



## New strategies for the construction and management of pond production systems for sustainable fish farming

Contributing to a necessary **revision of production systems** that must be **efficient, profitable, respectful of the environment and integrated into the territories**

### Program objectives

#### To propose new practices for pond fish farming

- A **central theme**: Defining the composition of the polyculture
- To produce in a more **sustainable way**
- Adapted to the **diversity of the contexts** (modalities of realization of the polycultures)
- Taking into account **all the biological compartments** of the ecosystem

### Our working method

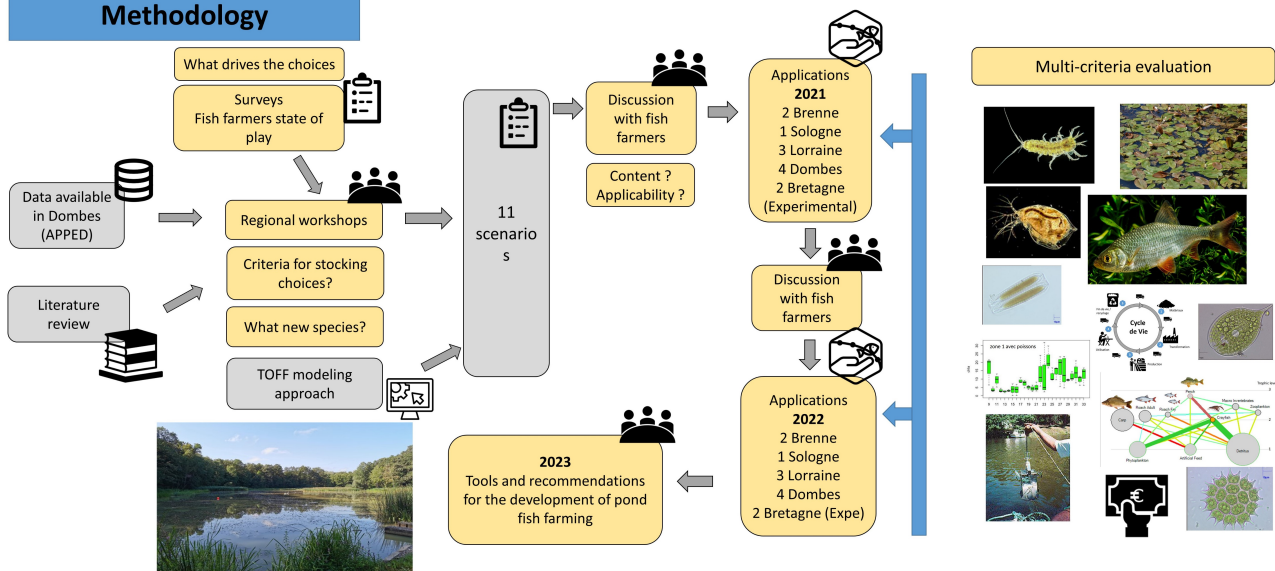
#### A work of co-construction with the actors of the sector

- A **multidisciplinary approach** to address the complexity of interactions between pond compartments
- The introduction of the notion of **ecosystem services** to discuss the vocation of fishponds
- The explicit consideration of **biodiversity** in the functioning of fishponds
- To help build new solutions, **modeling approaches**

### Program ambition:

To go as far as **recommendations and practical tools** for fish farmers.

### Methodology



### First results

Sites	Surface (ha)	Fish polyculture scenarios	Stocking (kg/ha)	Yield (kg/ha)
S01	2.2	C. Carp - Orfe - Pike	110	30
L04	2.1	Roach - Rudd - Pikeperch	80	86
D02*	9.4	Roach - Tench - Pikeperch - <b>White Sturgeon</b>	76	145
L01	1.4	C. Carp - Tench - Roach	100	197
L03	4.1	Roach - C. Carp - Grass Carp	266	295
B01	12	Tench - C. Carp - Pikeperch	91	336
D01*	3.4	White Fish - Tench - <b>Black Bass</b>	76	336
Bx1	0.1	C. Carp - Roach - Tench - Pikeperch (claustration)	115	404
Bx2	0.1	C. Carp - Roach - Tench - Pikeperch (open)	115	410
B02	0.8	Roach - C. Carp - Grass Carp - <b>Black Bass</b>	74	435
D04*	6	White Fish - Tench - C. Carp - Grass Carp - <b>Black Bass</b>	156	542
D03*	3	White Fish - C. Carp - Grass Carp - <b>White Sturgeon</b>	272	625

Feeding Without feeding \* Fertilization : Limit of 200 kg/ha

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