

# TECHNOPOLE de Nouvelle-Calédonie

Workshop AquaWatch

15 avril 2024

The Technopole **supports the economic diversification of New Caledonia** through transfer, innovation and the sustainable development of natural resources.

Our activities are deployed throughout New Caledonia

**13** sites

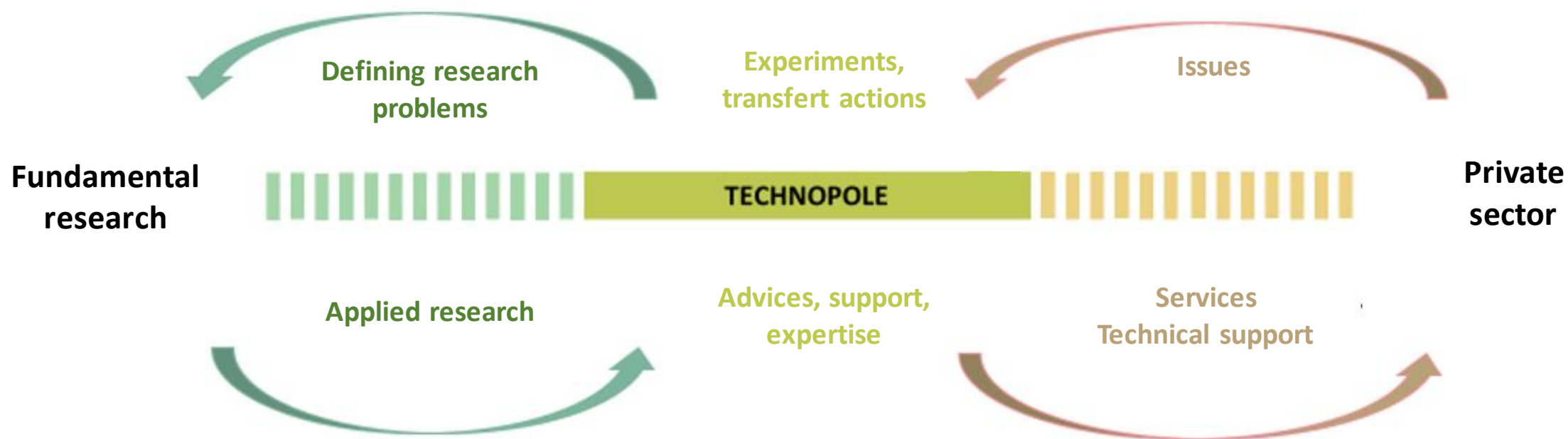
**9** sector-base experimental platforms

**68** employees





**Research, experimental development, transfer, innovation to promote economic development and diversification of sectors**



**Main financial backers**



## Marine & Land technical divisions aims:



→ Optimize production systems

→ improve quality

→ Contribute to the diversification of sectors



## Marine division

### Shrimp & diversification



### Marine pisciculture



### Microalgae



Ifremer

### Coastal and offshore fisheries observatories



- Support the blue shrimp industry
- Sanitary monitoring



- Develop local fish farming (*Rabbitfish*)



- Develop local marine microalgae culture

- Manage sustainable fisheries



- Develop local oyster farming





## Land division

### Fields crops



→ Develop, experiment and improve the cultivation of adapted species

- Increase food self-sufficiency
- Reduce dependence on imports

### Market gardening



### Tropical tuber



→ Multiplication and improvement of cropping systems

### Bee keeping



→ Support the honeybee sector  
→ Sanitary monitoring



## Innovation division

### Business incubator & accelerator



- Provide assistance to enhancement & extension of innovations brought by private project holders or internally
- Competencies in intellectual and industrial property



## Agri-food division



- Support the development of agri-food industries
- Improve competitiveness and increase food autonomy

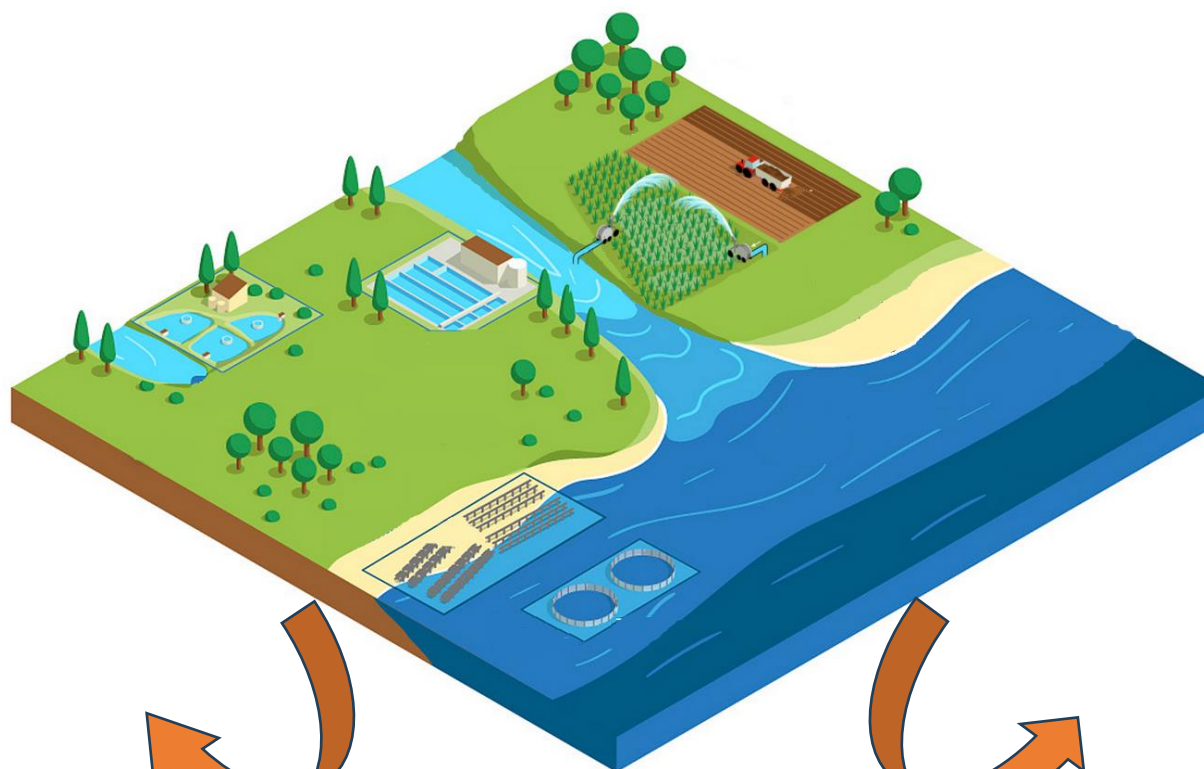
## Water quality challenges in aquaculture and agriculture



## Water quality challenges in aquaculture and agriculture

### Aquaculture

### Agriculture



#### Breeding impacts:

- Pond waste water
- Sea farming (cages and oyster beds)

#### Environmental impact

#### Impact of fertilizers

- Often over-dosed
- Often spread all at once

#### Impact of phytosanitary products

- Often over applied
- Efficiency depends on water

## Water quality challenges in aquaculture and agriculture

### Aquaculture

#### Sea Water

- Hatchery
- Pond culture
- Sea cages
- Filter organisms as oysters
- Quality of product

#### Fresh Water:

- Hatchery

#### Breeding impacts:

- Pond waste water
- Sea farming (cages and oyster beds)

### Agriculture

#### Rain & irrigation water:

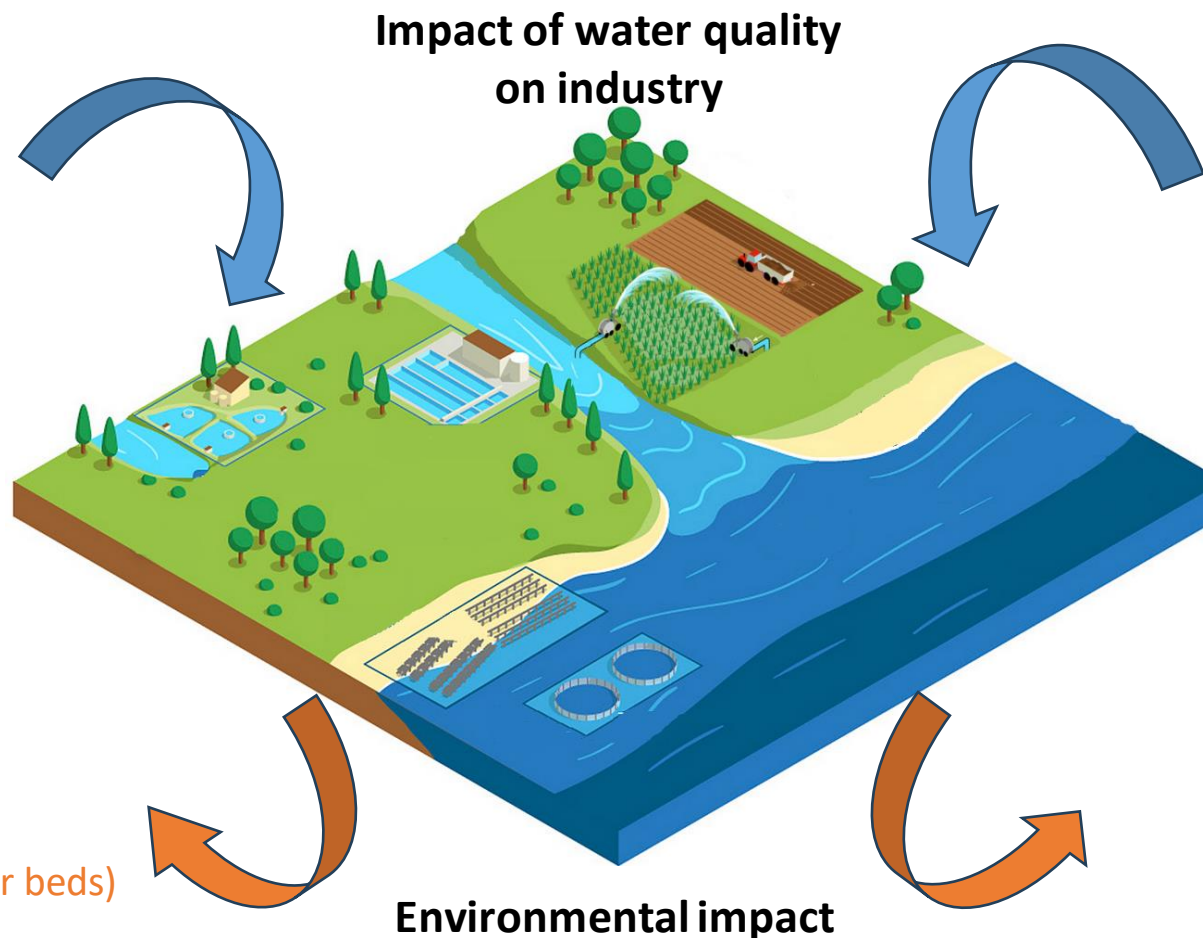
- Can lead to deficiencies or excesses
- Impact on the effectiveness of phytosanitary products (neutralized by positive ions)
- Fertilizer optimisation

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**Thank you for your attention**