

Factsheet final findings Applied Research Fund Call 2



Improving the resilience of the inland fisher communities and aquatic systems to overfishing and water resource degradation in Benin

Summary

The overall objective of the project was to explore the vulnerability of the inland fishing sector of Benin due to the increasing pressure on water resources, in order to strengthen the institutions of the local fish-dependent households. Propelled by ecological degradation, mistrust among fisher communities, a low degree of organization and absence of regulatory measures, development scenarios of the inland fishery sector of Benin generate bleak perspectives. These results were elucidated by the project after interviewing 837 fishermen and 237 fisherwomen and conducting extensive aquatic ecological research on water quality, species composition and catch. Results revealed that indeed deep cutting regulatory measures are urgently required to restore productivity and ecological integrity of the inland waters. The project therefore developed a road map that creates a productive stakeholder engagement to balance interests of the fisher community against quality and sustainability of inland waters. Despite the quest for harmonious solutions, some mandatory measures affect all stakeholders. First, restrict access to fishery grounds and provide alternative employment for the fisher community. Second, empower fisherfolks to supervise compliance of regulations. Third, and finally, stop pollution of inland waters by making city authorities aware and control polluting processes with monitoring systems.

Research Findings

- The impacts of human activity on the Lake Nokoué–Lagoon of Porto-Novo complex are numerous and visible. Water, fish and banks have been significantly polluted by heavy metals (including lead and mercury), fermentable materials, cans and plastic waste.
- Food insecurity prevails among 32 percent of the fishermen, while a high illiteracy rate restricts employment opportunities to low-wage labour. However, fishermen are true entrepreneurs who organise labour when needed, have access to credit and invest in the improvement of their fisheries.
- The shared water resource management is not functioning well. Despite concrete agreements on fishing arrangements, there is a high number of conflicts among fisher communities. In addition, the degree of organization within fisher communities is low, which translates into weak bargaining power with stakeholders (market players and decision-makers for example).
- Women occupy pivotal positions in the value chain of inland fishery activities. Yet, the inland fishery sector is still dominated by men. This weakens the position of women, with far-reaching consequences for their economic position, safety and food security.

Outcomes achieved

A survey among stakeholders found that in general, targeted fishers' communities (fishermen and women) and institutions understand regulatory rules and vulnerability of shared water resources. They are committed to contribute to the sustainable management of fishery activities. More specifically, inland fishermen and fisherwomen adopt sustainable new/improved fishing/fish processing techniques that support the sector. Fishers also indicate increased level of awareness of gender issues in the fishery sector.

A Most Significant Change (MSC) story was reported by the Chairman of the National Federation of Fishers. Before the project, evidence on pollution in lakes was lacking. Now the materials produced by the project are of good use to him to engage fishers and policy makers on the challenges posed by the pollution of the lakes and how to overcome them.

Project messages to

A) Actors from private sector:

- Consider the constraints of the inland fishery sector as opportunities and develop and implement business-driven solutions that would provide solutions to fisher communities. These business opportunities include, for example, the development of aquaculture and the promotion of cold storage facilities.

B) Civil society and practitioners organizations:

- Awareness-raising and advocacy among fishers should continue to be a priority in strengthening the resilience of the inland fisheries sector. Project insights on vulnerability and resilience of the sector will enable civil society and practitioners' organizations to develop evidence-informed campaigns to have a greater impact.
- Civil society and practitioners' organisations should endeavour to establish a multi-stakeholder platform as a space for knowledge sharing and co-creation of effective solutions.

C) Policy makers:

- The government should provide technical and financial support to develop alternative employment for the fisher community, finance capacity building initiatives, increase credit access, organize fishers' associations in cooperatives and facilitate school attendance of fishers' children.
- Local and central government should take immediate and strong actions to address inland lake pollution.

Knowledge products

- [What does the fisherman want?](#) Research report, May 2018.
- [The fisherwomen of Benin: Roles, constraints and possible solutions.](#) Research report, December 2018.
- [Tragedy of the Inland Lakes.](#) International Journal of the Commons, 2019.
- [Ecological stress in fish population of Lak Nokoué and Porto-Novo Lagoon Benin.](#) International Journal of Fisheries and Aquatic Studies, 2018.
- [Les contraintes qui inhibent le développement de la pêche continentale au Bénin](#) (in French). Policy brief, September 2018.
- [Knowledge sharing and policy engagement workshop report.](#) Policy brief, November 2018.

Knowledge networks

- [AgriProFocus](#)
- [Knowledge Management for Development](#)

Knowledge co-creation

Consortium members shared periodic updates on the implementation of specific activities. In the field, the project activities were effectively monitored thanks to the active collaboration with local government agencies and other stakeholders. The consortium combined the specific expertise of each member in a transdisciplinary manner to enhance the potential for co-creation of new knowledge. Co-creation efforts of the consortium have led to the development of a new research project to address fisheries post-harvest issues as this came as a major challenge for the fishery sector.

The project formalized the co-creation process by establishing a multi-stakeholder committee comprised of representatives from the Ministry of Agriculture, fishermen associations, local agricultural advisory services, associations of women in fishery, National Partnership for Water, and the municipals' association on the management of Lake Nokoué. The committee supported the mainstreaming of endogenous knowledge into the research process, the assessment of results and the sharing of the generated knowledge. The committee was instrumental in keeping a strong link with all stakeholders throughout the project. It helped to overcome for example challenges encountered during data collection and served as a good platform for discussing and confirming the project findings.

Consortium Partners

- [Centre d'Actions pour l'Environnement et le Développement Durable \(ACED\)](#)
- [Amsterdam Center for World Food Studies/Athena Institute, Vrije Universiteit Amsterdam](#)
- [Laboratoire d'Hydrobiologie et d'Aquaculture, Université d'Abomey-Calavi](#)

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