

Ecological intensification of fish farming: the PISCEnLIT project

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▶ To cite this version:

Julie Simon, Jérôme Lazard, Hélène Rey-Valette, Pascal Fontaine, Syndhia Mathe, et al.. Ecological intensification of fish farming: the PISCEnLIT project. 4. Conference of the European Pond Conservation Network, European Pond Conservation Network (EPCN). Labo/service de l'auteur, Oxford, GBR., Jun 2010, Berlin, Germany. hal-02757420

HAL Id: hal-02757420 https://hal.inrae.fr/hal-02757420

Submitted on 4 Jun 2020

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Ecological intensification of fish farming: the PISCEnLIT project

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INTRODUCTION



For the 21th century, all agricultures of the World will have to take up the challenge: how to feed all the population of the world? Because of the demographic growth and the restriction of resources, production systems have to become more efficient and respectful for environment. That is to say: it is necessary to develop methods for an ecological intensification of production systems.

In this framework and in the global context of fisheries, pond fish farming has an important role to play. PISCENLIT is a project which study the different ways for an ecological intensification of fish farming systems (including ecosystemic services management).

PRESENTATION OF PISCENLIT

It is an international project.

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Objectives:

- to assess the ecosystemic services related to pond culture system (surveys)
- to define the conditions of an ecological intensification implementation

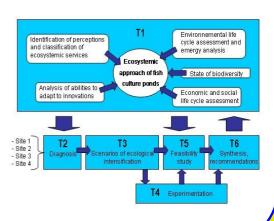
PISCEnLIT uses an interdisciplinary approach.

Main tools:

- Tools of environmental analysis (environmental Life Cycle Assessment : LCA + emergy analysis: analysis of energetic flows)
- Tools of innovation economy (social and economic LCA)
- Study of biodiversity, ecosystemic services and their perceptions

Project's organization:

Three years : 2010 → 2012 Six tasks : T1→ T6



Agricultural intensification gradient



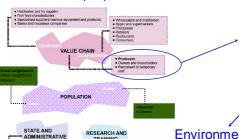


T1: Surveys



MATERIALS AND METHODS FOR T1 TASK

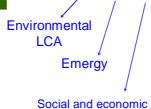
Different kinds of people were concerned:



Current priority:

- fish producer surveys : elaboration, test and practical application

Results of surveys



LCA

State of biodiversity

Ecosystemic services: test and improvement of this pattern

Preliminary identification of ecosystemic services from fish farming ponds

+ Study of perceptions

4th Conference of the European Pond Conservation Network (EPCN) Berlin (Erkner), Germany, 1st - 4th June 2010