

Towards a world first in agroecology



PROTEGE aims to strengthen climate change resilience of the primary sector in the overseas countries and territories (OCTs). Supporting the agroecological transition is thus the foundation for implementing its agricultural activities. Over the last few years, scientific studies and documented results from many farmers have shown that this form of agriculture - based on diversity of both crops and methods and the best use of natural resources (soil, biomass and diversity) - could meet the needs of a growing world population against the backdrop of major climate uncertainty.

Since the first symposium was held in 2014, the United Nations Food and Agriculture Organization (FAO) has supported its members to develop agroecology.

Under a cooperation agreement between the Pacific Community (SPC) and the Food and Agriculture Organization (FAO), a technical assistance agreement for the OCTs was signed in 2022. French Polynesia has been

receiving support to incorporate an agroecological performance assessment of its farmers and copra growers into its general agricultural census (RGA). In July 2023, FAO will train officers from New Caledonian agricultural organisations and local government bodies to use the Tool for Agroecology Performance Evaluation. Like the RGA, this training will provide an objective picture of the extent of the territories' agroecological transition and information on the impact of their public policies and measures.

This collaboration among FAO, SPC and the OCTs was highlighted during the most recent Pacific Week of Agriculture and Forestry held in Fiji (March 2023) at the same time as an agroecological transition conference. The results obtained under the PROTEGE project were shared and cooperation with the region's countries (organic demonstration farms funded by Kiwa) was showcased.



PROTEGE'S CARBON FOOTPRINT

In May 2022, PROTEGE was tasked with reviewing the project's contributions to carbon emissions and sequestration in each activity category as per the areas covered by PROTEGE.

The objectives were to identify the project's negative and positive emissions and make recommendations for in situ sequestration measures as sought by the territories; provide recommendations for the project's carbon strategy to ensure that the project promotes carbon neutrality; estimate the funding associated with the neutralisation activities based on the activities implemented by PROTEGE; and, provide recommendations on interventions to support the activities and incorporate the issue of carbon in public policy implementation.

You may also be interested in...

Want to know more about PROTEGE?

The PROTEGE website regularly provides news about the project in two languages, as well as a document archive.

The website will evolve as lessons learned through the project in 2023 are incorporated and will make available all the knowledge produced throughout the OCTs:

www.protege.spc.int/en



ATERCAP

French Polynesia hosted the 6-10 March 2023 PROTEGE Regional Technical Aquaculture Lessons-Learned Workshop (ATERCAP). It defined ways to disseminate the knowledge developed during the project.

It also defined post-PROTEGE activities to sustain that knowledge by defining OCTs' development strategies to ensure aquaculture diversification and sustainability appropriate to island contexts and by holding ongoing discussions among the territories.

Events

15,16 and 17 May 2023 on Wallis:
PROTEGE Steering Committee meeting

Biosecurity

To strengthen border biosecurity and prevent invasive plants and/or animal species from being introduced into the territory, French Polynesia assembled a sniffer dog team for international airport arrivals.

European PROTEGE funding was provided, in addition to funding from the territory, to set up a kennel at the Biosecurity Department (DBS) premises at Faa'a International Airport. Handover is projected for April 2023.

Under the partnership, three sniffer dogs were purchased and three DBS officers were trained as dog handlers under an agreement between French Polynesia and the New Zealand Ministry for Primary Industries.

Sarah, Maui and Hugo passed the dog



© DIREN PF

handler's exam with flying colours and have been back in the territory since 22 March. The three dogs - Oreo, Owen and Pete (Beagle x Harrier) - arrived on 14 April.

The WF water kit comes to NC

An awareness kit was developed for Wallis and Futuna through the PROTEGE programme.

Stakeholders involved in the water sector and awareness raising in New Caledonia expressed interest in adapting the kit to their territory and using it as a tool to create awareness of how water operates.

This is a shining example of regional cooperation under PROTEGE benefiting students in New Caledonia and Wallis and Futuna!

Fisher workshop launched on Wallis and Futuna

In line with the Wallis and Futuna 2018–2030 Multiyear Sustainable Primary Sector Development Plan (PPDDSP), the Wallis and Futuna Department of Forestry and Fisheries (DSA) is seeking solutions to support the fishery industry that can lead to sustainable projects.

With PROTEGE support, the Fisheries Unit launched the Fisher Workshop project.

It aims to set up and operate several networking, support and services groups starting in 2022 to meet the needs expressed by commercial coastal fishers (i.e., fishing licence holders) on Wallis and on Futuna.



© DSA WF

The department aims to use this workshop to implement a manageable project that can provide concrete, workable solutions, through services and support, to issues raised by WF fishers.

The DSA launched several training sessions for fishers and purchased three 500-kg ice-making machines that operate around the clock, which arrived on Wallis on 15 February 2023. PROTEGE funded two machines for Futuna (Leava and Vele workshops) and the territory's Convergence and Processing Contract funded the third for Wallis (Aka'aka workshop). Construction is underway so that the equipment can be installed properly before it is commissioned in the first half of 2023.



Aka'aka ice-making machine

© DSA WF

Teva I Uta's Biovator

On 26 January 2023, the Teva I Uta municipal authorities inaugurated their Biovator rotating composter, with the agriculture minister and the local mayor in attendance.

The machine was set up at the Farepua Young Teens' Centre (CJA) in Papeari and will mix animal and plant waste to produce quality compost. It was purchased as part of an ambitious circular economy project sponsored by the municipality and co-financed by European funds through PROTEGE. The project aims to reduce school cafeteria food waste.

Organic farming training was provided,



enabling several farmers in the area to set up organic operations. This wholesome local produce is intended to supply school cafeterias and the Biovator will help process food waste to foster a farm-to-table pathways. All the waste collected from the cafeterias will be processed into compost for CJA gardens.

Wallis and Futuna

1 400 pupils!

©STE WF



The educational kit on the water cycle in WF was designed as part of the PROTEGE project and handed over to the Catholic Education Office (DEC).

The Department of the Environment (STE), the DEC and the SPC team designed the kit, which is available in primary schools on both islands. It will be used to heighten awareness among 1400 primary school pupils. The STE provided a teacher training on using the kit on 15 March 2023. The participants particularly appreciated that the materials were adapted to the local context, of high quality and relevant.

Ongoing STE support for using the kit will be provided throughout the year to enhance teacher ownership.

New-Caledonia

Work starts on twelve Northern Province water tanks

The New Caledonian government wanted to help willing municipalities install disinfection units at the water supply facilities deemed at highest risk under PROTEGE.

The project, which is part of New Caledonia's Shared Water Policy, is being implemented in collaboration with the Health Department (DASS-NC), which commissioned the Ginger SOPRONER as the engineering consultant.

The Grand Borendy and Sailles sites in Thio were handed over in late December 2022 at a ceremony attended by municipal elected officials. Thio now has two clean-water disinfection units that treat water before supplying it to customers.

Two disinfection stations are now operational in the commune, supplying clean water to over 2000 residents.

The stations make the water safe to drink by using two disinfection methods that destroy bacteria - chlorination and electrochlorination.

Elsewhere, work on the 10 remaining sites in the Northern Province began in February after all the equipment was delivered, starting in the Canala municipal area.

Caribbean pine processing relaunched in Wallis and Futuna

Cooperation between the DSA and New Caledonia's Sud Forêt semi-public company involved characterising viable stocks, improving the timber industry and its potential markets, and assessing local timber processing facilities. The Sud Forêt and DSA teams carried out the gargantuan task of conducting a forest inventory on more than 90 hectares on Loka Mountain (Wallis).

At the same time, several interviews were held with traditional leaders and local timber processing stakeholders, importers and consumers. Meetings were held with the Lavelua (King of Wallis Island), the Faipule (district chief) of Hihifo (and owner of Wallis' largest forest stand), and the Heu (Vaitupu village chief) responsible for the forests in Hihifo district. These gatherings provided an opportunity to help them understand the critical need to sustainably log and manage their forests. They are interested and committed, and would like to receive training in forest management plan implementation.

The cooperation will continue under agreements between New Caledonia and Wallis et Futuna.



PROTEGE



Funded by European Union



Pacific Community
Communauté
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NOUVELLE
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FRENCH POLYNESIA



WALLIS AND FUTUNA



PITCAIRN ISLANDS



LESSONS LEARNED

Watch the latest videos on the SPC/CPS YouTube



<https://protege.spc.int>

and on our social media



LATEST VIDEOS



Preserving drinking water supply catchment areas in New Caledonia

Most drinking water supply catchment areas in New Caledonia are damaged. To remedy this, multiple partners – including the French Biodiversity Agency, ONFI (Office National des Forêts-International, World Wildlife Federation, the Houailou and Touho municipal authorities, and local associations – have supported several actions.

[Watch the video](#)



Watershed restoration and protection in Touho, New Caledonia

PROTEGE supports reforestation and efforts to cull invasive species in Touho. The goal is to restore and preserve watersheds that are the communities' only source of drinking water.

[Watch the video](#)



KNOWLEDGE SHARING – TUTORIALS

To share the knowledge acquired through protégé and learn about the new tools that build on the lessons learned, watch the video tutorials produced by AGIR NC, the New Caledonian Agroforestry Association.



Basic principles of agroforestry
Video tutorial 1
New Caledonia - AGIR NC

[Watch the video](#)



Soil, a vital resource for sustainable agriculture
Video tutorial 2
New Caledonia - AGIR NC

[Watch the video](#)



Improving crop yields
with mycorrhizae
Video tutorial 3
New Caledonia - AGIR NC

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ARTICLES



A virtual and physical workshop for farmers and agricultural officers in the Pacific region

24 and 25 april 2023

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Sustainable agriculture in sign language - for information access for all

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Food transition workshops in New Caledonia

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Biological monitoring of fisheries species at Port Moselle Market

Biological monitoring of fisheries species at Port Moselle Market

[Read the article](#)



A conference on agroecology in the Pacific region

The event was organised by FAO and SPC and held on 8 March 2023 in Fiji as part of the Pacific Week of Agriculture and Forestry. It addressed agroecology and sustainable agriculture in the region through experience sharing.

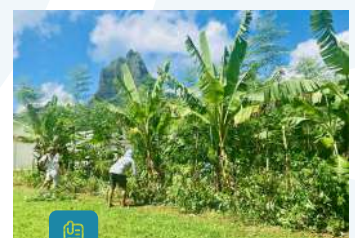
[Read the article](#)



Celebrating womens

8 March is International Women's Day, offering a host of awareness-raising and organising activities.

[Read the article](#)



Training on maintaining agroforestry plots in French Polynesia

Farmers from several islands – both men and women – received a second training in syntropic agroforestry on Moorea (16-17 February).

[Read the article](#)



AGROFORESTRY: Cooperation for action

Elena Gorchakova

Pacific Biodiversity Project Officer

French Committee of the International Union for the Conservation of Nature (IUCN)

Mickaël Sansoni, a farmer and syntropic agroforestry expert from New Caledonia, made a second visit to French Polynesia from 3 to 24 February 2023.

Local farmers were keen to see him. The trip was part of the project to support adaptation of agricultural methods and water management improvement on French Polynesian atolls, which the French Polynesian Department of Agriculture delegated to the French IUCN Committee under PROTEGE. In addition to assisting farmers involved in the Fakarava Atoll project, the Hiva Oa, Raiatea and Tahiti farmers asked Mickaël to create agroforestry plots in their fields.



© CPS

A syntropic agroforestry training was held on Moorea on 16-17 February 2023 as a follow-up to the 2022 session for male and female farmers from several French Polynesian islands. It provided training on agroforestry plot maintenance, particularly on the size of the various strata. Teachers from the agricultural high school received training on the role and propagation of mycorrhizae and micro-organisms to improve soil fertility.

Plots have since been set up in three French Polynesian island groups where agroforestry is expanding! ■



Sylvain GUTJAHR

Organic Farming and Agroforestry Project Officer

Opunohu Farm (French Polynesia) - EPEFPA

Mickaël provided an initial training on syntropic agriculture at Moorea Agricultural High School in May 2022. During the training, we went to a completely virgin plot to introduce a complex forestry system.

It was essential that he return nine months later, because as with all initial trainings, this "after-sales" service helps put the objectives into perspective. We discussed species selection and observed that some pioneer species had not grown significantly (probably because of Opunohu's rich soil) while others had grown well, and demonstrated pruning.

Embarking successional agroforestry requires adopting a certain mindset. Trees, bushes and banana trees can be used to produce biomass. Thus, farmers must master pruning techniques, understand when to prune to stimulate the system, and – in particular – to bear in mind that the soil must constantly be covered with plant debris. In addition, when practising regenerative farming, support from an experienced trainer is always reassuring. ■



IN THEIR WORDS



AGRICULTURE
AND FORESTRY

Agroforestry: cooperation for action (cont'd)



Anna Loridan

Farmer on Hiva Oa, French
Polynesia
Agroecology demonstration
farm



© CPFS

«I have always practised agroforestry without any inputs, which is why I joined PROTEGE. I then realised that I was the only demonstration farm practising this type of agriculture in French Polynesia.

Until recently, we had not conducted any agroforestry trials on my farm. Meeting Mickaël Sansoni during the regional gathering of farms in New Caledonia confirmed my choices and my methods.

When he stayed on my farm in February, I had the opportunity to have informative conversations, as Michael confirmed my empirical approach, which is based on personal observation and trials, by providing scientific information on the processes at work in the soil.

In addition to his valuable advice and information on useful plants, we also set up two agroforestry plots.» ■



Thierry Lison de Loma

Farmer managing two certified organic farms in Raiatea,
French Polynesia



Nine months after his first trip, Mickaël Sansoni returned to our farm to design the area and select the support species to be introduced into the agrosystem. In syntropic agroforestry, as in both of the productive models I'm developing (a permaculture orchard and biointensive microfarm), the same issues arise, including time management, travel, and organic matter supply.

The notion of design is central to these models. During my visit to New Caledonia for the Tech & Bio Show, we had the idea to turn part of our orchard into a syntropic agroforest.

We planted an array of some 10 support species providing

the desired ecosystem services (such as supplying biomass and shade, mycorrhization helper bacteria and growth) in the various herbaceous, shrubby and woody strata and inoculated them with local mycorrhiza.

The goal was to increase the yield of fruit trees that were already producing and reduce inputs of labour, organic matter and nutrients.

In a few months, we'll check back to see how the area is doing and then measure and quantify the impacts of the transformation of the model. ■

IN THEIR WORDS



COASTAL FISHERIES AND AQUACULTURE

Regional technical workshop on aquaculture lessons learned (ATERCAP)

More than 40 participants of different nationalities and from different professional backgrounds attended the ATERCAP held in French Polynesia from 6-10 March 2023. They shared their expertise, explored aquaculture issues and opportunities in the Pacific, and identified ways to promote sustainable, integrated aquaculture in the region. Fifteen topics were presented, seven of which were discussed in group sessions. A meeting with and visit to the Department of Marine Resources (DRM) site at Vairao were also organised..



Matangi MOEROA

Officer, Directorate of Marine Resources
French Polynesia

During the workshop, I was able to take stock of and discuss progress on aquaculture projects in all three territories and over the period of PROTEGE. We often share with our New Caledonian counterparts and sometimes with those on WF. But it's always more interesting and rewarding to talk face-to-face. An initial regional workshop on coastal fisheries and agriculture was held in WF in 2019 when PROTEGE was launched. A tropical oyster farming workshop was then held in New Caledonia in 2022. It was important that this one be held in French Polynesia so we could host our Pacific Island colleagues and show them the operations and, in particular, progress made in the fenua.

We know the managers in the other territories by name, but the workshop provided the opportunity to meet new people, including Lotolelei, an officer from WF, and a few professionals from New Caledonia, such as Patrick and Julie. It was interesting to discuss the issues they had all encountered in their territories and industries. At the end of the day, we all face very similar difficulties.

I particularly appreciated the frankness of the discussions. We were able to share the negative aspects which, in the end, reflect the reality on the ground. DRM offered feedback on the progress that the various entities have made. Opportunities for cooperation will improve dialogue, if the activities are maintained.

There is real potential for developing rock oysters in New Caledonia and French Polynesia. The future permitting, I will try to connect with the various stakeholders, such as Technopole, the provinces, IFREMER and DRM, as a "cross-territory" facilitator. ■



Lotolelei Manufekai

Lotolelei MANUFEKAI

Fisheries Technician
Fisheries Unit (DSA)
Wallis and Futuna

ATERCAP lasted for five days! Only five days! But they were very intensive and highly instructive days, surrounded as we were by a great team of motivated people seeking to make progress and continually improve so as to achieve their objectives in developing aquaculture projects.

I'm no aquaculture expert, especially as there are no aquaculture operations on Wallis, but the workshop helped me understand and visualise what this industry involves and all the specifics that cannot be overlooked. The discussions were edifying and constructive, with participants sharing, honestly, both their successes and failures! Regional cooperation is a force to be reckoned with when everybody takes part, listens carefully and shares!

People's kindness and the discussions with the experts, engineers, technicians and leading figures in French Polynesia and New Caledonia helped convinced me that a few aquaculture projects would be feasible on Wallis, starting with a small pilot oyster project, for example, in partnership with French Polynesia and New Caledonia. But that's not all! There are other projects to look forward to after ATERCAP and PROTEGE (including macro-algae and initial and further training). I'm committed to keeping this wonderful collaboration going between my island and the other territories. ■

IN THEIR WORDS



COASTAL FISHERIES
AND AQUACULTURE

ATERCAP Workshop (cont'd)



Philippe PEREZ

Aquaculture Technician
Area Sustainable Development De-
partment (DDDT), Southern Province,
New Caledonia

The aim of this workshop was to review activities conducted in all the territories participating in the PROTEGE programme. I would first like to thank all the participants, and particularly the organisers, as well as the Tahiti DRM for their warm welcome that week.

Each day was organised by topic and took a participatory approach.

Depending on the topics discussed, experts and businesspeople shared feedback.

Mornings were devoted to presentations on progress made in each territory. Working groups met in the afternoons to share and discuss lessons learned in various areas.

Based on the topics discussed, the experts and practitioners



Workshop participants.

shared their feedback.

The discussions were edifying and candid.

The workshop was an opportunity to pool everybody's know-how and, I hope, create momentum for cooperation among the territories.

With regard to prospects, the Department of Sustainable Development of the Southern Province will use this workshop as a basis for implementing its development strategy for sustainable and climate change-resilient aquaculture.

I will conclude with this famous quotation: "If you want to go fast, go alone. If you want to go far, go together." ■

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