gauri Salunkhe and a representative from the Swedish International Development Cooperation Agency in Guapi 2023 (English and Spanish):

https://www.kth.se/blogs/hist/2022/12/katarina-larsen-interviewed-in-guapi-colombia/



 Video of experiences during October 2022 fieldwork in Guapi: https://www.youtube.com/watch?v=rjBEosM-gxE



Pacífico Econavipesca Project Universidad Nacional de Colombia website: https://minas.medellin.unal.edu.co/vicedecanaturadeinvestigacion/index.php/econavipesca-english



• Presentation at KTH Royal Institute of Technology 11th January 2023:

https://www.kth.se/philhist/historia/2.78498/kalender/environmental-humani/co-creation-with-fishing-communities-of-guapi-colombia-experiences-from-the-econavipesca-project-1.1216498

Photos taken by Gauri Salunkhe, Jose Miguel Vecino, Julian Hernández, Sebastián Serna Designed by Gauri Salunkhe





## Key References and Further Reading

- Agusdinata, D. B. 2022. The role of universities in SDGs solution co-creation and implementation: a human-centered design and shared-action learning process. Sustainability science. [Online] 17 (4), 1589–1604.
- IPCC 2022. Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844.
- Larsen, K., Gunnarsson-Östling, U. and Westholm, E. 2011. Environmental scenarios and local-global level of community engagement : Environmental justice, jams, institutions and innovation," Futures: The journal of policy, planning and futures studies, vol. 43, no. 4, s. 413-423.
- Minoi, J.L., et al., 2019. A Participatory Co-creation Model to Drive Community Engagement in Rural Indigenous Schools: A Case Study in Sarawak. The Electronic Journal of e-Learning, 17(3), pp. 173-183, available online at <u>www.ejel.org</u>
- Moons, I.; Daems, K.; Van de Velde, L.L.J., 2021. Co-Creation as the Solution to Sustainability Challenges in the Greenhouse Horticultural Industry: The Importance of a Structured Innovation Management Process. Sustainability 2021, 13, 7149. <u>https://doi.org/10.3390/su13137149</u>
- Tengö, M. et al. 2021a. Indigenous Futures Thinking: Changing the narrative and rebuilding based on re-rooting. Workshop report. SwedBio at Stockholm Resilience Centre, Stockholm, Sweden.
- Tengö, M. et al. 2021b. Creating Synergies between Citizen Science and Indigenous and Local Knowledge. Bioscience. [Online] 71 (5), 503–518.
- Sida 2021. Strategiplan för Sveriges regionala utvecklingssamarbete med Latinamerika 2022-2024, Datum: 21-12-13, Environment, climate and sustainable use of natural resources (Stödområde 2: Miljö, klimat och hållbart utnyttjande av naturresurser, page 9) "Hållbar produktion och konsumtion (SDG12), men även SDG 3,5, 8 och 16, är viktiga för omställningen till grön/cirkulär ekonomi, som också måste ge fattiga och utsatta människor bättre möjligheter att förbättra sin livssituation och en ökad delaktighet i den ekonomiska utvecklingen."
- Universidad Nacional de Colombia, et al. 2021. Technical Report for the first year of the Agreement. Project Econavipesca Del Pacifico: Ecosistema Para la Navigacion Pesquera Sustentable en el Municipio de Guapi, Cauca.







Pacífico Econavipesca Project - Policy recommendations