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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

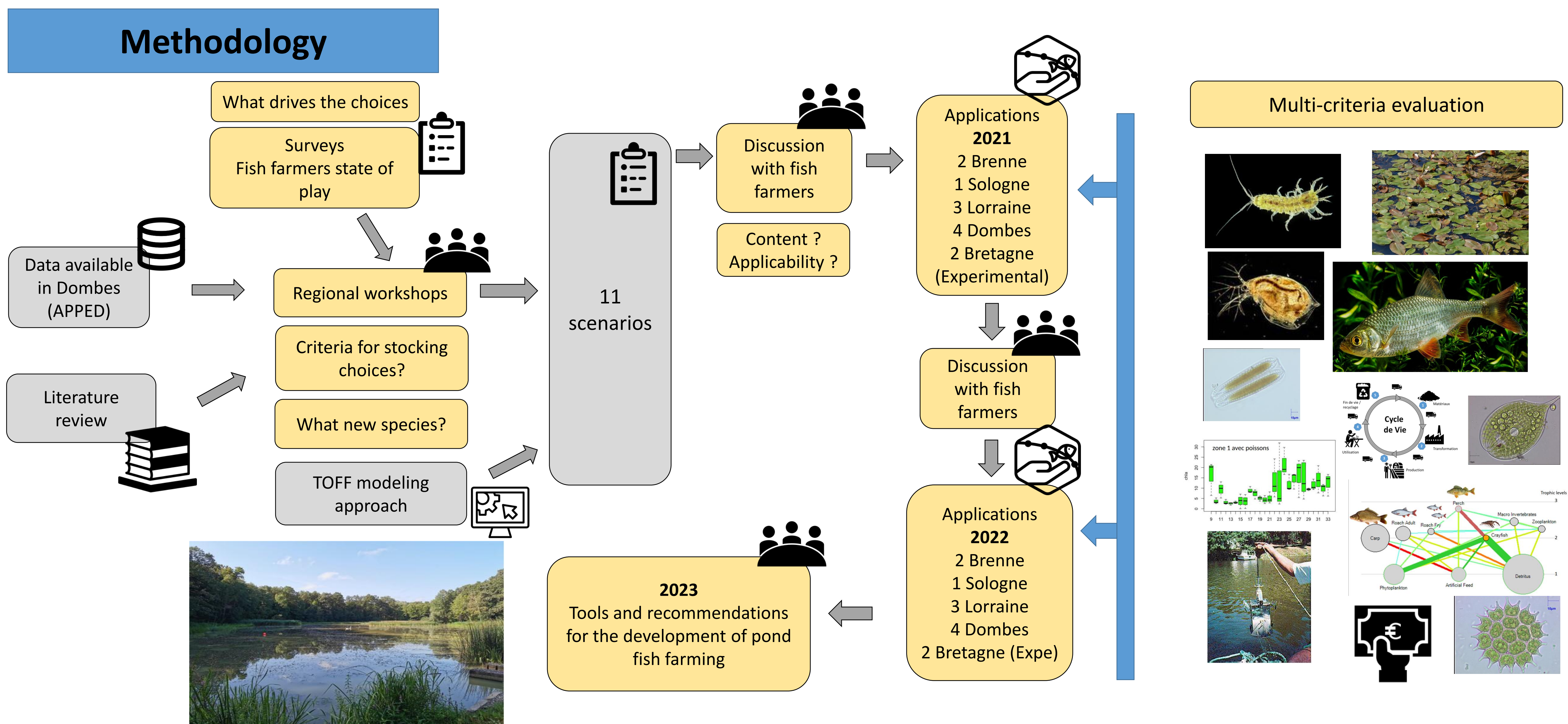
Our working method

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.



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 - White Sturgeon	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 - Black Bass	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 - Black Bass	74	435
D04*	6	White Fish - Tench - C. Carp - Grass Carp - Black Bass	156	542
D03*	3	White Fish - C. Carp - Grass Carp - White Sturgeon	272	625

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

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