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# Innovative and Sustainable Water Management: Optimizing the Function of Agricultural Irrigation

**Targeted territory:** New Caledonia

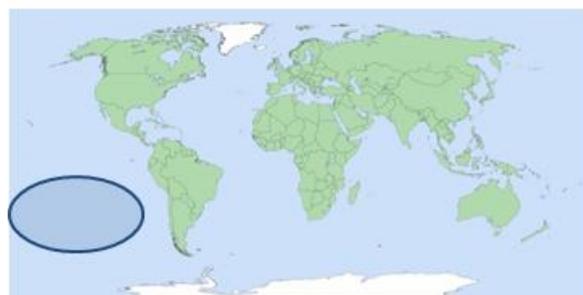
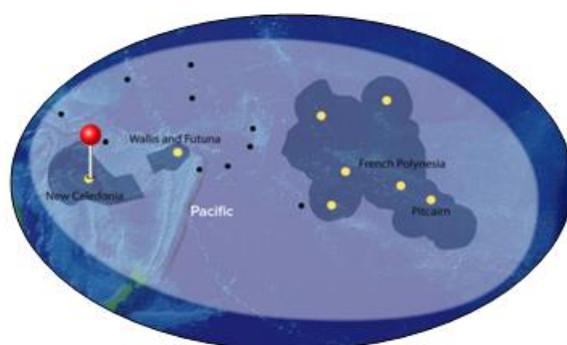
**Total project budget:** 49,900 Euros

**BEST 2.0 grant awarded:** 49,900 Euros

**Duration:** March 2017 – February 2018 (12 months)

**Lead organisation:** Aqualone

**Partner organisation:** Chambre d'Agriculture de Nouvelle-Calédonie



**aqualone**  
Climate sensitive irrigation

**AGRICULTURES  
& TERRITOIRES**  
CHAMBRE D'AGRICULTURE  
NOUVELLE-CALÉDONIE

## Background:

Today, the rate of coverage of food needs in terms of volume is about 15% in New Caledonia (excluding processed products). The potential for progress is very high and all political and institutional decision-makers agree on "the need to develop agriculture sustainably to better contribute to food self-sufficiency".

On the other hand, New Caledonia has positioned "the preservation of water resources" as a priority, particularly in terms of integrated and sustainable resource management and the fight against overconsumption.

In view of the crisis situations in the management and use of water that regularly confront civil society and the farmers of the territory, decision-makers have created participatory bodies: the water boards. This project is consistent with this approach.

### Description of the Project:

The objective of the project is to demonstrate that with an Innovative Irrigation Technological Solution (STII), the increase in sustainable organic production, that is "organic" and "responsible", enables a return on investment from the first harvest while also saving water resources. The project will create a replicable model with a communication and spin-off strategy adapted to the challenges of sustainable management of water resources and food self-sufficiency in New Caledonia and other Pacific islands. The project will be implemented at three pilot sites in each of the provinces of New Caledonia (1 site per province), taking into account the diversity of agro-socio-economic contexts (water, production, soils etc.) to create models adaptable to the specificities of each agrarian territory.

The project will be carried out on the 3 pilot sites using a proven approach:

1. Identify the needs of the site and get a commitment from the farmer.
2. Establish the return on investment objectives.
3. Deploy the Innovative Irrigation Technology Solution (STII).
4. Measure performance (including water consumption) and demonstrate the ability to create a return on investment from the first harvest.
5. Develop targeted communication to inform and structure the dissemination of STII.



### Intended results:

This project will contribute to the optimization of irrigation water management on the one hand, and the increase and optimization of New Caledonian agricultural production (food and commercial) on the other, through the demonstration and transfer of an Innovative Irrigation Technology Solution that is ecologically and economically viable and sustainable in the context of climate change.

As part of the dissemination plan, the technology is intended to be deployed more widely in New Caledonia and other Pacific islands.

### CONTACT

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