

Julie Mandresilahatra
j.mandresilahatra@apdra.org
Development
APDRA Pisciculture Paysanne/ Madagascar
Agroecology Scientific Day 2024
Workshop n°4, Session n°1

Title:

Multi-stakeholder territorial cooperation for the development of agroecology on a regional scale: the example of the implementation of Agroecological Development Plans in rice-fish farming areas in Madagascar

Abstract:

In Madagascar, carp farming in rice paddies, or rice-fish farming, is an agroecological practice adopted by many farmers in the highlands. However, in the context of climate change, droughts at the start of the cycle, followed by periods of flooding due to cyclones or tropical storms, are having a negative impact on production, by reducing the length of cycles or leading to the loss of fish. In addition, demographic pressure leads to a year-on-year reduction in irrigated farmland and unsustainable exploitation of the hillsides. This contributes to massive erosion, leading to the silting up of rice fields and damaging production. Faced with these facts, and to enable farmers to continue to develop rice-fish farming, it became necessary to intervene on a catchment scale rather than on a plot-by-plot basis. By applying agroecological practices on the hillsides, such as contour farming, cover crops, reforestation, compost production, etc., the farmers are better able to protect their catchment area and hence their fish farms in the lowland plots. This work on a range of practices mobilises different partners with complementary skills and requires a multi-actor territorial approach, placing the community of farmers at the centre. In fact, it is essential that the various development measures are designed to be consistent with the organisation of the area and respond to the concerns of the stakeholders who develop them. To this end, a specific working methodology has been devised for setting up Agroecological Development Plans (PDAE), which are co-constructed with the farmers concerned. These plans are based on the concerns encountered by the community of farmers in a sub-catchment area, which limit their ability to develop their land. These concerns are collected by field agents, using non-technical skills such as comprehensive interviews, village mapping and study walks, inspired by the approach developed by GERDAL (Groupe d'expérimentations et de Recherche: Développement et Actions Localisées) and other networks promoting participatory approaches. The technicians from the various development players involved in this process thus become territorial facilitators whose aim is to get farmers to transform their concerns into treatable problems, and to seek solutions that will enable them to protect their sub-catchment areas. These solutions are then brought together in a coherent way in these PDAEs, which are specific to each area. These plans are then implemented in the territories under the coordination of representatives chosen by the community, with the support of territorial facilitators. This methodology makes it possible to anchor the development of agroecology in the long term by ensuring that the practices implemented respond to the concerns of the farming communities and that they take ownership of their implementation.

Bibliographic references

- Andria-Mananjara D. E., Martel P., Raliniaina M., Andriamarolaza R., Rakotomanana D., Mikolasek O., Mortillaro J.-M. (2019). Malagasy integrated aquaculture agriculture *In* FAO, Report of the Special Session on Advancing Integrated Agriculture Aquaculture through Agroecology, Montpellier, France, 25 August 2018. FAO Fisheries and Aquaculture Report No. 1286. Rome.
- CRS et MEAS. 2016. Organiser et gérer des groupements de paysans : Un manuel sur les compétences pour la commercialisation et le développement rural (compétences SMART). Catholic Relief Services, Baltimore, MD, et projet Modernizing Extension and Advisory Services, Université d'Illinois, Urbana- Champaign, IL.
- Darré J.P. (2006). La recherche coactive de solutions entre agents de développement et agriculteurs. Collection Etudes et Travaux- GRET. Paris. 112 p.
<https://gret.org/publication/la-recherche-coactive-de-solutions-entre-agents-de-developpement-et-agriculteurs/>
- Dietsch L. (2018). Compte-rendu d'atelier - Amélioration des stratégies de diffusion à grande échelle des pratiques améliorées de grossissement de carpes dans les bassins rizipiscicoles des hauts plateaux de Madagascar - APDRA / TERO
- Dietsch L. (2019). Atelier 2 : Formulation de stratégies d'expansion territoriale. Rapport APDRA / TERO
- Dietsch L. (2021). Mission d'appui à l'amélioration du dispositif d'accompagnement des pisciculteurs et l'appui à la mise en œuvre d'une stratégie d'expansion territoriale pour les projets de l'APDRA à Madagascar. Rapport APDRA / GERDAL.
- Duru M., Fares et Therond O. (2014). Un cadre conceptuel pour penser maintenant (et organiser demain) la transition agroécologique de l'agriculture dans les territoires. Cahiers agricultures, vol. 23, n°2, pp. 84-95.

- Duru M., Therond O., Martin G., Martin-Clouaire R., Magne M.-A., Justes E., Journet E.-P., Aubertot J.-N., Savary S., Bergez J.-E. and others (2015). How to implement biodiversity-based agriculture to enhance ecosystem services: a review. *Agronomy for sustainable development*, vol. 35, n°4, pp. 1259-1281.
- Halftermeyer S. (2008). Construire un réseau de producteurs autour d'une nouvelle production agricole. Exemple du Projet Piscicole de Guinée Forestière. *Traverses* n°32. Groupe initiatives / APDRA-F. 45 p.
https://groupe-initiatives.org/IMG/pdf/traverses_32.pdf
- McGinnis M.D. and Ostrom E. (2014). Social-ecological system framework: initial changes and continuing challenges. *Ecology and Society*, vol. 19, n°2, pp. 30.
- Mandresilahatra J. (2023). Développer la rizipisciculture grâce à la recherche coactive de solutions. Antsirabe : Mise en place d'une stratégie de densification. Capitalisation APDRA. 23 p.
https://apdra.org/images/Apdra/Pdf/ReflexionCapitalisation/2312_-_Capitalisation_-_Densification_par_la_RCS_VF.pdf
- Maureaud C. (2018). La diffusion de la rizipisciculture : stratégies de passage à l'échelle. Capitalisation APDRA. 22p.
https://apdra.org/images/Apdra/Pdf/ReflexionCapitalisation/1806_Capitalisation_PADP_P2_Passage_a_echelle.pdf
- The African Network on Participatory Approaches (2000). Village participation in rural development. Manual and tools. Royal Tropical Institute / World Bank.
- Wezel A., Bellon S., Doré T., Francis C., Vallod D. and David C. (2009). Agroecology as a science, a movement and a practice. A review. *Agronomy for sustainable development*, vol. 29, n°4, pp. 503-515.